

Planned manufactured capital investment disclosures in annual and integrated reports: Evidence from New Zealand and Australian organisations

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Abstract

This research examines organisations planned manufactured capital investment (PMCI) disclosure practices. This disclosure constitutes primarily forward-looking information of both a qualitative and quantitative nature. Traditionally, organisations have provided this information in the management discussion and analysis section of annual reports. The integrated report, which has grown in popularity in recent years, also provides this information. The International Integrated Reporting Council Framework on integrated reporting suggests that organisations disclose both historic/backward and forward-looking information on six capitals including manufactured capital. However, there is a lack of research examining the content of PMCI disclosures, the different disclosure practices in annual and integrated reports, and changes PMCI disclosures over time.

The study uses content analysis to analyse PMCI disclosures presented in annual and integrated reports. The data comprises 73 integrated and 108 annual reports of selected New Zealand and Australian organisations. These reports were published from 2014 to 2018. This examination aims to understand and compare the features of PMCI disclosures made in annual reports against those in integrated reports.

Ninety-three PMCI disclosures were identified within 25 integrated reports and 41 annual reports over the five-year reporting period examined in this study. The disclosure patterns varied between the sample organisations. Most of these disclosures were made by New Zealand organisations rather than Australian organisations. The PMCI disclosures were found in various sections of the studied reports with the section outlining organisational performance and reviews most frequently used. There were five types of information involved in the PMCI disclosures: the type of investment, the projected cost, the projected timeframe, the expected investment benefits, and the decision-making process related to the PMCI. However, not every PMCI disclosure contained all these types of information. Commonly, the studied organisations outlined the type of investment in their PMCI disclosures with information about the projected timeframe of PMCI being the second most disclosed category of information. The decision-making process of a project related to PMCI projects was the least common disclosure. Although the nature of annual and integrated reports is different, the features of PMCI disclosures made in these reports were similar. Moreover, there was no difference between the disclosure practices of New Zealand and Australian organisations apart from the number of PMCI disclosures over the five-year period.

The findings of this study contribute by extending the understanding of organisations' reporting practices associated with PMCI. In addition, the findings reveal which information relating to PMCI is being delivered by organisations through their integrated and annual reports. This may contribute to reconciling the interests of management and stakeholders regarding PMCI disclosure.

Table of Contents	
Abstract	2
List of Tables	6
Attestation of Authorship	7
Acknowledgement	8
Chapter 1: Introduction	1
1.1 Introduction	1
1.2 Introducing the research topic	1
1.3 Existing literature	2
1.4 Research gap	2
1.5 Research design	3
1.6 Findings	3
1.7 Contribution	5
1.8 Outline	5
Chapter 2: Literature Review	6
2.1 Introduction	6
2.2 Forward-looking disclosure	6
2.3 PMCI disclosures in annual reports	7
2.4 Integrated reporting	9
2.5 PMCI disclosure in the integrated report	12
2.6 Gaps in the current research	12
2.7 Conclusion	14
Chapter 3: Research Design	15
3.1 Introduction	15
3.2 Data collection: list of reporters	15
3.3 Data collection: identifying annual and integrated reports	18
3.4 Data analysis: content analysis	20
3.5 Conclusion	23
Chapter 4: Findings and Analysis	24
4.1 Introduction	24
4.2 Assessing the integrated and annual reports	24
4.2.1 Number of organisations and reports disclosing PMCI	24
4.2.2 PMCI disclosures by industry	25
4.3 Classifying the planned manufacturing capital investment disclosures	26
4.3.1 Location of PMCI disclosures in annual reports and integrated reports	26
4.3.2 Types of PMCI information disclosed	34
4.4 Answering the research questions	45

4.5 Conclusion	46
Chapter 5: Discussion and Conclusion	47
5.1 Introduction	47
5.2 Discussion	47
5.2.1 PMCI disclosure practices of New Zealand and Australia	47
5.2.2 PMCI disclosure over time	49
5.2.3 PMCI disclosure in annual reports	50
5.2.4 PMCI disclosures in the integrated report	51
5.3 Conclusion	51
5.3.1 Summary	51
5.3.2 Contribution	52
5.3.3 Limitations	53
5.3.4 Future research	53
References	54
Appendices	59
Appendix 1 Deloitte 200 New Zealand Companies Award	59
Appendix 2 200 Listed Companies of Australia	61
Appendix 3 Coding Book	64

List of Tables

Table 1 List of organisations involved in the research sample	17
Table 2 List of industries covered in the research.....	18
Table 3 Reason for the uncollected annual reports	19
Table 4 Number of reports per year for each organisation	19
Table 5 List of organisations disclosing PMCI.....	24
Table 6 Number of organisations reporting PMCI by year.....	25
Table 7 Number of organisations making PMCI disclosures by industry	26
Table 8 Sections reporting the investment plan of manufactured capital in integrated and annual reports.....	28
Table 9 Number of disclosures for each type of PMCI information.....	35
Table 10 Organisations presenting PMCI disclosures about the decision-making process	43

Attestation of Authorship

I declare that this dissertation is my own work. I believe that this does not contain any portion of material published or written or submitted to any university or institutions or award or degree.

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Chapter 1: Introduction

1.1 Introduction

This chapter presents an overview of the dissertation. The chapter is organised into eight sections. After the introduction, section 1.2 will introduce the research topic of this study. Section 1.3 will present existing literature relating to PMCI disclosures made in annual and integrated reports. Continuously, section 1.4 will discuss the gaps in the existing literature. In section 1.5, the research design of this study will be presented in summary. Section 1.6 will discuss the summary of the results in this study, then the contributions of these results will be discussed in section 1.7. Finally, section 1.8 will present an outline of the structure of this dissertation.

1.2 Introducing the research topic

Planned manufactured capital investment (PMCI) is investment in manufactured capital that supports the production of goods or services by an organisation. PMCI can involve replacing, acquiring, or maintaining the physical assets or infrastructure of an organisation. Organisations consider PMCI when manufactured capital is required to meet demands related to customers, operations, markets and/or social or environmental issues. Hence, PMCI is essential to organisations as it impacts on their future in terms of cash flow, revenue and sustainability (Northcott, 1998).

Organisations inform their stakeholders about their PMCI through various communication channels including annual and integrated reports. In the annual report, information about PMCI is often provided in the management discussion and analysis section of the report (Bryan, 1997). Normally, the information is general, qualitative and forward-looking in nature. This facilitates users of the annual report such as investors and financial analysts in predicting the future aspects of the reporting organisation.

In 2013, the International Integrated Reporting Council (IIRC) launched the Integrated Reporting Framework for preparing an integrated report. The number of organisations which adopt this framework is increasing in the world (IIRC, 2019). Integrated reporting involves presenting information about how an organisation creates value over time (IIRC, 2013). The IIRC's framework provides guidance on what kind of information should be provided. According to this framework, organisations should provide forward-looking information about manufactured capital. Therefore, PMCI is expected to form, in part, forward-looking information.

1.3 Existing literature

PMCI disclosure is essential for organisations as the stock market reacts to this disclosure. Research has shown that PMCI disclosures impact on share price of the reporting organisations (Barron, Kile, & O'Keefe, 1999; Goodman, Neamtiu, Shroff, & White, 2013). However, PMCI disclosure has been noted as a limited number of disclosures in annual reports (Hooks, Coy, & Davey, 2002; Johansen & Plenborg, 2013) as well as integrated reports (Van Staden & Wild, 2013). Scholars who have studied integrated reports argue that this limitation is because of the relatively less interest in the market in manufactured capital (Eccles & Serafeim, 2017). However, scholars who have studied annual reports find that stakeholders' demands PMCI disclosure (Hooks et al., 2002; Johansen & Plenborg, 2013). Researchers have also examined the factors which influence the PMCI disclosure decisions of organisations which publish annual or integrated reports. These include high costs compared to benefits (Al-Qudah, Walker, & Lonie, 1991), investment opportunities (Hossain, Ahmed, & Godfrey, 2005), corporate governance and firm size (Kılıç & Kuzey, 2018).

1.4 Research gap

Although researchers have explored forward-looking information, integrated reports and PMCI disclosure in separate studies, these three areas have not been examined in a single study. Researchers have not yet examined what kind of PMCI information is usually provided by reporters. Understanding the extent to which organisations provide detailed information about PMCI, through integrated and annual reports before implementing these intended investments decisions, will be helpful for stakeholders who can predict the organisations' future performances more accurately. This will involve disclosure on the reporters' financial performances in terms of future cash flow or gearing or capital structure as well as operational performances in terms of growth in revenue and return because of decreasing in operational expenses relating to the manufactured capital.

Further, researchers have studied PMCI disclosure practices in integrated and annual reports separately. With the growing interest in integrated reporting, it is necessary to compare PMCI disclosures in annual reports against those in integrated reports and how this is changing over time. This comparison will allow regulators to better understand which type of report is more effective for users in relation to PMCI information.

Additionally, there is limited research examining corporate disclosure comparing PMCI disclosure practices of New Zealand and Australia based companies. If the PMCI disclosures from the organisations of these two countries were reporters', this will help to

understand the dependence of nature of PMCI disclosure on the size of organisations. In practice, Australian organisations are larger than New Zealand organisations.

1.5 Research design

This study seeks to address two inter-related research questions.

RQ1 What are the extent and nature of PMCI disclosure by New Zealand and Australian organisations?

RQ2 How have these disclosures changed over recent years?

The integrated and annual reports of organisations were the main source of data to discover answers to these questions. Therefore, a total of 181 reports including 73 integrated and 108 annual reports was downloaded from organisational websites. These reports were published by 23 New Zealand and 23 Australian organisations over the five-year period 2014 to 2018.

This research has various aims. One of them is to understand the reporting practices of New Zealand and Australian organisations associated with PMCI. Another objective is to investigate the trend of PMCI disclosures over recent years. It also aims to understand the nature and characteristics of PMCI disclosures by firms in these two countries. This study is also expected to reveal the formal information which the organisations provide in PMCI disclosures to their stakeholders. Finally, the results of this research should add to our understanding of the impact of different reporting guidelines on PMCI disclosures.

To achieve these objectives, the PMCI disclosures were analysed using content analysis with a qualitative approach. The analysis was conducted in two main steps. The first step was assessing the integrated and annual reports published by 46 New Zealand and Australian organisations over five years to discover the PMCI disclosures. Subsequently, the identified PMCI disclosures were classified to reveal their report sections and the nature of the information included in these disclosures.

1.6 Findings

The answers to the research questions were discovered through analysing the integrated and annual reports and the PMCI disclosures provided in these reports. The PMCI disclosures were discovered mostly in New Zealand organisations rather than Australian organisations. There were 21 New Zealand and 5 Australian organisations which disclosed the PMCI in the reports from 2014 to 2018. The most PMCI disclosures were discovered in the integrated and annual reports published in 2018. Notably, there was no

PMCI disclosure in the 2014 integrated reports of the selected organisations from these countries. This suggests that the frequency of PMCI disclosures by New Zealand and Australian organisations has increased over recent years.

The PMCI disclosures were found in the reporting sections about organisational performance and review, strategy, the budget or the management's letter or report. Contrary to expectations based on the IIRC guidelines which identify 'manufactured capital' as a distinct form of capital, the selected organisations did not organise their reports to present PMCI information in a reporting section called 'manufactured capital'. The organisations presented their one or more PMCI in the reports over the five years. Also, some organisations presented PMCI disclosures in a specific reporting section for each reporting year while others used different reporting sections for disclosing PMCI in each year. This suggests inconsistency in the placement of PMCI disclosures in company reports over time.

Five types of information were provided in the identified PMCI disclosures: the type of investment, the projected cost, the projected timeframe, the expected benefits from investment and the strategic decision-making process related to PMCI. This study found no examples of PMCI disclosures that provided all these types of information. The most common information was the type of investment, although there were eight disclosures that did not specify which type of manufactured capital investment was planned by the organisations. These eight disclosures were made in the annual reports. The least commonly provided information related to the strategic decision-making process of the PMCI. If the organisations presented this information in a PMCI disclosure, it mostly related to the implementation stage of the process. There was no disclosure presenting the whole process which involves recognising an investment opportunity, assessing the potential PMCI, defining the requirements of a PMCI, analysing this PMCI, transmitting it in the organisation and implementing it (King, 1975).

When the organisations disclosed the expected benefits from the PMCI, these benefits related to strategic development and growth, social and environmental benefit or improved profitability. However, organisations were more willing to disclose possible strategic development and growth than profitability. The number of identified PMCI disclosures which provided expected benefits was a limitation in this study. Some disclosures presented the projected cost for the next financial year without mentioning the type of investment. In addition, the projected timeframe which was provided in some

of the identified PMCI disclosures mostly related to the commencing or finishing period of the PMCI.

1.7 Contribution

This research aims to contribute to extending the literature on corporate reporting. The findings of this study will be helpful for management and regulators in developing corporate reporting practices and guidelines. These findings will support management in improving the quality of their PMCI disclosures by comparing their practices to the disclosures of peer organisations. In addition, management can realise to draw on these findings to reflect on the balance between what information they are disclosing about PMCI and what stakeholders might want to know about PMCI. The findings will also enhance our understanding of the trend in integrated reporting in New Zealand and Australia related to PMCI. Comparing the disclosures made in integrated and annual reports will assist in understanding the different nature of these reports.

1.8 Outline

This dissertation is organised within five chapters: introduction, literature review, research design, findings and discussion, and conclusion. In the introduction chapter, the research topic is introduced, and the scope of the research is discussed. Chapter 2 is a literature review which will discuss the existing literature on forward-looking disclosures, integrated reporting and PMCI disclosures in integrated and annual report. In Chapter 3, identifying organisations and integrated and annual reports for data collection and data analysis of this research will be discussed. The findings from the data analysis are presented in Chapter 4. The last chapter will discuss what the findings mean and conclusions of this research.

