

# **Human Resource Capital and Relational Capital Dimensions and the Perceptions of Mum and Dad Shareholders**

Submitted by

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## **Statement of Sources**

This thesis contains no material published elsewhere or extracted in whole or in part from a thesis by which I have been qualified for or been awarded another degree or diploma.

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All research procedures reported in this thesis received the approval of the relevant Ethics/Safety Committees (where required)

I consulted with a statistician, Dr. Sriram Ramachandran, to ensure I conducted the correct statistical tests for this research and to ensure the statistical tests were conducted correctly.

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## **Abstract**

Intellectual capital (IC), including its components of human resource capital (HRC) and relational capital (RC), is important to leverage tangible corporate assets. This research is conducted from a human resource perspective and refers to behavioural economic theories to explain its findings. There are four research aims which include: (1) to investigate perceptions of “mum and dad” shareholders about information on HRC and RC dimensions; (2) to understand the sources of advice individual investors turn to in their stock transaction decisions; (3) to determine if, in the corporate annual reports of Australian banking sector corporations (ABSC), HRC and RC information is provided to investors; and (4) to assess the relationship between the HRC and RC disclosure and share value.

Dimensions of HRC include employee recruitment, retention, values, development of management and leadership qualities, and developing employee problem solving skills. Dimensions of RC include customer capital, supplier chain relations, and competitors. The ABSC investigated include the eight ASX 200 listed corporations at the end of the 2006/2007 financial year. These include the Commonwealth Bank of Australia (CBA), Westpac Banking Corporation (WBC), National Australia Bank (NAB) and ANZ Banking Group Ltd (ANZ).

The research involved an initial pilot study and a two-part main study. The pilot study involved both quantitative and qualitative analysis. It was designed to validate a tool to measure perceptions of individual ABSC shareholders, regarding relevance of HRC and RC policy information to ABSC stock purchase decisions. The pilot study was conducted to develop operational definitions of HRC and RC and of their dimensions, and, to establish statistical validity and reliability of items for use in the main study.

Confirmatory factor analysis (CFA) was applied to validate policy statement items within the final questionnaire, to properly measure the five dimensions of HRC and three dimensions of RC, for measuring perceptions of ABSC shareholders. Perceptions relate to relevance of HRC and RC policy information to ABSC stock purchase decisions. Questionnaire items were determined to be reliable and valid and retained for use in the main study.

The main study is an empirical study investigating perceptions of importance of “mum and dad” ABSC shareholders of HRC and RC dimensions and the impact of perceptions, sources of advice, and demographic variables on ABSC stock decisions. The ABSC

investigated are those identified in the pilot study. Various statistical tests (One-way ANOVA, Bonferroni test, T-test, logistic regression, discriminatory analysis) were conducted on data from the main study questionnaire. The main study also investigates, empirically, the frequency and quality of HRC and RC disclosure by ABSC, and whether disclosure leads to appreciation of share price for the relevant ABSC. A focus group was conducted for thematic content analysis of ABSC corporate annual reports, comparative analysis was conducted on the output of that content analysis, and a cumulative abnormal return (CAR) analysis was conducted, based on content analysis results and on share price information for relevant ABSC in their reporting periods.

The research finds “mum and dad” shareholders of NAB stocks value all HRC and RC dimensions information more than shareholders of the others of the big four ABSC do. They believe customer capital and supplier chain relations dimensions to be more important than shareholders of ANZ stocks believe them to be in ABSC stock purchase decisions. The research finds “mum and dad” shareholders of solely NAB stock value HRC and RC information because it is not perceived to be adequately available in the NAB corporate annual report, and shareholders of multiple ABSC, including the NAB, place less value on the information. Employee recruitment is found to be important to “mum and dad” shareholders in their decisions to “buy” rather than to “hold” or “sell” ABSC stocks. “Family and friends” is found to moderate the relationship between perceptions and use of HRC and RC dimensions when deciding whether or not to hold ABSC stocks. Finally, HRC and RC dimensions disclosure is significantly varied between ABSC. The CBA, recognised as Money Magazine’s “Bank of the year 2008”, has the best quality of HRC and RC disclosure.

This research is significant because it provides stakeholders, within academic and commercial environments: (1) a list of HRC and RC dimensions and their operational definitions as influenced by “lay persons” understandings; (2) a tool to measure ABSC shareholder perceptions (questionnaire); and (3) research focused specifically on gaining insight into perceptions of “mum and dad” shareholders of ABSC stocks regarding HRC and RC elements of IC. This research builds previous work and encourages future research to investigate HRC and RC disclosure practices of other knowledge-intensive corporations, not just the ABSC.

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# **Chapter One**

## **Introduction**

### **1.1 Background to the Research**

#### **1.1.1 Understanding market speculation on the future value of a corporation from a human resource perspective.**

Corporations calculate and project their future value from the difference between their market value and what their current financial performance would deserve (Ballow, Burgman, & Molnar, 2004). By bidding on stocks in the market, shareholders make that judgment. That is one of the reasons why share prices are so volatile. Investors speculate on the future worth of a company. However, the provision of information on corporate Human Resource (HR) policies may help to reduce investor speculation and share price volatility.

In line with this, Desai (2000) researched whether strategic planning was rewarded by the stock market. An event-study methodology was used to examine the market values of companies during the time period when information was provided about the companies' strategic planning focus, function and/or orientation. Desai found that announcements highlighting the institutionalized strategic planning by companies were related to increases in the corporate stock prices. Additionally, he determined that the market reacted efficiently to such announcements and the reward was instantaneous.

Strategic management itself is concerned with the performance of the entire corporation; it is concerned with long term corporate objectives and it delivers planning and policies to achieve such objectives. Institutionalizing a strategic plan for the management of a company's human resources provides the support for the company's

overall competitive strategy. That is the role of Strategic Human Resource Management (SHRM). Kaye (1999) defines SHRM as a system-wide intervention that ties human resource management (HRM) to strategic planning and cultural change. The main focus of SHRM is the integration of a combination of HRM practices to facilitate corporate competitive advantage (Huselid, Jackson, & Schuler, 1997). In an attempt to achieve sustained competitive advantage, a company must develop and use key organizational competencies which are facilitated and enhanced by a range of HRM activities, functions and processes (Lado & Wilson, 1994). That is why managing human resource capital (HRC) and relational capital (RC) is increasingly viewed as a strategic HRM function of the organization, and also regarded as part of and facilitating corporate strategy (Huselid et al., 1997).

#### **1.1.2 Understanding the functions of HRM from a SHRM perspective.**

The strategic management of corporations has to do with policy decisions concerning the whole organization, with the general objective being to position the organization to transact successfully within its environment; it is regarded as an important part of realizing and maintaining effective performance in a dynamic environment (Gunnigle & Moore, 1994). However, research has found that, strategically, corporate competitiveness is best developed around the competencies and behaviour of people within firms, the firm's human resources (Luoma, 2000) or, more specifically, its combination of HRC and RC. While HRC is the collective attitudes, skills and abilities of employees contributing to organizational performance and productivity (Stockley, 2005), and RC includes productive contacts needed to acquire inputs and to sell outputs (Bezemer, Dulleck, & Frijters, 2003), both are supported by a number of functional

attributes. The functional attributes of human resources are those functions that facilitate acquired abilities and the personal attributes of employees and those linked to developing and maintaining appropriate employee values, problem solving competencies and management and leadership effectiveness (Bollen, Vergauwen, & Schnieders, 2005). It has been argued that the effective management of HRC has the potential to add significant economic value to a firm as excellence in HRM practices significantly increases the potential for organizational success (Verreault & Hyland, 2005). Yet, for HRC and RC to do this, the HRM functions, practices and policies must be developed and aligned with the strategic objectives of the firm (Hyland, 2005; Lado & Wilson, 1994, Luoma, 2000; Verreault & Horwitz, 1999; Wei, 2006). In facilitating the strategic goals of the firm, HRM goes from being regarded as a fairly separate and technically specific aspect of firm performance to one that is regarded as a potent value-driver existing within a firm and steering the achievement of corporate success. This is, effectively, a shift in focus from the operational view to the strategic view (Wei, 2006).

As research has established that company performance is directly related to the set of HRM practices a company has in place (Huselid et al., 1997), organizations move from HRM to SHRM. An example of a company that successfully implemented an SHRM framework to improve firm performance is Sears (Kirn, Rucci, Huselid, & Becker, 1999). In 1992, Sears was losing \$US 3.4 billion a year and acted to cut costs, cut jobs, divest of assets and restructure its organization (Kirn et al., 1999). Further, the company embarked on a campaign to focus on a target customer and undertook a complementary marketing campaign that highlighted the “softer side” of Sears (Kirn et al., 1999). The company required “best-practice” management of human resources to develop and communicate

the company mission, vision, and goals. It was able to create a conceptualized model of firm performance that linked employees, customers and shareholders in a causal chain. Referred to as the “Three Cs”, it initiated a variety of high impact HR policies that created a Compelling place to work, a Compelling place to shop, and a Compelling place to invest (Kirn, 1999). The HR policies were designed to encourage employee behaviours conducive to the corporate competitive strategy. Policies relating to employee education, performance management and reward systems, employee selection and retention and the delivery of basic HR were used to reenergize the company. The “Three Cs” concept was communicated, accepted and developed to impact favourably on the culture of the company. Corporate SHRM, which is aligned to and enabling competitive strategy, has been credited, to some extent, for the subsequent four-year recovery in the results of the company (Kirn et al., 1999).

Both traditional HRM and SHRM are concerned with being able to attract and maintain, through development and retention, the HRC and RC of a firm (Lado & Wilson, 1994). However, it is SHRM that results in the employment of HRC and RC practices and the design of a human resource system that has the proper “fit”, and is compatible with the firm strategy (Wei, 2006). As noted, Sears was successful in demonstrating the link between a commitment to a SHRM system, comprised of a combination of HRM policies that had a proper “fit” for the company, and an improvement in the company’s performance. It is even more critical in times of economic crisis and market volatility, for corporations such as Sears, to design tailor-made work practices to their unique corporate strategies. In tough economic times, they become

better placed than their competitors to realize improvements in their performance and in their future financial value (Kaye, 1999).

### **1.1.3 The global economic downturn and the volatility of the Australian share market – Understanding the impact on investors.**

Heralded by the onset of the global financial crisis, the Australian share market experienced marked levels of volatility during 2008 and 2009. The Australian Stock Exchange (ASX) 200 is Australia's leading large capitalization index, comprised of the top 200 Australian stocks based on market capitalization (ASX, 2005). In 2008, the ASX 200 declined by nearly 40 percent, the largest decline on record, especially for financial sector stocks that experienced falls of nearly 50 percent (RBA, 2009). In February 2009, the Reserve Bank of Australia (RBA) reported that average daily share price movements were nearly 1½ percent, down from nearly three percent in October 2008 (RBA, 2009). The RBA reported that the Australian share market was nearly 50 percent below its November 2007 peak and at the same level as in May 2004 (RBA, 2009). The RBA also reported that financial stocks had declined by nearly four percent, weighed down by the even bigger falls in the share prices of many overseas banks (RBA, 2009). Resource stocks rose by 22 percent from mid-November 2008 and the share prices of other companies in the index were broadly unchanged in the first part of 2009 (RBA, 2009). Based on historical evidence, the RBA made the assertion that it may take between three and six years for the Australian share market to recoup its losses (RBA, 2009), and, at any time within that time frame, there exists the potential for individual investors to make money or to incur losses based on their investment decisions.

Many investors have experienced a dramatic decrease in the value of their share portfolios and in their superannuation investments (RBA, 2009). Billions of dollars have been wiped off share markets, globally, and for individual investors, especially, it is increasingly difficult to assess share value. Both in times of certainty and in times of extreme volatility, individual shareholders will use an array of information in deciding what shares to buy, when to buy them, at what price, and for the duration of time they should be held before selling them. With increased market volatility, globally, and the decline of investor confidence, the challenge to all investors is to correctly assess the value of a particular share, invest appropriately for sufficient returns on capital. Investors may consider information about company earnings, company assets or the potential, they believe, the company has for earnings and growth, when they make investment choices. How the perceptions of shareholders influence their investment making decisions is a matter of great importance in this research, as it is to the corporations that appeal to investors for investment capital. This is especially true in times when the financial liquidity of many companies is adversely impacted by the global credit crunch.

