Impairment accounting practices of Chinese Companies: An exploratory case study

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A dissertation submitted to Auckland University of Technology in partial fulfilment of the requirements for the degree of Master of Business

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Abstract

Asset impairment accounting is challenging for many businesses globally. This study aims to provide insight into the practice of asset impairment in China. This study is informed by the theory that financial reporting quality is jointly determined by accounting standards and the institutional environment of accounting, such as legal and political system, capital market development, and accounting education level. This study employed a qualitative research method to collect data from semi-structured interviews with four Chinese accountants and publicly available financial statements.

This study finds that the application of asset impairment does not fully comply with the Chinese Accounting Standards 8 Assets Impairement in terms of determining impairment indications, applying asset groups, estimating recoverable amount, and presentation and disclosure. The possible reasons have been discussed from perspective of China’s institutional environment in terms of the legal and political systems, capital market development, and accounting education and training. This study contributes to both the academic and professional arenas. It is the first qualitative research aiming to understanding the the implementation and practice of CAS 8. It also highlights the practical challenges faced by Chinese accountants and asks for the issuance of appropriate guidance. In addition, it reveal the difference between their practices and the requirements of CAS 8 which used to be neglected unintentionally by Chinese accountants.
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List of abbreviations

Capital Asset Pricing Model (CAPM)
Chinese Accounting Standards (CAS)
Chief Financial Officer (CFO)
Cash Generating Unit (CGU)
Chinese institute of Certified Public Accountants (CICPA)
China Securities Regulatory Commission (CSRC)
European Securities and Markets Authority (ESMA)
Fair value (FV)
Financial Manager (FM)
Gross Domestic Product (GDP)
Hong Kong Exchanges and Clearing Limited (HKEX)
International Accounting Standards (IAS)
International Accounting Standards Board (IASB)
International Accounting Standards Committee (IASC)
International Financial Reporting Standards (IFRS)
Initial Public Offering (IPO)
Chinese Ministry of Finance (MOF)
National Equities Exchange and Quotations (NEEQ)
Net Realisable Value (NRV)
Property, Plant and Equipment (PPE)
Renminbi or Chinese Currency (RMB)
State-owned Enterprises (SOEs)
Supervision Project Team of Beijing Supervision Bureau under the China Securities Regulatory Commission (SPTBSBCSRC)
Shanghai Security Exchange (SSE)
Shenzhen Stock Exchange (SZSE)
Uniform Accounting Systems (UAS)
Weighted Average Cost of Capital (WACC)
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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.
Acknowledgements

During my around one-year study on the dissertation project, which was double the time required for a full-time Master’s programme, I encountered some difficulties that were beyond my control. It was the assistance and support of a number of persons that helped me to finally complete the project. I would like to convey my special thanks to them.

The most important of them is my primary supervisor, Dr. Gina Xu, who gave me her utmost support to complete my study and encouraged and guided me throughout my research.

I also acknowledge my second supervisor, Dr. Humayun Kabir, with deep appreciation because he shared his great knowledge with me and offered a great deal of guidance and advice which enabled me to complete my dissertation. His comments, notes and patience undoubtedly contributed significantly to the development of this study, and I seize this opportunity to express my deepest appreciation.

I also acknowledge the Auckland University of Technology Ethics Committee (AUTEC), which approved my Ethical Application (Number: 18/275) on 23 July 2018. Their approval ensured that I undertook the project within an ethical framework.

I would like to thank my interviewees; they are also my friends. Their participation and views are greatly appreciated. They spent their time to sit with me and complete interviews. Their insightful views enlightened my rich findings.

I would like to express my deep appreciation to my dear husband for his assistance in helping care for our little baby during the period of my study.

I am grateful to my brother and my other friends in Chengdu. Their belief in me and their encouragement have given me the motivation for this work and I would never have finished it without their love and support.
Finally, my very special thanks go to all my family members for their best wishes and support throughout the period of my study.
1 Introduction

The latest issued Chinese Accounting Standards (2007CAS, also regarded as China’s International Financial Reporting Standards [IFRS] by some researchers), which have been effective from 1 January 2007, are claimed to have been substantially converged with the IFRS by the Chinese Ministry of Finance (MOF) (S. Peng & Bewley, 2010). 2007CAS are compulsory for all listed companies. Other companies are encouraged to apply them. Many researchers have challenged the effectiveness of the adoption of the IFRS by emerging economies because the IFRS are derived from an Anglo-Saxon institutional environment that is characterised by a free market with strong investor protection (Houqe, Easton, & van Zijl, 2014; Kouki, 2018; Persakis & Iatridis, 2017). By contrast, the Chinese institutional environment is different; for instance, investor protection is not strong and has not increased in recent years (World Economic Forum, as cited in Houqe et al., 2014; World Economic Forum, 2017). Therefore, transplanting the IFRS to an emerging economy without any change could be challenging (Isidro & Raonic, 2012; Perera, 1989).

Within the Chinese context, the convergence has been in place for a decade, but little research has examined the application of 2007CAS. This research aims to provide some understanding of the practical challenges (if any) in applying CAS. In particular, this study focuses on how asset impairment is undertaken in practice in China through interviewing Chinese accountants. CAS 8 Asset Impairment is the equivalent of the International Accounting Standards (IAS) 36 Impairment of Assets. Thus the study investigates how CAS 8 is applied by Chinese accountants. The impairment process requires a significant level of professional judgement and estimation such as 1) to assess the indicators of impairment, 2) to determine the number of asset groups, and 3) to determine the elements in the process of estimating the recoverable amount of an asset or asset group. In addition, the amount and timing of impairment loss are also a matter of judgement (Kanakriyah, 2013). These judgements and estimates are often shaped by the institutional environments in which the accounting operates (Xiang, 1998). For
example, unlike the free market in Anglo-Saxon countries, the Chinese market is characterised by government control, which creates challenges in determining fair value (FV) (Xiao, Weetman, & Sun, 2004). For example, the exchange of fixed assets is often between related parties and the price does not necessarily reflect FV, which is not the only challenge. Value in use is also difficult to estimate reliably.

Value in use is the present value of the future economic benefits generated by an asset or asset group. An asset group is a term used in CAS 8 which is the equivalent to the term cash generating unit (CGU) used in IAS 36. To estimate the value in use, financial report issuers need to determine what constitutes an asset group, project the future economic benefits generated by the asset group and determine the discount rate to calculate the present value of the future economic benefits. All these estimates and judgements allow significant management discretion, sometimes resulting in management bias (Avallone & Quagli, 2015; Carlin & Finch, 2010; ESMA, 2011). For example, evidence suggests businesses often estimate optimistic future cash flows in order to report a higher value in use of assets (Avallone & Quagli, 2015) and the justification for the projected growing future cash flows is often not disclosed in financial reports (ESMA, 2011). Furthermore, studies find that listed companies in Australia and New Zealand intentionally selected a more optimistic discount rate which would result in a higher value in use and consequently a lower impairment loss (Carlin & Finch, 2010). Moreover, based on Australian companies, studies find that a single discount rate is applied for CGUs within one company. The discount rate should presumably differ among different CGUs of a company, because each unit operates in different sectors or markets; therefore, the risks they bear are different. The discount rate should reflect the risk of the operations of each business unit. These studies highlight two key issues (Avallone & Quagli, 2015; Carlin & Finch, 2010; ESMA, 2011). First, impairment is a difficult area for management. Second, due to the significant discretion required in the process, management judgements tend to be optimistic.
The findings from this study are informed by the theory that accounting quality is jointly determined by accounting standards and the institutional environment of the accounting (Isidro & Raonic, 2012; Lu, Ji, & Aiken, 2009; Soderstrom & Sun, 2007). This study aims to investigate how companies initiate an impairment test and how Chinese accountants determine the recoverable amount of an asset during the testing by analysing four companies’ financial statements and data from interviews with accountants from these four companies. Applying the same accounting standards may produce different accounting outcomes in different institutional environments such as the political and legal system, the development of capital markets and the accounting education level (Isidro & Raonic, 2012). Accounting is not a ‘number-crunching’ discipline but is influenced by the social and economic environment. As discussed, the accounting standards allow a significant level of judgement, which is influenced by economic and market conditions as well as management preference.

China has a very different accounting background from those of Anglo-Saxon countries where IFRS derived from. For example, China had a former Soviet accounting system which emphasised the stewardship of state funds. It was not until 1985 that China started to introduce Anglo-Saxon accounting practices which had been developed over a hundred years based on a capitalist system (Y. Chen, Jubb, & Tran, 1997; Chow, Chau, & Gray, 1995; Xiang, 1998). In 2000, the MOF started to consider moving towards the IAS by issuing the Enterprise Accounting System (2001CAS). Then the internalization became a mainstream reform of Chinese accounting standards.

China’s special institutional environment affects accounting quality in a broad range of ways. Unlike most IFRS adopters in Western areas, China is a code-law country. It used to publish laws along with a series of legal rules, local rules and regulations, guidance and explanations so that tax followers could better comply with the laws. The extant literature finds that firms in code-law countries are more likely to provide financial information of lower quality (Y. Ding, 2000; F. Liu & Xu, 2002; Lu et al., 2009; Lubman,
Besides, the underdevelopment of capital markets in China also affects accounting quality as the reporters have less incentive to publish high-quality financial statements (Ali and Hwang, as cited in Isidro & Raonic, 2012). The last factors affecting accounting quality which will be discussed in this study are the level of education and on-the-job training (Isidro & Raonic, 2012). The accountants may not make the professional judgements required by IFRS (Bond, 1991; S. Liu, 2006). Thus, China provides a special environment for examining the practical challenges in applying the IFRS-converged accounting standards.

This study adopts a qualitative research methodology and aims to provide some insights. Four Chinese accountants were interviewed regarding their experience in asset impairment accounting. The accountants come from two private listed companies and two state-owned non-listed companies. This combination is designed to provide a broad perspective. The interviewees’ responses are analysed along with their companies’ financial statements to demonstrate in what ways their practice varies from the standards.

This study finds that the application of asset impairment does not fully comply with the standards in terms of checking impairment indications, applying asset groups, estimating recoverable amount and presenting disclosure. This study contributes to both the academic and professional arenas. It fills in the blank by providing insights into the implementation and practice of CAS 8. It also highlights the practical challenges faced by Chinese accountants which highlight a need for clearer guidance issued by the standard setters and training provided by the profession. It also reveal the difference between their practices and the requirements of CAS 8 which used to be neglected unintentionally by Chinese accountants.

The structure of this dissertation is as follows. Section 2 reviews past literature. Section 3 describes and justifies the methodology and method employed during the research. Section 4 demonstrates the findings, followed by discussion in section 5. Section 6
concludes the dissertation.
2 Literature Review

2.1 Background to the development of the Chinese Accounting Standards

The Chinese ‘open door’ policy was announced in 1978, which marked the inception of the Chinese economic reforms (J. Chen, 2016). The traditional Soviet model accounting system that was based on a centralised planned economy could no longer accommodate a market-orientated economy (Chow et al., 1995; Davidson, Gelardi, & Li, 1996; Scapens & Hao, 1995). China needed a new set of accounting standards and an accounting system that could facilitate international trade and increase accessibility to capital markets (Baydoun, Nishimura, & Willett, 1997; Ge & Lin, 1993). Within three decades of development, the Ministry of Finance (MOF) of China claimed that the Chinese Accounting Standards (CAS) have substantially converged with the IFRS. The full set of CAS became effective in early 2007, and consist of Basic Standards and 42 specific standards. Each IAS/IFRS except IAS 29 Financial Accounting in Hyperinflationary Economies has an equivalent CAS standard[s]. The 2007CAS are compulsory for listed companies and voluntary for others. They are characterised by the adoption of fair-value accounting and allowing managers to execute a higher level of judgement in preparing financial statements, such as Research and Development, goodwill, revenue recognition and fair value measurement.

However, de jure convergence does not necessarily result in convergence in practice (de facto convergence) as maintained by Peng and Bewley (2010). Factors behind this variance have been explored by academics (Ke, Li, & Yuan, 2016; S. Peng & Bewley, 2010). Ke et al. (2016) suggest that such variance may stem from deficiencies in China’s institutional environment such as weak legal mechanisms. Peng and Bewley (2010) compared the application of fair-value accounting by listed firms in 2007 and 2008 against the standard’s requirement and propose that a deeply rooted conservative culture among Chinese accountants may exert a persistent effect on the choice of accounting policies.
2.2 The relationship between accounting quality and institutional environment

As discussed, the same or similar accounting standards may not ensure the same qualitative financial reports due to the effect of the different institutional environment in which an entity operates (Isidro & Raonic, 2012). The institutional environment in this dissertation refers to the legal and political systems, capital market development, and accounting education and training (Isidro & Raonic, 2012; Soderstrom & Sun, 2007).

The IFRS were issued by the International Accounting Standards Board (IASB), which only has responsibility to report to the International Accounting Standards Committee (IASC) foundation, an independent not-for-profit organisation. IASB’s independence allows the IAS/IFRS to be free of political influences to some extent. The board members of IASB mainly come from common law countries, which leads to the IFRS being principles based. On the contrary, China is a code-law country. As revealed by la Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998), code-law countries have a lower level of legal enforcement. The enforcement of China’s legal system is weak due to the dependent judicial system, within which judges are associated with local government in the aspects of compensation mechanism and political connection (Lubman, 2001). The weak enforcement level causes problems in the implementation of standards/laws (L. Yang et al., 2003). Consequently, investors are less protected in China compared to in common law countries (Y. Ding, 2000; F. Liu & Xu, 2002; Lu et al., 2009). This leads to lower accounting quality in code-law countries (Soderstrom & Sun, 2007).