Chapter 2: Literature Review

2.1 Introduction

The purpose of this chapter is to discuss the existing literature on forward-looking disclosures, organisational disclosure over PMIC and integrated reporting. The chapter is structured into seven sections. After the introduction section, section 2.2 explores forward-looking disclosure to understand what has been studied and what has been found. Then, the previous studies and results relating to PMCI disclosure made in annual reports will be discussed in section 2.3. Section 2.4 will discuss the history of the integrated report and what has been studied in this area. Then, PMCI disclosure practices in integrated reports will be discussed in section 2.5. Based on these sections, section 2.6 will present the research gaps in the examinations of forward-looking disclosures, PMCI disclosures and integrated reports. Finally, section 2.7 concludes the chapter with a brief summary of the whole chapter.

2.2 Forward-looking disclosure

The information contained within organisational reports can be grouped into backward-looking information and forward-looking information (Hartono & Wahyuni, 2017). Backward-looking information relates to the reporters' past/historical performances (Aljifri & Hussainey, 2007). A good example of this is the financial statements which provide information on the reporting organisations' financial performance over the previous 12 months. While backward-looking information is certainly useful, it does not provide the stakeholders with information on an organisation's future direction and expected future performance (Beretta & Bozzolan, 2004). Therefore, stakeholders also require organisations to present forward-looking information in their organisational reports. Such forward-looking information comprises a mix of quantitative and qualitative, financial and non-financial information on the reporters' future operations, capital expenditure (Bryan, 1997), current plans, future prospects (Alkhatib, 2014), earning targets, cash flow forecasts, sales forecasts and risks and uncertainties (Aljifri & Hussainey, 2007).

Several studies have examined the factors which influence managers' decisions to disclose forward-looking information in their reports. For example, Kent and Ung (2003) analysed the annual reports of Australian listed companies to understand why some reporters choose to voluntarily disclose information on expected future earnings while others withheld such information from their stakeholders. They found that larger reporters

with less volatile earnings disclosed more information on future earnings than smaller reporters with higher earnings volatility. Clarkson, Kao, and Richardson (1994) analysed the annual reports of Canadian listed companies and found that reporters with good news to share were more likely to provide forward-looking information than reporters with bad news. Other researchers identify different results. For example, Aljifri and Hussainey (2007) examined the relationship between a reporter's debt ratio, profitability and forward-looking disclosure in a sample of listed companies in Dubai. They found that reporters with high debt ratios and low profitability were more likely to disclose forward-looking information in their annual reports. They suggest that reporters may be using forward-looking information to instil stakeholder confidence in their future performance.

Researchers have also examined the benefits of providing forward-looking disclosures to both reporting organisations as well as stakeholders. Thus, forward-looking information disclosures have been found to reduce the information asymmetry between the reporter and their stakeholders (Hassanein & Hussainey, 2015). For example, Celik, Ecer, and Karabacak (2006) examined forward-looking disclosures made by listed companies of the Istanbul Stock Exchange and found that forward-looking disclosures facilitated investors in predicting future cash flows and firm values. Similarly, Bozzolan, Trombetta, and Beretta (2009) argued that forward-looking reports were useful for both analysts and investors. Analysts use this information to improve their forecasts, and investors use this information for their investment decisions. These authors found that increasing the quantity of forward-looking disclosure led to more accurate predictions by investors and analysts, especially if this information was verifiable.

2.3 PMCI disclosures in annual reports

Organisations invest in manufactured capital when they need to improve their business performance (e.g. product quality, increase production to meet market demand or to improve customer satisfaction), to improve their sustainability performance or to keep assets in good condition (Turner & Hesford, 2019). Organisations have usually communicated their PMCI decisions through traditional annual reports (Al-Qudah et al., 1991). Typically, disclosures on PMCI are part of the "Management Discussion and Analysis" (MD&A) section of the annual report. The MD&A typically comprises forward-looking information of voluntary nature (Bryan, 1997). PMCI disclosures allow stakeholders to evaluate proposed projects (Brailsford & Yeoh, 2004; Bryan, 1997), share value and managerial reputation (Brown, Gordon, & Wermers, 2006).

PMCI announcements in MD&A have an impact on the share price of the reporters. This implication was discovered by Cole and Jones (2004), who studied the usefulness of management decisions and analysis disclosures in the retail industry of the US. The relationship between the change in stock market values and PMCI disclosures can be attributed to future earnings, future revenues and free cash flows of the organisations. This relationship was agreed by Burton, Lonie, and Power (1999) who studied the stock market reaction to investment announcements of UK listed organisations and by Goodman et al. (2013) who studied the management forecast quality in the capital expenditure decisions of US-listed companies. Furthermore, if the quality of the PMCI announcement is high, the accuracy of analysts' forecasts is also high. This relationship between the quality of PMCI announcements and analysts' forecasts was found by Barron et al. (1999) who studied US-listed companies with correlation analysis.

Some researchers have examined the factors that influence organisations' decisions to disclose information on their PMCI. For example, Al-Qudah et al. (1991) analysed the accessibility of external investors to the PMCI information of UK listed organisations and the usefulness of this information to these investors with survey methods. In their survey response, they find that analysts and financial managers find this type of information useful and that analysts take steps to procure this information from companies. They discovered that the organisations disclosed their PMCI information if they believed that the benefits to external investors were more than the disclosure costs, especially commercial sensitivity costs. Moreover, they argue that finance managers are more likely to provide this information when 1) there is a need to secure external funds and 2) the reporter has news relating to a planned increase (as opposed to a decrease) in capital expenditure. Hossain et al. (2005) analysed the motivations behind voluntary disclosures made by New Zealand listed organisations. They found a direct correlation between the PMCI disclosures and investment opportunities, new security offerings and propositions of external directors. In their study, the large organisations, the organisations with higher proportions of outsiders on the board of directors and the organisations with higher growth opportunities disclosed PMCI in the annual reports. Others, however, provide a different explanation. For example, Brown et al. (2006) explain PMCI disclosures as a reflection of herd behaviour, whereby organisations operating in a similar industry follow the disclosure practices of their peers.

Johansen and Plenborg (2013) report that Danish financial analysts and investors were only moderately satisfied with the PMCI information provided in the annual reports of

Danish listed companies. These two groups of stakeholders demanded that it was important for them to retrieve such information even though the process of its presentation and publication might be expensive for the reporting organisations. Similarly, findings have also been noted by Hooks et al. (2002) who found that stakeholders of New Zealand electricity companies considered PMCI as essential disclosure information necessary to promote accountability towards the stakeholders.

2.4 Integrated reporting

The International Integrated Reporting Council (IIRC) is a global not-for-profit organisation which was created in 2010 to establish the integrated reporting concept (Rinaldi, Unerman, & de Villiers, 2018). The IIRC (2013) describes an integrated report “as a concise communication about how an organisation’s strategy, governance, performance, and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term”. It is a different type of report which seeks to integrate information contained within the financial statements and the sustainability report. The financial statements present information on the reporters' historical financial performance but fail to provide a complete account of the reporters non-financial/social and environmental performance (King, 2012). The sustainability report, however, provides information about the reporters’ social, environmental and economic performance but not the reporters’ financial performance (Gray, 2010). Addressing this silo approach to reporting the IIRC, encourages the publication of a single report containing information on the reporters’ financial and non-financial performance presented in an integrated manner (IIRC, 2013).

The number of organisations which have adopted the integrated reporting guidelines is around 1,750 in the world (IIRC, 2019). A reason for this growth is that in some countries like South Africa and France, integrated reporting has become a mandatory requirement. (Cheng, Green, Conradie, Konishi, & Romi, 2014). New Zealand is also encouraging this practice as the New Zealand Stock Exchange (NZX), publishing its revised guidelines on corporate governance in 2017, encouraged listed entities to publish non-financial information in the form of either a sustainability report (using the Global Reporting Initiative Standards) or an integrated report (using the IIRC framework) (NZX, 2017). Although the corporate governance guidelines and principles of the Australian Stock Exchange (ASX) do not make it compulsory for listed companies to adopt the IIRC framework, listed companies are required to disclose material information relating to

economic, social and environmental risks as well as providing a management plan on addressing these risks (ASX, 2014).

The growing interest in integrated reporting and the IIRC framework has motivated researchers to study this new form of organisational reporting. Pavlopoulos, Magnis, and Iatridis (2017) analysed the quality of accounting disclosure made in the integrated reports published by IIRC partner organisations from 2011 to 2015 in 25 countries. They conclude that the information provided in integrated reports has the potential to reduce information asymmetry. According to Barth, Cahan, Chen, and Venter (2017), this reducing information asymmetry is because the high-quality integrated reports assist investors in evaluating the value of the reporter as well as the predicting the reporter's future earnings. These authors tested the integrated reports published from 2011 to 2014 by top 100 listed firms of South Africa with statistical analysis.

However, others are critical and argue that integrated reports, like sustainability reports, are used as a tool to enhance management reputation and manage corporate legitimacy (Ahmed Haji & Anifowose, 2016) in studying integrated reporting trends of large listed South African companies with content analysis. Others point out the need to improve the quality of integrated reports addressing the issue of readability, particularly. For example, Du Toit (2017) studied the 2015 and 2016 Integrated Reports published by listed companies on the Johannesburg Stock Exchange to analyse the level of readability. The study found that the reports had very low readability and organisations used complex language to present information, potentially resulting in a lower level of understanding amongst users. However, Cheng et al. (2014) argue that the quality of integrated reports depends on the ability of organisations to stimulate new thinking and to adapt their business models rather than simply preparing a report according to the integrated reporting guidelines.

The IIRC Framework states that integrated reports should provide stakeholders with an understanding of the interrelatedness and trade-offs between six capitals (finance, natural, social, intellectual, human and manufactured capital) which are essential to generate sustainable returns (IIRC, 2013). The Framework defines these six capitals as follows:

- 1) Financial capital – the funds which can use for the goods and services of an organisation and are obtained from various sources: debt, equity or grant, productions or investments.

- 2) Social/relationship capital – sharing and relationships with the institutions, communities, stakeholder groups and other networks.
- 3) Manufactured capital – physical objects: buildings, equipment and infrastructure supporting production of goods and services. These objects can be produced by the organisations or by the reporting organisation to sell or use.
- 4) Intellectual capital - intellectual property: patents, copyrights, software, rights and licences and organisational capital: tacit knowledge, systems, procedures and protocols.
- 5) Human capital – competencies, capabilities and experiences and motivations of the people relating to the reporting organisation.
- 6) Natural capital – all renewable and non-renewable environmental resources and processes relating to goods or services of the reporting organisation.

According to the IIRC framework, reporting organisations should provide quantitative and qualitative information, backward-looking and forward-looking information on these capitals and present information associated with the organisational overview, external environment, governance, business model, risks and opportunities, strategy and resource allocation, performance, outlook and the basis of presentation (IIRC, 2013).

Researchers have analysed integrated reports to understand the nature of the information being disclosed. For example, Kılıç and Kuzey (2018) examined integrated reports published by non-financial organisations from the Integrated Reporting Examples Database in 2014 to understand what issues were commonly disclosed and if this information was of a qualitative or a quantitative nature. These organisations were from Europe, Africa, Asia, Australia, North America and South America. They found that information relating to issues such as growth opportunities, industry or market risks, environmental risks, investment projects, research and development plans and financial risks was usually of a qualitative nature while information relating to the environmental issues such as green gas emissions, water waste and energy consumption was usually of a quantitative nature. Importantly, they note that integrated reports provide the user with the information relating to advertising and publicity plans, expected market share, share price, political risks, industry or market risks, expected cash flows and growth opportunities. However, these types of information were less specific and qualitative in nature. Although these results were from analysing the early integrated reports of organisations, the disclosed information of integrated reports was questionable in terms of specific details. Van Staden and Wild (2013) analysed integrated reports published by

organisations participating in the IIRC's pilot programme. They comment that these reports were generally long, lacked precision and gave users only general information on the strategy, operational context and organisational overview. Ahmed Haji and Anifowose (2017) also found similar results when they analysed integrated reports published by South African listed companies. They note that the information relating to the interdependencies and trade-offs between the capitals lacked detail and clarity. Researchers argue that if reporters provide more specific and detailed information, this can help to improve the quality of integrated reports.

2.5 PMCI disclosure in the integrated report

Manufactured capital is one of the six capitals which the IIRC framework requires reporting organisations to disclose information on within their integrated report. However, studies examining the functions of integrated reports found only a limited number of PMCI disclosures in integrated reports. For instance, Wild et al. (2013) found less information about manufactured capital than other capitals (financial, human, social and natural) in the integrated reports of the IIRC pilot programme. Similar results have been noted by Eccles and Serafeim (2017) who studied integrated reports published by listed South African companies and IIRC partner organisations. These researchers explained that this could be a result of the decreasing importance of manufactured capital in the knowledge economy. However, this studying was from the perspectives of report preparers. The scholars, who studied the annual reports, have mentioned the interest of stakeholders on PMCI disclosures in the corporate report e.g.: Johansen and Plenborg (2013).

2.6 Gaps in the current research

The previous sections provide an overview of the existing literature in the areas of forward-looking disclosures, PMCI disclosures in annual reports and PMCI disclosures in integrated reports. While these studies offer useful insights, there are gaps which motivate the need for greater research examining PMCI disclosures in annual and integrated reports.

Firstly, in terms of forward-looking information disclosure, researchers have studied the benefits of disclosing this information (Barron et al., 1999; Bozzolan et al., 2009; Hassanein & Hussainey, 2015) and the factors that influence organisations' choice for disclosing for the same (Al-Qudah et al., 1991; Aljifri & Hussainey, 2007; Bravo, 2016). Secondly, researchers have studied PMCI in the annual reports in terms of its implications

(Burton et al., 1999; Cole & Jones, 2004; Goodman et al., 2013), determinants (Hossain et al., 2005) and stakeholders' perceptions of usefulness (Hooks et al., 2002; Johansen & Plenborg, 2013).