#### **1.1.4 Human capital information and its impact on share market speculation.**

Corporate reporting by Australia's public companies not only serves to disclose information about the financial state of their companies to their stakeholders, but it also serves to provide information on the range and combination of strategies and resources companies have to leverage their competitive position, facilitating the necessary growth for their future. From a SHRM perspective, reporting on the human capital policies needed to facilitate corporate strategy and effectiveness may be one way for a company to attract greater investment dollars. However, both institutional investors and individual

“mum and dad” investors face challenges in deciding how much they should pay for shares based on the information made available to the shareholders by the companies. Shareholder perceptions about the information provided to them, along with their need to act quickly, leaves investors open to the potential of making uneducated and speculative investment decisions. This may be especially true for the purchase of shares in companies that rely heavily on intangible assets and knowledge management to create a winning combination, and in times of increased market volatility and low investor confidence. Investors are currently facing these challenges both globally and within Australia.

For corporate shareholders, it is both important and difficult to assess accurately and to understand the true value of a corporation. This contributes to the criticality of decision-making by far-less-equipped individual investors to have access to information about the assets of a company to help them assess and understand the true value of a corporation. Companies have a range of both tangible and intangible assets on which to report. Not reporting on intangible assets may have the effect of making those companies rich in intangible assets appear less valuable than they really are (Guthrie & Petty, 1999; Guthrie, Petty, & Ricceri, 2006). Today’s organizations must pay greater attention to intangible assets and, in doing so, must use new management reporting instruments that correctly identify and report on the value that intangible assets add to an organization (Daum, 2002). Although tangible assets are regarded as a result of past performance, intangible assets are regarded as indicators of the organization’s future performance (Chen, Cheng, & Hwang, 2005; Royal & O’Donnell, 2008). These assets combine to make the company profitable or to give the company the potential for profit in the future.



The tangible assets of an organization include the physical assets traditionally reported on in financial statements and annual reports. These tangible assets are material and incorporate premises and capital investments, including investments in plant and equipment. It is the corporation's "Statement of Financial Position", published in the annual report that represents the value of tangible assets. However, it is harder to quantify the value of intangible assets, including goodwill, knowledge, and human capital (Flamholtz, Bullen, & Hua, 2002). This is because the intangible assets of a corporation are tacit rather than concrete; they include assets that are difficult to measure. Yet, corporations are required to measure these assets effectively to identify the true value of the organization and to communicate its value to both current and potential investors (Deloitte & Touche, 2002). This requirement is, in part, due to the less apparent existence to various stakeholders of a company. The intangible assets of knowledge and systems, supported by the benefits to be gained through effective human capital management, provide a level of power to corporations in knowledge-based industries (Brookings Institution, 2004). Also, the value of intangible assets, including HRC and RC are difficult to measure and report, yet are necessary in leveraging tangible assets in the value creation process (Lev, 2001).

A balance sheet is a financial report that set out in dollar terms the value of an organization's assets, liabilities and shareholder's/owner's equity as at a specific point in time. Corporations provide this information in their annual reports as part of their corporate reporting requirements. Daum (2002) states that while intangible assets may not appear on the balance sheets, they are considered by potential investors when they are evaluating a company. In making this assertion, Daum refers to the proportion of the

company's book value compared with the total market value which has changed from 60 percent in the early 1980s to 20 percent at the end of the 20<sup>th</sup> century. Daum convincingly argues the fact that neither the tangible assets nor the intangible assets work effectively on their own. The reliance of organizations on the interplay between tangible assets and intangible assets is apparent throughout the literature in the area of corporate reporting. Each underpins the other in the value creation of the organization. As researchers highlight the need for information disclosure on intellectual capital, there is a strong argument for using supplementary information to the annual financial reports. Further to this, Daum refers specifically to stakeholder relationship management, referring to it as a daily task for top management that must be integrated throughout the internal management process. In identifying the need for illustrated annual reports and continuous reporting to engage the corporate stakeholders, Daum recognizes the efforts of Skandia Group, with their Human Capital Accounts, in the disclosure of the supplementary information required to stakeholders in the decision-making process. Daum's contentions are further supported by research identifying that various stakeholders want companies to be more transparent about their IC information and to disclose the information in their corporate annual reports (Alwert, Bornemann, & Will, 2009; Royal & O'Donnell, 2004, 2008; Petty, Ricceri, & Guthrie, 2008).

#### **1.1.5 Communicating the value of intangibles in the market value of a corporation**

It has been argued that in the assessment of an organization's value drivers, accountants and CFOs need to communicate more effectively, to the stakeholders, the hidden or intangible value drivers that are considered in investment decisions (Daum,

2001; Lev, 2001). Knowledge-based industries and large corporations, including Deloitte and Touche, recognize the value of intangible assets to corporate strategy. They assert that human capital practices help grow profits and corporate value.

*“The bottom line is, those companies that tailor their human capital strategy to their unique business strategy and market orientation substantially outperform companies that do not,” and “human resources professionals need to become more strategic when adopting human capital practices and think more in terms of how they link to the critical employee behaviours that drive value and profits in their business.”* (Deloitte & Touche, 2002, p. 1)

Knowledge-based industries include organizations involved in “information technology”, “life sciences and health care” and those in “media and entertainment” (RBC Royal Bank, 2004). The knowledge that exists in any organization is referred to as its intellectual capital, and is the sum of its human and structural capital (Edvinsson & Malone, 1997). While financial disclosure laws cannot ensure individual investors have access to more than the financial information from listed companies, it is fairly difficult for investors to access information about the companies’ intangibles, including their intellectual capital. Yet, it is an organization’s overall intellectual capital that gives it its competitive advantage, as intellectual capital, linked to the management of knowledge within an organization, advances an organization’s capacity to obtain, share and employ knowledge in a manner that improves its survival and success (Edvinsson & Malone, 1997). The critical questions are “What information do individual shareholders use when they make investment decisions?” and “Does this information communicate the value of intangible assets, including human resource capital and relational capital, especially

within the knowledge-based industries that are reliant on intangible assets?” Rightfully, the resultant questions and hypotheses, that this research proposes to test and seeks to answer, shed light on the perceptions and actions of individual shareholders.

A company’s market value, its book value, comprised of its tangible assets and working capital, and its future value, is upon which prospective investors speculate and that speculation is facilitated by reported intangible assets. Organizations with a high degree of intangible assets are also those that are more often speculated on and, as a result, often have highly volatile share prices. To control the speculation and resultant volatility of share prices, information on intangibles is provided by a number of corporations. In Europe, Skandia Group and its Intellectual Capital Accounts, has become the benchmark example for corporations such as Allianz (Rimmel, 2003). There is, however, a risk in over-disclosure in this area that may increase volatility and perhaps compromise the competitive edge of a corporation. This is where risk management is important in the game play of any corporation. It is vital to ensure that disclosure on intangibles is on the value-creating activities of a corporation and that the process of reporting must be holistic, comparable, and supportive of value-creation for all corporate stakeholders. It is crucial for management to understand how the capabilities of a corporation can be used to leverage its intangible resources. It is also important to understand how best to communicate such information to its corporate stakeholders in an effort to influence their perceptions of the company in a clear, precise, and positive manner, alleviating the potential anxiety of investors relying on little to no information, or even worse yet, on unjustified rumours or suppositions.

### **1.1.6 Intellectual capital and its components of human resource capital and relational capital – Understanding the concepts.**

Intellectual capital (IC) refers to the knowledge that exists in any organization (Edvinsson & Malone, 1997). It is an intangible asset (Lev, 2001), you cannot grab it or lock it up, and it is extremely difficult to measure, yet its contribution to the success of a corporation cannot be denied. Not only is IC equal to knowledge, it is also about how to allow the knowledge of an organization work for it and have it create value (Chaminade & Roberts, 2003; Johanson, 2005). It is made up of both human resource capital (HRC) and structural capital and within structural capital is a company's relational or process capital (RC) (Bontis, 1998; Chen et al., 2005; Edvinsson & Malone, 1997). A corporation's IC, especially the capital relating to its human resources, cannot be copied. It is a company's thumb print, influenced by the stresses of its work, both unique to the company and dynamic in its evolution with time. Corporations will work tirelessly to ensure that they use the components of their unique IC to leverage their corporate productivity and growth.

The relationship between IC and the market value of a corporation has been investigated to various extents by researchers throughout the world (Abdolmohammadi, 2005; Bukh, 2002; Chen et al., 2005; Daum, 2002; Deloitte & Touche, 2002; Guthrie & Petty, 2000; Lev, 2001; Rimmel, 2003; Royal & O'Donnell, 2004; Sveiby, 1998). Bontis and Fitz-enz (2002) have been successful in identifying a positive relationship between IC and firm performance and Bollen, Vergauwen, and Schnieders (2005) have included intellectual property in models linking IC to firm performance, enhancing the validity of the model and its relevance for strategic management. Value is created when the various

human resources, structural and relational components of IC have the correct degree of connectivity to complement each other, productivity in one resulting from an investment in another (Johanson, 2005). Deloitte and Touche (2003) also concluded that there are specific human capital practices that commonly propel the market value of companies. They assert that such practices relate to the management of talent, to the rewarding of performance and to communication. They further contend that there are also other practices that give companies with specific market orientations a competitive edge. They stressed that “for top quartile companies, effective human capital practices led to 66 percent higher returns and a 300 percent greater return to shareholders over the five-year period studied.” (Deloitte & Touche, 2003, p.1)

The human resources of any organization are its people. It is the people who provide companies with their skills and talents, their abilities to create and maintain stakeholder and customer relationships and their potential for developing ideas and innovative practices. Investing in people is investing in a company’s future, in its potential for growth. The concept of HRC is a consequence of identifying people as valuable assets to their organizations. Yet, traditionally, human resources are regarded, by a company, as an expense rather than an investment (Becker, 2005). In acknowledgement of the significant contribution of people to organizations, the idea has evolved to the consideration of HRC, an investment rather than an expense. For example, in the late 1960s and early 1970s, the Nobel Prize-winning economic theorists, Schultz and Becker, employed the term “human capital” (Becker, 2005). Becker contends that economists consider spending money on education, training, medical care, and so on as investments in human capital. They are referred to as human capital because people

cannot be separated from their knowledge, skills, health, or values in the same way as they can be separated from their financial and tangible assets. Human capital consists of human sources of values including “knowledge, skills, and practices” and activities including “employee training, recruitment, staff turnover and diversity” (Manville, 2002). It also includes creating a workplace culture that considers the importance of training and development initiatives, compensation benefits, recognition programs, and other HR programs (Gary, 2003). Human capital theorists agree that human capital is linked to the competence of a firm’s employees, which includes their knowledge, skills, experiences and abilities (Johanson, 2005). Expenditure in the training, development, health and support of staff is regarded as an investment, not just as an expense to an organization (Stockley, 2005).

Consistent with this concept of human capital, the term “human capital” has been further explicated as “the collective attitudes, skills and abilities of people contributing to organizational performance and productivity” (Stockley, 2005). Stockley’s definition also identifies people within the organization as assets, integrally involved in the development of the organization in much the same way as tangible assets and money do. Within an organization, its human resources are simply its people, those who represent the human capital. Therefore, human capital is HRC.

Many believe that HRC is the most important part of a firm’s intangible resources, the generative and central element of IC (Johanson, 2005). It is deemed to be the single most important determinant of organizational success, as the market-to-book value ratios of listed organizations change (Lev, 2001). Recently, 60 to 70 percent of the wealth of listed companies has been attributed to HRC (Gary, 2003). Prior to 2005, it was also

suggested that the market-to-book value ratios of US Standard and Poor's (S&P) 500 corporations grew from slightly above one to over five, inferring that approximately 80 percent of corporate market value is not reflected in financial reporting (Chen et al., 2005). There is a widening discrepancy between the reported book values of organizations and the value that investors put on organizations. It becomes evident that investors are looking at more than just the financial indicators when they are making investment decisions.