The development of capital markets also affects accounting quality. The size of share markets in China has developed at a relatively fast pace over the past decades. The number of listed companies has grown 300 times in 26 years from 10 companies in 1990 to 3000 companies in 2016 (National Bureau of Statistics of China, 2016a). The value of the stock market was more than 50 trillion RMB in 2016 (National Bureau of Statistics of China, 2016b). However, its ratio of market capitalisation to Gross Domestic Product (GDP) is only 0.68, which is quite low compared to the average
market capitalisation ratio of 1.39 for the 26 countries which including both developing and developed countries investigated by Isidro and Raonic (2012). On the other hand, China issued a national debt of around three trillion RMB in 2016. In addition, the majority of listed companies are state-owned enterprises (SOEs), and their market value constitutes a significant majority of total market capitalisation (He, Wong, & Young, 2012). Therefore, the minority investors in China’s share market are not significant and their funds are not the main source of listed firms’ capital (Wong, 2006). As a result, the report issuers in China have fewer incentives to publish high-quality financial statements according to the investigations undertaken by Ali and Hwang, as cited in Isidro and Raonic (2012).

The level of education and on-the-job training, one of the results of economic development, affects the quality of financial reporting as well (Isidro & Raonic, 2012). In China, in order to be a qualified accountant, a CPA student has to pass the CPA examination program, which includes six core papers, i.e., accounting, auditing, taxation law, economic law, financial management and cost management, and company strategies and risk management and an integrated paper containing all the above disciplines (Xu & Hooper, 2010). CPA exam is regarded as the most difficult in China (L. Huang, Chen, & Xie, 2013). There are two streams available for affiliates who passed the papers. If he/she works in a commercial entity, they can apply for CICPA members (non-public practice) within five years after passing all of the CPA papers. If he/she works in a firm, they can apply for CICPA members (public practice) once they acquire two-year working experience as an independent auditor after passing the CPA papers. Although the quality of accounting education in China has improved owing to the achievement of economic reform after 1990 (Z. Lin & Deng, 1992; Y. Liu & Chi, 2008; Tang, 1997; Winkle, Huss, & Tang, 1992), qualified accountants are not sufficient for the implementation and practice of the 2007CAS because of the drawbacks in China’s tertiary accounting education system, i.e., only a minor portion of the subjects in Chinese universities and polytechnics are designed to teach accounting-related papers while the number in Western countries is double that (Woodbine, 2007). Although the
entrance of international accounting bodies such as ACCA and CGA has led China’s tertiary education providers to involve more accounting-related papers into their curricula, the students still need to enrol into extra classes in order to pass the CPA papers (X. Li & Wu, 2008). Additionally, other issues within the Chinese accounting education system such as a lack of qualified teachers (Chan & Rotenberg, 1999; T.-c. Wu & Tong, 2004), an ineffective assessment system, and a teacher-centred pedagogy discourage student creativity (Xu & Hooper, 2010), and independent and critical thinking which are important in the practice of principles-based accounting standards (Bond, 1991; S. Liu, 2006). Consequently, unqualified accountants and poor-quality professional education lead to unsound accounting or even corporate scandals (Low, Davey, & Hooper, 2008).

2.3 Impairment accounting under Chinese Accounting Standards

CAS 8 Impairment of assets has requirements very similar to IAS 36 with very few exceptions. The main divergence exists in the determination of fair-value price and the reversibility of impairment loss. CAS 8 does not allow the reversal of impairment loss in prior years (Section 17). The details of this divergence are listed in Appendix 2.

Under CAS 8 (Section 22), entities are required to present their non-current assets (Property, Plant and Equipment (PPE), long-term share investments, goodwill and intangible assets) at no more than their recoverable amount. If there is any indication that the carrying value of an asset is more than its recoverable amount, the impairment test process should be triggered unless the asset is measured at the revaluation model. In addition, goodwill and intangible assets with indefinite lives should be tested at least once per year (Section 4). The indications include but are not limited to the following (Section 5):

1) External economic changes which may lead to a drop in value of assets
2) Increase in discount rate due to higher market interest rate or return on investments
3) Obsolescence or physical damage, idleness, discontinuation or
4) Other internal changes adversely affecting economical performance of an asset or a group of assets or the net assets of an entity

The entities are responsible for detecting any other indications which might adversely affect the recoverable amount of an asset.

Recoverable amount (MOF, 2006b, Section 6) is defined as the higher amount of fair value less costs of disposal and value in use.

CAS 8 lists the order of sequence for how to decide the fair value less cost of disposal of an asset (MOF, 2006b, Section 8):

1) Price in sales agreement under fair tradingless disposal expense which can be directly attributed to the asset.
2) Market price if an active market for the asset is available less cost of disposal.
3) If neither sales agreement nor the active market is available, the fair value less cost of disposal should be estimated based on best information accessible. The estimation could be adjusted according to the latest trading price for similar assets in the same industry.

Sections 9-14 require that the value in use of an asset should be calculated by discounting future cash flows generated by the asset with an appropriate rate by estimating future cash flows, useful life, and discount rate (MOF, 2006b).

When determining the recoverable amount of an individual asset, an entity shall estimate the recoverable amount of the asset group which comprises the asset (MOF, 2006b, Sections 18-22). The critical judgements involve the identification of an asset’s groups and the allocation of corporate assets (or head office assets) and goodwill to an appropriate asset group or several asset groups as required by CAS 8, section 18 (MOF, 2006b).
If the recoverable amount of an asset is less than its book value, the asset should be recorded at its recoverable amount. The difference should be recognised as “impairment loss” which should be recognised in the current profit and loss statement. At the same time, an asset impairment provision is recognised in the balance sheet as a minus of asset account. Accordingly, annual depreciation or amortisation charge shall be calculated based on the asset’s new book value, new residual value (if any) and remaining useful life (MOF, 2006b, Section 22).

CAS 8 does not allow reversal of impairment loss of fixed assets (MOF, 2006b, Section 17). Before the implementation of 2007CAS, the old version of the Chinese Accounting Standards allowed the reversal of impairment loss. To reduce the manipulation of impairment reversal which may undermine the reliability and decision usefulness of financial statements, the MOF prohibited the reversal of impairment loss for PPE in 2007CAS.

The preparers are required to disclose information related to asset impairment such as the amount recognised, the reason for a significant decrease in value, and the methods and assumptions in relation to the estimation of the recoverable amount for the significantly impaired assets (CAS 8, chapter 7).

2.4 Main judgements during impairment testing
The primary management discretions exerted during impairment testing include CGU identification, allocation of goodwill and corporate assets, risk adjustment in cash flow projections, discount rate, valuation model and growth rate in the terminal period (ESMA, 2011, 2013; in a survey of 58 questionnaires conducted by Petersen & Plenborg, 2010). Furthermore, assumptions behind the budgets and forecasts are regarded as more important by ESMA (2011).

ESMA (2013, p. 11) states: “ESMA found that most issuers do provide appropriate information”. However, the researchers investigating CGU issues in other countries do not agree. Petersen and Plenborg (2010) reveal that in firms in Denmark over 95% of
investigated firms define CGU properly and apply it in the impairment test process. As far as I noticed, only one paper researched the experimental evidence related to the identification of asset groups in China (Hua Li, 2009). He analysed the recognised impairment loss of 91 listed companies between 2005 and 2007 and finds that the amount of impairment loss decreased year by year partly because the identification of asset groups was too difficult for Chinese accountants due to the lack of detailed guidance and explanations. Some other journal articles provide guidance about how to use the asset group in the impairment test process (Han Li & Zhu, 2007; W. Li & Lin, 2007; Tian & Shi, 2008).

Many analyses focus on discount rates. Both Husmann and Schmidt (2008) and Schauten, Stegink, and de Graaff (2010) prefer the weighted average cost of capital (WACC) in calculating impairment loss although the standard allows multiple methods. This could be another reason for the exercise of managers’ discretion: unclear or inappropriate guidance from standard setters, e.g., the IASB. However, Carlin and Finch (2010) applied the Capital Asset Pricing Model (CAPM) to calculate discount rates for their experiment.

Another factor regarding discount rates is that some report issuers use a single average discount rate for all CGUs instead of a specific discount rate for each CGU (ESMA, 2013). Carlin and Finch (2010) extended this finding by analysing 105 Australian firms’ financial reports in 2006 and reveal that over half of the inspected sample apply discount rates which are significantly lower than the estimation.

As far as I noticed, only one paper investigates the listed companies and audit firms in Beijing City to explore the problems of discount rate selection related to goodwill impairment testing (SPTBSBCSRC, 2017). The problems detected include the inappropriate use of the after-tax rate, mistakenly adjusting after-tax rate to pre-tax rate and adopting the discount rate of other companies in the same industry.
The manipulation of growth rate was investigated by Avallone and Quagli (2015) against a sample of listed companies from Germany, Italy and the UK. These companies reported a large amount of long-term assets and goodwill during the period of 2007 to 2011. The result supports the evidence of ESMA (2011, 2013) and Petersen and Plenborg (2010) that the growth rates applied by the reporting entities are rather aggressive given the current economic environment. As a result, the impairment loss measurement is distorted and underreported.

2.5 Manipulation of asset impairment

The regulation of asset impairment is criticised for providing managers with opportunities to exercise discretion in financial statement preparation (Alves, 2013; Feng & Guo, 2008; Mazzi, Liberatore, & Tsalavoutas, 2016). Many listed companies make use of this regulation to manipulate their reported earnings. For example, when a company incurs a loss in one year, it tends to record a large amount of impairment loss. Then in the next year, it reverses the impairment loss to turn deficit to profit (Feng & Guo, 2008). The strong motives for such actions derive from the regulation of the China Securities Regulatory Commission (CSRC, 2001): when a company reports a loss in three consecutive years, the Security Exchange should suspend the transactions of the company’s stock within 10 days of the publication of annual statements. Consequently, they might take advantage and manipulate earnings through postponing the recognition of impairment loss (Filip, Jeanjean, & Paugam, 2015), goodwill write-off (Alves, 2013), recording impairment loss in years with a high profit and reversing it in future year(s) (Feng & Guo, 2008). The ‘earnings-management-tool’ role of impairment reversal has been researched by hundreds of Chinese articles as it was employed by many public companies to manipulate the reported earnings (J. Wang, 2007; Zhao, 2006; Zhu, 2014). The examination of all listed companies’ asset impairment loss during 2002-2004 undertaken by Zhao (2006) testifies that companies are inclined to utilise the timing of making provision or reversing impairment loss to
smooth reported earnings. A mass of similar journals provide sufficient evidence of the manipulation of the reversal of impairment loss and support the prohibition of reversal in the 2007CAS (Tan, 2008; J. Wang, 2007; Zhao, 2006). J. Wang (2007) proposes that corporate structure and earnings management motives (such as earnings smoothing or ‘big bath\(^1\)’) are two important factors affecting the decision to reverse impairment loss. The defectiveness of the corporate structures of some listed entities, such as a non-independent audit committee and a combined director board and executive management team, lead to frequent abnormal utilisation of reversing the long-term asset impairment loss to gloss over operating results.

This could be bolstered by later inspections undertaken by Y Chen, Zhang, and Yang (2013). They have looked at the association between asset impairment loss and earnings management, and have found that long-term assets’ impairment loss is not used by management as a tool for earnings manipulation during the new CAS age. Y Chen et al. (2013) analyse impairment loss for long-term assets, inventory and account receivables disclosed by 50 companies listed on the Shanghai Stock Exchange in the years 2009 and 2010 and find that impairment loss of current assets, such as write-down of inventory to net realisable value (NRV), and provision for accounts receivable, instead of impairment loss of long-term assets, is associated with the entity’s earnings management. A possible reason might be the prohibition of the reversal of impairment loss for long-lived assets (S. Chen, Wang, & Zhao, 2009; MOF, 2006b; Zhang, Lu, & Ye, 2010). Consistently, H. Wu, Xu, and Gu (2017) and Zhu (2014) conclude that the converged standard has some positive effect on suppressing earnings management.

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\(^1\) A company strategy to accrue more expense in current period to clear the financial statements to reserve more space for future earnings management.
However, some researchers declare that the prohibition of impairment loss reversal is not necessarily positively correlated to a decrease in earnings management. The comparison of companies’ earnings management levels under 2007CAS and the older version by Y. Wang and Campbell (2012) revealed that the application of the converged accounting standards could not be evidenced to discourage or encourage earnings management in China. Similarly, F. Ding (2008) analysed the impairment loss recognition from 2001 to 2006 of Chinese public companies and asserted that the evidence for the theory of ‘impairment loss as an earnings management tool’ is insufficient at the listed companies level.

2.6 Gaps in the extant literature
The extant literature is useful for providing a context for the challenges in obtaining FV and value in use. However, these studies are mainly based on archival data which provide a very limited understanding of the actual applications of impairment. As far as I noticed, no in-depth analysis regarding the implementation of asset impairment has been presented. For example, what factors or circumstances do managers consider to estimate value in use? Why do they choose a certain growth rate instead of another number? Moreover, the current research scope mainly focus on goodwill impairment, while PPE attracted little research attention. Due to China has a vast manufacturing industry, the reporting entities report a high level of tangible assets (Riedl, 2009). For example, the average fixed asset/total asset is around three times the average intangible asset/total asset for listing companies in Hunan province (Y. Yang & Yi, 2012). Therefore, investigation into tangible long-term assets impairment can extend the existing academic literature. Therefore, to extend the extant literature, this study aims to examine the insight of the application of asset impairment through interviews with Chinese accountants and managers.
3 Research methodology and method

This study uses semi-structured interviews to collect primary data concerning the practice of Chinese accountants regarding the impairment of assets. The research questions determine which method is appropriate for a study.