However, little academic attention has been paid to understanding the features of PMCI disclosure in the annual reports relating to the type of information, whether general or specific. These studies also mostly focused on listed and large organisations in these studies. Although the implications of PMCI disclosures have been studied, the level of implications has not yet been studied based on detailed information about PMCI. Moreover, these studies did not tell specifically which part of MD&A sections belonged in PMCI disclosure. Finally, there is little if any information available on how PMCI disclosures have changed in the annual reports after developing the integrated reporting.

Scholars also studied the integrated reports to understand the benefits of organisations publishing an integrated report (Ahmed Haji & Anifowose, 2017; Barth et al., 2017), the quality of the published integrated reports (Ahmed Haji & Anifowose, 2016; Cheng et al., 2014; Du Toit, 2017) and nature of information disclosed in the integrated reports (Ahmed Haji & Anifowose, 2017; Kılıç & Kuzey, 2018; Van Staden & Wild, 2013). In addition, the researchers studied PMCI disclosure through the function of the integrated report and factors influencing the disclosure decisions of the organisations.

There is still a gap to study the feature of specific disclosure instead of PMCI disclosure in the integrated report. Furthermore, like annual report studies, the scholars have little interest in detailed information about PMCI and the reporting section of PMCI in the integrated reports. There is also a need for greater research examining integrated reports published by New Zealand and Australian organisations. This is because earlier studies focused on South African reports and/or IIRC pilot project partner companies (Ahmed Haji & Anifowose, 2017; Kılıç & Kuzey, 2018; McNally, Cerbone, & Maroun, 2017), with the latter including only a small number of New Zealand and Australia based reporters. Furthermore, the scholars have not shown interest in studying the differences between PMCI disclosures made in annual and integrated reports.

Therefore, this research aims to examine the PMCI disclosures of annual and integrated reports published by New Zealand and Australian organisations in terms of number of PMCI disclosures, reporting sections in which PMCI is disclosed and detailed information about PMCI. This examination will help to fill the gaps in the current literature by focusing on extending the analysis of PMCI disclosure practices undertaken by various types of organisations in New Zealand and Australia.

Filling these gaps will lead the related parties of disclosure to realise some situations. For example, the regulators can realise which type of report is more useful for the users through comparing annual report and integrated report. Consequently, it will support them on how to improve their guidance to be an effective corporate report for the users.

Moreover, the detailed information of PMCI can support the investors to predict the more accurate future performance of the organisations. However, the information involving in PMCI disclosure can differ because of different reporting section. For example, the PMCI disclosure under environmental review will involve more information about environmental performance than operational performance. Then, this difference limits the predictions of investors. Therefore, understanding the usual reporting section of PMCI disclosure and usual information of PMCI will support the users and managers to reconcile their interest in PMCI disclosure. The understanding detailed information of PMCI also will support in improving the quality of integrated report increasing interest of the world.

Finally, comparing New Zealand and Australian organisations will show how different guidance and growth of countries influence on the reporting practices of organisations especially in PMCI disclosure.

2.7 Conclusion

This chapter presented the relevant literature of forward-looking disclosure, integrated report and PMCI disclosures in integrated and annual reports. In the forward-looking disclosure section, the benefits and determinants of forward-looking disclosure were discussed. The integrated report was presented regarding benefits, current quality and commonly disclosed information of the integrated report. Current reporting practice of PMCI disclosure and the different views of stakeholders on PMCI disclosure presented in the integrated and annual reports were presented in the PMCI disclosure section. In addition, the chapter also highlighted the gaps in the current research. These gaps have attributed to the examination of the PMCI disclosure of New Zealand and Australian organisations through the integrated and annual reports. The next chapter will discuss the research design of this examination.

Chapter 3: Research Design

3.1 Introduction

This chapter presents the research design for this study. The chapter is structured into five sections. After the introduction section, section 3.2 explores how the list of reporters was identified in this research. Section 3.3 discusses the identified integrated and annual reports which are essential for data analysis. After that, the data analysis method and procedure are presented in section 3.4. Finally, section 3.5 concludes the chapter with a brief summary of the research design relating to this study.

3.2 Data collection: list of reporters

The purpose of this study is to examine PMCI disclosures contained within the annual and integrated reports of New Zealand and Australian organisations. Based on the gaps found in the literature review, this study aims to address the following two inter-related research questions:

RQ1 What is the extent and nature of PMCI disclosure by NZ and Australian companies?

RQ2 How have these disclosures changed over recent years?

To address these research questions, the integrated and annual reports published by New Zealand and Australia based organisations were intended to be the source of data. The period of analysis was five years from 2014 to 2018. This allowed for a longitudinal analysis of how PMCI disclosure practices were evolving over time. The criteria for identifying these reports depended on the availability of integrated report during these five years. The reason was the number of organisations publishing the integrated report was the limitation of this study. Therefore, other criteria such as size of the organisation, nature of business could not be counted in this study.

However, the study targeted large organisations at first as these were more likely to engage in the production of costly PMCI and integrated reports. Large organisations were identified from Deloitte's 2017 Top 200 New Zealand companies list¹ (Deloitte 2017 Top 200 New Zealand Companies announced, 2018). As New Zealand based organisations were focused, this list was applied in this study instead of Top 200 listed companies of the New Zealand Stock Exchange involving the companies based in other countries. Subsequently, the websites of these companies were visited to assess if they had published an integrated report during the five years from 2014 to 2018. From this search, it was

¹ The criterion used by Deloitte in determining company size was company revenue.

found that ten companies had published an integrated report during this time. In a similar approach, it adopted to identify integrated reports published by Australian companies. However, Deloitte did not list Top 200 Australian companies for Australia. Therefore, Top 200 listed companies of Australia Stock Exchange (ASX) was focused to collect data. For this purpose, the study used the ASX 200 list from the website “ASX200list.com”². The websites of these companies were searched to identify companies which had published an integrated report. Through this process, five companies were identified as having published an integrated report during the research period, i.e. 2014 to 2018. Fortunately, these five companies were companies based in Australia. Finally, a total of 15 New Zealand and Australian companies were identified. After that, the study was extended to include all integrated reporters from New Zealand and Australia thereby including professional bodies, government organisations and smaller private companies during the five-year period of analysis from 2014 to 2018. The partners of the pilot IIRC program under the Australasian region were also counted to add to the sample. This was secured from the IIRC website. This list identified 22 companies; however, fifteen companies were excluded from this study as they were based either in Sri Lanka or Singapore. Among the remaining companies, five companies had already been identified through the earlier described web searches of the Deloitte Top 200 and ASX 200 web search. Therefore, only two organisations, CPA Australia and Vicsuper, both Australia based, were added to the list of organisations publishing an integrated report.

Additionally, a simple google search using key words such as integrated reporting or IR AND New Zealand or Australia was also conducted to identify any missing. This led to the identification of two New Zealand and four Australian organisations which had published an integrated report. These organisations were Ports of Auckland, Controller Auditor General, Bank Australia, Cbus, Australia Post and Australian Council of Superannuation Investors Limited. Thus, the total number of organisations included 12 New Zealand and 11 Australian organisations which published an integrated report from 2014 to 2018. The final data set comprised of 23 New Zealand and Australia based organisations engaged in integrated reporting.

Among these 23 organisations, some organisations published the annual report instead of the integrated report in some of the research years. For example, The Warehouse

² This is an independent organisation based in Sydney.

published the annual report for each of four research years: 2017, 2016, 2015 and 2014. However, the organisations, which involved in the first data set, were not applied again in studying of PMCI disclosures from annual reports. It was to avoid a situation which is possible same reporting practices of an organisation in different nature of the integrated report and annual report. Avoiding this situation will support more to understand the reporting practices of organisations in the different reporting types. Therefore, the second list of 23 organisations which had published an annual report, but no integrated report was compiled by identifying their related business industry. one organisation per each organisation of the first data set was selected. This was done for both New Zealand and Australia. In order to classify organisations into industries the Global Industry Classification Standard (GICS) was used. Further, the same focused groups and approaches were applied in identifying these organisations. The list of 46 organisations is presented in table 1.

Table 1 List of organisations involved in the research sample

Industry	Organisations issuing an Integrated Report	Organisations issuing an Annual Report but no Integrated Report
New Zealand		
Energy	Z Energy	BP Energy
Food, Beverage and Tobacco	Sanford	Ngati Porou Seafoods Group
Food, Beverage and Tobacco	Moana	King Salmon
Utilities	Meridian	Contact Energy
Transportation	KiwiRail	Air New Zealand
Food & Staples Retailing	Bidcorp	Foodstuffs
Utilities	Mercury	Trustpower
Transportation	NZ Post	Freightways
Food & Staples Retailing	The Warehouse	Briscoe Group
Food, Beverage and tobacco	Landcorp	Alliance Group
Transportation	Ports of Auckland	Auckland Airport limited
Government organisation	Controller Auditor General	New Zealand State Service Commission
Australia		
Banking	Bank Australia	Bank of Queensland
Commercial and Professional services	CPA Australia	Chattered Accountants Australia and New Zealand
Banks	National Australia Bank	Westpac
Real estate	Stockland	Abacus Property Group
Diversified financials	Vicsuper	AMP Limited
Banks	ANZ	Commonwealth Bank
Real estate	Lend-lease Group	Growthpoint Property
Real estate	Vicinity Centers	SCA Property Group
Diversified financials	Cbus	Challenger Limited
Transportation	Australia Post	TNT Express
Commercial and Professional services	Australian Council of Superannuation Investors Limited	Research Australia

Table 2 presents the related business industries of these 46 organisations. These organisations covered ten business industries defined by GICS. They are energy, food, beverage and tobacco, utilities, transportation, food and staples retailing, government, banking, real estate, diversified financials, and commercial and professional services.

Table 2 List of industries covered in the research

Sr. No.	Industry	Number of organisations
1	Energy	2
2	Food, Beverage and Tobacco	6
3	Utilities	4
4	Transportation	8
5	Food & Staples Retailing	4
6	Government	2
7	Banking	6
8	Real Estate	6
9	Diversified Financials	4
10	Commercial and Professional Services	4
	Total	46

After determining the organisations, their websites were visited to collect their reports. If these reports were published in recent years, it would be helpful to understand the current reporting practices of the organisations. Therefore, the reports published in a period from 2014 to 2018 were collected for this research. For this study, an integrated report was identified based on its reference to the International Integrated Reporting Council (IIRC) Framework. Each stage of data collection will be presented in the data collection section.

3.3 Data collection: identifying annual and integrated reports

The process of data collection is collecting data from the selected participants to perform research with an appropriate approach (Sreejesh, 2014). In this research, the integrated and annual reports of 46 organisations, which were published for five years, were the primary resource of data. Generally, the organisations upload their reports onto their websites to be accessed by the public. Therefore, each website of these organisations was visited to collect these reports.

In collecting the traditional annual reports of 23 New Zealand and Australian organisations, all reports published in five years were downloaded except some reports of New Zealand King Salmon Limited, Air New Zealand, Alliance Group, and Challenger Limited. Table 3 presents the reason for non-collection of these. As a result, 108 traditional annual reports were gathered to examine the disclosure of investment plan relating to the manufactured capital.

At the same time, 2014 to 2018 integrated reports of 23 New Zealand and Australian organisations were downloaded from each website of these organisations. While some organisations have been publishing an integrated report for five years, others have started more recently and had published an integrated report for one or two years only. For example, The Warehouse Group Limited published its integrated report following the guidelines of IIRC from 2018, while New Zealand Post had issued an integrated report applying these guidelines since 2013. In addition, CPA Australia, a professional body, has not yet uploaded its 2018 Integrated Report at its website as its financial year ended in May and data collection was completed in March 2019. Therefore, a total of 73 integrated reports were collected for this research.

Table 3 Reason for the uncollected annual reports

Company	Reason
New Zealand King Salmon Limited	It published its first annual report in 2017 after listing in NZX.
Air New Zealand	Its Annual Data Book was published from 2015.
Alliance Group	On its website, there were annual reports for four years from 2015 to 2018 but no report for 2014. Although the company was contacted to share a 2014 copy, it did not reply.
Challenger Limited	There was no report uploaded for 2014 on the company website. The company was contacted to share a copy; however, they replied that the information could be shared by registered investors only.

When collecting these reports, it was found that some organisations (such as BP Energy, TNT express and Bidfood, etc.) did not distribute an individual annual or integrated report for New Zealand and Australia. For such organisations, their group reports were collected for this research. Conclusively, there was a total of 181 integrated and annual reports collected for analysing the disclosure of investment plan relating to the manufactured capital — these 181 reports comprised of 73 integrated reports and 108 annual reports. Table 4 represents the collected reports from 46 New Zealand and Australian organisations for over five years.