As for the dimensions of HRC, they may be those which are unique to individuals or those which are generic (Johanson, 2005). Johanson asserts that HRC dimensions include innovation, capacity, creativity, know-how and previous experience, teamwork capacity, employee flexibility, tolerance for ambiguity, motivation, satisfaction, learning capacity, loyalty and formal training and education. Sveiby (1997), as included in his *Intangible Asset Monitor*, suggests that the components of HRC are knowledge, skills, innovativeness, talent, values, culture, philosophy and ability. Bontis (1998) asserts that HRC dimensions include intelligence, skills, expertise, learning capability, changing capability, innovativeness and creativity. The dimensions of HRC are, as a result highly people-oriented and inherently unique in value to each organization.

With regard to the structural capital of an organization, fundamentally, structural capital is "the supportive infrastructure of human resource capital". It is the knowledge secured and preserved in an organization's systems and structures, it is the residual knowledge after all the human capital has gone home (Edvinsson & Malone, 1997). In the measurement of structural capital, dimensions such as the quality and scope of information technology systems, corporate images, proprietary databases, organizational



concepts and documentation are assessed. Structural capital also takes account of intellectual properties such as patents, trademarks and copyrights. Finally, it includes customer capital, organizational capital, process or RC and innovation capital. Stakeholder relationships are incorporated within this construct.

To understand RC is to recognize that it is part of the social capital of a corporation. Social capital theory assumes a direct relationship between the investment in social relations and the expected returns on that investment (Lin, Cook, & Burt, 2001). Social capital, and therefore RC, includes the norms and networks that enable people to act collectively; it is the aggregate of the real or potential resources, related to the possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition (Bourdieu, 1986). RC itself is made up of contacts between economic mechanisms needed to acquire inputs and to sell outputs; a directly productive aspect of social capital (Bezemer et al., 2003). RC refers to the productive contacts that individuals use in achieving sold output. In some essential features, RC will not differ from other forms of capital, such as money and machinery (Robison, Schmid, & Siles, 2002). Put simply, if we can borrow from a commonly used phrase, “it’s not what you know but rather who you know”, RC is the “who you know” while HRC is the “what you know”. These contacts form the individual aspect of social capital that is directly productive (Woolcock & Narayan, 2000).

As for the dimensions of RC, Bollen, Vergauwen, and Schnieders (2005) assert that these include items related to customer capital such as knowledge of marketing channel, knowledge of customer relationships, customer orientation (accessibility of customer feedback), customer orientation (image of the company), customers (amount of

customers), customers (strong relationships) and customers (satisfaction of products and services); items related to supplier relations such as employees knowledge of customer relations and number of customers; items related to competitors such as relationships with other organizations and competitor orientation; general aspects to be accounted for when engaging in relationships such as long term focus related to customer and supplier relations and profit objective related to customer and supplier relations. Within the company's IC thumb print (refer Figure 1.1), HRC lies at the centre while RC lies around it, supporting it and facilitating its use.

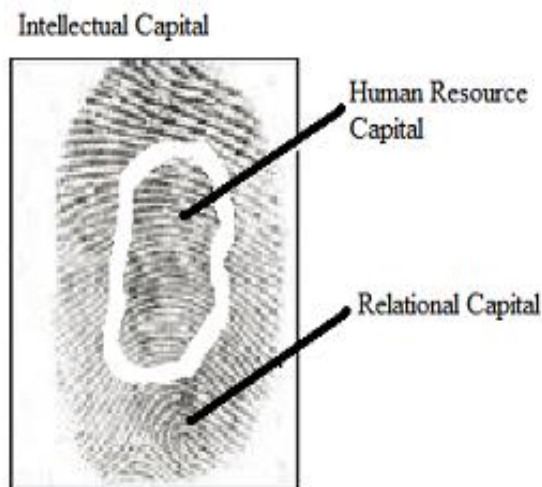


Figure: 1-1

*Figure 1.1. Intellectual Capital*

### **1.1.7 Australian stock ownership – Shareholders and sources of stock investment advice.**

Both institutional investors and “mum and dad” investors buy and sell shares in stocks in the Australian share market. Institutional investors are those entities that have

large amounts of money to invest with ([http://www.investorwords.com/2504/institutional\\_investor.html](http://www.investorwords.com/2504/institutional_investor.html), retrieved 19, May, 2009). They include investment banks, managed funds, pension funds, investment companies, etc. These investors specialize in investing, and are therefore more knowledgeable and equipped, representing the majority of trading volume every day.

“Mum and dad” shareholders include small business owners and middle class investors, usually married, who seek to build their wealth through share ownership (Keane, 2008). Among them are the many individual investors who acquired shares through some of Australia’s major company floats, demutualizations, and privatizations of the 1990s (Roth, 2008). These shareholders are usually quite conservative in their investment decisions, opting for investments in household names (Naidu, 2008). Commonwealth Securities even came up with an index based on these investors, calling it the “Mum and Dad Index” (Naidu, 2008). Currently included in the index are nine companies, including AIG, the Commonwealth Bank (CBA), and Telstra (TLS).

“Mum and dad” investors like to invest in what they know (Naidu, 2008), that is why a company such as Telstra can boast about having 1.6 million “mum and dad” shareholders (Koutsoukis, 2007). Before the global economic crisis, and on the heels of a share ownership explosion in the 1990s (Roth, 2008), Australia had the greatest proportion of exposure to direct shares in the Western world (Keane, 2008). This helps us to appreciate why the current share market volatility has especially hurt “mum and dad” shareholders (Roth, 2008). “Mum and dad” shareholders cannot be blamed for becoming increasingly cautious, lacking investor confidence to take up strategies of “dollar-cost averaging” and “share diversification” to benefit their portfolios.

Understanding the importance they place on considering human resource policy information in their share investment decisions has not been studied to any extent. Their perceptions have been largely ignored because they are not well known. While other researchers have studied the perceptions and needs of institutional investors and advisors, “mum and dad” investors have been disregarded. Also, disclosure on IC may be an effective way to prompt renewed investment demand from “mum and dad” shareholders and an increase in share price and the resultant market value of a company. Knowledge-based corporations especially, may do more to close the gap between the demand and the supply of HR policy information, information regarded as supplementary to the financial reports. This is one of the reasons why research in this area is so vital.

Australian shareholders themselves are more active, sophisticated and knowledgeable than they were in the past and there exists a prevalence of overseas shares ownership by Australian investors and an increase in the average number of shares held (ASX, 2007). Recently, there has been a marked improvement in shareholder knowledge and in the overall attitudes to investment as the ASX Share Ownership Study (2007) revealed that typical direct shareholders are just as likely to be male as female, aged at least 35, with tertiary qualifications, making at least \$100 000, from any area (less so from Queensland) and from capital cities. There was however, a drop in share ownership which was attributed to several factors including departure of passive investors, a need to repay debt, disappointment with shares or funds, disinterest and ignorance (among other reasons). For Australian investors, the primary reason cited for holding shares is to accumulate wealth (ASX, 2007).

The ASX Share Ownership Study (2007) has also identified 11 sources of investment advice the individual investors have access to. These include newspapers, friends/family, financial planner or advisor, stock broker, internet, investment newsletters, accountant, work colleague, magazines, radio and some other source of advice. For the purpose of this research study, the sources of advice can be segmented into 3 groups, “media”, “friends, family and work colleagues” and “professional investment advisors”. “Media” includes newspapers, internet, magazines, radio and other sources such as TV. “Friends, family and work colleagues” includes just that, friends/family and work colleagues. “Professional investment advisors” includes the categories of financial planner or advisor, stock broker, investment newsletters and accountant.

## **1.2 Need for the Research**

Traditionally, rational economic theorists argue the theory of Efficient Market Hypothesis (EMH) which suggests that shares of listed stocks are traded on their fair values on stock markets and that it is impossible to purchase undervalued shares or to sell shares for more than what they are worth (Malkiel, 2003; Van Bergen, 2004). In making bigger returns on investment, EMH attributes no value to the effect of shareholder expectations derived from information that is only available to some stakeholders. The theory also assumes investors think and act rationally in their stock investment decisions and assumes corporate information is available to users, equally. This current research study, however, is driven by previous research such as that conducted by Lev (2001) that contends that information asymmetry produces uncharacteristic gains to informed investors and chips away at investor confidence in the integrity of capital markets. The

volatility caused in markets through widening bid-ask spreads of securities, inflated transaction costs to investors, and an increase in the cost of capital is attributed to the resultant deterioration in investor confidence (Lev, 2001).

Contrary to EMH and rational economic theories, behavioural economic theories and the field of behavioural finance infer that investors are not always rational in their stock transaction decisions (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). Behavioural finance is used to explain market bubbles and market crashes and infers that market reactions may be attributed to several cognitive biases including limited investor self-attribution, overconfidence, overoptimism, herding, and noise trading, to name a few (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). Daniel, Hirshleifer, and Subrahmanyam (1998, 2004) contend that the turbulence and volatility of stock markets may be better understood when the various cognitive biases are considered. They propose a theory that infers stock investors overreact to private information and under-react to public information signals due to their biased self-attribution and overconfidence. They contend that behavioural economics is a complement to rational economic theories by providing insight into instances of irrational consumer decision-making and behaviour. In part, this current research study will refer to both EMH and behavioural economic theory in an attempt to understand the findings in relation to the perceptions and actions of “mum and dad” shareholders regarding HRC and RC dimensions information and its impact on their ABSC stock transaction decisions and on the ABSC share prices.

The need for this research is most certainly driven by the idea of the principle of HC representing a lead indicator of future financial performance, and the notion that HC

analysis is quite necessary in knowledge-based industries which include banking sector industries (Chen, Cheng, & Hwang, 2005; Royal & O'Donnell, 2008). It is driven by underlying theoretical principles about tacit assets that suggest that a lack of reporting on intangible assets may make intangible-rich companies appear less valuable than they really are (Guthrie & Petty, 1999; Guthrie, Petty, & Ricceri, 2006). It is also driven by research that has established that company performance is directly related to corporate SHRM practices (Huselid et al., 1997) and is driven by research that identifies that stakeholders prefer companies to provide greater transparency regarding IC information disclosure in their annual reports (Alwert, Bornemann, & Will, 2009; Royal & O'Donnell, 2004, 2008; Petty, Ricceri, & Guthrie, 2008).

By this stage, it is fairly easy to recognize that even at the best of times, individual shareholders such as “mum and dad” investors have been disadvantaged by the IC information disparity which is characteristic of the global equity markets. That is, while professional investors, analysts and brokers may have more timely access to essential corporate information, much of the information an individual investor can access is either in the annual reports of companies or delivered to them through the media and word of mouth. Simply by asking around, one gets the sense that individual investors are nervous, they lack the confidence to effectively profit from the equity markets and they are ever more sceptical about the ability of companies to provide sufficient returns on their investments. It seems that investors require access to a range of information that is not provided by many companies. While companies are required by law to comply with disclosure rules on their financial positions, there is much more they don't say about their organizations, information that investors may need to know. The challenge is to

understand the information needs of investors and to meet those information needs in a timely and efficient manner. Give the investors adequate information and they may be more likely to invest in a company. Greater corporate transparency may induce improved market performance for those willing to voluntarily disclose information concerning much more than just the financial data. Understanding the perceptions “mum and dad” shareholders have about the importance of HRC and RC information in their stock purchase decisions is necessary before one can argue for the information to be provided in the corporations’ annual reports.

The focus of this research study is on the perceptions of individual “mum and dad” shareholders of the importance of HRC and RC information in making decisions relating to investing equity into companies within the knowledge-based banking industry. “Mum and dad” shareholders are important to the Australian banking sector; they commonly have shares in Australian banking sector corporations (ABSC). This is because the banks are household names and represent a fairly conservative investment for this shareholder group. This research seeks to provide insight into the perceptions and the actions of individual shareholders within the Australian environment. Initially, this research study proposes to provide clear, operational definitions for the constructs related to IC and its components of HRC and RC. Then, quite specifically, this study seeks to provide an assessment of the perceived importance of HRC and RC information disclosure by corporations within Australia’s banking sector and the impact of those perceptions on the purchase of shares within that sector. If this research study is successful in demonstrating a positive relationship between shareholder perceptions and stock purchase decisions, the ABSC may have the motivation to voluntarily report on HRC and RC within their annual



reports. Additionally, the research proposes to provide information on the type of HRC and RC information investors regard to be more or less important in their investment decision-making process. This may prompt companies to provide the specific type of information conducive to investor share purchase. It is with enthusiasm that this research is proposed as the findings may prove to be a powerful tool with which Australia's banking sector firms may develop their communication strategies to better improve their overall status with the bulk of "mum and dad" investors.