As mentioned in section 1, this study aims to investigate how asset impairment accounting is applied in China. More specifically, the research questions are as follows:

1. How does a Chinese accountant determine an asset should be impaired?
2. How do the Chinese accountants determine the recoverable amount of an asset during impairment testing?
3. What do Chinese accountants disclose impaired assets in the financial statements?

The research questions aims to understand how Chinese accountants account for asset impairment and why they adopt such accounting practices, which is one of the strengths of qualitative research (Keegan, 2009). Qualitative research is used by researchers to gain an in-depth understanding of the relationship between practice and theory (why and how) by providing descriptive data that should be interpreted within a certain environment (Taylor, Bogdan, & DeVault, 2016). Therefore, this study falls within the qualitative framework.

To gain insights, semi-structured interviews with accountants and finance managers of four Chinese companies were conducted to collect the details of the impairment process for long-term assets, as interviews are the most flexible method to obtain the greatest depth of information (Bai, 2007).

The research builds a framework starting with a couple of research related to the relationship between institutional environment and accounting application, including legal and political system (la Porta et al., 1998) and capital market development (Ali &
Hwang, 2000). However, during the discussion phase, the student failed to explain why Chinese accountants practice differently from their financial statements showing. In order to interpret the findings from the data collected, an abductive process (Lynda C. Taylor, 2018) was applied to refine and reassess the framework. During this process, the accounting education investigated by Isidro and Raonic (2012) was added into the initial theoretical framework. However, it is worthy to realise that an open attitude to the ongoing theorising throughout the whole process provided the student a possibility to consider other causes of the findings.

Given the scope of a dissertation, this study selected four Chinese companies, two SOEs (S1 and S2) and two private listed companies (P1 and P2), as cases to examine how accounting standards on asset impairment are applied by Chinese accountants. The two SOEs’ parent companies are listed on the Shanghai Security Exchange (SSE) and the Hong Kong Exchanges and Clearing Limited (HKEX) separately. The two private companies are listed on the Shenzhen Stock Exchange (SZSE) and the National Equities Exchange and Quotations (NEEQ) respectively. As their parent companies are public, they are required to adopt the 2007CAS since 1\(^{st}\) January 2007. They are in different industries (construction, agricultural machine, food, and power generation). P1 mainly manufactures and provides construction materials such as plaster, and cement to its clients locating in South-West of China. P2 is a trade company, which provide agricultural machines, machinery, equipment, and other products related to agricultural industry. S1 is focusing on manufacturing, sales and distribution of beer products. It acquires local brands of many provinces and cities and replaces those markets with its own brand. S2 produces hydro-power generations and provides powers to the State Grid company. As the water source is under control of government, the operation of S2 is significantly up to bureaucratic policies. Besides, these four companies differ from each other in term of asset size (Table 1). Their profitability vary from minus to 50%. This purposeful sampling is likely to provide a broad perspective. I obtained public financial statements from 2010 to June 2018 of the companies or their parent companies to review
the disclosure of assets impairment qualitatively.

Table 1 Extracted Financial Reports (Year 2017) – Amount of asset and profit

<table>
<thead>
<tr>
<th>Companies</th>
<th>Total Assets (RMB)</th>
<th>Revenue (RMB)</th>
<th>Net Profit (RMB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>1 billion</td>
<td>647 million</td>
<td>92 million</td>
</tr>
<tr>
<td>P2</td>
<td>2 billion</td>
<td>3 billion</td>
<td>Minus 33 million</td>
</tr>
<tr>
<td>S1*</td>
<td>40 billion</td>
<td>30 billion</td>
<td>1 billion</td>
</tr>
<tr>
<td>S2</td>
<td>140 billion</td>
<td>16 billion</td>
<td>7 billion</td>
</tr>
</tbody>
</table>

* As S1 is not a listed company and its financial statements are not publicly available, I have used the consolidated statements published by its parent company.

China has two main Security Exchange Markets. One is in Shanghai, named the SSE, and the other is in Shenzhen, named the SZSE. Additionally, the NEEQ is an over-the-counter market approved by State Council of the People’s Republic of China, in which small- and medium-sized companies are able to acquire external finance and their equities can be exchanged in this market.

The financial reports for the years after 2010 of the two private listed companies were collected from the web pages of the SZSE and the NEEQ. S2’s report is available from the web page of the China Foreign Exchange Trade System, which is a national interbank funding centre. I collected the financial report for the years 2010-2018 of S1’s parent company from the HKEX as S1’s financial reports were consolidated into its parent’s account. They do not release their own financial reports to the public.

The interview started with an open question requiring the interviewees to describe a story of their past experience of the asset impairment test. Then around 20 questions
followed to elicit the assumptions and factors related to the impairment test process and
the measurement and recognition of impairment loss. The interview questions were
designed following the ideas of Petersen and Plenborg (2010) to cover the entire
impairment process. The interview questions were finalised based on a careful review
of CAS 8 and other related articles (Kanakriyah, 2013; MOF, 2006b). The key interview
questions included: How did they carry out the impairment test process? How were
CGUs or asset groups identified? How many CGUs were used for impairment tests?
How was the recoverable amount determined? How did they estimate the fair value of
the assets? How often was the impairment test carried out? How did they estimate the
recoverable amount of goodwill? How did they make the assumptions related to the
estimation of an asset/CGU’s value in use? (The interview questions are in Appendix 7.)

Ethical approval was granted by AUTEC on 23 July 2018 because the research involved
human subjects (as mentioned in the Acknowledgement). After then, I approached five
people at the initial stage based on their position in their companies and the nature of
their companies to cover both private and SOEs, both listed and unlisted. The potential
participants were identified from my personal social network as this could enhance the
availability of future interview. They were either Chief Financial Officers (CFOs) or
Financial Manager (FM). They were selected because they were responsible for testing
asset for impairment when they worked/work for these companies. They are also well
educated, experienced, and professional in accounting area. They are members of the
Chinese Institute of Certified Public Accountants (CICPA). However, none of them has
acquired membership of any international professional bodies. For privacy of
information, their names are pseudonyms in this research. I named them Jack, David,
Robert, and Michael. I named Jack’s employer as P1, David’s as P2, Robert’s as S1 and
Michael’s as S2. Table 2 summarises the basic information about the companies and
interviewees. I contacted them via WeChat\(^2\) or phone to explain what this project is about, collect basic information about their employers, and issue my invitation. They all agreed to participate at the invitation stage; however, after I had started the interview process, two of them were too busy to schedule interviewing time. Therefore, I had to approach another accountant, who agreed to participate. However, as this interviewee (Robert) is in another city, the interview was undertaken via a phone call. Three interviews were conducted in person. All interviews were recorded and transcribed by a professional. I checked the transcripts for accuracy. The transcripts were analysed in Chinese. The quoted sentences were translated into English literally by the student. As demonstrated by Table 3 Basic information about interviews the interviews were conducted during 31 July 2018 – 2 September 2018. The interviews last from 30 minutes to 70 minutes. The average interview time was around 43 minutes.

### Table 2 Basic information about the companies and interviewees

<table>
<thead>
<tr>
<th>Cases</th>
<th>Industry</th>
<th>Listed or Unlisted</th>
<th>Nature (i.e. state-owned or private)</th>
<th>Label of the interviewee</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Construction Manufacture</td>
<td>Listed in NEEQ</td>
<td>Private</td>
<td>Jack</td>
</tr>
<tr>
<td>P2</td>
<td>Agricultural Machine Manufacture</td>
<td>Listed in SZSE</td>
<td>Private</td>
<td>David</td>
</tr>
<tr>
<td>S1</td>
<td>Food industry</td>
<td>Unlisted</td>
<td>State owned</td>
<td>Robert</td>
</tr>
<tr>
<td>S2</td>
<td>Power industry</td>
<td>Unlisted</td>
<td>State owned</td>
<td>Michael</td>
</tr>
</tbody>
</table>

\(^2\) WeChat looks similar to WhatsApp, LINE or Viber. It also combines some functions of Skype such as video call and audio call.
Table 3 Basic information about interviews

<table>
<thead>
<tr>
<th>Cases</th>
<th>Position</th>
<th>Age</th>
<th>Years worked in sampled company</th>
<th>Duration of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>CFO &amp; Vice General Manager</td>
<td>40</td>
<td>7</td>
<td>68 minutes</td>
</tr>
<tr>
<td>P2</td>
<td>CFO</td>
<td>37</td>
<td>10</td>
<td>44 minutes</td>
</tr>
<tr>
<td>S1</td>
<td>FM</td>
<td>36</td>
<td>14</td>
<td>30 minutes</td>
</tr>
<tr>
<td>S2</td>
<td>Associate FM</td>
<td>36</td>
<td>11</td>
<td>30 minutes</td>
</tr>
</tbody>
</table>

The interview data were analysed in Excel. The major technique applied was thematic analysis and content analysis. The analysis process started after all the interviews were completed. First, I read the transcripts several times to classify the data and group similar ideas/themes in an Excel table based on the interview questions (Hycner, 1985; Miles, Huberman, & Saldaña, 2014). This helped me to connect the responses to the interview questions. Secondly, I excluded the irrelevant themes identified in the first step to highlight those themes related to the research questions. As some interviewees are rather talkative, their responses may wander from one question to another, or they avoid answering the questions directly, therefore, a lot of the information provided by them can only be understood within a certain context. At the end of this step, Appendix 1 was prepared to display utilisable themes for this study. Thirdly, I interpreted the themes and demonstrated findings to answer the research questions. The interviewees’ answers were also compared with the financial reports and accounting standards to examine whether or not there are any gaps between what companies do in practice and what they report in annual reports.
4 Findings

The data were analysed based on key judgements needed to be applied in the impairment process and the research questions.

4.1 Description of the context

As discussed in section 3 and demonstrated in Table 2, the investigated companies include two private listed companies and two SOEs. They are in four different industries.

P1 is a private company, listed on the NEEQ. It was in the process of launching ‘initial public offering’ (IPO) on the SZSE at the time of the interview. P2 is a SZSE-listed private company. S1 and S2 are both subsidiaries of listed SOEs, respectively. S1 operates in a highly competitive industry while S2 in an industry controlled by the government. In addition, S1’s parent company is listed on the HKEX. S2’s parent company is listed on the SSE.

Jack is the CFO and Vice General Manager of company P1. He has worked in P1 for over seven years, and has insight into the company’s operations. David was CFO of P2. He was also vice CFO of P2’s parent company (holding company, not listed) and a director of many subsidiaries of P2. He left the group two years ago. P2 is one of the top companies in the agricultural machinery manufacturing industry. It has dozens of subsidiaries and long-term equity investments. Robert has worked for S1 for over ten years as the FM. As S1 is one of the wholly owned subsidiaries of its listed parent company, Robert’s experience is limited to the operations at the subsidiary level. All of the subsidiaries in the group focus purely on manufacturing, therefore, the assets in the subsidiaries mainly consist of manufacturing equipment and purchased trademark without goodwill as all investment activities are at the parent company level. Michael is the associate finance manager of S2, which mainly focuses on building hydropower generation sites and providing hydropower to the State Grid Company. S2 does not have goodwill. Although S2 is a subsidiary of its parent company; it operates independently. The decision related to asset impairment is within S2’s full authority.
CAS 8 requires reporting entities to test whether a long-term asset with finite life is impaired if there are indicators at the year-end and to test an intangible asset with indefinite life at the year-end regardless of impairment indicators. The responses from interviewees generally agree with this requirement in the standards. Table 4 shows the types of assets which are subject to the impairment process in investigated companies and their recognised impairment.

**Table 4 Assets subject to the impairment process**

<table>
<thead>
<tr>
<th>Asset categories</th>
<th>Amount of impairment loss '000 RMB (2017)</th>
<th>Amount of Accumulated impairment loss '000 RMB (2017)</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 Equipment, intangibles</td>
<td>0</td>
<td>6,300</td>
</tr>
<tr>
<td>P2 Equipment, goodwill, intangibles, long-term equity investment</td>
<td>76</td>
<td>3,799*</td>
</tr>
<tr>
<td>S1 Equipment, trademarks</td>
<td>291,000**</td>
<td>415,000**</td>
</tr>
<tr>
<td>S2 Equipment, intangibles</td>
<td>-4</td>
<td>350</td>
</tr>
</tbody>
</table>

* P2 is the only company with impaired goodwill. Other companies do not have goodwill on their balance sheets.
** As S1 is not a listed company and its financial statements are not publicly available, I have used the consolidated statements published by its parent company.