Table 4 Number of reports per year for each organisation

	Year					Total
	2018	2017	2016	2015	2014	
Organisations which issue <IR> Report						
Z Energy	1	1	1	-	-	3
Sanford	1	1	1	1	1	5
Moana	1	1	1	-	-	3

	Year					Total
	2018	2017	2016	2015	2014	
Meridian	1	1	-	-	-	2
KiwiRail	1	1	1	-	-	3
Bidcorp	1	1	1	-	-	3
Mercury	1	1	-	-	-	2
NZ Post	1	1	1	1	1	5
The Warehouse	1	-	-	-	-	1
Landcorp	1	1	-	-	-	2
Ports of Auckland	1	1	-	-	-	2
Controller Auditor General	1	1	1	-	-	3
Bank Australia	1	1	1	1	-	4
CPA Australia	-	1	1	1	1	4
National Australia Bank	1	1	1	1	1	5
Stockland	1	1	1	1		4
Vicsuper	1	1	1	1	1	5
ANZ	1	1	-	-	-	2
Lendlease Group	1	1	1	-	-	3
Vicinity Centers	1	1	-	-	-	2
Cbus	1	1	1	1	-	4
Australia Post	1	1	1	-	-	3
Australian Council of Superannuation Investors Limited	1	1	1	-	-	3
Organisations which issue Annual Report						
BP Energy	1	1	1	1	1	5
Ngati Porou Seafoods Group	1	1	1	1	1	5
King Salmon	1	1	-	-	-	2
Contact Energy	1	1	1	1	1	5
Air New Zealand	1	1	1	1	-	4
Foodstuffs	1	1	1	1	1	5
Trustpower	1	1	1	1	1	5
Freightways	1	1	1	1	1	5
Briscoe Group	1	1	1	1	1	5
Alliance Group	1	1	1	1	-	4
Auckland Airport limited	1	1	1	1	1	5
New Zealand State Service Commission	1	1	1	1	1	5
Bank of Queensland	1	1	1	1	1	5
Chattered Accountants Australia and New Zealand	1	1	1	1	-	4
Westpac	1	1	1	1	1	5
Abacus Property Group FP Ordinary	1	1	1	1	1	5
AMP Limited	1	1	1	1	1	5
Commonwealth Bank	1	1	1	1	1	5
Growthpoint Property FP Ordinary	1	1	1	1	1	5
SCA Property Group	1	1	1	1	1	5
Challenger Limited	1	1	1	1	-	4
TNT Express	1	1	1	1	1	5
Research Australia	1	1	1	1	1	5
Total	45	45	38	30	23	181

These 181 reports were applied to analyse data for this research. The data analysis process will be discussed in the final section of this chapter.

3.4 Data analysis: content analysis

To achieve this objective, the technique of content analysis, a qualitative research method, was considered as a suitable research method for this research. According to Downe-Wamboldt (1992), this technique can provide understanding of the phenomenon under

study. It can be used with different purposes such as describing characteristics, e.g. themes and trends of communication content and the relationship between the sender and recipient of a communication etc. (Berelson, 1952). Moreover, it can be used in different types of research such as visual research, conversational research and documentary research etc. It can provide systematic approaches to describe and quantify a phenomenon from a valid conclusion sourced in conversation, text and visual data (Downe-Wamboldt, 1992). Content analysis is a common research method applied in clarifying disclosures of corporate reports in the accounting area which has been used by various researchers over the years (Chang, 2018; Sreejesh, Mohapatra, and Anusree, 2014).

Because of these characteristics of content analysis, it was used to examine PMCI disclosures in integrated and annual reports. This technique is particularly suited to documentary research, where the aim is to look for common structures by comparing documents (Fisher & Buglear, 2004). Before collecting organisational reports for data analysis, it was necessary to identify the relevant organisations to collect their reports. This will be discussed in the next section.

Content analysis allows analysing data with a quantitative or qualitative approach (Lock & Seele, 2015). While the quantitative approach focuses on the frequency of words or phrases, a qualitative approach focuses on the presentation of data and interaction of data between sender and receiver (MacLennan, Gibbons, & Piña, 2018). This research applied the qualitative approach to analyse data as its objective was to understand how the organisations present their PMCI. This analysis involved two steps: assessing the integrated and annual reports and clarifying the features of PMCI disclosure.

Assessing the integrated and annual reports of 46 New Zealand and Australian organisations aimed to identify how many reports and which organisations presented the PMCI over five years. The following terms were applied for this assessment: an acquisition or purchasing plan of assets which is determined as the manufactured capital, an investment plan of the organisational infrastructure, a replacement or maintenance plan of existing manufactured capital, and the leasing or production of the assets in future. Moreover, the different terminologies of the plan (Budget, Forecast, Expect) were also applied as the reporting organisation used different words in presenting the PMCI. The results from this assessment were categorised into three categories: organisations per country, number of organisations per year and number of organisations per industry.

Following this, the investment PMCI disclosures from these reports were established in two main categories: the reporting section of the disclosure and the factors including in a PMCI disclosure. Its objective was to understand the features of a PMCI disclosure of the integrated and annual reports. In this step, the inductive approach was applied to create codes as this approach allows creation of categories from data freely (Allen, 2017) and creation of a general statement from the observations (Elo & Kyngäs, 2008).

The objective of identifying the reporting section was to discover the reporting sections where the stakeholder should observe the PMCI disclosure. Therefore, the results were categorised under four categories, which were created based on the findings. These categories are organisational performance and review, strategy, management's letter or report and budget.

The objective of classifying data involved in PMCI disclosure is to understand which information through this disclosure is presented to the report users by the organisations. The information relating to benefits, the projected cost, projected timeframe, type of investment and strategic decision-making process of a PMCI was expected to comprise the PMCI disclosure. Therefore, the following questions were formed to apply in analysing the factors of disclosure before the process:

- 1) Did the organisation present type of investment?
- 2) Was the projected investment cost mentioned in the PMCI disclosure?
- 3) Were the expected benefits, which come from this investment, mentioned in the PMCI disclosure?
- 4) Was the strategic decision-making process presented in the PMCI disclosure?
- 5) Was the projected timeframe mentioned in the PMCI disclosure?

After that, the codes were created from the results of this clarification. Details of the codebook can be found in Appendix 3.

Microsoft Excel was used by the researcher to organise the data analysis, which allowed efficient comparisons and analysis of the data. It is an efficient comparative tool which can support this research to compare its results. In addition, this research aimed to present what was disclosed for the PMCI by the organisation. It did not intend to observe the interactions of the results. Therefore, Microsoft Excel, a straight-forward program, was selected to analyse data.

3.5 Conclusion

This chapter presented the research design of this research within three sections: data collection: lists of reporters and identifying annual and integrated reports and data analysis. In the data collection: lists of reporters, it discussed how sample organisations were selected and which organisations from New Zealand and Australia involved in this study. In addition, the data collection: identifying annual and integrated reports presented how many reports were collected from the sample organisations and the situations which were faced in collecting the annual and integrated reports. Finally, the data analysis section discussed which method was applied in this study and how data analysis was conducted. Conclusively, this research design chapter discussed how the research was accomplished. The results of the analysis will be discussed in the next chapter.

Chapter 4: Findings and Analysis

4.1 Introduction

This chapter will discuss the results from the analysis of PMCI disclosures made in the collected integrated and annual reports. The analysis aimed to address the three research questions outlined in Chapter 1 by discovering how the organisations disclosed PMCI in their integrated and annual reports, how this disclosure has changed over recent years and how it differed between the integrated and annual reports. Therefore, the first step of the analysis was to examine the reports that disclosed corporate PMCI. Then, the discovered disclosures were classified to understand the corporate reporting practices over five years. To discuss the findings from these steps, this chapter comprises two sections: assessing the integrated and annual reports and classifying the PMCI disclosures.

4.2 Assessing the integrated and annual reports

4.2.1 Number of organisations and reports disclosing PMCI

Of the 46 organisations identified, only 26 disclosed information on their PMCI during the five years of analysis. Thus, while the majority (57%) of organisations disclosed some information on this area, a significant number of reports (43%) did not provide stakeholders with any information on PMCI. These 26 organisations comprised five Australian organisations and 21 New Zealand organisations. Of the five Australian organisations, three chose to disclose this information in their annual reports while the rest used their integrated reports. Of the 21 New Zealand organisations, ten used the integrated reports to communicate their PMCI with stakeholders while eleven used the annual reports. In addition, over 90% of the selected New Zealand organisations disclosed their PMCI in their integrated or annual reports. However, only 23% of Australian organisations did so. These findings show that New Zealand organisations disclosed their PMCI more than Australian organisations (Table 5).

Table 5 List of organisations disclosing PMCI

New Zealand		
Z Energy	New Zealand Post	Foodstuffs
Sandford	Landcorp	Trust Powers
Moana	Ports of Auckland	Freightways
Meridian	BP Energy	Briscoe Group Limited
KiwiRail	Ngati Porou Seafoods Group	Alliance Group
Bidcorp	Contact Energy	Auckland Airport
Mercury	Air New Zealand	New Zealand State Service Commission
Australia		
FED Express	Vicinity Centers	SCA Property
Stockland	Growth Point Property	

These 26 organisations presented their PMCI in 62 integrated and annual reports through the research period (i.e. 34% of the total 181 reports examined for the five years of analysis). The number of organisations increased year by year with 2018 being the year with the highest number of PMCI disclosures, i.e. 18 reports, which was more than three times the number in 2014 (Table 6).

Table 6 Number of organisations reporting PMCI by year

Year	Number of Reporters		Total
	<IR> Report	Annual report	
2018	9	9	18
2017	7	10	17
2016	5	9	14
2015	2	7	9
2014	-	6	6
Total	23	41	64
% of reports in the sample	31%	38%	34%

Although the difference between the total number of integrated and annual reports containing PMCI disclosures was 18 reports over five years, the representative percentages were similar at 31% of the 73 integrated reports and 38% of the 108 annual reports. In addition, the 23 integrated reports were published from 2015 to 2018, with no PMCI disclosures found in the 2014 integrated reports examined for this research. However, the 41 annual reports that mentioned PMCI were published from 2014 to 2018. Increasingly, over the five years, the use of integrated reports to disclose PMCI started from zero and then equalled to the use of annual reports by 2018.

4.2.2 PMCI disclosures by industry

The 26 organisations which disclosed PMCI in their annual or integrated reports operated in seven different industries: real estate; transportation; food, beverage and tobacco; utilities; food and staples; retailing energy and government (Table 7). This means that the sample organisations based in three industries, banking, diversified financials and commercial and professional services, did not disclose their PMCI during the whole analysis period.

Seven out of the 26 organisations that reported their PMCI were from the transportation industry. Hence, this industry had the highest number of organisations disclosing PMCI among the seven industries represented in the sample. In contrast, government had the least number of organisations as only one organisation disclosed PMCI in this industry.

Table 7 Number of organisations making PMCI disclosures by industry

Industry	Number of organisations
Energy	2
Food and Staples Retailing	3
Food, Beverage and Tobacco	4
Government	1
Real Estate	4
Transportation	7
Utilities	5
Total	26

Although 26 organisations disclosed their PMCI, only three organisations disclosed this plan continuously over five years. These were Freightways, Briscoe Group Limited and Auckland Airport, which provided information on PMCI disclosure in their annual reports. Other organisations such as Z Energy, Stockland, Meridian and KiwiRail presented PMCI information in their integrated reports continuously since their first <IR> report. However, it was not for five years.

These findings partially address the research question related to the examination of the PMCI reporting practices of New Zealand and Australian organisations. While PMCI was not a widespread disclosure among these organisations, the number of integrated and annual reports disclosing PMCI increased year by year. In addition, this PMCI disclosure is becoming a formal disclosure in the integrated report rather than the annual report. The results related to classifying PMCI disclosures will be discussed in the next section.

4.3 Classifying the planned manufacturing capital investment disclosures

The objective of classifying the PMCI disclosures is to understand the features of this disclosure. The classification was performed in two steps. The first step involved discovering *where* the information about PMCI was disclosed in an organisational report. The second step involved identifying *the type of information presented* in these disclosures.

4.3.1 Location of PMCI disclosures in annual reports and integrated reports

The sample organisations prepared their integrated and annual report using various formats. According to the Integrated Reporting Framework (2013), organisations do not need to categorise the organisational information based on the six capitals that IIRC identified in their guidelines (of which manufactured capital is one). Therefore, the sample organisations did not create a section called “manufactured capital” specifically.

Their reports were organised with sections called strategy, outlook, performance and value creation etc. On the other hand, the examined annual reports had various reporting sections; for instance, risk management, management letter, performance, and outlook. Therefore, the structures of the examined integrated and annual reports were similar. Subsequently, the sections disclosing PMCI were grouped into four categories: organisational performance and review; strategy; management's letter or report; and the budget. The objective of grouping the reporting sections is to understand which section PMCI belongs to. When the reporting sections were grouped, the title and information presented in these sections were counted within this grouping. Table 8 presents the detail on reporting sections grouped within the four categories. Examples of the approach taken to categorisation are as follows.

- "From our CEO" and "Managing Director's report" sections were categorised under *management's letter or reports*.
- The sections presenting management decisions and analysis were grouped under *organisational performance and review*.
- The budgeting section was in the *budget category*.
- The sections disclosing the business strategy and model were in the *strategy category*.