### **1.3 Aims and Research Questions of the Research Study**

One of the aims of this study is to investigate the perceptions of individual investors about information concerning the IC components of HRC and RC. Another aim of this research study is to provide an assessment of the relationship between the disclosure of HRC and RC and its impact on share value, as share market volatility and share price fluctuation are issues that impact all investors. The study also aims to determine if HRC and RC information is provided to investors and to determine if they perceive HRC and RC information to be important in their investment decision-making. A further aim of this research study is to understand the sources of share investment advice individual investors turn to in their investment decision-making.

The proposed study investigates seven research questions to study the aims of the study. These research questions include the following:

- What are the differences in the perceptions of individual shareholders of the importance of HRC and RC dimensions between ownership of stocks in the different ABSC?

- What are the differences in the perceptions of individual shareholders of the importance of HRC and RC dimensions between ownership of stocks in only a single Australian bank and ownership of stocks in multiple ABSC?
- Do individual shareholders' perceptions of the importance of HRC and RC dimensions relate to their decisions to purchase ABSC stocks?
- Do individual shareholders perceive HRC and RC dimensions to differ in importance for use in the purchase, holding on to, or selling of ABSC stocks?
- In the ABSC stock transaction decisions of individual shareholders, is the individual shareholder's perception of the importance of HRC and RC dimensions moderated by information provided by differing sources of advice (as identified by the ASX shareholder survey 2006) and demographic variables?
- How does the CBA, Money Magazine's "Bank of the Year 2008", compare to the other banks in the provision of HRC and RC information in the corporate annual reports?
- For ABSC, is there a positive relationship between the provision of information on HRC and RC dimensions in the corporate annual reports and the corporation's share price?

Information gained through this research study may have the potential impact of providing organizations with ways to meet the information needs of the individual investors, to close the gap between what HRC and RC information "mum and dad" shareholders have and what HRC and RC information is required in their investment

decision-making. The research may also provide answers to ways organizations can use HRC and RC information to prompt improvements in investor confidence and a potential reduction in share market volatility. Essentially, this research study seeks to provide, from an HR perspective, valuable information to a number of key stakeholder groups which include practitioners and academics in the field of SHRM, individual “mum and dad” investors, ABSC and government legislators.

#### **1.4 Significance of the Research Study**

Practitioners and academics in the field of SHRM, individual “mum and dad” investors, ABSC and government legislators all stand to benefit from the results of this research study. In the field of Finance, there has been research provided that suggests that information on intellectual capital is provided to investors and has a positive effect on company performance (Brookings Institution, 2004; Chen et al., 2005; Daum, 2002; Lev, 2001). However, even though there is a generally accepted link between company performance and the provision of information on intellectual assets, such as information on the strategic management of HR, there has been little research from an HRM perspective to state this. First of all, this research has the potential to contribute valuable insight into the perceptions of investors regarding the disclosure of SHRM policy information. In doing so, it will benefit the field of SHRM by building on current knowledge, having an impact in the area both academically and commercially.

Secondly, with regard for the importance of HRC and RC information to share investment decisions, this research proposes to identify the key information disclosure requirements of investors by providing insight into their perceptions and behaviours. This is of benefit to individual “mum and dad” investors because it results in the onus

being on companies to make the information known to meet the specific needs of the current and potential investors. In doing this, the research study proposes to provide insight into whether shareholders of Australia's four biggest banks, including the CBA, Westpac Banking Corporation (WBC), National Australia Bank (NAB) and ANZ Banking Group Ltd (ANZ), have significant difference in perception of the importance of the HRC and RC information in deciding to purchase ABSC stocks. The study will also help to identify whether there is a significant difference in perception in the importance of the HRC and RC information in the decision to purchase ABSC stocks of shareholders who have ownership in only a single bank and of shareholders who have ownership in multiple banks. At this point in time, there is no research available that provides this advice and there is a definite gap in research when it comes to understanding specifically the perceptions of individual "mum and dad" investors in Australia.

Thirdly, of benefit to ABSC is the potential identification of a significant positive relationship between an individual's perception of the importance of HRC and RC information and the decision to purchase ABSC stocks. Research is lacking in this area. Knowing what HRC and RC information "mum and dad" shareholders find more or less important in their investment decisions, with specific regard to Australian banking shares, is research that has not been conducted in the past. The study also proposes to discover whether individual shareholders perceive HRC and RC information to differ in importance for the use in the purchase, holding on to, or selling ABSC stocks. ABSC will also be assessed in regard to the provision of HRC and RC information in the corporate annual reports by reporting on the frequency and quality of the information provided. The relationship between HRC and RC information disclosure and share price

will also be assessed. The data has the potential to help banking sector firms better understand any potential gap in the HRC and RC information and the information needs of investors, and, to improve their ability to use the information on HRC and RC to both manage and communicate the value of a company.

Finally, support and research provided by both the academic and commercial environments has the potential to benefit government legislators by helping to set guidelines for the disclosure of HRC and RC information necessary to the share investment decisions of “mum and dad” shareholders. This may facilitate a levelling of the playing field between institutional and individual investors. This study proposes to do this by further providing insight into whether differing sources of advice such as the “media”, “friends, family and work colleagues” and “professional investment advisors”, as well as gender, age or education of individual shareholders, have a significant moderating effect on the relationship between the individual shareholder’s perceptions of the importance of HRC and RC information and the individual shareholder’s use of HRC and RC information in ABSC stock purchase. The research seeks to improve the potential for corporate awareness and to make evident who or what are the influencers and to what degree in Australia.

## **1.5 Thesis Structure**

This dissertation is divided into six chapters with associated appendices and references. This chapter, Chapter One, provides a background to the research. In doing so, it highlights the state of the current economic environment and provides an overview of the link between IC, specifically HRC and RC, and the impact IC has on share prices of knowledge-based companies. It also introduces the academic constructs and the

context in which the study is conducted. It establishes that the research is conducted from an SHRM perspective, rather than from a finance perspective, as much previous research has presented. Chapter Two provides a detailed review of the literature in the key areas of IC, HRC and RC identification, measurement, and reporting. Other previous studies conducted in the field are discussed. Chapter Three presents a discussion on the pilot study which utilises a range of pretesting strategies to develop a questionnaire for use in the hypotheses-testing phase of the research. Chapter Four provides detailed information on the research problems for the main study and hypotheses to be tested. Information concerning is further provided about the research methodology employed and the implications and limitations of the research findings. Chapter Five sets out the results of the thematic content analysis of the annual reports of Australia's eight banks as at the end of the 2006/2007 financial year and it also provides the results of the hypotheses-testing study. Chapter Six provides the discussion of the results; conclusions are drawn from the research. Limitations and the contribution of the research to the commercial environment and to the various stakeholder groups are discussed. Chapter Six is followed by appropriate appendices and references.

## **Chapter Two**

### **Literature Review**

#### **2.1 Introduction**

The purpose of this chapter is to provide the foundational understanding necessary for the hypotheses this research is planning to test. While this chapter includes references to recent studies in the fields of IC and SHRM, some references are made to less recent studies that provide the theoretical underpinning for this research study.

#### **2.2 Literature Review**

##### **2.2.1 IC and its components of HRC and RC.**

This research study is not a finance based study but rather a HR based study. Primarily, the study seeks to test the relationship between the perceptions of the importance of HR information, information on HRC and RC dimensions in stock purchase decisions, and use of such information in the actual purchase of shares in ABSC. Yet, a necessary prerequisite to understanding and applying constructs of HRC and RC within this study is a review of literature in the area of IC itself. While the separate dimensions of HRC and RC have not been studied to the same extent as IC, they are part and parcel of the construct of IC and delving into the research in that area provides the significant information necessary for the building blocks in this research study.

Brooking (1996) made a significant contribution to the academic literature on IC. In her book “Intellectual capital: Core assets for the third millennium enterprise”, Brooking utilized an audit based perspective to discuss what IC was by talking about what it included. Brooking broadly referred to the construct of IC as being the collection

of intangible assets which enable an organization to function. This implied that, if an organization's asset is not tangible, it is automatically considered to be part of IC. In her ground breaking work, Brooking provided a clearer definition of IC and the classification of IC assets by clustering them into the four categories of market assets, intellectual property assets, human-centred assets and infrastructure assets. Specifically, she regarded brands, customers, distribution channels and business collaboration as market assets. Patents, copyright and trade secrets were included under intellectual property. Education and work related competencies were included as human centred assets while management processes, information technology systems, networks and financial systems were included under infrastructure assets. Within this construct, Brooking further proposed the categorization of such IC assets into human capital and structural capital and proposed the use of a Technology Broker model (a questionnaire) to audit the IC of organizations to enable organizations to put a dollar value on their IC assets. In relation to the human capital of an organization, Brooking also defined it by referring to what it included. She proposed that human capital includes a range of items to consider including competence, skills and know-how of employees; attitudes, motivation and leadership skills of managers; intellectual agility, innovation, entrepreneurship and the ability to adapt. In relation to the structural capital of an organization, Brooking referred to the relationships with customers and suppliers and the structure, culture, practices and policies of an organization. Brooking argued that her Technology Broker model provided a practical tool with which organizations can bring together and manage their IC, an exercise she deemed vitally important in achieving organizational success.



Karl-Erik Sveiby, a pioneer of knowledge management since the late 1980s, is responsible for a number of books and articles on knowledge management and IC. Sveiby was first and foremost in identifying the need for organizations to measure human capital, and, in his book “The invisible balance sheet”, compiled the results of a working group set up to come up with a theory to be used in measuring the knowledge management of an organization (Sveiby, 1989). Sveiby was able to tackle the human capital components of knowledge capital. In focus were the competencies and knowledge of employees. He successfully put forth a theory for the measurement of knowledge capital by separating it into three categories including customer capital, individual capital and structural capital. A number of Swedish companies responded by using Sveiby’s framework and by altering the format of their annual reports to include his framework of knowledge capital reporting. In 1995, Edvinsson, at the Swedish company Skandia, was one of those who applied Sveiby’s framework in its organization. In doing so, he also initiated the use of the term IC in the supplement to the annual report of Skandia. Sveiby (1997) continued his work in the field of knowledge management and more specifically in IC by publishing his work on “The new organizational wealth: Managing and measuring knowledge based assets”. He asserted that, for companies, the value of their intangible asset is representative of the difference between their market and book values. In making this contention, he used case studies and referred to the market and book values of knowledge companies such as Microsoft. Sveiby referred to three categories of intangible assets which include employee competence, internal structure and external structure. He used a number of examples of knowledge based companies that have leveraged their success through knowledge strategies focusing on getting the most

out of their HR communication. Sveiby's framework of knowledge capital reporting, the Intangible Assets Monitor, is holistic. Internal structure refers to the organization's management while external structure refers to suppliers and customers. The flow of information between all categories of intangible assets is regarded as the catalyst for well-managed and effectively used competencies. The book is presented from a non-financial perspective and the measures presented in an effort to help companies manage their intangibles, are on knowledge-based assets. The measures are those which relate specifically to the internal and external structures and the competencies of people to help achieve the strategic objectives of a firm.

Influenced by the work of Sveiby (1997), Edvinsson and Malone (1997) studied IC in an attempt to highlight the importance of IC to organizations. In "Intellectual capital – Realising your company's true value by finding its hidden brainpower", the nature, measures and management of IC was their central focus. Also, similar to Brookings (1996), Edvinsson and Malone, with their Skandia Value Scheme, served to define the construct of IC and to identify its components within a framework based on clusters. It was an endeavour to help companies understand that IC enhances their potential for wealth and value creation. The researchers considered IC to include human capital, structural capital, and customer capital. They defined human capital as an organization's combined human capability with regard to solving business problems. They considered it owned and inherent within the people themselves, not within the organization, a capital that went home when the people went home. Edvinsson and Malone regarded structural capital as all that exists within an organization to support the employees in their work roles. They argued that structural capital is owned by the organization regardless of

whether the employees leave. They identified it as the supportive infrastructure that enables human capital to function. However, due to its varied range of components, structural capital was further categorized into organizational, process, and innovation capital. Within organizational capital, they included organizational systems and philosophy that worked to leverage the organization's capability. Within process capital, they included techniques, procedures and programmes that implemented and improved the organization's delivery of goods and services. Within innovation capital, Edvinsson and Malone further classified intellectual properties as those which are copyrighted or trademarked, and intangible assets as any other capacity or hypothesis used to carry out the business of the organization. As for customer capital, they argued that it includes the strength and the loyalty of an organization's customer relations. They made reference to customer satisfaction, repeat business from customers, financial well-being and price sensitivity as measures of an organization's customer capital.