As demonstrated by Table 4, the assets subject to impairment test mainly comprise tangibles and intangibles other than goodwill. According to their financial statements (extracted statements are included in Appendix 3 to Appendix 6), P1, S1’s parent company and S2 have a recognised impairment loss for PPE of 6.3 million RMB, 415 million RMB and 0.35 million RMB until the end of 2017, respectively. The recognised impairment loss of goodwill of 76 thousand RMB (accumulated to 3.8 million RMB) was presented in P2’s 2017 financial reports.
The variances in the responses mainly result from the different nature of the selected companies. P1 is a large concrete manufacturer, which has multiple subsidiaries operating at different sites in China. The company is listed on the NEEQ, which mainly accommodates companies in their initial development phase. They have not acquired other businesses. Therefore, no goodwill needs to be impaired despite the statement in the accounting policy in the financial statements that goodwill is subject to be tested for impairment. P2 is the largest manufacturer of and dealer in agricultural machinery in China. The company has been listed on the SZSE for many years and has acquired different businesses. The amount of goodwill and PPE on P2’s 2017 report is 100 million RMB and 153 million RMB, respectively. Therefore, goodwill constituted the biggest part of assets in the impairment process, as many of the PPE were not subject to impairment test due to no indicators of impairment. S1 is a beverage manufacturer that is a wholly owned subsidiary of its parent company, which is listed on the HKEX. S1 does not own other companies. Similarly, S2 is a majority-owned subsidiary by an SOE, which is listed on the SSE. S2 does not have any subsidiaries. Impairment of goodwill or long-term investment is not applicable to either S1 or S2 as their parent companies control all investment activities. Consequently, the amount of goodwill and long-term equity investment presented in their financial reports was nil.

4.2 Question 1: How does a Chinese accountant determine an asset should be impaired?

4.2.1 The parties involved in the impairment process
The responses from the interviewed accountants suggest that the decision-making process is similar between private companies and SOEs as demonstrated in Table 5.
Table 5 Parties involved in the impairment process

<table>
<thead>
<tr>
<th></th>
<th>Initiator(s) of the process</th>
<th>Parties involved in the decision-making process</th>
<th>Parties granting approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>Finance department</td>
<td>Equipment management department, finance department</td>
<td>Board of Directors</td>
</tr>
<tr>
<td>P2</td>
<td>Asset management department</td>
<td>Asset management department, finance department, administrative department, internal audit department</td>
<td>General Manager (annual impairment loss less than 10 million RMB) Chairman of Director board (annual impairment loss more than 10 million RMB)</td>
</tr>
<tr>
<td>S1</td>
<td>Equipment department</td>
<td>Finance department, plant manager, regional company</td>
<td>Parent company</td>
</tr>
<tr>
<td>S2</td>
<td>Asset management department and finance department</td>
<td>Asset management department, finance department, and law and audit department</td>
<td>General Manager of S2 for amounts under 10 million RMB and Board of Directors for amounts over 10 million RMB.</td>
</tr>
</tbody>
</table>

As demonstrated in Table 5, operations departments (asset management department or equipment management department) in P2, S1 and S2 are involved in the initiation of the impairment-testing process. The interviewees from these three companies explained that an asset management department is an internal department which is responsible for managing plants and equipment. In particular, it is responsible for repairs and maintenance, requests for replacement and regular checks on the condition of assets. Due to their responsibilities, staff members of the department are in a position to identify impairment indicators at entity level such as obsolescence, idleness, or plans to replace the asset. The asset management department investigates the possibility of asset impairment at the year-end during physical counting and initiates the application for impairment process if necessary.

However, P1 is different from the other three. Its equipment management department
does not pay enough attention to looking out for signs of impairment. The finance department has to discover which assets need to be impaired, as reported by Jack:

其实严格来讲，我们希望业务部门的他这方面意识相对来讲，我觉得，中国的企业，还不够那么重视。很多时候实际上不是业务发现的，而是我们财务发现的。

We hope the operations department will be able to do this (initiating the impairment process). However, I don’t think Chinese companies take this [impairment] seriously enough. In most cases, it is us, the finance department who find that an asset ought to be impaired (Jack).

Besides, with the exception of S1, three of the selected companies involve both the operations department (e.g., the asset management department and equipment management department) and the finance department in the impairment process. Other departments such as the administrative department, internal audit department or law and internal audit department are also involved in S2 and P2. Normally, the finance department provides the book value of the investigated assets. The operational departments decide the recoverable value as they are knowledgeable about the assets and “the value they estimate is more or less the same as the final disposal amount” (Jack).

The approval process varies according to the hierarchical position of the company in its group. Other than S1, all other companies are independent legal entities; the Board of Directors or the General Manager has the authority to approve the amount of the impairment loss. In P1, the Board of Directors approve the impairment loss. In P2, the General Manager can approve an impairment loss of less than 10 million RMB accumulated in a financial year. When the annual accumulated impairment loss is more than 10 million RMB, it requires the approval of the Chairman of the Board of Directors. This is similar in S2. However, S1 itself does not have full authority to approve the recognition of impairment loss which could only be approved by an authorised person from S1’s parent company. The recognition of impairment loss has to be approved by
the parent company.

审批发起是设备部，审批过程中有工厂要审批，包括财务在内的，然后提交到区域公司，然后提交到集团，只有集团都签署完毕，才能计提减值准备。

*The approval process is initiated by the equipment department; the manufacturing plant (manager) and finance department (of the plant) need to express their opinions. If they approve, the process flows to the regional company and then the group company. The impairment loss cannot be recognised until it is approved by the group company (Robert).*

### 4.2.2 What are the indicators of asset impairment?

The results for this question are inconsistent with the accounting policies disclosed in the financial statements of the companies. As described in Table 6, three companies (P1, P2 and S2) have similar impairment accounting policies as disclosed in their financial statements. The accounting policies on PPE impairment are literally the same as the requirements of CAS 8 (for further detail, see section 2.3). It appears that the companies comply with the standards to a great extent. However, the responses from the interviewees suggest otherwise.

#### Table 6 Indicators of asset impairment

<table>
<thead>
<tr>
<th>Accounting policy concerning impairment as stated in financial statements</th>
<th>Indicators used as per interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>P1</strong> In addition to accounting policies similar to P2’s, it also lists accounting estimated (detail in the notes below this table*).</td>
<td>Government Plan</td>
</tr>
<tr>
<td><strong>P2</strong> P2 checks PPEs at the balance sheet date and undertakes impairment testing if impairment indicators exist. After the test, if the carrying amount of the asset is more than its recoverable amount, the group recognises the balance as an impairment loss which cannot be reversed in subsequent years.</td>
<td>1) The carrying amount of an asset is apparently less than its market value. 2) Regular impairment tests at half-year and year-end</td>
</tr>
<tr>
<td><strong>S1</strong> No financial statements available</td>
<td>Asset is no longer used.</td>
</tr>
<tr>
<td><strong>S2</strong> Similar to P2</td>
<td>Asset is no longer used.</td>
</tr>
</tbody>
</table>
Accounting estimates of P1*:

The group undertakes impairment tests for PPE such as buildings and equipment if there is an indication to show they were impaired. The recoverable amount for PPE is the higher of its fair value less costs of disposal and discounted present value of its estimated future cash flow. The calculation requires an accounting estimation.

If management adjusts the gross profit ratio in the forecasting of future cash flow for an asset or asset group (after the year of recognition of the impairment loss), and the adjusted gross profit ratio is less than that in the estimation, the group increases the impairment loss for the asset.

If management adjusts the discount rate in discounting future cash flow for an asset or asset group (after the year of recognition of the impairment loss), and the adjusted discount rate is more than that in the estimation, the group increases the impairment loss for the asset.

If the gross profit ratio in the later years is more than that in the estimation or the discount rate is less than that in the estimation, the group cannot reverse the impairment loss recognised in previous years.

As demonstrated in Table 6, the indicator of asset impairment in S1 and S2 is “an asset is no longer used”. This is an indication stated in CAS 8 that an asset becomes idle or discontinued.

Robert (S1) mentioned that “no longer used” is the only indicator for impairing assets.

We only recognise an impairment loss when the equipment is no longer used. While it is possible that the market value of the asset may have decreased, it is however still valuable for our production line, therefore we do not provide an impairment loss [when the asset is still used for production] (Robert).

Similarly, Michael mentioned that the company impairs its assets when the assets cannot
be used anymore:

一般是结果导向，即在年末进行盘点时，资产使用人提出说该资产不可以用了，才启动资产减值程序，即先做资产减值，然后买新的资产。

The asset impairment process is normally driven by outcome. When we count assets at the year-end, if the user of an asset says that the asset is not usable anymore, we (the finance department) will ask them to initiate the asset impairment process. We recognise the asset impairment loss and then a new asset can be purchased [to replace it] (Michael).

I probed why the accountant bothered to go through an impairment-test process: why not directly dispose of the asset? Michael explained that the disposal of an asset is a non-recurring expenditure which requires extra disclosure:

直接报废，损失计入营业外支出，营业外支出涉及管理责任和披露都麻烦

If the asset were disposed of directly, the loss would have to be recorded in “non-business expenditure” (non-recurring expenditure), then the related explanation is management’s responsibility and disclosure is troublesome (Michael).

According to MOF (2006b, Section 15), the impairment loss should be recorded in account “asset impairment loss - assets devaluation”, which belongs to operating expenses, whereas the loss on asset disposal should be recognised as a “non-business expenditure” (MOF, 2006a, Section 23), which requires an explanation from executives to explain why there is “non-business expenditure” and to defend themselves against a potential charge that they have made incorrect decisions in operating. As this could be treated as underperformance of senior executives, they are not willing to present “non-business expenditure” in their financial reports.

P1 has a slightly different context because its sites operate on separate areas of land rented from local government. P1 operates multiple production sites in different cities; they often have to close off their sites because the local government(s) want to use their
sites for other developments. In that case, P1 would impair the site because of discontinued operation. The fixtures they build on the sites have to be fully impaired. However, the equipment is normally movable and valuable as there are potential buyers in the market. Thus, this equipment is not impaired. Even if an equipment become idle or obsolescent, P1 continues to depreciate it instead of recognising impairment loss.

一般来讲，像我们提减值的设备有些就是涉及到后面要处置了。一般来讲就是折旧设置都比较合理的，所以一般来讲就是你老化(过时)，我们也正常提折旧。提得差不多了，(就直接报废)。

Normally, the depreciable years were set at a rather reasonable level, so even if it was obsolescent, we just depreciated it as normal, when its accumulated depreciation almost equalled its cost, we wrote it off directly (Jack).

P2’s indicator is the obsolescence of an asset indicated when its value is obviously lower than the market value. David expressed that P2 normally undertakes impairment testing when “…the value [of a fixed asset] is obviously below its market value…” The “obvious decrease in value” is determined by the asset management department and is the only indicator used by this company. The interviewee expressed confidence in the reliability of the estimation:

They (the asset management department) are responsible for plants and equipment; therefore, they are very knowledgeable about the market value of a particular piece of equipment. For example, if [the company] plans to purchase a product line, both the asset management department and purchase department should be involved. They both do market research to understand how much the equipment is worth and what the market condition is. They must understand the value of an asset very well. Otherwise, they could not know whether the equipment is impaired (David).
Furthermore, David also mentioned that P2 undertook impairment testing for all its assets twice per year, at half-year and year-end regardless of whether there was an impairment indicator or not. The impairment tests he mentioned refer to the market-value check by the asset management department.

4.2.3 The identification of an asset group in the impairment testing process

The interview data, suggests that impairment is normally based on individual assets rather than an asset group. Although CAS 8 stipulates “If it is hard to estimate the recoverable amount of an individual asset, then the recoverable amount of an asset group, to which the individual asset belongs, will be estimated”, which is reflected in the accounting policy section of an entity’s report. For example, in S2’s financial statement, it states:

本公司以单项固定资产为基础估计其可收回金额。本公司难以对单项固定资产的可收回金额进行估计的，以该固定资产所属的资产组为基础确定资产组的可收回金额。

The company estimated the recoverable amount for individual assets. If it is hard to estimate the recoverable amount of an individual asset, then the recoverable amount of an asset group, to which the individual asset belongs, will be estimated (S2 report).

Robert (S1) and Michael (S2) responded that all assets were tested for impairment based on the individual asset only rather than the asset group. Neither of them has considered a production line as an asset group. It is reasonable for them to recognise impairment loss for an individual asset as they can estimate the recoverable amount of each individual asset, therefore, they do not need to estimate the recoverable amount of an asset group. It is not clear from interviewees’ responses whether the impaired assets should be tested as a part of an asset group.

However, the practice of asset group identification described by Robert is not consistent with the financial policies disclosed by S1’s parent company. The consolidated report
of S1’s parent company, which complies with accounting principles generally accepted in Hong Kong, provided appropriate information about goodwill allocation and the level of CGU:

*The carrying amount of goodwill was allocated to the cash generating units (‘‘CGU’’), each of which represents an operating entity within the operating segments identified by the Group for the purpose of segment reporting (S1’s parent company report, 2017).*

Jack (P1) classified the assets used in a concrete manufacturing site as an asset group. The assets include fixtures (buildings and properties), machinery equipment and office equipment. However, the notes in P2’s statements failed to clearly express how an asset group is classified. The only boilerplate sentences related to asset groups include:

| 本公司年末对商誉进行了减值测试，按照被投资公司预计未来现金流量折现计算可收回金额，对预计未来现金流量小于包含商誉的资产组组合的差额计提减值准备。 |
| *The company undertook impairment testing for goodwill at the yearend. We calculate recoverable amount by discounting invested companies’ forecast future cash flow. We recognise impairment loss for the asset groups, to which goodwill belongs, if their estimated future cash flow is less than [book value] (P2 report).* |

Similarly, David (P2) regarded a subsidiary as an asset group for the impairment process for goodwill, which will be presented in section 4.2.4.