Table 8 Sections reporting the investment plan of manufactured capital in integrated and annual reports

Organisations	Report	Management's Letter or report	Organisational Performance and review	Strategy	Budget
Stockland	2018 Integrated Report	Letter from the Managing Director and CEO - Repositioning our business for future growth			
Stockland	2017 Integrated Report			Our strategic priorities: Grow asset returns and our customer base-Retail Town Centers	
Stockland	2016 Integrated Report		Grow asset returns and our customer base: Retail		
Stockland	2015 Integrated Report		Operational Excellence-Caloundra South		
Vicinity Centers	2018 Integrated Report	Chairman's review			
Z Energy	2018 Integrated Report		Value Creation-Creating Value	About Z – Business Model	
Z Energy	2017 Integrated Report			About Z- Our capability	
Z Energy	2016 Integrated Report		See the risk, manage the risk		
Sandford	2018 Integrated Report	Sandford and our operations- Chairman and CEO's review	Reporting outcomes and material issues – Building a sustainable seafood business-shareholder value and risk		
Moana New Zealand	2016 Integrated Report		Introduction to our area of focus- our performance		
Meridian Energy Limited	2018 Integrated Report		Responsibility Generation- a resilient asset mix		
KiwiRail	2018 Integrate Report		Business review-performance of our business units- Infrastructure and Capital review: Financial and Assets		
KiwiRail	2017 Integrated report		Business review-performance of our business units- Infrastructure and Capital review: Assets		
KiwiRail	2016 Integrated report		Capitals review: Assets		
Bidcorp	2018 Integrated report		Divisional reviews: Europe, Emerging markets		

Organisations	Report	Management's Letter or report	Organisational Performance and review	Strategy	Budget
Mercury	2018 Integrated report	Chai's update-returning value	Pillars-Commercial		
Mercury	2017 Integrated Report	Chair's update-returning value and Chief Executive's update- financial performance	What matters most- enhanced natural resources: security of supply		
New Zealand Post	2017 Integrated Report	Our outlook- Chief and Chief Executive	Our performance – our network	Our strategies: Growth- Grow capacity and value, Efficiency- Pursue efficiency and lower costs and Sustainability- Grow our sustainability	
New Zealand Post	2016 Integrated report			Our strategy and performance- Expanding our delivery capabilities	
New Zealand Post	2015 Integrated report		Our story networks- Integrating mail and courier functions		
Landcorp	2017 Integrated report			Strategy environmental care on farms and in value chains	
Ports of Auckland	2018 Integrated report	Chair's statement and Chief Executive's statement			
Growthpoint Property	2018 Annual Report	Business overview-managing Director's report	Business Overview- Sustainability revive		
Growthpoint Property	2017 Annual report		Portfolio Review- Industrial portfolio review		
SCA properties	2018 Annual report	Message from CEO	Our performance- Development Pipeline		
SCA Property	2017 Annual Report		Our performance		
FED Express (TNT Express)	2018 Annual Report		Management's discussion and analysis of results of operations and financial condition-reportable segment		
FED Express (TNT Express)	2017 Annual Report		Management's discussion and analysis of results of operations and financial condition-outlook, FedEx express group outlook, FedEx Ground segment outlook and		

Organisations	Report	Management's Letter or report	Organisational Performance and review	Strategy	Budget
			FedEx freight segment outlook		
FED Express (TNT Express)	2016 Annual Report		Management's discussion and analysis-outlook, FedEx express group outlook, FedEx ground segment outlook and Liquidity outlook		
BP Energy	2017 Annual Report		Performance-Focused on delivering competitive returns		
BP Energy	2016 Annual Report			Strategy-Focused on delivering competitive returns	
BP Energy	2015 Annual Report			Strategic Report-Our financial framework	
BP Energy	2014 Annual Report			Strategic Report Group-performance	
Ngati Porou Seafoods Group	2017 Annual Report		Pakihiroa Farms		
Ngati Porou Seafoods Group	2016 Annual Report	Chief Executive's report			
Contact Energy	2015 Annual report		Our seven material themes-Every dollar count		
Air New Zealand	2018 Annual Report		Operating fleet	Sustainability-Our carbon strategy	
Air New Zealand	2017 Annual report		Operating fleet		
Air New Zealand	2016 Annual Report		Air New Zealand operating fleet		
Food staff	2018 Annual Report	From our CEO			
Food staff	2015 Annual report	Director's report			
Trust Power	2018 Annual Report	Chairman & Chief Executive's report			
Trust Power	2016 Annual report	Chairman and Chief Executive joint report			
Freightways	2018 Annual report	Full-year review from the Chairman and Chief Executive Officer			
Freightways	2017 Annual Report	Report from the Chairman and Managing Director			
Freightways	2016 Annual Report	Report from the Chairman and managing director			
Freightways	2015 Annual Report	Report from the Chairman and Managing Director			
Freightways	2014 Annual Report	Report from the Chairman and Managing Director			
Briscoe Group Limited	2018 Annual Report	Managing Director's operation review			

Organisations	Report	Management's Letter or report	Organisational Performance and review	Strategy	Budget
Briscoe Group Limited	2017 Annual report	Managing Director's operation review			
Briscoe Group Limited	2016 Annual report	Managing Director's operation review			
Briscoe Group Limited	2015 Annual report	Managing Director's operation review			
Briscoe Group Limited	2014 Annual report	Managing Director's operation review			
Alliance Group	2017 Annual Report			Highlights-Strategy	
Alliance Group	2015 Annual Report		Our Performance-Processing		
Auckland Airport	2018 Annual Report			Our strategy at work	
Auckland Airport	2017 Annual Report		Nau Mai and welcome	Investing in our strategy	
Auckland Airport	2016 Annual Report		Invest for future growth		
Auckland Airport	2015 Annual Report		Future Focus		
Auckland Airport	2014 Annual Report		Review		
New Zealand State Service Commission	2017 Annual Report				State Services Commission – Capital Expenditure PLA
New Zealand State Service Commission	2016 Annual Report				State Services Commission – Capital Expenditure PLA
New Zealand State Service Commission	2015 Annual Report				Statement of Departmental expenditure and capital expenditure against appropriations for the year ended 30 June 2014

Among these four categories, ‘organisational performance and review’ was the most popular among the organisations. Most of PMCI disclosures were found in the reporting sections within this category. Nineteen out of 26 organisations used these sections when disclosing their PMCI in 15 integrated and 17 annual reports over five years. In contrast, the least popular category used by the organisations to present their PMCI was ‘budget’. Except the New Zealand State Services Commission, the other 25 organisations did not use this section to disclose PMCI. The New Zealand State Services Commission used the budget section of their 2017, 2016 and 2015 reports. The other reporting sections disclosing PMCI fell within the ‘management’s letter or report’ category. Especially, the organisations that made PMCI disclosures in their annual reports used these sections to present the PMCI information. Over the five years, there were 17 annual report disclosures in this category, which was ten more than integrated reports. However, the organisations did not use the section called ‘manufactured capital’ in the integrated reports and ‘capital expenditure’ in the annual reports to present PMCI.

For some organisations, the location of PMCI disclosures both in annual and integrated reports changed over time. For example, Z Energy presented its PMCI in sections titled “About Z-Business Model” and “Value Creation-Creating Value” for 2018, “About Z-Our capability” for 2017 and “See the risk, manage the risk” for 2016. Among these sections, “About Z-Business Model” and “About Z-Our Capability” was grouped in the strategy category for this study. The other two sections were in the organisational performance and review category of this study.

On the other hand, some organisations used the same section to disclose PMCI in each year. For example, FedEx disclosed its PMCI only under the title “Management’s Discussion and Analysis of Results of Operations and Financial Condition” in each year. This section was in the organisational performance and review category of this study. Also, the New Zealand State Services Commission presented its next year’s estimated fund for manufactured capital as part of the budget at the end of both its 2017 and 2016 annual reports.

Some organisational reports disclosed the PMCI in different sections of the same report. One of them was the New Zealand Post. It presented its plans to invest in business network functions (processing, transport and delivery, and a state-of-the-art parcel and mail processing plant) in different sections of its 2017 Integrated Report: “Our performance-our network”, “Our outlook- Chief and Chief Executive”, “Our strategies:

Growth- Grow capacity and value”, “Our strategies: efficiency- pursue efficiency and lower cost” and “Our strategies: Sustainability- Grow our sustainability”. In another example, KiwiRail mentioned its future investments in “Business Review- Performance of Our Business Units-Infrastructure” and “Capital Review: Assets” which were in the organisational performance and review category.

“KiwiRail continues to focus its investment on growth corridors including the freight critical Auckland-Hamilton-Tauranga route with targeted infrastructure investments that will support growing volumes at New Zealand ports” (KiwRail, 2017 Integrated Report, p. 19).

“New assets ensure that KiwiRail has the capacity to meet our customers’ requirements and further reduces the number of asset variations in our fleet, enabling KiwiRail to drive reliability gains by streamlining our servicing methods. By 2030, the programme will reduce the average age of our fleet to 15, down from 30 in 2017....., the KiwiRail Board made the decision to replace an ageing electric locomotive fleet with new generation diesel locomotives after two years of an external and internal investigation and consultation. The all diesel fleet is expected to be fully in operation by 2019.” (KiwiRail, 2017 Integrated Report, p. 32).

However, there were also the organisations which presented various PMCI projects in a section of a report together. For example, Meridian Energy Limited, which presented its PMCI projects in a section called ‘Responsibility Generation- a resilient asset mix’. This section was a part of the reporting section presenting the performance of Meridian Energy in various areas; therefore, it was categorised in the organisational performance and review category in this study.

“We have also progressed design work at the Maungahururu wind farm development option in Hawke’s Bay. Meanwhile, at Te Uku wind farm near Raglan, we have continued with work to refit and upgrade the turbine blades, aimed at getting a 2% increase in annual production. That project will take three or four years to complete” (Meridian Energy Ltd, 2018 Integrated Report, p. 43).

In summary, the findings suggest that there was little consistency in the reporting sections used by the sample organisations to disclose PMCI information. Further, these results indicate that the organisations that published the integrated reports did not organise their reports into sections related by each of the six capitals identified by the IIRC. On the other

hand, PMCI is a type of forward-looking disclosure and part of the MD&A sections of the annual report according to previous studies. Since the disclosure practices of the sample organisations varied in terms of where PMCI was disclosed, the stakeholders would have to read all reporting sections to discover this PMCI, which creates a greater chance to miss it. The next section will discuss what kind of information was found in these PMCI disclosures.

4.3.2 Types of PMCI information disclosed

There are various types of information which can be a part of the PMCI disclosures in annual and integrated reports. These include the type of investment; the expected benefits of a PMCI; the strategic decision-making process; the projected cost; and the expected information timeframe for the investment. The following discussion describes the results of analysing PMCI disclosures into these categories.

4.3.2.1 Type of investment in manufactured capital

When organisations disclose their PMCI through reports, these organisations should mention what kind of manufactured capital they will invest in (Hooks et al., 2002). In this research, 91 PMCI disclosures were discovered in 23 integrated and 41 annual reports. These 91 disclosures were the combination of 38 disclosures provided through integrated reports and 53 disclosures presented through a traditional annual report (see table 9). Approximately 85 of the 91 identified PMCI disclosures contained information about the types of investment in manufactured capital, while eight disclosures did not mention these details. The eight disclosures with the unidentified investment plan were presented in the annual reports. Hence, the type of investment was disclosed in all the 38 PMCI disclosures identified in the integrated reports.

Table 9 Number of disclosures for each type of PMCI information

Year	Number of disclosures	Number of disclosures specifying the type of investment	Number of disclosures specifying the projected cost of the investment	Number of disclosures specifying the projected timeframe	Number of disclosures specifying the expected benefits of the investment	Number of disclosures specifying the decision-making process
Integrated Reports						
2018	16	16	7	5	8	5
2017	15	15	5	13	12	5
2016	5	5	3	3	5	4
2015	2	2	-	1	1	
2014	-	-	-	-	-	-
Annual Reports						
2018	14	13	5	12	9	3
2017	14	14	7	14	7	4
2016	12	10	5	11	3	2
2015	7	5	4	4	2	1
2014	6	3	5	6	1	1
Total	91	83	41	69	48	25

The PMCI of the examined organisations related to short-term or long-term plans. However, presenting the type of investment plan depended on each organisation's preference. For example, Sanford discussed its PMCI for the coming year in its 2018 integrated report. However, the disclosure fails to provide the reader with information on which (nature and type of) assets (other than a simply broad classification of operational upgrades) it plans to invest in:

“... approved, in principle, a significant investment programme totalling over \$100 million for the next two years, which has a strong emphasis on operational upgrades...” (Sanford, 2018 Integrated Report, p.9).

However, in the same report, Sanford does provide more detailed information on PMCI for the next financial year plan.

“In the coming year, \$3 million will be invested in upgrades of our inshore fleet This will be complemented by infrastructure upgrades in most of our plants around the country A further \$15 million is earmarked for the rejuvenation of our deepwater fleet. ... includes replacing a scampi vessel and improving the

operational efficiency and production ability as well as selectively looking at crew conditions on another seven vessels.” (Sanford, 2018 Integrated Report, p.9).

Another similar instance can be noted in Air New Zealand’s proposed plan for the purchase of seven Airbus aircraft in its 2018 annual report specifically.

“In the 2018 financial year, we announced a further commitment to purchase seven additional Airbus A321 NEO aircraft for our domestic network.” (Air New Zealand, 2018 Annual Report, p.10).

In addition, there were organisations, such as Freightways, which presented a planned investment amount for an unidentified investment. Freightways disclosed its capital expenditure budget for the upcoming financial year in each yearly annual report. However, the report did not provide information on the area in which the organisation intends to invest:

“Overall capital expenditure for the 2018 financial year is expected to be approximately \$17 million.” (Freightways, 2017 Annual Report, p.9).

The same approach was also found in the 2017 annual report of BP Energy. While the report contained information on how much the company intended to invest in ‘organic capital expenditure’, no further details were provided on the type of expenditure intended:

“2018 ----- We expect organic capital expenditure of \$15-16 billion. 2019-2021-
-We expect organic capital expenditure of \$15-17 billion per year.” (BP Energy, 2017 Annual Group Report, p. 25).

In summary, information on the type of investment was the most common information disclosed by the organisations regarding their PMCI. While most of the organisations making PMCI disclosures stated their intended investment areas, the practices of organisations differed in both the detail and depth of information.

4.3.2.2 The projected investment cost

The projected investment cost of PMCI is an essential factor in the investment decision-making process as the available resources of the organisations can affect the investment plan (Dobbins & Pike, 1980). Therefore, this information was expected to be present in the PMCI disclosures identified in this study. However, this information was disclosed in only 41 (45%) of the 91 PMCI disclosures made by the sample organisations. These 41 disclosures comprised 15 disclosures in integrated reports and 26 disclosures in annual

reports (see Table 9). These disclosures were made in the reports of organisations in seven industries: energy, food, beverages and tobacco, transportation, food and staples retailing, utilities, government and real estate.

When these organisations indicated the projected investment cost in their PMCI disclosures, the cost was either for the whole project or for the financial year. For example, Vicinity Centers disclosed the implementation cost of each stage of its solar programme investment in its 2018 integrated report:

“We have committed to Australia’s largest shopping centre solar program across two stages ... Stage one is underway with a \$28 million investment across five centres ... Stage two is planned to commence in FY19 and will include approximately \$50 million of investment.” (Vicinity Centers, 2018 Integrated Report, p.7).

In addition, SCA Property group presented the projected cost to invest in the development and refurbishment of its centres in its 2018 annual report:

“We have identified over \$125 million of development and refurbishment opportunities at 24 of our centres over the next five years.” (SCA Property Group, 2018 Annual Report, p.18.