Also very importantly, Canadian researcher Nick Bontis has spent many years researching IC classification and disclosure (Bontis, 1998, 2002; Bontis & Fitz-enz, 2002). Bontis (1998) explored the development of several conceptual measures and models relating to IC and its impact on business performance and used empirical analysis to develop and support his research. In an exploratory pilot study, Bontis set out to survey a number of entry-level MBA students and required each of the respondents to answer the eight page questionnaire booklet as representatives of firms they worked for before entering the MBA program.

The questionnaire was designed to utilize "IC constructs as well as business performance within the context of the conceptual model" (Bontis, 1998, p. 67). He had

64 respondents fill out the questionnaire, an eight page document comprising questions to be answered on a 7-point Likert scale, with 63 items designed to delve into four constructs, three of which related to IC and one relating to business performance. Bontis (1998) used SPSS in Windows to factor analyse the information relating to the constructs of IC including human capital, customer capital, structural capital, and performance in an effort to identify which items captured the constructs most effectively. He identified a “valid, reliable, significant, and substantive causal link” between the components of IC and business performance (Bontis, 1998, p. 63). While Bontis asserted that understanding a company’s IC is extremely important to performance, he also asserted that the implicit nature of IC may hinder analysts from being able to measure it using economic variables, and that a formula may never be constructed to explain the specific monetary value of intellectual capital. The research helps other researchers and practitioners to understand and develop the components of IC with the academic and commercial environments as Bontis’ research suggests a shift in the future from short-term strategies focused on products, to strategies that are longer-term, those that focus on the specific human, structural and customer capital of an organization.

The concepts of HRC and RC are linked to identifying an organization’s people as its valuable assets. Researchers infer that the dissection of the construct of IC leads to the understanding of the concepts of HRC and RC (Bollen et al., 2005). Definitions of the HR components of IC proposed by Brooking (1996), Edvinsson and Malone (1997), Roos and Roos (1997), Sveiby (1997), Bontis (1998), Lynn (1998) and Johanson (2005) created the foundation for the research carried out by Bollen, Vergauwen, and Schnieders (2005). Bollen, Vergauwen, and Schnieders, in reviewing and bringing together the

literature, used a comparative analysis of the theories provided by leading researchers in the field to provide an integrated framework of IC and its components of HRC and RC (refer to Appendix A).

Bollen, Vergauwen, and Schnieders (2005) identified that Johanson (2005) proposed HRC components which included innovation, capacity, creativity, know-how and previous experience, teamwork capacity, employee flexibility, tolerance for ambiguity, motivation, satisfaction, learning capacity, loyalty and formal training and education. They identified that Sveiby (1997) suggested that the components of HRC are knowledge, skills, innovativeness, talent, values, culture, philosophy and ability. They also were able to assert that Bontis (1998) proposed HRC components to include intelligence, skills, expertise, learning capability, changing capability, innovativeness, and creativity.

In referring to the work of Edvinsson and Malone (1997), and in regard to the concept of the structural capital of an organization, Bollen, Vergauwen, and Schnieders (2005) were able to identify that the RC concept was included within this construct because structural capital is the knowledge secured within an organization's systems and structures. They regarded structural capital as what is left when all have gone home. Structural capital was found to include a range of components such as the quality and scope of information technology (IT) systems, corporate images, proprietary databases, organizational concepts, and documentation. It is also recognized as including intellectual properties such as patents, trademarks, and copyrights. Finally, Bollen, Vergauwen, and Schnieders also assert that it includes customer capital, organizational capital, process or relational capital and innovation capital. RC is regarded as part of

structural capital. As for the components of RC, Bollen, Vergauwen, and Schnieders (2005) proposed that these are items related to customer capital, supplier relations, and competitors. Items related to customer capital include knowledge of marketing channel, knowledge of customer relationships, customer orientation (accessibility of customer feedback), customer orientation (image of the company), customers (amount of customers), customers (strong relationships) and customers (satisfaction of products and services). Items related to supplier relations include employees' knowledge of customer relations and number of customers. Items related to competitors include relationships with other organizations and competitor orientation. Also, general aspects to be accounted for when engaging in relationships and in profit objective, such as long term focus, relate to both customer and supplier relations. As Bollen, Vergauwen, and Schnieders bring together, literally and in table format, for comparison, the work of leaders in the field of IC, they provide a good foundation for the development of definitions relating to each of the constructs of IC, the HRC and RC being assessed in this research study.

In summary, much research has focused on the definition of the construct of IC. This is because understanding the IC of an organization is critical to organizational performance. Also, a focus on the separate components of IC, HRC and RC, is a result of identifying that the people within an organization are its most valuable assets. However, as researchers have argued (Bontis, 1998), the implicit nature of IC makes it difficult for analysts to measure its value in monetary terms. Researchers infer that it is only through the dissection of the construct of IC that an understanding of the concepts of HRC and RC can be gained.

### **2.2.2 The importance of the functions of HRM to organizational strategy.**

As a component of an organization's IC, human resources are the most important and unique assets of an organization. Employees must be managed effectively in order to set in motion the other organizational resources in the development of innovation to achieve competitive advantage. HRM is widely regarded as the act of planning, organizing, directing and controlling of the procurement, development, compensation, integration, maintenance, and separation of human resources to the end that employee, organizational and social objectives are realized (Flippo, 2007). The functions of HRM within organizations relate to attracting and maintaining a company's human resources. Traditionally, this process includes recruiting and hiring the right staff, helping individuals and the organization to develop, manage and influence the performance of individuals and teams within the organization, and working to develop the careers and leadership skills of staff. HRM systems include policies on the compensation, integration and maintenance of human resources to facilitate employee and organizational performance.

Lado and Wilson (1994, p. 700) contended that HRM systems were "sets of distinct but interrelated activities, functions and processes that are directed at attracting, developing, and maintaining (or disposing of) a firm's HR". HRM systems may either contribute to or wipe out organizational capabilities that assist competitive advantage. Lado and Wilson argued that within HRM systems, the strongest drivers of sustained competitive advantage were recognized as being organizational culture, learning, routines, and entrepreneurship. They went on to assert that organizational capabilities develop further into organizational competencies, those firm-specific resources and

capabilities that enable the organization to develop, choose and implement value-enhancing strategies. For example, in our dynamic global environment, it is the learning organization, that which encourages innovation and learning and development at individual and organizational levels, which will be best placed for achieving competitive advantage. Lado and Wilson assert that in relation to this, and in relation to other determinants of an organization's competitive advantage, firm-specific, hard-to-replicate, and immobile organizational competencies will result in economic gains to an organization. They went on to refer to a range of managerial competencies, input-based competencies, transformational competencies, and output-based competencies organizations need to develop to achieve competitive advantage.

Similar to Flippo (2007), Lado and Wilson (1994) contended that the functions of HRM included implementing cognitive processes in the recruitment and selection of employees, carrying out job analysis, having in place suitable training and development initiatives, performance appraisal systems, and having effective compensation programs. The first two functions, of embracing cognitive processes in recruitment and selection and job analysis, relate to attracting employees, and the remaining three functions, of training and development, performance appraisal, and compensation, relate to the maintenance (development, retention, and maintenance) of employees. Compensation is used for both attracting employees to a company and for maintaining them. These functions are regarded by researchers as important to affect the organizational culture, learning, routines and entrepreneurship. This, in turn, leads to organizational competencies that help an organization achieve competitive advantage through innovation, cost reduction and/or improved productivity.



However, within a SHRM framework, the HRM functions presented above may also be classified into procurement and performance management. This is because procurement is about attracting and selecting employees while performance management is about everything else that follows their recruitment (McNamara, 2006). McNamara asserts that performance management of employees is an on-going process which includes the requirements to establish goals, to monitor employee achievement of goals, to share feedback with employees, to evaluate the employee performance, to reward performance, and even to let an employee go. It is an ongoing process of communication and feedback used in the appraisal of employees, procedures, and processes to measure progress toward the preset goals. Performance management involves the relationship between HR practitioners and the employees in an attempt to facilitate a company's strategic objectives. Professional organizations and corporations alike must recognize that, by its dynamic nature, successful performance management creates the groundwork for rewarding excellence. It enables managers to clarify expectations, to decide on objectives, to identify goals, to give feedback, and to assess results. Performance management, within a SHRM framework includes, quite necessarily, the development and management of induction programs, training, formal performance appraisals, high pay and various financial incentives, non-monetary benefits, job enrichment, and career progression.

In summary, it has been argued that human resources are the most vital and unique assets of an organization and that they must be managed effectively in order to engage all organizational resources in innovation to gain sustained competitive advantage. Firm-specific resources and capabilities enable organizations to develop, choose, and

implement value-enhancing strategies. The functions of HRM within organizations relate to attracting and maintaining a company's, firm-specific human resources. In carrying out the functions of HRM, HRM systems are used. HRM systems may either contribute to or wipe out organizational capabilities that assist competitive advantage (Lado & Wilson, 1994). Organizations with HRM systems that are aligned with organizational strategy, for the encouragement of innovation and learning and development at individual and organizational levels, are best placed for achieving competitive advantage and economic gains.

### **2.2.3 Understanding SHRM – Getting companies to develop the necessary link between HRM and corporate strategy.**

Researchers such as Kaye (1999) and Wei (2006) seem to be of the same opinion about the role of HRM in the utilization of an organization's IC to support organizational strategy. They contend that corporations that achieve competitive advantage are those that take a strategic focus, those who have a SHRM perspective, whose leaders actively work to enable a strategic orientation. Essentially, they are those who realize the value of the appropriately fitting IC components of human resources to the overall business strategy. With regard to the notion of SHRM and its value to an organization, this paper refers to the work of Kaye (1999) and Wei (2006).

*“If HR policy is to contribute to the organization's bottom line, areas such as recruitment, selection, training, development and performance appraisal should be consistent, integrated and strategically focused.” (Kaye, 1999, p. 581)*

Kaye (1999, p. 577) referred to SHRM as a “system-wide intervention that links HRM to strategic planning and cultural change”. Kaye argued that if the purpose of

SHRM is to strategize in combination with an organization's business direction, then it has to be reconceptualised to acknowledge the human endeavour. Kaye argued that SHRM, including "soft" and "hard" strategies, needs to consider the needs of employees and needs to be integrated with business strategy as organizational culture that provides direction and a sense of purpose and involvement will create long-term competitive benefit. Kaye also contended that by failing to reframe the language and the intent of SHRM, organizations will be unable to realize the much sought after sustainable competitive advantage.

In her theoretical paper, Kaye (1999) used a literature review to provide a critical analysis of SHRM from an Australian perspective. She argued that while SHRM was being utilized to specify a system-wide intervention that ties HRM to strategic planning and cultural change, the Australian experience suggested that SHRM was not quite people focused and had led to increased job insecurity and decreased job satisfaction. Even as Kaye recognized that employers were rewarding employees in an effort to link strategy to performance, she also encouraged organizations to let go of the economic level of a single vision strategy which was embraced by many Australian companies. Kaye was concerned that the traditional approach to HRM that was evidenced in the Australian context was not adaptive and not open-ended enough to deal with the unpredictable and unknowable, which is essentially what corporate strategy is all about.