Additionally, neither P1 nor P2 provides segment reporting based on asset groups for external stakeholders which breaches the regulation in CAS 8, section 23 (MOF, 2006):

*The sizes of asset groups….should not exceed those of segments determined according to CAS 35 segment reporting.*

The boilerplate disclosure in the financial reports prevents readers of the report from finding out information about the impairment loss of an asset group, such as how much the carrying amount of an asset group is, how an entity decides the recoverable amount
of an asset group and how much the estimated recoverable amount of the asset group is.
4.2.4 Impairment testing for Goodwill

Among the four accountants I interviewed, only David’s company reports goodwill and impairment for goodwill, so the findings are based on his responses.

When David (P2) was asked how the recoverable amount of goodwill is estimated, he responded that the value of goodwill at testing point was calculated based on the company’s budget, which was usually forecast for the next one or two years. The future cash flow after the budgeted years (the subsequent one or two years) is estimated by applying the growth rate to figure out its perpetuity. Then the forecasted cash flow is discounted to present value.

P2 has quite a mature system to ensure the budget reflects the future market.

We have a specialised strategy department and a budget committee. They organize a budget review meeting and review the budgetary data submitted by all subsidiaries at the beginning of each year (David).

Although P1 had not reported any impairment loss for goodwill at the time of the interview, Jack (P1) has some insightful understanding regarding the matter as they have discussed it thoroughly.

Private companies do not pay much attention to budget management... This could be because of employee inexperience ... The variance between actual and budget can be large because unexpected circumstances often arise. Therefore, the medium- and long-term budgets are not prepared, though senior management may have a rough idea of future performance. Having said this,
our annual budget is quite precise (Jack).

4.3 Question 2: How do the Chinese accountants determine the recoverable amount of an asset during impairment testing?

4.3.1 Net realisable amount

Table 7 suggests that net realisable value is the main consideration in estimating the recoverable amount of an asset. Both Jack (P1) and David (P2) mentioned that the recoverable amount of PPE was decided based on the “net realisable value”, which was normally provided by staff from the asset management department who may have expertise in the valuation of machinery equipment.

Table 7 Responses regarding recoverable amount and Fair value

<table>
<thead>
<tr>
<th>Recoverable amount</th>
<th>Fair value</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 Fair value (net realisable value)</td>
<td>Price on second-hand market</td>
</tr>
<tr>
<td>P2 Fair value (net realizable value)</td>
<td>Price on second-hand market</td>
</tr>
<tr>
<td>S1 Nil</td>
<td>N/A</td>
</tr>
<tr>
<td>S2 Scrap value</td>
<td>N/A</td>
</tr>
</tbody>
</table>

It is possible that some used machineries are still usable when the company decides that a site will be shut down. However, as new item of machinery with better productivity and power efficiency were available when building a new site, P1 often purchased brand new equipment. Then they are unlikely to estimate the value in use of the old equipment.

The asset management department might value the asset based on their experience or by making inquiries among several prospective buyers in the market. When the auditors reviewed their valuation, an inquiry is often used as well. Jack explained that:

中国人一般都不愿意用收益法, 他觉得这个东西有很多不确定性, 会计师一般都不支持收益法, 他一般都会按照报表日的变现价值。他就觉得中国的公允市场有很多不确定, 如果你采取公允价值, 他就要去对其做一个确定, 他就不愿意。另外一个他觉得可能企业在这个事情上可操作空间也比较大

Chinese accountants are normally reluctant to apply value in use. They think this involves too much uncertainty. The auditors normally don’t like value in
use either. They usually use realisable value at balance sheet date. They are concerned that there is too much uncertainty in the active market. If the company adopts fair value, they have to confirm the measurement and value. They don’t want to do so (Jack). … They think the companies may have more chance to manipulate the financial reports (Jack).

David’s response supports Jack’s, “the audit firms are more likely to accept this valuation [inquiring about the price on the second-hand market]”. The auditor’s opinion about the value of the asset is very important.

They also test asset impairment by undertaking inquiry questionnaires on the market ….if the value of the asset varies materially from their judgements. As the auditors normally audit other companies in the same industry, they have reference to the value of the assets (David).

However, this selection is not inflexible. If the forecasted profit was not high enough to cover the impairment loss according to their normal method (net realisable value), value in use could be adopted to improve profitability:

但假设今年我的利润真的就很低，那我提出用收益法去评估减值，也是有道理的。

If the profit for this year is too low, I will use value in use to estimate the recoverable amount of impaired assets [so that a lower impairment cost can be reported]. It did not breach the accounting standards; it is a reasonable choice (Jack).

Table 7 also suggests that the recoverable amount of an asset in S1, if it were decided/approved to be impaired, would be decreased to zero. Therefore the amount of impairment loss is equal to its book value at the time of recognition of an impairment loss, even though the asset might be worth something. This is the group’s policy. However, it is not stated in the group/listed company’s financial reports.
Michael’s response is very similar to Robert’s. The net recoverable amount is often set at the scrap value of the asset, normally 3% or 5% of its cost. Michael explained why they prefer to use the residual value of an asset as the recoverable amount. The costs of using fair value are much higher than its benefits. The total amount of impaired assets represents only one millionth of S2’s total assets (0.35 million RMB vs 135 trillion RMB); it is unnecessary to devote resources to valuing the accurate fair value of an impaired asset. However, P1 and P2 report a slightly different preference for fair value.

4.3.2 How do they determine the fair value?

As demonstrated in Table 7, P1 and P2 adopted an estimation through internal ‘expertise’ or results of inquiries on the second-hand market. They were confident of their judgements about the price of the assets.

We only compare the extant price on the second-hand market [with the carrying amount of the asset]. Although the market is not active, we still have a basic idea due to our experience in this industry (Jack).

For large-scale equipment, we usually simply inquired about the market price. For example, how much is a brand new piece of equipment? How much does a one-year-old second-hand piece of equipment cost? This is more reliable. Generally, a more reliable price is obtained from asking three buyers. The audit firm also preferred this method (David).

This question does not apply to the two SOEs, as they artificially determine the scrap value (or nil value) as the recoverable amount.
4.3.3 Growth rate

When David assessed the future cash flow for the asset group to which the goodwill was allocated, the future cash flow for the years beyond the budget period was normally set as growing at a conservative rate, which is normally 1% or 2%. David’s company merged and acquired several subsidiaries, which specialise in mechanical engineering equipment and mineral equipment, during 2010-2011. At the time of the acquisition, the market value of those subsidiaries was high because of the rebuilding process after the devastating Wenchuan earthquake in 2008. Therefore, P1 paid a very high price when acquiring these subsidiaries. However, after 2012, because the blowout effect during 2008-2011 wore off, the sales of the subsidiaries dropped dramatically. Therefore, goodwill was impaired and David and his colleagues expressed a pessimistic view regarding the growth potentiality of those subsidiaries. Furthermore, David mentioned that different growth rates were applied to different asset groups. A higher growth rate was applied to subsidiaries which had stronger influential products and vice versa.

4.3.4 Discount rate

P2 adopted an average interest rate of debt capital (before tax) in impairment testing. During the calculation, they calculated interest rates for each debts such as bank loans, commercial loans and bonds and averaged them according to the weight of each type of loan. However, the costs of equity capital were neglected in the process.

Besides, a single rate was applied to asset groups. He explained:

但中国的银行的融资不会根据行业有太大的不同。不外乎我们是上市公司，可能有一部分信用贷款，所以资金成本相对低一些 （8.5%左右）。

*The lending rate for Chinese banks does not vary much between different industries. The advantage we have is that we are a listed company [that has higher credibility], so we can get a lower rate. Therefore, our cost of capital is a little bit lower, at around 8.5% (David).*
4.4 Question 3: What do the Chinese accountants disclose regarding the impaired assets?

4.4.1 Timing of recognition of impairment loss

David’s response demonstrated that some indicators of impairment might have existed long before the company recognised the impairment loss. For example, P2 disclosed around 4 million RMB impairment loss in 2017 for its long-term investment in two companies because these two associates entered the process of liquidation. However, when discussing this issue with David, he explained that the two companies actually had operational troubles as early as 2014. Although management thought it was possible to restructure the company and they made some efforts to do so, the result was not satisfactory. Finally, the investors lodged an application to liquidate the companies in 2017 and the impairment loss for long-term investment was recognised in 2017. In hindsight, David said earlier action would have been more appropriate for P2.

Some problems occurred in 2014, but the outcomes were not clear. The shareholders were unhappily working with each other. We proposed to change the management team and the other party agreed... Operations in 2015 were bad. Then in 2016, a lot of problems were exposed. Strictly speaking, it would have been more appropriate to take measures [to recognise the impairment loss] in 2016 (David).

4.4.2 Other disclosures

The impairment loss for PPE is often presented as a sub-item in the PPE breakdown (for examples, see Appendices 3, 5, and 6) without explaining what the indicators of impaired assets are. P1 explained why the value of impairment loss increased during the first half-year of 2018:

2018 年 6 月 22 日，**公司作出股东会决议，因政府规划等原因，子公司暂停生产，恢复生产情况不定故对相关建筑物和生产设备设施计提 6,***,***元减值准备。

应该说 14 年就发生了一些危机，但那个时候这个问题还没有结论，只是大家觉得合作不是很愉快，我们会考虑改选管理层。当时对方合作伙伴是同意的。。。但通过 15 年整个运作都不是很好，到 16 年很多问题就开始暴露出来了。严格意义上来说，16 年公司就应该做一些审慎的措施。
The **subsidary’s shareholders agreed that, because of planning changes in local government, the subsidiary would temporarily cease production on 22nd June 2018. Currently it is unclear when production will be resumed, therefore, we recognised an impairment loss of 6,***,*** RMB for related PPE (P1’s report for June 2018).

Considering that the amount of recognised impairment loss was about five per cent of total PPE and nine per cent of net profit, the description above is insufficient to explain how P1 decided the impaired amount and the recoverable amount of the assets. According to Jack, the whole site was written off except some movable assets such as office equipment and computers. However, this information was not disclosed in the financial statement.

The problem in P2’s report is even more severe. David’s company recognised an impairment loss for goodwill (14% of the total amount of goodwill) in 2014. However, the notes describe the accounting policy regarding goodwill impairment without any details of how the impairment was tested and carried out except for the following boilerplate description:

\[
\text{The company undertook impairment testing for goodwill at the year-end. The recoverable amount was calculated by discounting estimated future cash flows. The impairment loss equals [the book value of] the asset group to which the goodwill has been allocated minus discounted cash flow from the asset group if the former is higher than the latter (P2’s report for 2014).}
\]

Compared to some of the companies on other stock exchanges, for example, S1’s parent company which is listed on the HKEX, the deficiencies in P2’s notes are obvious. First, the asset group was not defined in the notes. Second, information regarding how many years have been budgeted in the cash flow estimation is missing. Other critical information related to value-in-use estimation is not disclosed, e.g., pre-tax or after-tax
To summarize, the main findings suggest accounting standards for impairment are partially followed by the investigated companies. First, the impairment testing for PPE is primarily triggered by a single fact: the asset is not in use anymore. Second, some of the investigated companies’ PPEs are individually impaired rather than incorporated into an asset group during impairment. Third, the recoverable amount for PPEs in SOEs is equivalent to nil or the scrap value of the assets. Fourth, value in use is estimated based on a short-period budget for cash flow forecast, and the discount rate is based on the interest rate. Lastly, the disclosure of impairment only presents the amount of impairment loss for each category of PPE without explaining the reasons for impairment and justification for cash flow projection, growth rate or discount rate.
5 Discussion

The judgement-making process for calculating impairment of assets by Chinese accountants, especially those working in the private sector, is moving closer to that of their Western peers (detail see Table 8). For example, they identify the indicators of asset impairment, identify asset groups, estimate the recoverable amount of assets, undertake impairment testing for goodwill and intangible assets with indefinite lives at least once per year, apply discounted cash flow in the estimation of value in use for goodwill etc. Besides, the growth rate used by P2 is much lower than the figure reported by ESMA (2011), which reflects that a conservative approach was undertaken by the Chinese entities (section 4.3.3). In addition, P2 used different growth rates for different asset groups (subsidiaries in impairment testing for goodwill).

Table 8 Findings summary

<table>
<thead>
<tr>
<th></th>
<th>P1</th>
<th>P2</th>
<th>S1</th>
<th>S2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parties involved</strong></td>
<td>FD, EMD, BOD</td>
<td>AMD, FD, Admin, IAD, GM, BOD</td>
<td>ED, FD, Parent company</td>
<td>AMD, LAD, GM, BOD</td>
</tr>
<tr>
<td><strong>Indicators of impairment</strong></td>
<td>Government plan</td>
<td>Value less than market</td>
<td>No-longer used</td>
<td>No-longer used</td>
</tr>
<tr>
<td><strong>Asset Group</strong></td>
<td>Production site</td>
<td>No asset group</td>
<td>No asset group</td>
<td>No asset group</td>
</tr>
<tr>
<td><strong>Impairment testing for Goodwill</strong></td>
<td>N/A</td>
<td>Calculating value of goodwill each year</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Question 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net realisable amount</strong></td>
<td>Fair value (net realisable value)</td>
<td>Fair value (net realisable value)</td>
<td>Nil</td>
<td>Scrap value</td>
</tr>
<tr>
<td><strong>Fair value</strong></td>
<td>Price on second-hand market</td>
<td>Price on second-hand market</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Growth rate</strong></td>
<td>N/A</td>
<td>Quite low</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Discount rate</strong></td>
<td>N/A</td>
<td>Average interest rate of debt capital</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Question 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Timing of recognition</strong></td>
<td>Lagging behind</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other Disclosures</strong></td>
<td>Lacking important information</td>
<td>Boilerplate description</td>
<td>Detailed information provided</td>
<td>Boilerplate description</td>
</tr>
</tbody>
</table>
* Abbreviations of parties involved: Administrative department (Admin), Asset management department (AMD), Board of Directors (BOD), Equipment department (ED), Equipment management department (EMD), Finance department (FD), General Manager (GM), Internal audit department (IAD), law and audit department (LAD).