The organisations could reveal the investment cost in their PMCI disclosures or conceal this information even in the same report. For example, KiwiRail presented its plans to invest in a national freight network and replace its ferries in its 2018 integrated report. While the investment cost was noted in the disclosure of the national freight network investment, there was no information provided on the replacement cost of the ferries and procurement cost of new locomotives:

“...KiwiRail was allocated \$230 million for FY19 to finance capital expenditure on the national freight network, ..., and \$145 million to fund reinstatement of the Main North Line ...” (KiwiRail, 2018 Integrated Report, p. 28).

“Within the next five years, Interislander will be expected to replace at least two of its three ferries, Aratere and Kaitaki, ... At the same time, the project is also considering terminal options, including whether KiwiRail could share facilities with other operators... The initial focus of Nexus is specification and procurement of the next generation of super shunt locomotives (large shunting locomotives

capable of mainline running) and mainline locomotives for the South Island.” (KiwiRail, 2018 Integrated Report, p. 36).

On the other hand, there were disclosures in which the organisations indicated a funding requirement for investment, but not a specific amount. For example, the 2018 integrated report of the Controller Auditor General of New Zealand stated:

“Our capital expenditure programme is funded through depreciation and amortisation of existing assets. This funding allows for the replacement of our assets but does not always allow for investing in new technology to improve our systems. We will need extra funds for this in the coming years.” (Controller Auditor General of New Zealand, Integrated Report, p.40).

These results have shown that the projected cost of PMCI is not accessible information which organisations consistently present in their PMCI disclosures. This information is most often found in PMCI disclosures if the plan is at the implementation stage, but the presentation of this information depends on the decisions of the organisations. This is because the reporting guidelines do not mention how much detailed information should be provided by organisations in their PMCI disclosures.

4.3.2.3 The projected timeframe

When an organisation decides to invest in a project, they should know its expected completion time because of the time value of money and meeting the organisational and external demands (Bierman Jr & Smidt, 2012). Thus, this information was expected to form part of PMCI disclosures in this study. However, only 69 out of 91 PMCI disclosures provided information on the expected time frame for the PMCI which is 76% of the total identified disclosures over the five years considered for this study (see Table 9). Notably, disclosures on the projected timing of PMCI were most frequent in integrated and annual reports published in 2017 and 2018, with 17 and 27 disclosures in each year, respectively. Comparing the number of disclosures per the type of report, there were eight more disclosures in annual reports than in integrated reports.

In one instance of PMCI disclosures that noted the projected timeframe, Mercury disclosed its station upgrade project in its 2017 integrated report. In this disclosure, the organisation mentioned what would be completed and achieved within a specific period:

“The station upgrade, scheduled for completion in 2020, involves an intensive programme of work where all of the turbines, generators and governors will be

replaced. This will increase the station's capacity by 24 MW to 124 MW. Similar preparations are well advanced for an upgrade of the Aratiatia Station, with on-site activity scheduled to start in October 2017. The rehabilitation programme includes the replacement of all three generators, governors and one turbine, along with an extensive refurbishment of the station. Completion is expected mid-2020." (Mercury, 2017 Integrated report, p. 46).

Vicinity Centers also presented its expected implementation time for its Galleria and Chatswood Chase Sydney development project in its 2018 integrated report:

"Future projects - A development at Galleria is in its final planning stage and is currently targeted to commence in 2019. Already one of Sydney's leading retail centres, Chatswood Chase Sydney is set to become a luxury retail destination with an outstanding dining precinct to cater to Sydney's affluent multi-cultural north shore demographic. Planning is underway for this significant project with commencement expected in FY19. (Vicinity Centers, 2018 Integrated Report, p. 34).

Similarly, the commencing time, current implementation stage, and expected achievement were noted in a PCMI disclosure in the 2017 integrated report published by Air New Zealand:

"In June 2014, Air New Zealand announced the purchase of 13 new Airbus A320/A321NEO aircraft to refresh its international narrow body fleet. The first 10 A320/A321 NEO aircraft will enter the fleet in the 2019 financial year... A further four aircraft are on order to be delivered in the 2018 and 2019 financial years and will increase the total number of Dreamliners in the fleet to 13." (Air New Zealand, 2017 Integrated Report, p.18).

On the other hand, some organisations made PMCI disclosures that did not involve any information about the projected investment timing. For example, Alliance Group presented its investment project in its 2017 annual report without disclosing the specific projected time:

"We are investing \$1.3 million in our Pukeuri Plant to improve the recovery of offal. The range of beef offal captured at Pukeuri is currently limited by the size of the offal room however this upgrade will boost the capacity of our bovine offal

and blood capture facilities significantly.” (Alliance Gropu, 2017 Annual Report, p. 26),

The same lack of projected time duration information was evident in the disclosure by Growthpoint Property in its 2018 annual report:

“599 Main North Rd, Gepps Cross, SA Negotiating with tenant regarding \$50 to \$60 million expansion of Gepps Cross Exploring the use of sustainable energy options including the proposed addition of a 1.6MW solar farm.” (Growthpoint Property, 2018 Annual Report, p.9)

In conclusion, the projected timeframe was not stated in every PMCI disclosure. However, this information was the second most frequent type of information discovered in the PMCI disclosures. The discovered information could include the investment start time, different periods involved in the investment, and/or the timing of the whole investment process. However, the reporting practices of organisations varied in relation to specifying projected timeframes in PMCI disclosure. Although the reporting guidelines suggest presenting the future perspective of organisations, the guidelines are principle-based guidelines, so do not specify the details of what should be disclosed.

4.3.2.4 The expected benefits of investment

Organisations invest in manufactured capital because of operational requirements, or the demands of sustainability issues or customers, or their business strategy and development (Turner & Hesford, 2019). Therefore, the sample organisations disclosing PMCI were expected to disclose what they expect to achieve from their PMCI. However, 48 of the 91 PMCI disclosures over five years containing the benefits of investment were found in 48 reports, which is 75% of 64 reports. In addition, this information appeared in integrated reports (26 disclosures) more than in the traditional annual reports (22 disclosures) (see Table 9). However, the nature of the disclosed benefits of PMCI differed in the reports. Therefore, the findings are categorised into three groups: profitability, social and environmental benefits, and strategic development and growth. The organisations presented the strategic development and growth associated with the PMCI the most. The number of disclosures, including this type of information, was 22 in the integrated reports and 16 in the annual reports for this research. The disclosures about the social and environmental benefits were six disclosures in integrated reports, which was double the number of disclosures of annual reports. The least common information presented in the

disclosures was about profitability with only two disclosures in integrated reports and three in annual reports.

The disclosures about the expected profit from investments included details like internal rate of return, different yields, and/or reductions in operating costs. For example, Growthpoint Property mentioned the expected initial passing yield from the investment in industrial properties in the 2017 annual report.

“The Group continues to assess opportunities to acquire industrial properties ---. On 13 July 2017, the Group exchanged contracts for the acquisition of four adjoining, modern industrial warehouses at Perth Airport in Western Australia for \$46.0 million providing an initial passing yield of 8.13%.” (Growthpoint Property, 2017 Annual Report, p. 35).

Similarly, Stockland’s 2017 integrated report disclosed the possible increment in internal rates of return and funds from operations because of its retail development:

“The Retail business maintains its focus on creating market-leading town centres, redeveloping its most productive assets to create community and entertainment hubs and maximise trade area market share. We have \$449 million, at cost, of retail development under construction and a future pipeline of \$1 billion, targeting incremental IRRs of 9%+ and stabilised FFO yields of 7%+ from this activity.” (Stockland, 2017 Integrated Report, p. 31).

Some organisations’ disclosures identified both strategic benefits and social and environmental benefits from their PMCI. Among them was Moana New Zealand. Its 2016 integrated report described both the anticipated production capacity and the social benefit from new investment in its fishing fleet:

“Sealord has made a \$70 million investment in its fishing fleet with the purchase of a new 82.9m, state-of-the-art vessel...The purpose-built vessel will provide the company’s fishing capability with 20,000 metric tonnes capacity and will be the business’ most advanced, efficient, versatile and sustainable vessel yet. It will be able to fish all Sealord’s target species such as hoki, along with pelagic fish such as barracouta, squid and jack mackerel and will make the business more self-reliant..... As well as allowing more flexible and efficient operations, the new vessel will also mean up to 80 new local jobs, once delivered in 2018.” (Moana New Zealand, 2016 Integrated Report, p. 38).

Another example of this type of disclosure can be found in the 2018 annual report of Air New Zealand:

“Air New Zealand has also recently announced capital expenditure for seven additional Airbus A321 NEO aircraft, with phased delivery expected from 2020 to 2024. Equipped with new generation engines and approximately 25 per cent more seats, the A321 NEOs are expected to deliver fuel savings and efficiencies of up to 15 per cent compared to our existing A320 domestic aircraft, helping to reduce carbon emissions.” (Air New Zealand, 2018 Annual Report, p. 18).

However, some other PMCI disclosures did not attempt to quantify the identified return from the investment. For example, the 2017 integrated report of Sanford said:

“Investments in replacing and upgrading our on-water infrastructure have continued during the year, and further investments will be made over the next two years to improve both productivity and the quality of fish from the farm.” (Sandford, 2017 Integrated Report, p. 31).

Another example was a disclosure in the 2018 annual report published by Trust Power:

“We continue to make prudent investments in our asset base with a particular focus on the highest earning hydro machines. We commenced significant work at Matahina that will be completed in the coming months and have a planned upgrade for the Coleridge power station generators.” (Trust Power, 2018 Annual Report, p. 9).

In summary, the organisations disclosed various expected benefits of PMCI in their PMCI disclosures. The appearance of this information did not differ much between the integrated and annual reports. Both types of reports included the benefits relating to strategic development and growth more often than the other types of benefits. The PMCI disclosures stated either one or two categories of benefits. However, there were no PMCI disclosures which stated all the categories of benefits. Information about expected benefits from PMCI was disclosed more often than the two types of PMCI information i.e. the projected cost and the strategic decision-making process, which is discussed next.

4.3.2.5 The strategic decision-making process of PMCI

According to King (1975), a strategic decision-making process related to PMCI has six stages: recognising the investment opportunity, assessing this opportunity, defining the requirements of an investment, evaluating this investment, transmitting it within the

organisation and deciding to implement it. Based on this, the decision-making process for a PMCI is a long journey from discovering the investment opportunities to implementation. Therefore, it is an exciting area to understand that the organisations disclose their PMCI at which step of this process. This information was found in PMCI disclosures made in only 22 integrated and annual reports examined during this research. These 22 reports represented 34% of the total reports disclosing the PMCI and comprised 16 reports from New Zealand organisations and six reports from Australian organisations (See table 10).

Table 10 Organisations presenting PMCI disclosures about the decision-making process

Organisations	Number of Reports
Australia	
Stockland	2
Growthpoint Property	1
SCA Property Group	3
New Zealand	
Moana New Zealand	1
KiwiRail	3
Bidcorp	2
Mercury	2
New Zealand Post	1
New Zealand King Salmon	1
Air New Zealand	2
Trust Power	1
Auckland Airport	3
Total	22

These organisations provided information on different steps of the strategic decision-making process when they made disclosures about PMCI in their reports. For example, KiwiRail’s 2018 integrated report described a step-by-step plan for the decision making for the reporting period as well as for future years:

“The initial focus of Nexus is specification and procurement of the next generation of super shunt locomotivesand mainline locomotives for the South Island. The first phase of the process-preliminary market research - was completed in FY18, and it is expected that tendering will begin in FY19, to be followed by contract development.... Manufacture of 15 new DL Class locomotives was largely completed during FY18. The locomotives are currently being tested, before being shipped to New Zealand to arrive in late 2018. They will undergo commissioning at the Te Rapa maintenance depot before being introduced to service during FY19.” (KiwiRail, 2018 Integrated Report, p. 36).

However, Mercury's PMCI disclosure in its 2017 integrated report contained information only on what steps in the investment process had been completed up to the reporting period:

"Stay-in-business capital expenditure, which represents the capital expenditure incurred by the Company to maintain our assets in good working order, was \$114 million..... reflecting phasing of ongoing hydro refurbishing and the returning to service of two new hydro units at Aratiatia and Whakamaru, and the drilling of a new geothermal well at Ngatamariki.... Solid progress has also been made in preparing Aratiatia hydro station for its upgrade which is scheduled to commence on site in October 2017, with completion expected mid-2020." (Mercury, 2017 Integrated Report, p.18).

In another example, a PMCI disclosure about the initial stage of the decision-making process was found in the 2018 integrated report of Ports of Auckland.

"In November 2017, we released our 30-year master plan for public comment. This is the first time we've developed such a detailed plan and included all the projects – large and small Providing this level of detail is in line with our commitment to being more open and transparent. In May this year, Auckland Council endorsed the master plan and we are now starting to implement it. (Ports of Auckland, 2018 Integrated Report, p. 14).

In the same report, Ports of Auckland presented information about its investment plan as well as the accomplished steps of the process in another section.

"Under the master plan, we will address that by building a five-storey car handling building... On top of this building, we plan to create a new waterfront park and next to it, on Quay Street, a new hotel... Resource consent for the building's earthworks was lodged in July 2018, and we aim to start construction in February 2019 in order to complete the building in 2020." (Ports of Auckland, 2018 Integrated Report, p.27).

"To meet growing demand, we are planning a new wharf on the north end of our Bledisloe Multi-Purpose Terminal. Design work is underway, and we intend to start talking to stakeholders soon with a view to lodging resource consent within the next six months..." (Ports of Auckland, 2018 Integrated Report, p.29)

In summary, the organisations did not describe their whole strategic decision-making process, from recognising an investment opportunity to the implementation of a project. Most of the disclosed PMCI information on the process related to the implementation stage. Further, information about the decision-making process was the least favourite type of PMCI disclosure.

4.4 Answering the research questions

The results of the data analysis addressed the research questions as follows.