Essentially, HR strategies deal with people issues and opportunities to achieve and maintain competitiveness through people. Kaye (1999) argued for a more wide-ranging definition of the concept of SHRM; one that produces a framework that includes both the outward focus of strategic planning and the inward focus which allows for the human

contribution leading to organizational reality. Kaye found that to enable strategic orientation, research suggested that strategy needed to be initiated and controlled from the top management level, needed to be deliberate and deductive, and needed to be holistic, integrating the goals and actions of an organization into a combined whole. By implementing a strategic framework, organizations work with their present situation with the intention of predicting future requirements to achieve advantage. Kaye argued that SHRM backs up the belief that organizational effectiveness is enhanced if HR is well thought-out when deciding on business strategy. She referred to both “soft” and “hard” HR strategies and explained that SHRM requires a balance of emphasis on the developmental (soft) and on the structural, task-forced (hard) HR strategies.

According to Wei (2006), SHRM involves designing and putting into action a set of internally consistent policies and practices that make certain that the human capital of a firm adds to the accomplishment of its business objectives. It is about merging the HRC practice into the strategy of the firm. In his theoretical paper, Wei (2006) proposed to establish a conceptual framework that accounted for the “fit” of HR practices to organizational strategy. Like Kaye (1999), Wei undertook a review of literature in the field and found that the widespread indication from previous research was that SHRM enabled corporations to achieve sustained competitive advantage.

Initially, in setting out to establish his conceptual framework, Wei (2006) suggested that defining SHRM was hard, but, what was known was its function. Similar to Kaye (1999), he believed combining the traditional HRM function with corporate strategy resulted in SHRM. He argued that SHRM gave organizations greater flexibility and use

of their human resources, therefore enabling organizations to improve their competitive positions.

Wei's main focus was on the "fit" between HR practices and policies and business strategy. Fit was identified as being "the pattern of planned human resource deployments and activities intended to enable the firm to achieve its goal" (Wei, 2006, p. 49; Wright & McMahan, 1992, p. 298). There were two kinds of fit that Wei referred to, "horizontal fit" and "vertical fit". Horizontal fit was identified as the congruence among the various HRM practices within the organization (Wei, 2006; Baird & Meshoulam, 1988), and vertical fit was identified as the alignment of HRM practice with the strategic management process of the organization (Wei, 2006; Schuler & Jackson, 1987). Wei considered vertical fit a critical step on the way to achieving organizational goals through the initiation of HR activities that are aligned with the organization's objectives. He also stated that horizontal fit was necessary whilst making good quality use of such resources.

Wei (2006) also asserted that, fundamentally, SHRM focuses on developing the organization's ability to respond to the external environment by making better use of its human resources. Given that an organization's strategy is a reflection of its response to competitive external changes, a reserve of human capital, possessing a wide range of skills that are attuned with the organizational strategy, is a mechanism for ensuring the achievement of strategic goals by promoting behavioural efficacy amongst the employees.

Further to suggesting definitions for the constructs, Wei (2006) was successful at creating a conceptual framework on the antecedents of "fit" and at providing a conceptual model that illustrated the determinants of both kinds of "fit". Wei provided a detailed

discussion on the model in which he argued that horizontal and vertical fit were impacted to various extents by three types of factors. Wei was able to conclude that, as human resources are becoming more and more important to competitive organizations, their management must be viewed from a strategic perspective. Similar to Kaye, he identified the need for the deliberate, systematic, long-term perspective in relation to the management of HRC. With regard to both horizontal and vertical fits, Wei warned about managers relying too heavily on one factor or the other and disturbing the balance of both fits which is needed in the overall strategic framework of organizations. He admitted to the difficulties linked to setting strategies that are both compatible and internally consistent with an organization's HR system and suggested that management and culture play pivotal roles in the success of such strategies. Finally, Wei referred to the interactive process in which SHRM and organizational development set out to encourage and advance each other. Wei concluded that organizations that actively participate in HR development behaviours are those which are expected to benefit through financial performance and human capital improvements, strengthening those antecedents for attaining better fits, and subsequently improving organizational effectiveness.

In summary, research has found that SHRM is a system-wide intervention linking HRM to an organization's strategic planning and cultural transformation (Kaye, 1999). It includes "soft" and "hard" strategies that consider the integration of employee needs and organizational culture with organizational strategy in an effort to create long-term, sustained competitive benefit. Corporations that attain sustained competitive advantage are those who have leaders who adopt a strategic focus, who actively work to support organizational strategy and encourage a SHRM perspective.

Assisting organizational strategy by fitting the human resource components of IC to the overall business strategy is a critical role of HRM. The expectation is that organizations benefit, attaining human capital improvements and organizational effectiveness. It will be interesting to see if this research can shed some light as to whether the dimensions of HRC and RC perceived to be important to shareholders will be those that are linked to a company's strategic orientation.

#### **2.2.4 Recognizing the need for IC management, measurement and reporting.**

With regard to the activities of IC measurement and reporting, as researchers have asserted in past studies, IC rich companies who do not report on their IC sell themselves short by appearing to be less valuable than they truly are (Guthrie & Petty, 1999; Guthrie, Petty, & Ricceri, 2006). Yet, before companies can report on IC, they must have some way of measuring it, whether in a qualitative or quantitative manner. The consistent application and evolution of IC measurement is, in itself, recognition of the great value this tool represents for assessing the true economic worth of an organization. A number of research papers have revealed significant information on the topic of IC Management, Measurement and Reporting. Flamholtz (1988), Kaplan (1993), Lev (2001), Sveiby (1989, 1997, 1998) and Guthrie and Petty (2000) are among those who have researched and expanded the knowledge in the field of measuring and reporting on an organization's intangible resources.

In the United States, Flamholtz has researched the measurement of intangible assets and has devised a probabilistic formula to determine the value of an organization's human capital. He applied the formula using an organizational-specific scorecard method of aligning organizational strategy with human capital capabilities (Flamholtz, Searfoss,

& Coff, 1998). He based his theory on the assumption that movement between organizations is in itself a probabilistic process where an integrated Human Resource Accounting (HRA) system measures both the probable replacement cost of human assets and the economic value of individuals in each position. Flamholtz' HRA paradigm is considered a "psycho-technical systems approach (PTS)" to organizational management (Flamholtz et al., 1998; Flamholtz, Bullen, & Hua, 2002). Fundamentally, Flamholtz regards HRA and disclosure on human capital as an effective tool in HR decision-making.

Flamholtz, Bullen, and Hua (2002) provide a definition of HRA and the authors again suggest that measurement of human capital is useful for financial reporting and managerial decision making. The authors also argue that the mere academic research in the area of HRA can create the tool for further development and improvement of accounting for IC, which includes people as human assets. They too suggest that the organization's human resources are its prime intangible assets and that human capital is to be viewed as such an asset rather than a cost to the organization, as is the dominant view. The authors agree with other scholars in the field that human capital must be accounted for when information is presented to stakeholders both internally and externally if they are to make more accurate strategic decisions. Although HRA is difficult, due to a level of subjectivity rather than the objectivity that is part of the assessment of tangible assets, it is beneficial as a management tool. The authors refer to three functions of HRA which include: the provision of numerical information about the cost and value of human capital, serving as an analytical framework in the decision-making process and providing the motivation for decision-makers to take on a human



resource perspective. The article makes reference to Flamholtz' HRA paradigm in terms of the PTS approach to organizational measurement. This system highlights the two functions of measurement, the process function and the numerical or informational function. Finally, the historical development of HRA, over the last three decades is discussed and the current developments in the area are also discussed (Skandia Navigator). The authors paint a clear link between research and practice and are compelled by the knowledge that HRA information can aid decisions within an organization and in the capital markets.

Kaplan and Norton (1993) promote the use of the balanced scorecard (BSC) as an HRM tool. With the BSC, measures are chosen from a number of perspectives such as financial indicators, performance for customers, internal processes and innovation and improvement activities. Kaplan and Norton assert that the BSC is being used by successful firms to measure performance and set strategy. They discuss the need for managers to design and use new measures that are effective in monitoring new goals and processes as they question the relevance of old measures in the implementation of new organizational initiatives. They too regard effective measurement as an integral part of the management process and refer to the BSC as a management system that can induce breakthrough developments in the important areas of product, process, customer, and market development. However, measurement in all areas is reliant on the key indicators that are specifically applicable to individual firms and their individual strategies. The design of the BSC is not the same for all organizations. The job of management is to understand which measurements will facilitate strategy. The BSC continues to be used successfully by firms to both measure performance and set strategy.

In 1996, Lev founded Intellectual Research at New York University. Similar to Kaplan and Norton (1993), Lev (2001) refers to a value chain scoreboard used to provide information to both managers and investors, at different levels of detail and frequency, about the innovations within the organization. Within his approach, he uses a mix of both quantitative and qualitative data to quantify the value of intangible assets. Lev asserts that there is a need for primarily quantitative measurement and disclosure and for a degree of qualitative measurement and disclosure as an annex, providing the context in which the quantitative performance data is analysed. Lev's research also highlights the importance of disclosure on intangible assets. He speaks about the discrepancies between values of company shares and values of tangible capital. He goes on to demonstrate that the value of intangibles is significant in knowledge-intensive industries. This is in line with the current research on human capital disclosure. Lev argues that the consequences of information asymmetry include: abnormal gains to the informed investors, a deterioration of investor confidence in the integrity of the capital markets based on intangibles and information asymmetry, a widening of bid-ask spreads of securities and, as a result, high transaction costs to investors and an increase in the cost of capital. Lev believes that if a clear, well-defined, and information relevant system can be developed to reflect the value of the intangible assets of a firm, most managers would indeed provide disclosure on such information for the good of the business itself.

Researchers in Europe have also contributed quite valuably to the wealth of knowledge in this area. In Scandinavia especially, human capital measurement and reporting is encouraged throughout both public and private sector firms. Research such as that by Sveiby (1989, 1997, 1998) and the Swedish group Skandia identifies the

generation of financial results through the human focus as the motive behind the development of customer, process and developmental capital (Daum, 2001). Studies indicate that the stimulating forces for Human Resource Costing and Accounting (HRCA) in Scandinavian countries are based on OECD initiatives that are values-based, concerned with social order and organizational improvement (Grojer & Johanson, 1998). In their literature review, Grojer and Johanson (1998) discuss the development of HRA theory and practice. They refer to HRCA as a multifaceted and inadequately understood process of accounting. The researchers make reference to the development of the accounting process which was influenced by both external and diverging internal forces for change. In initiating their review, they focused on the example of Sweden and the forces organizations faced that effected the stimulation or inhibition of the development of HRCA.

Grojer and Johanson (1998) take on a historical perspective to highlight periods of growth in the field in the 1960s, characterized by the development and assessment of models for the measurement of human resource costs and values. Their article discusses the diminished interest in the area at the end of the 1970s and the renewed interest in the concepts of HRCA since the 1980s as organizations struggled in the practical application of what was referred to as an “interesting concept” (Grojer & Johanson, 1998, p. 496) that of measuring and accounting for human capital. While intangibles are readily recognized as an important component of an organization’s assets, only few countries have been interested in the further development of HRCA, those seeing it not only as a management tool but also as a tool for capital markets to gauge the true value of organizations. The Swedish Government and many Swedish organizations have put

much faith into the new paradigm. The authors were able to conclude that HRCA, while not really popular in every country, “based on a management control perspective, seems to be used to a substantial degree by many Swedish organizations” (Grojer & Johanson, 1998, p. 496). Grojer and Johanson go on to highlight the possible reasons for its attractiveness to the Swedish organizations, all having much to do with the needs of stakeholder groups. Finally the article discusses the link between the interest in the measurement of intangibles and the degree to which the political and organizational stakeholders push for the developments. Grojer and Johanson were able to conclude that as time has gone by, there has been an increase in opportunities for research in the area, they did, however, question where the researchers were. The study calls out for more research and hence researchers in the area to further legitimize its potential for improving organizational effectiveness.

In summary, there has been an expansion of the knowledge in the field of measuring and reporting on an organization’s intangible resources. Researchers have argued that the measurement and reporting of intangible resources, such as IC, is critical to corporations in order to adopt a strategic orientation (Flamholtz, Searfoss, & Coff, 1998). Knowledge-based, IC rich companies, who fail to report on their IC, suffer an injustice by appearing to be less valuable than they are. The measurement of IC must be utilized in both managing an organization and in communicating its value to both internal and external stakeholders. Measurement tools for IC, including organizational-specific scorecards aligning organizational strategy with human capital capabilities, help in assessing the true economic worth of an organization. The utilization and evolution of IC

management, measurement and reporting is, in itself, recognition of the immense value attached to the disclosure of IC information.