However, due to China’s special institutional environment, the practice of the Chinese accountants regarding asset impairment still diverges from their Western peers. This section will apply the theoretical framework (Chapter 3) and try to connect the extant literature and China’s institutional environment with the findings to explore how the accounting professionals’ practice is influenced by China’s legal and political systems, capital market development, and accounting education and training. The discussion will be presented in the sections below.

5.1 The impact of China’s legal and political system
The legal and political systems affect the reporting quality of entities. On one hand, China, as a code-law country, used to have a highly rule-based accounting system to guide accountants in their practices. However, the 2007CAS, converging to IFRS, are principle-based standards that allow for management discretion. The CAS 8 asset impairment has only eight pages to cover asset impairment, including indicators of asset impairment, the calculation of recoverable amount, the recognition of impairment loss, the identification and impairment loss of an asset group, goodwill impairment loss, and disclosure. The requirement on the CAS 8 is a kind of translation of an extract of IAS 36 but excluding many detailed guidelines such as paragraph 14\(^3\) in IAS 36 (IASB, 2013; MOF, 2006b). It is hard for Chinese accountants to switch from a stewardship role to a professional role. Therefore, the judgements made by the accountants from different backgrounds may vary dramatically although they all believe that they follow 2007CAS.

\(^3\) Paragraph 14 lists some evidence from internal reporting relevant to indicators of asset impairment such as forecasted increase of investment and decrease of cash flow compared to the original budget.
This is why there is conflict between what some of the investigated companies stated in their published reports and what they actually did. For example, the asset-impairment policies disclosed in the financial statements of the selected companies are similar to the requirements of accounting standards without specific information whereas they simply applied ‘no-longer use’ as the main indicator of asset impairment (section 4.2.2). In addition, some of the investigated companies do not apply impairment testing to asset groups. Asset groups were newly introduced into 2007CAS; both the operation departments and finance departments of firms neglect its importance. They still conduct asset impairment under the 2001CAS for individual assets. Although P1 seems to treat a production site as an asset group, the value of each component was estimated individually. Only P2 estimated the value in use of goodwill with regard to asset groups.

Moreover, China’s tax policies differ from accounting requirements in many aspects (An & McGee, 1998; Ting & Ge, 2014). The principles of tax law require that the deductions for a certain period should have occurred in that actual period (L. Peng, 2007; Shi, 2017). However, the impairment loss recognised in accounting bookkeeping is not deductible when calculating income tax. To avoid complicated deferred tax adjustment, when an asset becomes idle and obsolescent, companies are inclined to continue deprecating PPE following the original depreciation estimations instead of recognising impairment loss and adjusting depreciation for subsequent years unless the asset is about to be disposed of in the very near future.

5.2 The impact of China’s capital market development
As presented in section 2.2, China’s capital market has developed rapidly after the ‘open door’ policy in the 1980s. Both the numbers of investors and firms have been growing. Entities are disclosing more financial information to attract investors in the stock market. It is more obvious in Chinese listed private companies than unlisted SOEs. The two private listed companies (P1 and P2) comply with the accounting standards to a higher degree than S1 and S2. For example, they undertake impairment testing based on asset groups and estimate the recoverable amount based on reasonable methods other than
assigning nil or scrap value as the recoverable amount (section 4.3). This difference may stem from their varying dependence on different capital sources (as listed in Table 9 below). Table 9 shows that the debt capital for private companies represents roughly 70%-80% of equity capital. The major part of capital is sought from the stock market. However, P2 relied on debt capital severely and can obtain debt capital with more ease. In China, large-scale SOEs are preferred by banks due to interest rate regulation and bond issuer preference (Gao, 2010; R. Li, 2015). The state-owned banks are inclined to give bank loans to SOEs with a rather low interest rate due to their ownership and “politically oriented lending practice” (Bailey, Huang, & Yang, 2011, p. 1800). The parent company of S1 disclosed in its 2017 financial statement that “The effective annual interest rates on the Group’s floating rate borrowings range mainly from 1.09% to 2.80%”. Therefore, the quality of the financial statements is not a principal concern for either borrowers or lenders. On the contrary, the private companies are pushed to commercial banks and other financial institutions, and money providers from the stock market, who are more concerned about borrowers’ credit ratings and repayment capabilities. Therefore, the accountants in P1 and P2 have more incentives to provide financial information of good quality.

Although P2 present the impairment loss of goodwill well, some non-compliance still exists as the stock market in China is still underdeveloped compared with the Western developed countries. According to the wording of CAS 8, the recoverable amount, i.e., the higher of value in use and fair value less disposal cost is used to estimate the value of the asset group to which the goodwill has been allocated. However, in reality, the accountants in China do not seem to bother to apply the fair value. Instead, they adopt value in use directly. This could be argued to be reasonable as it is hard or even impossible to find an active market for an asset group, especially, goodwill (Jian, 2007). This is consistent with the investigative results of Carlin and Finch (2010), who report a more frequent application of value in use than of fair value.
Table 9 Capital components (based on the companies’ financial statement 2017)

<table>
<thead>
<tr>
<th>Company</th>
<th>Equity capital (million RMB)</th>
<th>Loans (million RMB)</th>
<th>Total (million RMB)</th>
<th>Debt/Equity ratio</th>
<th>Loan interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>254</td>
<td>186</td>
<td>440</td>
<td>73%</td>
<td>10%</td>
</tr>
<tr>
<td>P2</td>
<td>579</td>
<td>450</td>
<td>1,029</td>
<td>78%</td>
<td>8%</td>
</tr>
<tr>
<td>S1*</td>
<td>14,090</td>
<td>3,470</td>
<td>17,560</td>
<td>25%</td>
<td>4%</td>
</tr>
<tr>
<td>S2</td>
<td>28,543</td>
<td>83,218</td>
<td>111,761</td>
<td>292%</td>
<td>3%</td>
</tr>
</tbody>
</table>

* As S1 is not a listed company and its financial statements are not publicly available, I have used the consolidated statements published by its parent company.

Furthermore, the report issuers in China have fewer incentives to publish high-quality financial statements according to the research undertaken by Ali and Hwang, as cited in Isidro and Raonic (2012). For example, disclosures in their statements lack a detailed description of how they classify an asset group. The notes are boilerplate and a copy of the standards. Additionally, the reliability of the estimation of the value in use of asset groups (including those to which goodwill is allocated) is in question. The cash flow projection used in the process of value-in-use estimation is forecast based on the firms’ budget. However, they can only prepare a budget for the next one or two years, possibly because of the low predictability of cash flow budget of Chinese public companies (SPTBSBCSRC, 2017) due to the lack of experienced and skilled management and accountants (S.-Z. Huang, 2005), which will be discussed further in section 5.3.

5.3 The impact of China’s accounting education level

As presented in section 2.2, the underdeveloped accounting education in China hinders the cultivation of skilled and qualified accountants (Low et al., 2008; Winkle et al., 1992; Woodbine, 2007; T.-c. Wu & Tong, 2004). Consequently, Chinese accountants are trained to be bookkeepers rather than critical thinkers (Z.J. Lin, Xiong, & Liu, 2005). Therefore, they act to a greater extent as followers of orders in the detection of indicators of asset impairment (section 4.2.2). They are also not inclined to challenge when the asset should be impaired (section 4.4.1) even if there is some evidence to show that a
subsidiary’s future cash flow will drop dramatically.

In addition, many researchers claim that traditional Chinese accountants are more accustomed to the old rule-based accounting system and terminologies (Bing, 1998; Z. Jun Lin & Chen, 2000) and are unfamiliar with the newest principles-based 2007CAS (Jian, 2007), especially the core of these new standards, i.e., fair value. Accountants often misunderstand the meaning of ‘fair value’ and ‘net realisable value’ due to the lack of sufficient on-job training and continuing professional training provided by the accounting professional body – CICPA (S. Wang, 2009).

Furthermore, the interviewees and their auditors are not familiar with/advocating fair value and/or value in use (section 4.3). Instead, they prefer “net realisable value” to a greater extent although both the CAS 8 and the investigated companies’ financial reports state that the recoverable amount is the “higher of an asset’s fair value less costs of disposal and its value in use”, which means that in the process of impairment testing, both methods should be applied and the results should be compared so that the higher of the two amounts can be selected. Then the higher one shall be compared with the book value of the asset/asset group to decide whether an impairment has occurred. The practices of these accountants are obviously inconsistent with CAS 8. However, none of the companies carried out this process as required in the standards.

Besides, the lack of qualified accountants also impacts the accuracy in estimating value in use for goodwill. As mentioned in section 5.2, the cash flow budget of Chinese public companies (SPTBSBCSRC, 2017) is of low predictability partially due to the lack of experienced and skilled management and accountants (S.-Z. Huang, 2005). In the end, the CSRC has to accept that budget information is voluntary for public entities (S.-Z. Huang, 2005) although budget information has been required to be disclosed by the CSRC since 1995.

Finally, the selection of the discount rate applied in the estimation of value in use is also
affected by accounting education level. Although the articles provide a series of theoretical models for the discount rate calculation such as WACC and the CAPM, the respondent’s choice is quite simple and straightforward, i.e., the average interest rate was applied for all asset groups.

On one hand, it is inconsistent with academic analysis in Western countries (Husmann & Schmidt, 2008). Husmann and Schmidt (2008) favour WACC in their analysis. WACC is also adopted by over half of respondents in the examination of Petersen and Plenborg (2010). However, Carlin and Finch (2010) adopted the CAPM to develop independent estimates of discount rates as they consider the CAPM as the most used model in practice. However, P2 adopted an average interest rate which only takes into consideration the debt capital but neglects the effect of equity capital, which is hard for Chinese accountants (Jian, 2007). They may prefer parameters that are convenient to access to those providing better reliability but that are not familiar or barely used.

On the other hand, although the academic literature opposes the ‘whole-of-firm’ discount rate, this practice exists worldwide (Carlin & Finch, 2010). The standards request an association between the discount rate adopted and the risk characteristics of each CGU (IASB, 2013; MOF, 2006b). Although the subsidiaries of P2 operated in different industries, a uniform discount rate was applied for all of them.
6 Limitations and Conclusions

This study interviewed four accountants in charge of asset impairment accounting in their companies. The data contains interview transcripts and the companies’ financial statements. The findings from data analysis include: 1) The companies do not consider or evaluate the indications listed in the standards. Instead, they consider lower market value or no-longer-use as the only criterion. 2) Asset groups are not identified when testing PPE impairment. Assets are tested individually. 3) The asset groups in goodwill testing are not clearly disclosed in the notes. 4) The number of asset groups was not disclosed. 5) Neither fair value nor value in use is applied by the accountants in estimating the recoverable amount of PPE. They still use net realisable value, which is the terminology in the 2001CAS. 6) The accountants adopt an average interest rate, neither WACC nor the CAPM as the discount rate applied in the calculation of the recoverable amount. 7) A ‘whole-of-firm’ discount rate is applied for all asset groups.

The possible reasons for the above non-conformities may derive from China’s special institutional environment, such as China’s legal and political systems, capital market development, and accounting education and training.

This research contributes to the existing literature in two ways. First, it provides qualitative evidence regarding Chinese companies’ operation in impairment testing and impairment accounting. Second, it highlights the practical challenges in implementing impairment accounting and offers insight for standards setters when issuing appropriate guidance or explanations. This research also contributes to accounting practices in China. The accountants may realise the difference between their practices and the requirements of CAS 8 which used to be neglected unintentionally. Hopefully, the quality of Chinese companies’ financial statements will be improved accordingly.