RQ 1. What are the extent and nature of PMCI disclosure by New Zealand and Australian organisations?

Amongst the selected organisations, New Zealand organisations were more willing to present PMCI in their integrated and annual reports than Australian organisations. In both countries, the PMCI disclosure was mostly included within information on ‘organisational performance and review’ or in the ‘management’s letter or report’. In addition, the reporting practice associated with PMCI was not much different between these countries. The sample organisations from both countries did not present information about every aspect of PMCI. In this study, the information about PMCI was categorised into five types: the type of investment, the projected investment cost, the projected timeframe, the expected benefits of PMCI and the strategic decision-making process. Of these, the most common category of PMCI disclosures was about the type of investment. Regarding the expected benefits of PMCI, the sample organisations generally provided information on how the PMCI would assist in promoting organisational performance and growth. Moreover, these organisations made disclosures about the implementation stage of PMCI rather than the other stages of the strategic decision-making process.

The findings of this study also suggest that PMCI disclosures by New Zealand and Australian organisations are not significantly different between integrated and annual reports. Although the nature of the integrated and annual reports was different, both types of reports disclosed PMCI in the reporting sections related to ‘organisational performance and review’. Although there were some disclosures in annual reports which did not mention the type of investment, the general nature of information about PMCI was similar in both types of reports. In terms of detail and depth, information about PMCI was also similar in integrated and annual reports. However, the frequency of disclosures about PMCI notably increased in the latter years examined in this study.

RQ2. How have these disclosures changed over time?

PMCI disclosures were identified in approximately one-third of the sample of integrated and annual reports. This means that PMCI disclosure was not common. However, its frequency was increasing in both types of reports. The increment was more significant in the sample integrated reports than the annual reports. In relationship to the detailed information about PMCI, there were not many changes during the research period. The PMCI disclosures were being still mostly qualitative rather than quantitative disclosures during the research period.

4.5 Conclusion

This section has presented the findings from the data analysis. This analysis identified 91 PMCI disclosures in 64 integrated and annual reports published by 27 organisations over five years from 2014 to 2018. These organisations presented their PMCI disclosures in different reporting formats. However, the organisational performance and review section was the most popular section for making PMCI disclosures among the organisations' integrated and annual reports. For traditional annual reporters, the management letter or report also was a common section in which to find PMCI disclosures. These disclosures presented various kinds of information. While there were disclosures that identified the investment plan, the projected investment cost and timeframe, the expected investment benefits or the decision-making process, disclosures with two or more of these types of information were discovered less often. The implications of these results will be discussed in the next chapter.

Chapter 5: Discussion and Conclusion

5.1 Introduction

This chapter discusses how the results from the data analysis relate to the existing literature and draw conclusions about the study. In the discussion section, the findings of the data analysis are discussed in four subsections: PMCI disclosure practices in New Zealand and Australia, changes in PMCI disclosure over the five-year period of study, PMCI disclosure in annual reports and PMCI disclosures in integrated reports. The conclusion section comprises a summary, an outline of the study's contribution, the limitations of this study and suggestions for future research.

5.2 Discussion

5.2.1 PMCI disclosure practices of New Zealand and Australia

In this study, each sample organisation was expected to disclose PMCI in their organisational reports. The reasons for this expectation related to previous studies and reporting guidelines. In previous studies, large organisations disclose more forward-looking information in their organisational reports (Hossain et al., 2005). The users of the annual report also demand to disclose this information in the report (Johansen & Plenborg, 2013). The Integrated Reporting Framework guides organisations to disclose forward-looking information about manufactured capital in the integrated report. Furthermore, the sample organisations apart from government and professional bodies were large organisations of New Zealand and Australia.

However, only 58% of the sample organisations made disclosures about their PMCI in their annual and/or integrated reports over the time period analysed for this study. Only five of the 22 studied Australian organisations disclosed PMCI in their organisational reports. In contrast with Australia, New Zealand organisations better fulfilled this reporting expectation as 21 out of 23 organisations disclosed PMCI in their reports. Since the New Zealand organisations were generally smaller than the Australian organisations, this result suggests there may not be a consistent, positive relationship between firm size and PMCI disclosure. It shows independent of reporting practice on the size of the country as well. However, different guidelines for the corporate report can impact on reporting practice according to this result. New Zealand organisations have a mandatory requirement for adopting Integrated Reporting guidelines while Australian organisations can support integrated information without adopting these guidelines.

Previous studies have suggested some factors that influence organisations' disclosure decisions. One suggestion is that organisations disclose PMCI if they have news about it (Al-Qudah et al., 1991). In this study, four New Zealand organisations disclosed PMCI in their organisational reports after announcing it through other communication channels. This suggests that PMCI disclosure can be expected in the year-end organisational reports if an organisation has announced PMCI to its stakeholders before year end.

Another possible explanation for disclosing PMCI in organisation reports is herd behaviour (Brown et al., 2006). In this study, the sample organisations spanned ten industries. Organisations from three industries, banking, diversified financials and commercial and professional services, did not disclose PMCI over the studied five-year period while the organisations from the other seven industries did disclose PMCI. This result lends support to the herd behaviour explanation of PMCI disclosure practices suggesting that PMCI disclosure can be expected in several organisations from the same industry if an organisation within that industry starts to disclose PMCI information.

This study classified where PMCI was disclosed in the annual and integrated reports of the sample organisations. The results showed that these organisations disclosed PMCI in various sections of their reports. This is likely because the integrated reporting guidelines do not require organisations to structure their integrated reports according to the six capitals of which manufactured capital is one. Therefore, New Zealand and Australian organisations prepared their integrated reports with reporting sections such as outlook, business strategy, performance review, management letter or report and financial statements. In addition, PMCI disclosure is part of the MD&A sections of annual reports according to previous studies (Bryan, 1997). Consequently, stakeholders seeking information about PMCI should read each section of an integrated report if the organisation does not include a reporting section called 'manufactured capital' in the report.

When the PMCI disclosures of these sample organisations were assessed, there was an unexpected result. The PMCI decision is risky for the organisations' long-term investment and requires a lot of effort to make this decision for the organisations (Northcott, 1998). Therefore, the organisations were expected to disclose detailed information about PMCI to make sure their stakeholders were aware that their PMCI decision was relevant for the organisation. Subsequently, detailed information about PMCI in terms of the type of investment, projected cost, projected time, benefits and strategic decision-making process were expected in each PMCI disclosure. Information

relating to the type of investment projected investment cost and expected benefits of PMCI were more expected than the other two types of information. However, the number of PMCI disclosures to provide these types of information were limited in this study. Even the type of investment was not mentioned in eight PMCI disclosures found in this study. This finding suggests that the studied organisations are more willing to provide general information rather than specific information about their PMCI. It leads to limit the investors in predicting future performances from various aspects of the organisation such as financial, operation and sustainability.

In addition, it was hoped the profitability of PMCI, e.g. net present value (NPV) and internal rate of return (IRR), etc. might form part of PMCI disclosures identified in this study. According to King (1975), organisations consider the benefits of PMCI, including potential profitability in evaluating potential investments. However, very few PMCI disclosures provided information relating to the profitability of PMCI in this study. This suggests that the organisations did not disclose every fact that was counted in PMCI decisions in the organisational reports, perhaps because it is considered commercially sensitive information.

5.2.2 PMCI disclosure over time

In this study, the number of PMCI disclosures increased each year from 2014 to 2018. This may be because of its impact on the stock market and benefits to stakeholders. Notably, this increment was more significant in the integrated reports. Therefore, more PMCI disclosures can be expected in the future, together with the increase in the number of organisations adopting the Integrated Reporting Framework.

The PMCI disclosures examined for this study were becoming more specific and quantitative over time, although the number of quantitative PMCI disclosures was still limited. Benefits relating to profitability, social and environmental impacts, and strategic growth and projected investment costs were the information which can support PMCI disclosures to become more quantitative. If the organisations provide more detail and depth of information about PMCI, these disclosures will become more quantitative rather than qualified over time. More quantified PMCI disclosures will support report users in better-predicting organisations' future aspects in terms of cash flow, revenues and firm value. In previous studies, scholars have mentioned that verifiable forward-looking information especially supports the users in this regard (Bozzolan et al., 2009). In addition, the high quality of this information supports these users to reduce the volatility

of their predictions (Barron et al., 1999). Even if the organisations do not provide detailed information on PMCI, disclosing the type of investment can help stakeholders to assess the fund requirements, future cash flows and manufactured capital of these organisations. This fact was agreed by Bryan (1997), who mentioned the usefulness of PMCI disclosures to financial analysts and investors.

5.2.3 PMCI disclosure in annual reports

Hooks et al. (2002) and Eccles and Serafeim (2017) mentioned that stakeholders demand the disclosure of PMCI in annual reports. In this study, only 41 out of 108 sample annual reports disclosed PMCI during five-year research period. This shows a limitation of PMCI disclosures in New Zealand and Australian annual reports and suggests that stakeholders' satisfaction will not be more than moderate as found by Johansen and Plenborg (2013). However, the number of PMCI disclosures was increasing year by year in the studied annual reports. Therefore, it may be that the studied organisations are considering disclosing PMCI in their annual reports to promote stakeholder satisfaction.

In regard to where PMCI disclosures were presented, previous research mentioned that PMCI disclosure is the part of the MD&A sections of the annual report (Bryan, 1997). This finding was supported by the results of this study which showed that 76% of sample PMCI disclosures was located in the reporting sections that presented information about 'organisational performance and review' and 'management's letter or report' in annual reports.

This study also found that PMCI disclosures in annual reports were quantitative as well as qualitative in nature. However, more than half of PMCI disclosures were the qualitative disclosures in this study. The main reason for being qualitative PMCI disclosure was lack of detailed information about benefits and the projected cost of PMCI. It shows that most of PMCI disclosures of annual reports were general rather than specific in this study.

This study attempted to classify PMCI disclosures made in the sample annual reports in terms of their detail and depth of information. However, the sample annual reports did not present detailed information on PMCI from various aspects. The sample PMCI disclosures provided information on no more than three aspects, most commonly the type of investment, the projected investment cost and the expected benefits of PMCI. There were also PMCI disclosures that mentioned the projected cost without identifying the specific type of investment. Therefore, there is still considerable scope for organisations to provide more detailed information about PMCI in their annual report disclosures.

5.2.4 PMCI disclosures in the integrated report

Eccles and Serafeim (2017) suggested that organisations present information about manufactured capital less than other capital because there is less interest in the market on this capital. However, the findings of this study do not support this suggestion. This study found that the number of PMCI disclosures in the integrated reports of New Zealand and Australian organisations has increased in recent years. It seems, therefore, that there are other reasons beyond less interest in the market for limited PMCI disclosures in integrated reports.

When the sample integrated reports were assessed, the PMCI disclosure was expected to appear in a reporting section, which was called ‘manufactured capital’ because this corresponds to one of the capitals identified by the IIRC. However, most of PMCI disclosures in the sample integrated reports were in section presenting information about organisational performance and review. Sometimes, PMCI disclosures will relate to the social and environmental issues of the organisations. In this study, there were eight integrated reports which disclosed PMCI relating to these issues.

Concerning the quantitative or qualitative nature of PMCI disclosures, the results for integrated reports were similar to those for annual reports. PMCI disclosures found in integrated reports were also more qualitative than quantitative in nature. Furthermore, the general information was more common than specific information in the identified PMCI disclosures. These results support those of Kılıç and Kuzey (2018), who mentioned that growth opportunities and investment projects form part of the general information included in the integrated report. Additionally, they showed the insignificant benefits for the users on the adopting integrated report of organisations relating to PMCI disclosure. This fact leads the regulators to consider how to improve the quality of integrated report after adopting integrated reporting framework in preparing the corporate report.

5.3 Conclusion

5.3.1 Summary

This study aimed to examine the PMCI disclosures made by New Zealand and Australian organisations in their integrated and annual report. Therefore, 73 integrated reports and 108 annual reports were downloaded from 23 New Zealand organisations and 23 Australian organisations. These reports were published from 2014 to 2018 by these organisations. These reports were analysed using content analysis in two steps. First, the integrated and annual reports were assessed to identify any PMCI disclosures. Second,

these disclosures were assessed to identify where they were presented in the reports and what categories of information were presented.

The results of this analysis show that PMCI disclosures by the sample New Zealand and Australian organisations increased from 2014 to 2018. Although the natures of annual and integrated reports are different, the PMCI disclosure practices in these two types of report were not much different. In both, the selected organisations presented PMCI in various reporting sections rather than a section called ‘manufactured capital’. Further, most PMCI disclosures were located in the sections related to ‘organisational performance and growth’ and ‘management’s letter or report’. Although the number of disclosures providing detailed information about PMCI increased during the analysis period, there were also PMCI disclosures that described only the type of investment or projected investment cost. If the organisations disclosed the expected benefits of PMCI, most of the benefits related to strategic development and growth. Finally, the strategic decision-making process information included in these PMCI disclosures tended to focus on the implementation stage of PMCI.

5.3.2 Contribution

This study aimed to add to the literature on organisational reporting and PMCI disclosure practices. The result of this study can support regulators in improving the quality of integrated reporting for PMCI disclosure in New Zealand and Australia. Especially, they can apply these results to guide the organisations which information should involve and how much detail should present in a PMCI disclosure. The regulators can also support the organisations to balance the functions of an integrated based on these results. On the other hand, because of the insignificant improvement of PMCI disclosure in the integrated report, the regulators can realise that the quality of corporate report depends on report information rather than the type of report. Consequently, they can consider how to improve the quality of the corporate report.

Furthermore, this study addresses a research gap by analysing the content of PMCI disclosures. Managers also draw on these findings to better understand how peer organisations disclose PMCI and reconcile stakeholders’ interests with their own disclosure decision. This will help the organisation in improving the quality of their corporate report which is important for public communication.