### **2.2.5 Reporting in the context of corporate annual reports and the relationship between IC and the market value of a corporation.**

Researchers have found that the IC of an organization has been able to impact positively on the market value of an organization and on its financial performance (Chen et al., 2005). Past research has also demonstrated a positive relationship between the HRC indicators and the market-to-book value ratios of Spanish banking firms (Saenz, 2005). However, public legislation in Australia, as in most countries, does not mandate the disclosure of IC information, including information relating to HRC and RC, in the annual reports of corporations. This results in a deficiency of disclosure on strategically important organizational resources and activities (Guthrie, Boedker, & Cuganesan, 2005). Holland (2003) and Guthrie, Boedker, and Cuganesan (2005) concluded that private information not included in the annual reports represented 25 to 50 percent of the relevant information used by fund managers in corporate valuations. Mouritsen, Bukh, and Marr (2004) also assert that the lack of disclosure on non-financial indicators, important for organizations within a knowledge economy, is leading to a decline in the relevant value of the information in annual reports. They argue that the “traditional financial statements do not provide the relevant information for managers or investors to understand how their resources – many of which are intangible – create value in the future” and “for external communication purposes, additional kinds of reporting may be necessary” (Mouritsen et al., 2004, pp. 46 & 47).

Saenz (2005) asserts that many people believe a firm's IC represents the difference in value between a company's market value and its book value. Saenz conducted his research study to test this assertion. Saenz' research provided a methodology to explore and assess the relationship between IC indicators and the market-to-book ratios (MBR) of 4 Spanish banking sector companies. The Spanish banking sector was chosen based on the fact that Spanish banks had traditionally tended to create and disclose IC reports. The four banks referred to in the research were those that did just that, they either published IC reports or a human capital report.

The research study was focused on exploring the relationships between human capital, MBR, and various business performance indicators (Saenz, 2005). In doing so, each of the three main IC components of human, structural, and relational capital scored. The scores were an attempt to measure the relative positioning of companies within the same industries in each of the IC blocks. A global score was also set, which involved combining the scores of the previous blocks. A common set of indicators in the corporations studied was required. However, the empirical application of the study's proposed methodology to external IC reports was limited by the imbalance between firms showing strategy uniqueness and delivering comparable information across their companies.

In comparing the average human capital rate calculated for the period 2001-2003 with the MBR, Saenz (2005) obtained the average of this ratio for the period 2002 to 2004 given that the information relating to human capital was only regarded to influence the market value of shares once the information was published. That was the reason Saenz considered a one year delay for the MBR. Saenz employed the use of various

correlation tests in his analyses. The findings of the study successfully demonstrated an obvious positive relationship between human capital indicators and MBR, and almost no relationship between human capital indicators and banks' efficiency and financial return. Based on the analyses conducted, Saenz concluded that the human capital of the companies studied seemed to have an impact on MBR but the incidence on the level of efficiency and financial return is very weak. Finally, the aspects which seem to have the most influence on the MBR are the levels of efficiency and financial return of the Spanish banking sector firms. Overall, Saenz' study was of value to the field in its provision of the methodology for external IC benchmarking.

Bukh (2003), in his theoretical paper, has presented the argument that for IC disclosure to be seen as pertinent from a capital market viewpoint, the information should be made known as a vital part of the framework revealing the value creation methods of the firm. Bukh asserts that there is a demand for the disclosure of IC information based on the fact that many organizations derive their success from intangibles including know-how, patents and skilled employees. Bukh refers to the IC reports of Danish firms and argues that for IC reports to be effective, they must convey the management's knowledge of strategy and value formation, and not only display indicators of general concern.

Rimmel (2003), in his dissertation, provided an in depth analysis of the level of voluntary human capital disclosure in Sweden by two organizations in particular, Skandia and Allianz. In conducting his research, Rimmel has stated that while organizations indicate that their employees as their most valuable resources, only a few organizations have been successful at measuring and reporting on the value of human resources in their annual reports. The purpose of Rimmel's study was to illustrate the practice of providing

voluntary information on human resources in company annual reports by comparing the findings on justification, disclosure, and utilization. Rimmel used a tripartite model of human resource disclosure practice to study information, providers, and users. He studied the extent of voluntary information in annual corporate reports, why the information was provided, and how the users of the information used it. As for the methodology employed, Rimmel used a disclosure scoreboard to gain the empirical data needed for his research, he also interviewed the users and providers and he utilized a comparative case study analysis of two organizations, one more experienced at voluntary disclosure than the other. The study found that both organizations provided a large amount of voluntary disclosure in their corporate annual reports yet over a five year period the more experienced organization lost its lead in voluntary disclosure. Both organizations provided human resource disclosures as both deemed them to be important in their overall picture of the worth of the organization yet, the inexperienced organization provided a greater amount of human resource disclosure. Notably, the comparative analysis indicated that the human resource disclosure provided did not fully meet the expectations of the users and that the users found the information hard to analyse, especially for comparative purposes over a number of years.

Following on from his work (Bontis, 1998) on identifying a causal link between a company's IC and its business performance, Bontis (2002) went on to study the IC disclosures of Canadian companies. He used content analysis to study the extent of IC disclosures in the annual reports of ten thousand Canadian companies and found that most IC terms were disclosed only once in the annual reports. Bontis (2002) found that IC disclosure was very much still in academic discussions and was generally ignored in



corporate reporting. It was concluded that the companies that voluntarily disclosed more information were those from the “new economy” and that there was no statistically significant difference between the companies that disclosed IC information and the rest of the population with regard to employee size or shareholder equity. Bontis referred to IC language as being a necessary antecedent to the development of IC statements in Canada, as that country seemed to be behind its Scandinavian counterparts and argued that there is not much in Canada bringing together the ideas of management and disclosure. A recommendation of the study was made to the corporations concerned about their relationship with the capital markets. Those companies were encouraged to develop strategic and tactical plans that make way for the voluntary disclosure of IC.

Furthermore, Bontis and Fitz-enz (2002), in their paper, detail the results of their “ground-breaking” research study measuring the antecedents and consequents of “effective” HC management. They stated that the purpose of their research was to integrate constructs from the fields of intellectual capital, knowledge management, human resources, organizational behaviour, information technology, and accounting in an effort to expose a more holistic perspective of organizational performance. The study provided definitions of key constructs and had five identified objectives including the desire to reconcile the use of economic and perceptual measures of HC and its antecedents into triangulated indices yet to be measured; to determine path coefficient relationships between constructs that are developed from an overall conceptual model based on academic and practitioner literature; to benchmark the relative standing of the participating organizations, so client human resource may be reallocated more effectively; to establish a research trajectory, more advance and innovative than anything

currently considered in the fields of IC or knowledge management; and, to set a base line for trending, norming, and forecasting the human and financial capital links.

The first phase consisted of the collection of quantitative data on revenue, profit, number of employees, turnover, and training information. This was to tap into the four constructs of human capital effectiveness, human capital valuation, human capital investment, and human capital depletion (Bontis & Fitz-enz, 2002). The second phase involved the distribution and completion of a qualitative survey consisting of perceptual items and questions based on Likert-type scales. This survey instrument was used to describe fifteen latent constructs including employee satisfaction, employee motivation, human capital, and management leadership, just to name a few. Seventy six senior executives from twenty five companies took part in the research study.

The quantitative and qualitative measures were integrated in the study to realize a more holistic and comprehensive understanding of human capital management (Bontis & Fitz-enz, 2002). The result of the study was a complex structural equation model. They succeeded in creating a holistic causal map integrating constructs from the fields of intellectual capital, knowledge management, human resources, organizational behaviour, information technology, and accounting. Referring to the causal map created, Bontis and Fitz-enz afford participating researchers and academics a better ability to assess a company's human capital capabilities and ensure they are better equipped to carry out the efficient allocation of resources relating to human capital management. They have been successful in identifying a positive relationship between IC and firm performance.

However, with regard to the market value of a corporation, Ballow, Burgman, and Molnar (2004) assert that at any point in time, the share price of a corporation

incorporates the current market value of the corporation and its future growth prospects. They assert that corporations “infer the sum of their future value from the excess of the market’s valuation of their company over what its current performance would warrant” (Ballow et al., 2004, p. 27). In demonstrating that future value is considered in the share price of a stock, Ballow, Burgman, and Molnar refer to the EBay Corporation as an example. In their demonstration, they propose that the market value of EBay at \$US31 billion dollars is made up of its current value at \$US2.7 billion (9 percent of total value) and its future value at \$US28.3 billion (91 percent of total value).

In their research, Guthrie and Petty (2000) discuss public disclosure with respect to the intangible assets of Australian firms. They focus on how Australian firms respond to the challenge of reporting intellectual capital. Using content analysis methods and empirical data from the annual reports of the top twenty Australian listed companies as at the end of 1998, Guthrie and Petty report on the scope of IC disclosed in the annual reports in comparison to those of European companies. In carrying out the empirical research, they utilize the framework for understanding IC developed by Sveiby (1997). They report that the primary areas of IC reporting “focus on human resources; technology and intellectual property rights; and organizational and workplace structure” (Guthrie & Petty, 2000, p. 241). Through their research, Guthrie and Petty found that the formation of a model for reporting intangibles is not broadly spread and that information on intangible assets is not reported within a standardized framework. They suggest that while companies may want to manage and develop their IC, they are unaware of the tools available for measuring the change in their intellectual capital accounts. Guthrie and Petty also conclude that companies don’t report IC externally as they may regard the

development of IC as an internal management issue, external to the extent of annual reporting.

Abdolmohammadi (2005) also studied the prevalence of reporting on the components of IC by a number of US Fortune 500 companies over a time frame of five years, from 1993 to 1997. He used content analysis of 284 corporate annual reports to investigate the type and frequency of IC disclosure by 58 companies from both old and new economy sectors within the USA. The purpose of his study was firstly to create a descriptive framework of the components of IC in the annual reports of those firms and secondly to understand the effects of such IC disclosure on market capitalization. In doing so, he firstly carried out a literature review to categorize the components of IC. He used the work of researchers such as Sveiby (1997) and Guthrie, Johanson, Bukh, and Sanchez (2003) to create the ten broadly defined categories of IC. This was needed as the components of IC represented his unit of analysis. Abdolmohammadi surmised that the components of IC included brand, competence, corporate culture, customer base, information technology, intellectual property, partnership, personnel, propriety process and R&D. He found that there was high variance in disclosure between companies and sectors and that the incidence of information disclosure on brand and proprietary processes had improved over the period in question. He also found important differences between the economy sectors with regard to the IC components. IC components of brand and partnerships differed where there was more disclosure by old economy sector and, information technology and intellectual property differed where there was more disclosure by the new economy sector, such as with software companies. He also used regression modelling with IC disclosure, return on assets (ROA) compared to industry

averages, and company book value information to assess the relationship between IC disclosure and market capitalization. He found that the effect of IC disclosure on market capitalization was positive and highly significant and represented an incentive for companies to provide voluntary disclosure. However, he did indicate that the cost to companies of voluntary IC measurement and reporting was not taken into consideration and could not be assessed for its detraction from disclosure.

In summary, the IC of an organization is understood to have the potential to impact positively on the market value of a company and on its financial performance (Chen et al., 2005). However, public legislation in Australia, as in most countries, does not mandate IC information disclosure, including information relating to HRC and RC, in corporate annual reports. This causes a deficiency of disclosure on strategically important organizational resources and actions (Guthrie, Boedker, & Cuganesan, 2005). The expectations and needs of the information users are often not met by companies and, as a result, investors experience difficulty in analysing and comparing the information that is provided to them. As a causal link has been identified between IC and business performance, researchers have argued for the inclusion of IC information in corporate annual reports, either directly or as subsidiary reports. Companies that create strategic and tactical plans to voluntarily disclose IC information, through their corporate annual reports, have the potential to be rewarded in their relationships with investors and with the capital markets.