The major limitations of this research include the sample size and questionnaire design. Only four cases were employed in this article. Considering that the Chinese economy
and the capital market are both massive, more cases will be needed to provide justifiable results. Specifically, only one of these four companies has presented goodwill in its financial reports. In addition, the questions were designed to examine what the accountants do without further exploring why they do so. To better understand their actions, more qualitative data from accountants may be of importance in future research.
REFERENCE LIST


## Appendix 1: The themes from transcribed data

<table>
<thead>
<tr>
<th>Questions</th>
<th>Jack (P1)</th>
<th>David (P2)</th>
<th>Robert (S1)</th>
<th>Michael (S2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Which assets did they test for impairment?</strong></td>
<td>Equipment, Intangibles</td>
<td>Equipment, Goodwill, intangibles, long-term equity investment</td>
<td>Equipment, Trademarks</td>
<td>Equipment, Intangibles</td>
</tr>
</tbody>
</table>

- **Who initiates the impairment process?**
  - Jack (P1): 但我们希望业务部门的他这方面的意识相对来讲，我觉得，中国的企业，还不够重视。很多时候实际上不是业务发现的，而是我们财务发现的。
  - David (P2): 严格来讲，我们希望业务部门有这个意识，但实际上，很多时候是财务发现的。
  - Robert (S1): 现在审计会基于财务报告的目的，会提交报表给他们，要求他们进行减值测试。
  - Michael (S2): 我们提供一个资产清单给资产管理部，由他们来发起测试。

- **Who is involved in the impairment test?**
  - Jack (P1): 我们有专门做设备的人员，大家对这种设备的估值其实是非常的，他们其实非常了解市场。也都是通过这种对市场价格的判断，做的是比较贴近的。
  - David (P2): 实际上我们有专门做设备的人员。
  - Robert (S1): 我们和审计会基于财务报告的目的，会提交报表给他们，要求他们进行减值测试。
  - Michael (S2): 我们提供一个资产清单给资产管理部，由他们来发起测试。
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<th>Questions</th>
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<th>David (P2)</th>
<th>Robert (S1)</th>
<th>Michael (S2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>their estimation about the value is very close (to the price on the market).</td>
<td>physical counting.</td>
<td></td>
<td>department, and law and audit department participate the impairment test.</td>
</tr>
<tr>
<td>Who decides the impairment loss?</td>
<td>最终要董事会，但是（财务部）肯定给些建议</td>
<td>年度累计1000万以下总经理，超过董事长</td>
<td>审批过程中有工厂要审批，包括财务在内的，然后提交到区域公司，然后提交到集团，只有集团都签署完毕，才能计提减值准备。</td>
<td>减值损失金额的确定由参与减值测试部门提出意见，报公司总经理审批确定</td>
</tr>
<tr>
<td></td>
<td>The board of direct has the final authority to approve the impairment loss with the suggestion from the finance department.</td>
<td>The general manager can approve impairment loss of less than 10 million RMB accumulated in a financial year. When the annual accumulated impairment loss is more than 10 million RMB, it requires the approval from the board of directors.</td>
<td>The approval process is normally initiated by the equipment department; the manufacturing plant (manager) and finance department (of the plant) need to express their opinions. If they approve, the process flows to the regional company and then the group company. The impairment loss can only be recognized when it is approved by the group company.</td>
<td>The general manager approves the recognised amount of impairment loss considering the suggestion from the departments attending the test.</td>
</tr>
</tbody>
</table>

就算我们不做，我们的会计师事务所对我们审计时也一样要按照要求，他们也要做减值测试。如果我们标的资产和会计师事务所现在看的资产进行判断的价值有较大出入的，他会自己发问卷调查。因为国内事务所一个审计小组，都会审计同类型/行业的上市公司，所以他们有个参考。
<table>
<thead>
<tr>
<th>Questions</th>
<th>Jack (P1)</th>
<th>David (P2)</th>
<th>Robert (S1)</th>
<th>Michael (S2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>.....even we don’t test (impairment), the auditors would require so. They also test asset impairment by undertaking inquiry questionnaires on the market .....if the value of the asset varies materially from their judgements. As the auditors normally audit the companies in the same industry, they have references to the assets’ value.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| What are the indications of asset impairment? | 可能有些站，需要搬迁，或有些地方政府调规了，那我们就要替我 | 他们专门管生产设备，所以他们 | 固定资产减值准备的计提一般都在固定资产不 | 一般是结果导向，盘点时发现过时了，或不能用了，就 |
| | 的这块地可能就收不回来了，这还有一些存在一些潜在的一些像，土地权属问题。我们在 | 对生产设备的市场价值很清楚。比如，如果我要 | 是在固定资产不使用的情况下，我们才计提减值准备。 | | |
| | 中国来讲，我们正常经营使用（厂房所在土地）没问题，但你要 | 采购一条生产线，资产管理部门 | 市场可能已经减少了，但是对于我们生产线来说，他的价值并没有减少。所以最终 | | |
| | 如果要做ipo，那么他 | 和采购部都要共同参与，他们都要对市场进行调研，这台设备值 | 我们也不会计提减值准备。 | | |
| | 第一个土地要求就非常严。所以呢我们减值的驱动有点不太一样。 | 多少钱，市场情况怎么样，他肯定知道。他不仅是管数量，他对价值必须要非常清楚。不然他怎么能知道（是否减值）。 | | |
| | Sometimes the sites need to be moved because of the change of local governments’ planning. Another situation is that the | They (the asset impairment process is actually driven by ‘results’. That is to say, when we count assets at the year-end, the | We only recognize an impairment loss by ‘results’. | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |</p>
<table>
<thead>
<tr>
<th>Questions</th>
<th>Jack (P1)</th>
<th>David (P2)</th>
<th>Robert (S1)</th>
<th>Michael (S2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>property rights of some sites are in question. Although it is OK for use, it is a problem when we seek IPO. So the drivers of impairment may be different.</td>
<td>management department are responsible for manufacturing equipment; therefore, they have clear judgements about the market value of the manufacturing equipment. For example, if I planned to purchase a product line, both asset management department and purchase department should participate jointly. They both should do market research. They should sure know how much the equipment is worth, how is the market. They are not only responsible for the quantity management but also the value. Otherwise, they could not know whether the equipment is impaired.</td>
<td>It is possible that its market value maybe decrease, but it is still valuable for our production line.</td>
<td>user of an asset may say that the asset is not usable anymore. Then we ask them to initiate the asset impairment process. After this, then the asset could be written off, and then a new asset could be purchased (to replace it).</td>
<td></td>
</tr>
</tbody>
</table>
### Questions

<table>
<thead>
<tr>
<th>Questions</th>
<th>Jack (P1)</th>
<th>David (P2)</th>
<th>Robert (S1)</th>
<th>Michael (S2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The application of asset group in the impairment testing process</td>
<td>You like we have two subsidiaries, it is essentially complete. But government planning changes, we have to go through impairment. For example, two of our subsidiaries have complete property rights, however, we need to recognise impairment loss for the whole sites because the government changed their plan.</td>
<td>When testing impairment for goodwill, we estimated the subsidiary as a whole.</td>
<td>Q: Do you apply asset group before? A: Never</td>
<td>A: There is no CGU testing based on individual assets. We don't apply CGU.</td>
</tr>
<tr>
<td>How they decide recoverable amount?</td>
<td>Chinese accountants are normally reluctant to use the value in use. They think this involves too much uncertainty. The auditors normally don't support value in use. They usually use realizable value at balance sheet date. They concern that there is a large amount of equipment, we usually simply inquired the market price. For example, how much is a brand new equipment, how much is for a one-year-old second-hand equipment. This is more reliable.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes

- 对单独资产作减值测试
- 没有确定 CGU
- 对大型设备，我们过去这种比较简单的做法，就是查下市场价格。比如新的卖多少钱，使用一年的，二手的现在值多少钱。这样可靠些，基本问三家，价格就比较可靠了。事务所也比较接受这种。
- 对大型设备，我们过去这种比较简单的做法，就是查下市场价格。比如新的卖多少钱，使用一年的，二手的现在值多少钱。这样可靠些，基本问三家，价格就比较可靠了。事务所也比较接受这种。
Questions | Jack (P1) | David (P2) | Robert (S1) | Michael (S2)
---|---|---|---|---
is too much uncertainty in the active market. If the company adopts fair value, they have to confirm the measurement and value. They don’t want to do so. They think the companies may have more chances to manipulate the financial reports.

But假设今年我的利润真的就很低,那我提出用收益法去评估减值，也是有道理的。

If the profit for this year is too low, I will use value in use to estimate the recoverable amount of impaired assets [so that a lower impairment cost can be reported]. It did not disobey the accounting standards; it is a reasonable choice.

How do they decide the fair value?

我们就比较现在的二手市场价格，虽然二手市场价格，没出来，就算不活跃，但是你做这个行业嘛，大家判断还是有。

We only compare the extant price on the second-hand market (with the carrying amount of the asset). Although the market is not active, we still have some basic sense due to

is more reliable. Generally, the price is rather reliable after asking three buyers. The audit firm also preferred this method.
<table>
<thead>
<tr>
<th>Questions</th>
<th>Jack (P1)</th>
<th>David (P2)</th>
<th>Robert (S1)</th>
<th>Michael (S2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>our experience in this industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How many years of budgets did the company prepare?</td>
<td>民营企业应该来讲的，我们现在对这种预算的重视度，我觉得还不够，...还有一方面就是你，员工的成熟度，...而你实际运行会跟你预计的未来的几年情况，偏差可能会很大，经常会很意外。。。所以一般对这种中长期的，更多存在于企业高层管理中，一般是在这个，他们的意识里，不会形成书面的东西，..但我们做年度一般都看得很清楚。</td>
<td>We have a specialized strategy department and Budget committee. They organize budget review meeting and review the budgetary data submitted by all subsidiaries at the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How they estimate the recoverable amount of goodwill?</td>
<td>净现值</td>
<td>NPV</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Questions

<table>
<thead>
<tr>
<th>Questions</th>
<th>Jack (P1)</th>
<th>David (P2)</th>
<th>Robert (S1)</th>
<th>Michael (S2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>between actual and budget might be huge and incidental. Some casual events are the main drivers of such variance…therefore, the medium- and long-term budgets are usually known by the senior management without paper documents,…but our annual budget is quite precise.</td>
<td>beginning of each year.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**What growth rate did they use in cash flow projection?**

Because the performance of these companies was not good, the growth rate was set to 1% or 2%. Different subsidiaries have different growth rate based on their products.

Because the performance of these companies was not good, the growth rate was set to 1% or 2%. Different subsidiaries have different growth rate based on their products.
<table>
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<th>David (P2)</th>
<th>Robert (S1)</th>
<th>Michael (S2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What was the discount rate used in value-in-use estimation?</td>
<td>折现率基本上差不多。为什么呢？因为折现率基本上考虑当时市场的资金成本啦，还有我们利率的调整，所以折现率基本上是用的统一的。我们基本考虑是1-3年的融资的综合资金成本。在当时经济不景气（2013、2014年）我们的集团的资金成本大概是在8%-10%之间。中国的银行的融资不会根据行业有太大的不同。不外乎我们是上市公司，可能有一部分信用贷款，所以资金成本相对低一些（8.5%左右）。</td>
<td>The interest rates between industries in China would not differ too much. The speciality for us is that we are listing company and can get some credit loan with a lower rate. Therefore our capital cost is a little bit lower, at around 8.5%.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix 2: The main divergence between CAS 8 and IAS 36

<table>
<thead>
<tr>
<th></th>
<th>CAS 8</th>
<th>IAS 36</th>
<th>IFRS 13</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>How to decide</strong></td>
<td>Price in the sales agreement</td>
<td>Referred to IFRS 13</td>
<td>Three-level hierarchy:</td>
<td>The first choice of CAS 8 is excluded from the IAS/IFRS frame.</td>
</tr>
<tr>
<td><strong>Fair value price</strong></td>
<td>Market price under active market</td>
<td></td>
<td>1) market price under an active market</td>
<td>The third hierarchical fair value estimation adopted by IFRS 13 is excluded by CAS 8 as it is rather identical to the description of value in use model.</td>
</tr>
<tr>
<td></td>
<td>Best estimation according to the latest trading price for similar assets in the same industry.</td>
<td></td>
<td>2) Estimation based on comparable items in a specified market</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3) The price will be estimated using certain valuation models such as present value approach or discounted cash flow approach.</td>
<td></td>
</tr>
<tr>
<td><strong>Reversal of</strong></td>
<td>Non-reversible</td>
<td>Reversible</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>impairment loss</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 3: Extracted financial reports (P1)

Notes for PPEs

<table>
<thead>
<tr>
<th>Year 2017</th>
<th>Opening balance</th>
<th>Debit</th>
<th>Credit</th>
<th>Closing Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated Impairment loss:</td>
<td>6,300</td>
<td>6,300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property and plant</td>
<td>4,249</td>
<td>4,249</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>2,051</td>
<td>2,051</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicles</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office and other facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Accounting policies

出现减值的迹象如下:

（1）资产的市价当期大幅度下跌，其跌幅明显高于因时间的推移或者正常使用而预计的下跌；

（2）企业经营所处的经济、技术或者法律等环境以及资产所处的市场在当期或者将在近期发生重大变化，从而对企业产生不利影响；

（3）市场利率或者其他市场投资报酬率在当期已经提高，从而影响企业计算资产预计未来现金流量现值的折现率，导致资产可收回金额大幅度降低；

（4）有证据表明资产已经陈旧过时或者其实体已经损坏；

（5）资产已经或者将被闲置、终止使用或者计划提前处置；

（6）企业内部报告的证据表明资产的经济绩效已经低于或者将低于预期，如资产所创造的净现金流量或者实现的营业利润（或者亏损）远远低于（或者高于）预计金额等；

（7）其他表明资产可能已经发生减值的迹象。

Indication for asset impairment of PPEs:

The indications showing possible impairment of asset include:
(1) The asset’s value has declined during the period significantly more than would be expected as a result of the passage of time or normal use.

(2) Significant changes with an adverse effect on the entity have taken place during the period or will take place in the near future, in the technological, market, economic or legal environment in which the entity operates or in the market to which an asset is dedicated.

(3) Market interest rates or other market rates of return on investments have increased during the period, and those increases are likely to affect the discount rate used in calculating an asset’s value in use and decrease the asset’s recoverable amount materially.

(4) The evidence is available of obsolescence or physical damage of an asset.

(5) An asset becomes idle, or there are plans to discontinue or restructure the operation to which an asset belongs to; or there are plans to dispose of an asset before the previously expected date.

(6) The evidence is available from internal reporting that indicates that the net cash flow or operational profit (loss) created by an asset is, or will be, much less (higher) than expected.

(7) Other evidence indicates an asset is impaired.