5.3.3 Limitations

There were various limitations in this study because of the available time and resources and research method. This study focused the organisations publishing integrated reports as a starting point for collecting data. Consequently, the size of the organisation was not the key criterion in examining PMCI disclosures. This limits the potential to compare this study's findings to those of prior studies that have examined the relationship between organisational size and disclosure practices. Although the research period was from 2014 to 2018, some of the sample organisations published their first integrated report in 2018. This study did not consider different reporting practices between first-time and mature adopters of new reporting guidelines. In addition, annual reports which did not follow integrated reporting guidelines were collected for this study. However, the structure of sample annual and integrated reports was similar unintentionally. On the other hand, this study used the qualitative approach of content analysis which aims to analyse the results as they appear rather than to identify the reasons why information is reported in this way. Therefore, it was not possible to further examine the factors that influenced the PMCI disclosure practices of the sample organisations.

5.3.4 Future research

Future scholars could conduct more studies to extend the literature on PMCI disclosure and integrated reporting. Top of them, the scholars can study the reporting practice of organisations from the same business industry relating to PMCI disclosure by comparing the integrated report and annual report. This study will show the improvement of the corporate report in an industry more specifically after adopting the Integrated Reporting Framework.

Another possibility is to discover the relationship between disclosing detailed information on PMCI and the determinants of forward-looking disclosure. Such a study would support our understanding how PMCI disclosures are similar or different to other forward-looking disclosures.

Moreover, future studies could promote the quality of the integrated report by examining stakeholders' satisfaction and engagement with the content of PMCI disclosures made in organisational reports.

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Appendices

Appendix 1 Deloitte 200 New Zealand Companies Award

Sr	Company	Sr	Company
1	Fonterra	101	Mitsubishi Motors
2	Fletcher Building	102	Toll
3	Ebos Group	103	Orora
4	Woolworths	104	Scales Corporation
5	Foodstuffs North Island	105	OMV
6	Air NZ	106	Fairfax
7	Z Energy	107	Mazda
8	Fulton Hogan	108	Refining NZ
9	Spark	109	Independent Liquor
10	The Warehouse Group	110	Pact Group
11	Foodstuffs South Island	111	Tourism Holdings
12	BP	112	HEB Construction
13	Mainfreight	113	Bupa
14	Meridian Energy	114	CDC Pharmaceuticals
15	Zespri	115	TVNZ
16	ExxonMobil	116	DHL
17	Farmlands	117	Wesfarmers Industrial
18	Silver Fern Farms	118	OfficeMax
19	Contact Energy	119	Orion
20	Vodafone	120	City Care
21	Genesis Energy	121	Mondelez
22	Infratil	122	Mediaworks
23	Mercury	123	Xero
24	Downer	124	IBM
25	ANZCO Foods	125	Mercedes-Benz
26	British American Tobacco	126	Northpower
27	Nuplex Industries	127	Ryman Healthcare
28	Alliance Group	128	Tatua Co-Op Dairy
29	Vector	129	Nissan
30	Toyota	130	McConnell Dowell
31	Datacom	131	GPC Asia Pacific
32	Haier	132	Allied Foods
33	PGG Wrightson	133	HP
34	Methanex	134	McDonald's
35	Oji Fibre Solutions	135	AWF Madison
36	Transpower	136	Port of Tauranga
37	Chorus	137	Delegat's Group
38	Bidfood	138	NZ Wool Services
39	Bunnings	139	Treasury Wine Estates
40	Tasman Steel	140	Linde Holdings
41	TrustPower	141	Enviro NZ
42	Skycity	142	APHG NZ Investments
43	Harvey Norman	143	Metro Performance Glass
44	Sky Network Television	144	Nobilo
45	NZ Post	145	Pernod Ricard
46	T&G Global	146	Kordia
47	Goodman Fielder	147	Visionstream
48	Fisher & Paykel Healthcare	148	Hallenstein Glasson
49	Colonial Motor	149	Kiwi Property
50	Open Country Dairy	150	Martin-Brower NZ Holdings
51	Mitre 10	151	Sumitomo Forestry
52	Ballance Agri-Nutrients	152	Trade Me
53	Shell	153	JB Hi-Fi

Sr	Company	Sr	Company
54	Synlait Milk	154	Abano Healthcare
55	Apple	155	C B Norwood
56	Two Degrees	156	CablePrice
57	H. J. Heinz	157	Electrix
58	KiwiRail	158	Unison Networks
59	Pacific Aluminium	159	ACI Operations
60	Ford	160	Ports of Auckland
61	Sime Darby Motor	161	NZ Sugar
62	Coca-Cola	162	Mars NZ
63	Watercare Services	163	Juken
64	Westland Co-Op Dairy	164	Asaleo Care
65	Auckland Airport	165	Smiths City Group
66	Ravensdown	166	Turners Automotive
67	Ingram Micro	167	Compass Group
68	Tegel	168	Weyville Holdings
69	Briscoe Group	169	Christchurch Airport
70	Holden	170	Ashburton Trading Society
71	Market Gardeners	171	Dimension Data
72	Lion - Beer, Spirits & Wine	172	Bridgestone
73	Imperial Tobacco	173	Skellerup
74	A2 Milk	174	Sealed Air
75	Freightways	175	Unilever
76	Restaurant Brands	176	Glencore Agriculture
77	Beca	177	Airways
78	Oceana Gold	178	NZPM Group
79	Broadspectrum	179	Rexel
80	Steel & Tube	180	Oceanic Communications
81	DB Breweries	181	Nelson Forests
82	Green Cross Health	182	LIC
83	Oregon Group	183	Orion Health
84	Taumata Plantations	184	OTTP NZ Forest
85	Opus International	185	Skyline Enterprises
86	Powerco	186	Philip Morris
87	Sanford	187	Landcorp
88	Waste Management	188	Kerbside Papers
89	Kura	189	Tango Holdings
90	Kathmandu	190	Seeka
91	Coles Group	191	AsureQuality
92	LWC Limited	192	Amcor Flexibles
93	Samsung	193	Dairy Goat Co-Op
94	Kaingaroa Timberlands	194	C 3 Limited
95	Spotless	195	Wellington Electricity
96	Fruco Beverages	196	Huawei
97	Pan Pac Forest Products	197	NZ Investment Holdings
98	NZME	198	Tasman Liquor
99	Nestle	199	Moana NZ
100	Matariki Forestry	200	Honda

Appendix 2 200 Listed Companies of Australia

Sr. No.	Company	Sr. No.	Company
1	Commonwealth Bank	101	Mineral Resources
2	BHP Group Limited	102	Afterpay Touch
3	Westpac Banking Corp	103	Platinum Asset
4	CSL Limited	104	OZ Minerals
5	ANZ Banking Group Limited	105	New Hope Corporation
6	National Aust. Bank	106	Altium Limited
7	Woolworths Group Limited	107	Adelaide Brighton
8	Macquarie Group Limited	108	Growthpoint Property Unit/ Stapled Securities
9	Wesfarmers Limited	109	Carsales.com Limited
10	Telstra Corporation	110	Duluxgroup Limited
11	Transurban Group Ordinary Shares/Units FP Triple Stapled	111	JB Hi-Fi Limited
12	Woodside Petroleum	112	Pendal Group Limited
13	RIO Tinto Limited	113	Idp Education Limited
14	Resmed Inc Cdi 10:1 Foreign Exempt NYSE	114	Brickworks Limited
15	Scentre Group Stapled Securities	115	ST Barbara Limited
16	Goodman Group Stapled Securities FP	116	Regis Resources
17	SOUTH32 Limited	117	Saracen Mineral
18	Newcrest Mining	118	Costa Group Holdings
19	Suncorp Group Limited	119	Trade Me Group Foreign Exempt NZX
20	Insurance Australia	120	Nib Holdings Limited
21	Brambles Limited	121	Nine Entertainment
22	Coles Group	122	Sca Property Group Units FP Stapled Securities
23	Arcor Limited	123	Premier Investments
24	SYD Airport FP Stapled Securities	124	Corp Travel Limited
25	Cimic Group Limited	125	BWP Trust Ordinary Units FP
26	Aristocrat Leisure	126	Nufarm Limited
27	AGL Energy Limited	127	Independence Group
28	QBE Insurance Group	128	Metcash Limited
29	Fortescue Metals Group	129	Cromwell Prop Ordinary/Units FP Stapled Securities
30	Ramsay Health Care	130	Steadfast Group Limited
31	ASX Limited	131	Skycity Ent Group Limited Foreign Exempt NZX
32	Santos Limited	132	Blackmores Limited
33	Origin Energy	133	NEXTDC Limited
34	Oil Search Limited 10 Toea	134	Graincorp Limited Class A
35	Dexus Units FP Stapled	135	Sims Metal MGMT Limited
36	Treasury Wine Estate	136	Chorus Limited Foreign Exempt NZX
37	Sonic Healthcare	137	Vocus Group Limited
38	APA Group Units FP Stapled Securities	138	Myob Group Limited
39	Cochlear Limited	139	Technology One
40	Vicinity Centres Ordinary/Units FP Stapled Securities	140	Iress Limited
41	REA Group	141	Janus Henderson Chess Depositary Interests
42	GPT Group Stapled Securities FP	142	Abacus Property Group Units/ Stapled Securities
43	Qantas Airways	143	IOOF Holdings Limited
44	Computershare Limited	144	Navitas Limited

Sr. No.	Company	Sr. No.	Company
45	Tabcorp Holdings Limited	145	Charter Hall Retail Units FP
46	Aurizon Holdings Limited	146	Bapcor Limited
47	Stockland Units/ Stapled Securities	147	Viva Energy REIT Stapled Securities
48	Mirvac Group Stapled Securities	148	Inghams Group
49	Crown Resorts Limited	149	Perpetual Limited
50	The a2 Milk Company	150	Webjet Limited
51	Spark New Zealand Foreign Exempt NZX	151	CSR Limited
52	AMP Limited	152	Healius
53	Fisher & Paykel H Foreign Exempt NZX	153	Super Ret Rep Limited
54	Medibank Private Limited	154	Breville Group Limited
55	James Hardie Indust Chess Depositary Interests 1:1	155	Appen Limited
56	Caltex Australia	156	Monadelphous Group
57	Alumina Limited	157	Domain Holdings Aus
58	Lendlease Group Unit/ Stapled Securities	158	G8 Education Limited
59	Orica Limited	159	Mayne Pharma Limited
60	Evolution Mining Limited	160	CHTR H LWR Stapled Securities
61	TPG Telecom Limited	161	Pact Group Holdings Limited
62	Soul Pattinson (W.H)	162	ARB Corporation
63	Seek Limited	163	National Storage Stapled Security FP
64	Coca-Cola Amatil	164	Smartgrp Corporation
65	Northern Star	165	Mcmillan Shakespeare
66	Xero Limited	166	Invocare Limited
67	Bluescope Steel Limited	167	Pilbara Min Limited
68	Challenger Limited	168	Bingo Industries Limited
69	Boral Limited	169	IPH Limited
70	Ausnet Services Limited	170	Sandfire Resources
71	Incitec Pivot	171	Lynas Corporation
72	Worleyparsons Limited	172	Bega Cheese Limited
73	Bendigo and Adelaide	173	G.U.D. Holdings
74	Wisetech Global Limited	174	Aveo Group Ordinary/Units FP Stapled Securities
75	Seven Group Holdings	175	Credit Corp Group
76	Unibailrodawestfield Chess Depositary Interests 20:1	176	Galaxy Resources
77	Whitehaven Coal	177	Resolute Mining
78	Flight Centre Travel	178	News Corp Class B Voting Common Stock-Cdi
79	Atlas Arteria Ordinary Stapled Securities	179	Elders Limited
80	The Star Ent Group	180	Nanosonics Limited
81	Magellan Fin Group Limited	181	Orocobre Limited
82	QUBE Holdings Limited	182	Seven West Media Limited
83	Downer Edi Limited	183	Bellamy's Australia
84	Fletcher Building Foreign Exempt NZX	184	Ausdrill Limited
85	Bank of Queensland	185	Ooh!Media Limited
86	Healthscope Limited	186	Bravura Solution Limited
87	Harvey Norman	187	Tassal Group Limited
88	Spark Infrastructure Stapled \$0.65 Loan Note and Unit US Prohib	188	Eclixp Group Limited
89	Orora Limited	189	STHN Cross Media
90	Link Admin HLDG	190	GWA Group Limited
91	Reliance Worldwide	191	Ardent Leisure Group Ordinary/Units FP Stapled Securities

Sr. No.	Company	Sr. No.	Company
92	Viva Energy Group	192	Speedcast Int Limited
93	Domino PIZZA Enterpr	193	Australian Pharm
94	Charter Hall Group Stapled Securities US Prohibited	194	Emeco Holdings
95	Cleanaway Waste Limited	195	Sigma Health Limited
96	Als Limited	196	Estia Health Limited
97	Iluka Resources	197	Western Areas Limited
98	Beach Energy Limited	198	Automotive Holdings
99	CYBG Plc Cdi 1:1 Foreign Exempt Lse	199	Syrah Resources
100	Ansell Limited	200	Infigen Energy Stapled Securities FP

Appendix 3 Coding Book

Code	Description
1) Did the organisation present type of investment?	
Type of Investment	Planning to invest or acquire or build an asset
2) Was the projected investment cost mentioned in the PMCI disclosure?	
Total amount	Total cost of a plan
Amount per Year	Cost per year of a plan
3) Were the expected benefits, which come from investment, mentioned in the PMCI disclosure?	
Profitability Benefit	Improvement in the profitability of organisation
Sustainability Benefit	Impact on social and environment
Strategic development and growth	Development or growth in productivity and customer satisfaction, etc.
4) Was the strategic decision-making process presented in the PMCI disclosure?	
Pre-process	Finding the opportunity and decision-making process of an investment plan
Implementation process	How the plan will be implemented
5) Was the projected timeframe mentioned in the PMCI disclosure?	
Total years	Number of years which will be required for a plan
Initial year	A starting year which the plan is implemented