固定资产减值准备的会计估计

本集团在资产负债表日对存在减值迹象的房屋建筑物、机器设备等固定资产进行减值测试。固定资产的可收回金额为其预计未来现金流量的现值和资产的公允价值减去处置费用后的净额中较高者，其计算需要采用会计估计。

如果管理层对资产组和资产组组合未来现金流量计算中采用的毛利率进行修订，修订后的毛利率低于目前采用的毛利率，本集团需对固定资产增加计提减值准备。

如果管理层对应用于现金流量折现的税前折现率进行重新修订，修订后的税前折现率高于目前采用的折现率，本集团需对固定资产增加计提减值准备。

如果实际毛利率或税前折现率高于或低于管理层估计，本集团不能转回原已计提的固定资产减值准备。
Accounting estimation for impairment process of PPEs:

The group undertakes impairment test for PPEs such as buildings and equipment if there is indication showing they were impaired. A PPE’s recoverable amount is the higher of its fair value less costs of disposal and discounted present value of its estimated future cash flow. The calculation needs accounting estimation.

If the management adjusts gross profit ratio in the forecasting of future cash flow for an asset or asset group (after the year of recognizing impairment loss), and the adjusted gross profit ratio is less than that in the estimation, the group increases impairment loss for the asset.

If the management adjusts discount rate in the discounting future cash flow for an asset or asset group (after the year of recognizing impairment loss), and the adjusted discount rate is more than that in the estimation, the group increases impairment loss for the asset.

If the gross profit ratio in the later years is more than that in the estimation or the discount rate is less than that in the estimation, the group cannot reverse the impairment loss recognized in previous years.
### Appendix 4: Extracted financial reports (P2)

Accumulated impairment loss for goodwill

<table>
<thead>
<tr>
<th>Invested company</th>
<th>Opening balance</th>
<th>Debit</th>
<th>Credit</th>
<th>Closing Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company 1</td>
<td>3,025</td>
<td></td>
<td>3,025</td>
<td></td>
</tr>
<tr>
<td>Company 2</td>
<td>65</td>
<td></td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>Company 3</td>
<td>431</td>
<td></td>
<td>431</td>
<td></td>
</tr>
<tr>
<td>Company 4</td>
<td>202</td>
<td></td>
<td>202</td>
<td></td>
</tr>
<tr>
<td>Company 5</td>
<td>58</td>
<td></td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>Company 6</td>
<td>18</td>
<td></td>
<td>18</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,723</strong></td>
<td></td>
<td><strong>3,799</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Appendix 5: Extracted financial reports (S1’s parent company)

<table>
<thead>
<tr>
<th></th>
<th>Opening balance</th>
<th>Debit</th>
<th>Credit</th>
<th>Closing Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated Impairment loss:</td>
<td>291,000</td>
<td></td>
<td>415,000</td>
<td></td>
</tr>
<tr>
<td>Building</td>
<td>53,000</td>
<td></td>
<td>135,000</td>
<td></td>
</tr>
<tr>
<td>Plant and Machinery</td>
<td>233,000</td>
<td></td>
<td>275,000</td>
<td></td>
</tr>
<tr>
<td>Other fixed assets</td>
<td>5,000</td>
<td></td>
<td>5,000</td>
<td></td>
</tr>
</tbody>
</table>

### Appendix 6: Extracted financial reports (S2)

<table>
<thead>
<tr>
<th></th>
<th>Opening balance</th>
<th>Debit</th>
<th>Credit</th>
<th>Closing Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accumulated Impairment loss:</td>
<td>354</td>
<td></td>
<td>4</td>
<td>350</td>
</tr>
<tr>
<td>Property and plant</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td>350</td>
<td></td>
<td></td>
<td>350</td>
</tr>
<tr>
<td>Vehicles</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Office and other facilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix 7: Interview question list

As this research will be conducted as a case study, the interview questions are open-ended to encourage the interviewees to provide as much details as possible.

To begin the interview, the student will explain the rights of participants and ensure that the participants understand that their private information is kept confidential. Some information of participants’ position in their employers and their responsibilities will be collected. Then the interviewees will be asked an open question: “I note that the financial statement shows an impairment of xx (only for public companies), please tell me one or more stories how you did impairment test and recorded impairment loss in your company”. After the interviewees tell me the stories, I will probe the interviewee with some of questions below if they haven’t mentioned already.  (The questions list is only a guideline. I might change the sequence of questions or only ask some of them depending on relevance to the entities).

1. Which assets did they test for impairment? Was an impairment loss on that asset recognised?
2. Which level in the organization (i.e., organizational position) makes the impairment decision? Who initiate the impairment process? Who are involved to carry out the impairment process? Who determines the impairment costs?
3. What triggered the impairment test for assets other than goodwill, indefinite life intangible assets and intangibles-in-process?
4. Did they test the asset for impairment as a stand-alone asset or as part of a CGU? How many CGUs did they use? If they use multiple CGUs, how did they decide how many CGUs to use and how did they allocate assets to each CGU?
5. How did they estimate the recoverable amount? Value-in-use and fair value less cost of disposal? Is one basis used for all assets? Or different bases for different assets? If they used different bases, why did they use one base for one asset but not for other assets? Why did they choose the basis?
(6) If they used the fair value less cost of disposal, how did they estimate the fair value? Who estimated the fair value – they or an external valuer?

(7) How often did they test intangible assets other than goodwill?

(8) How often did they test goodwill for impairment?

(9) How many CGUs did they use for goodwill? If more than one, how did they decide the number and the allocation of goodwill to these CGUs? How many operating segments did you report on? Did they use the CGUs for internal management purposes? What purpose?

(10) Which basis did they use for estimating the recoverable amount of goodwill? Value-in-use or fair value less cost of disposal? Why did they choose the basis?

(11) If value-in-use was used, how did they estimate the value-in-use? How did they estimate the future cash flow? How many years of cash flow forecasts did they use in estimating the value in use?

(12) How many years of budgets did the company prepare? If the number of years of cash flow forecasts exceeded the number of years covered by the budgets, how did they estimate the cash flow forecasts beyond the budgeted years? What growth rate did they use in cash flow projection? How did they estimate the growth rate? If multiple CGUs are used, did they use multiple growth rates or one growth rate? If one growth rate is used, why one growth rate?

(13) What was the discount rate used in value-in-use estimation? How many discount rates were used? The same rate for all CGUs or a separate one for each CGU? If the same rate is used, why is that? How did they estimate the discount rate for estimating the value-in-use? (what model?)

(14) Beyond the growth rate and discount rate, what key assumptions were used in estimating the value-in-use? How did they estimate the values assigned to the key assumptions?

(15) Were data about these assumptions already available inside the organization? Or were they developed afresh for impairment test?
(16) How did they estimate fair value less disposal cost for assets without active markets?

(17) How did they determine the cash flow of an asset or a CGU? Could you please list five assumptions and judgments that you consider the most difficult to develop/make for impairment tests? (1 for the most difficult and 5 for the least difficult) Could you please tell me why you consider these assumptions the most difficult? How did they develop these estimates?

(18) Is there any asset tested for impairment, but it is found the asset has not been impairment?

(19) Who prepare the notes for impaired assets? Auditors or accountants?

(20) Other questions might also be raised during interview.
Appendix 8: The AUTEC Ethics Approval Letter

Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology
P.O. Box 92006, Auckland 1142, NZ
T: +64 9 323 4000 ext. 8516
E: [HYPERLINK "mailto:ethics@aut.ac.nz"]
www.aut.ac.nz/researchethics

23 July 2018
Gina Xu
Faculty of Business Economics and Law

Dear Gina


Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology ethics committee (AUTEC).

Your ethics application has been approved for three years until 23 July 2021.

Standard Conditions of Approval

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through [HYPERLINK "http://www.aut.ac.nz/research/researchethics"]
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through [HYPERLINK "http://www.aut.ac.nz/research/researchethics"]
3. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form. [HYPERLINK "http://www.aut.ac.nz/research/researchethics"]
4. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only if you require management approval for access to your research from another institution or organisation then you are responsible for obtaining it. If the research is undertaken outside New Zealand, you need to meet all locality, legal and ethical obligations and requirements. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

for any enquiries, please contact [HYPERLINK "mailto:ethics@aut.ac.nz"]

Yours sincerely,

Kate O’Connor
Executive Manager
Auckland University of Technology Ethics Committee

Co: 40701.2006hc@gmail.com; 40701.2006hc@aut.ac.nz

Kate O’Connor
Executive Manager
Auckland University of Technology Ethics Committee
Appendix 9: The Participant Information Sheet

Date Information Sheet Produced:
10 July 2018

Project Title
Impairment accounting practices of Chinese companies – An exploratory case study

An Invitation
My name is Mei Li. I am a Master of Business (MBus) student at AUT. I am doing this research project as part of the requirement of the MBus program and would like to invite you to kindly participate in this project as an interviewee.

Participation in this project as an interviewee is voluntary, and you can withdraw from this project at any time before the completion of data collection. Whether you decide to participate or not will cause neither advantage nor disadvantage to your interest.

What is the purpose of this research?
The purpose of this project is to examine how Chinese managers apply the impairment requirement for long-term assets. The purpose of these interviews is to collect data for this project.

How was I identified and why am I being invited to participate in this research?
You are identified and invited because 1) you have experiences in assets impairment; 2) You are known to me through my existing professional network, i.e., you are either my ex-colleague or my schoolmate. In total, this project will recruit four to six interviewees. If there are more interviewees than needed, the following criteria, in a sequence of precedence, will be used for selection:
• The availabilities of participants match to researchers’ schedules.
• The participants’ working experience fall within the selected investigated periods.
• A balance of gender and ethnicities background.

How do I agree to participate in this research?
You need to sign on a “Consent Form” provided by me after you read this information sheet. If you feel uncomfortable to sign, the interview will stop.

Your participation in this research is voluntary (it is your choice) and whether or not you choose to participate will neither advantage nor disadvantage you. You are able to withdraw from the study at any time. If you choose to withdraw from the study, then you will be offered the choice between having any data that is identifiable as belonging to you removed or allowing it to continue to be used. However, once the findings have been produced, removal of your data may not be possible.

**What will happen in this research?**

During this interview, I will ask you several questions regarding your demographics followed by some open ended questions about your experience in assets impairment. All interviewees will be asked the same questions. However, depending on the answers of interviewees, other follow-up questions will be raised during the interview. All the interviews will be recorded with your permission and subsequently transcribed. The transcripts will be analysed to address the research questions. The data collected will only be used for research purpose.

In my Master dissertation, I will report the interview findings mainly in an aggregated form. I will also select certain representative quotations from some interviews without revealing the identity of the interviewee.

The interview will take place outside of your work environment. You may choose any public places such as coffee shops or tea houses, at a time that suits you best.

After my research process, i.e., data collection, analysis and writing findings, my dissertation including the research findings might be published and/or presented to professional associations.

**What are the discomforts and risks?**

There are minimal discomforts and risks because you have the right to decide whether to participate in this project and may withdraw from the project at any time before data collection is complete.

**How will these discomforts and risks be alleviated?**
You will also have rights to review the transcripts. During the review process, you will have opportunity to withdraw or edit your statements for better comfort and accuracy.

**What are the benefits?**

Your participation in this project will help generate insights into how Chinese managers apply the impairment requirement. The insight is likely to be beneficial to standard setters in China to understand the challenges in applying the Chinese Accounting Standards in practice. If you are interested in it, I am happy to share my findings with you after my dissertation is completed.

**How will my privacy be protected?**

Private information of you and your workplaces will be protected during data collection and analysis and subsequent publications arise from this research. You and your workplace will be assigned with a reference number to conceal your identity. I will identify whether your company is a state-owned or private entity because it provides a context.

**What are the costs of participating in this research?**

This interview will take about 45-60 minutes.

**What opportunity do I have to consider this invitation?**

You will have two weeks to decide whether you would accept this invitation. Besides, the interview will be scheduled according to your convenience.

**Will I receive feedback on the results of this research?**

Please you are interested to receive a copy of the results of this research, please tick yes to the last question on the Consent Form.

**What do I do if I have concerns about this research?**

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr. Gina Xu, gina.xu@aut.ac.nz, +64 (09) 09 921 9999 ext 6979.
Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O’Connor, ethics@aut.ac.nz, +64 (09) 921 9999 ext6038.

**Whom do I contact for further information about this research?**

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

**Researcher Contact Details:**

Mei Li, 40791200bhc@gmail.com.

**Project Supervisor Contact Details:**

Dr. Gina Xu

Lecturer

Faculty of Business Economics and Law,

Auckland University of Technology

Auckland, New Zealand

E-mail: gina.xu @aut.ac.nz

Phone: 09 921 9999 ext 6979

Approved by the Auckland University of Technology Ethics Committee on 23 July 2018, AUTEC Reference number 18/275.
Appendix 10: The Consent Form

**Project title:**  
Impairment accounting practices of Chinese companies – An exploratory case study

**Project Supervisor:**  
Gina Xu

**Researcher:**  
Mei Li

☐ I have read and understood the information provided about this research project in the Information Sheet dated 10th July 2018.

☐ I have had an opportunity to ask questions and to have them answered.

☐ I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.

☐ I understand that taking part in this study is voluntary (my choice) and that I may withdraw from the study at any time without being disadvantaged in any way.

☐ I understand that if I withdraw from the study then I will be offered the choice between having any data that is identifiable as belonging to me removed or allowing it to continue to be used. However, once the findings have been produced, removal of my data may not be possible.

☐ I agree to take part in this research.

☐ I wish to receive a summary of the research findings (please tick one): Yes ☐ No ☐

Participant’s signature:  
________________________________________________________________________

Participant’s name:  
________________________________________________________________________

Participant’s Contact Details (if appropriate):

________________________________________________________________________

________________________________________________________________________
Date:

Approved by the Auckland University of Technology Ethics Committee on 23 July 2018 AUTEC Reference number 18/275

Note: The Participant should retain a copy of this form.