### **2.2.6 Stakeholders' perceptions about the disclosure of IC information in the corporate annual reports.**

Ax and Marton (2008), in their research paper, documented the results of their exploratory study into the relationship between human capital disclosures in corporate annual reports and human capital management practices. Their research was the first to link human capital disclosure in the corporate annual report and 'internal' human capital management practices. They found that, regardless of whether IC information was actually disclosed or not, there existed a significant relationship between internal management practices and companies' perceptions of importance of such disclosure. Their research study included the use of two sets of data, including data on the comparative content analysis study on the quantity of human capital disclosure, collected from annual reports from a single year, and data on management practices, collected through an emailed questionnaire. Ax and Marton investigated the top 16 traded companies listed on the Stockholm Stock Exchange (SSE). The results of the study showed that there was a limited relationship between the two data sets. While they demonstrated that there was a significant association overall, further testing demonstrated no systematic associations.

It has been argued that IC reports contribute to the improved transparency of organizations by allowing them to illustrate their unseen value and long term development options (Alwert, Bornemann, & Will, 2009; Edvinsson & Malone, 1997), as small to medium sized enterprises (SMEs) increasingly create and use IC reports to improve their management abilities and disclosure practices. Alwert, Bornemann and Will (2009) conducted a study into the behaviour of analysts with regard to whether they

were impacted by information in the corporate IC reports of small to medium sized companies. Focusing only on German companies, the researchers were attempting to assess whether their IC reports had any influence on how analysts rated the future earnings potential of the companies studied. Their data was collected from the experience of SMEs in Germany and the banks they deal with, their capital market partners. In conducting their research study, the researchers carried out a review of the existing literature in the field, focus groups on corporate evaluation with nine financial experts, a quantitative survey completed by 68 respondents from banks and chartered accountants for validation and refinement of their research and two case study based experiments involving seventeen bankers, auditors and financial analysts from leading German financial institutions and chartered accountants.

The aim of the research was to determine the importance of the IC of the companies to the analysts in their assessments of corporate values (Alwert et al., 2009). In doing so, the researchers had to investigate whether IC reports had a significant influence on the evaluation process; they investigated whether the way the IC reports are set out, how long they were and what they included were viewed favourably by the capital markets; they investigated whether IC reports resulted in a more precise evaluation of a company's credit rating and future earnings potential. The research study resulted in a number of key findings. Firstly, the initial questionnaire survey yielded results regarding the basic requirements for IC reports. Financial analysts from banks and other financial institutions and auditors share the same requirements to an IC report. Yet, financial experts have other expectations for IC reporting than corporate management. This is particularly important for the relative importance related to the various factors of

influence. Additionally, investigating the specific requirements of financial analysts regarding the content and set up of IC reports resulted in the finding that qualitative descriptions are considered important as is information on indicators which enable analysts to quantify the information. Indicators of high relevance for most analysts were identified as was the need for timely information on indicators to ensure the value of the information. The study found that the basic elements of an IC report need to cover the business environment, business strategy, and a multi-faceted analysis of IC as well as planned measures to improve IC to achieve the strategic objectives of a corporation. They also concluded, in reference to the desired length of IC reports, that they should not be more than ten pages. Through their case study experiment used to understand how IC reports influence how financial analysts value a company, they found that by adding subsidiary IC reports to traditional annual reports enables more homogenous results in the credit ratings of companies and more homogenous results in the expert assessment of the future development of companies. They also found that additional data does not always result in a better rating because it increases transparency regarding both the strengths and weaknesses of a company.

Generally, the findings indicated that IC reports reduce risks for banks and financial institutions because they result in a more homogenous assessment of the company. Alwert, Bornemann, and Will (2009) were able to conclude that IC reports could improve accuracy and fairness in the process of capital-raising for both SMEs and banks. Also, they did suggest that an IC report on its own is perceived to be of little benefit to users which puts the focus on the need for the integration of the information within the annual reports. They suggested that combining the annual report with IC report fulfils the



requirement for efficient communication with the capital markets and this reduces risks for investors, banks and SMEs. They assert that the findings of the study may be used to further expand and adjust IC reports to balance the annual reporting in line with analysts' requirements. However, they fall short of suggesting whether the IC report should be integrated into the annual report or if it should be part of the explanatory section of the annual report.

Both internal and external stakeholders represent groups that legitimately require information on the IC of corporations. Management and employees, investors, customers and suppliers may have different perceptions about the importance of IC information disclosure. With specific focus on investors, the 2004 Australian Share Ownership Study conducted by the Australian Stock Exchange (ASX) (ASX, 2005) has shed some light into the investment choices and actions of Australian investors. The information published in April 2005 provides an overview of trends in investment. The study was undertaken to benefit the share market as a whole and to provide the ASX and the brokers with an improved understanding of the investment landscape and how it changes over time. In conducting the survey, the study measured three categories of shareowner, direct share ownership only, indirect share ownership only, and both direct and indirect share ownership.

The ASX used a sample of 2,402 randomly selected adult Australians who owned shares, from across Australia and resulted in a number of findings relevant to this research study (ASX, 2005). The study achieved two outcomes. The first outcome was that the study was able to track the incidence of share ownership in Australia, providing the range of the demographic, behavioural, and attitudinal profiles of investors. They

were able to conclude that Australian investors were trading more often, on average seven times per year, and that the average value of trades had increased by roughly five percent since 2003. The study found that 55 percent of adult Australians had shares as part of their investment portfolios (23 percent with direct share ownership only, 11 percent with indirect share ownership only, and 21 percent with both direct and indirect share ownership). At that time, 44 percent of the adult Australian population reported to own some direct shares, this representing the highest level of retail share ownership in the world. The second outcome was that the study was successful at measuring how investors interacted with their brokers, what type of brokers they used, and whether they used their brokers as a source of advice.

When surveyed, investors cited the main source of advice on shares as coming from newspapers (44 percent), family and friends (33 percent), financial planners (30 percent), and magazines (25 percent), and finally brokers (20 percent) (ASX, 2005). It was also concluded that while most Australians were happy with their choice of brokers, 28 percent preferred using a discount/non-advice or internet brokers as their main brokers. However, in referring to sources of advice most influential in decision-making, newspapers, family and friends and financial planners were each nominated by 17 percent of respondents, while only 10 percent of respondents nominated their brokers. In addition to the empirical evidence, the study included a qualitative component. The results of the quantitative component indicated that the attitudes of investors toward share investment and ownership was positive and that it would be likely to continue to be so for the short term as a result of a strong economy and good company profits.

Again in May 2007, the ASX released the results of its 2006 ASX Share Ownership Study (ASX, 2007). In that study, the tenth in the series, they used a sample of 2,405 randomly selected adult Australians from across Australia to take part in a telephone survey. They were able to conclude that while fewer adult Australians (46 percent) had shares as part of their investment portfolios (either directly or indirectly) than in 2004, they were more active, sophisticated and knowledgeable. The drop in share ownership was attributed to several factors which included the departure of passive investors, a need to repay debt, disappointment with shares or funds, disinterest and ignorance (among other reasons). The main reason cited for holding shares was to accumulate wealth. The study also referred to a growing prevalence of overseas shares and a rise in the average number of companies held by investors. They also found marked improvements in shareholder knowledge and the overall attitudes of shareholders to investment remained positive.

Again, investors cited the main source of advice on shares as coming from newspapers, friends and family and financial planners/advisors, followed by stock brokers, the internet, investment newsletters, accountants, work colleagues, magazines, radio, and some other sources (ASX, 2007). The study found that typical direct shareholders were just as likely to be male as female, aged at least 35, with tertiary qualifications, who made at least \$AUD100 000, from any area (less so from Queensland) and from capital cities.

Finally, while the ASX (2005) study found that investors were increasingly savvy with their investment decisions and that their primary motivation for investment was the

accumulation of wealth, the study uncovered no information was about the perceptions of importance of HRC and RC information specifically by individual shareholders.

With regard to corporate investments, it is evident that if corporate wealth is being attributed to intangible assets, investors are not assessing just the company profits in their investment decision making. Both ASX (2005, 2007) studies were important to shed light on the investment choices of Australian shareholders. The studies helped to highlight investment trends. It is reasonable to assume that there are many factors which will determine the actions of investors. In talking to individual investors, one recognizes they speculate on the value of shares based on a range of both financial and non-financial factors. While the market-to-book value (MBR) ratios of corporations rise and fall, share ownership in Australia also continues to rise and fall, and it is important for stakeholders to understand the trends in the market to improve their potential for success.

Furthermore, this research recognises that investors make a range of decisions regarding investing in publicly listed stocks. Such decisions, however, may be regarded as rational or irrational in nature, and as unique as the people who make them. Traditionally, rational economic theorists have argued in support of the theory of Efficient Market Hypothesis (EMH) which suggests that shares of publicly listed stocks are traded on their fair values on stock markets and that it is virtually impossible to purchase undervalued shares or to sell shares for more than what they are worth (Malkiel, 2003; Van Bergen, 2004). In attempting to increase returns on investment, EMH attributes no value to the effect of shareholder expectations which may be derived from information that is only available to some stakeholders. That is, the theory makes the contention that investors think and act rationally in their stock investment decisions and

assumes that corporate information is equally available to users. Information asymmetry goes unrecognised when EMH is applied. This current research study, however, is driven by previous research such as that conducted by Lev (2001) that contends that information asymmetry does exist, that it produces uncharacteristic gains to informed investors, and that it chips away at investor confidence in the integrity of capital markets.

Contrary to EMH, and aligned to what has been presented thus far, behavioural economic theories infer that information asymmetry does exist and that investors are not always rational in their stock transaction decisions (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). Behavioural finance has been used to explain market bubbles and market crashes and infers that market reactions may be attributed to several cognitive biases including self-attribution, overconfidence, overoptimism, herding, and noise trading, to list a few (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004).

Daniel, Hirshleifer, and Subrahmanyam (1998, 2004) analysed evidence from a variety of cognitive psychological experiments and from surveys that demonstrated ways in which people overestimate their abilities in a variety of contexts. This was requisite to their goal of developing a theory to explain investors' decisions related to security markets. They were concerned with accounting for both instances of rational and irrational decision-making and for the potential for decisions to be influenced by cognitive biases of investors. The researchers focused specifically on cognitive biases including investor overconfidence and biased self-attribution. They contended that investors, while tending to be "quasi-rational" made errors based on their biases, and that the turbulence and volatility of stock markets may be better understood when the various cognitive biases were considered.

Daniel, Hirshleifer, and Subrahmanyam (1998, 2004) proposed a theory that inferred that stock investors overreact to private information and under-react to public information signals due to their biased self-attribution and over-confidence. They contend that behavioural economics is a complement to rational economic theories by providing insight into instances of irrational consumer decision-making and behaviour. In part, this current research study will refer to both EMH and behavioural economic theory in an attempt to understand the findings in relation to the perceptions and actions of “mum and dad” shareholders regarding HRC and RC dimensions information and its impact on their ABSC stock transaction decisions and on the ABSC share prices.

In summary, researchers contend that IC reports enhance the transparency of organizations by permitting them to illustrate their hidden value and long term development options (Alwert, Bornemann, & Will, 2009). In light of this, researchers have studied the behaviours of various groups, including analysts and bankers, the perceptions of management and the perceptions of accountants in relation to the importance they place on the disclosure of IC information in corporate annual reports, to their assessments of corporate values. Research by the ASX (2005, 2007) has provided an insight into the demographic information and investment actions of Australian investors in the ASX listed companies, and behavioural economic theories and the field of behavioural finance provide a lens through which the research results may be explained. What is generally lacking, however, is information into the perceptions of “mum and dad” investors, specifically, what they believe their HRC and RC information expectations and needs are, and how valuable they perceive the IC information provided in corporate annual reports to be to their stock transactions. Therefore, this represents a

gap in the research and the potential for the further expansion of knowledge in the field of IC management and reporting.

### **2.2.7 How to assess the impact of IC information on share prices –**

#### **Methodology.**

Many researchers have studied the impact of events and announcements on share markets and individual share prices. Event windows have been used successfully by past researchers when assessing the impact of specific events on share prices (Barnes & Ma, 2001; Desai, 2000; Dumay & Tull, 2007; Lonie, Abeyratna, Power, & Sinclair, 1996). In the UK, Lonie, Abeyratna, Power, and Sinclair (1996) used a conventional event study methodology in examining the stock market reaction to the firm-specific event of a dividend announcement. The actual share return was compared with the expected share return surrounding the annual dividend per share announcement period to see if any stock market reaction occurred. Lonie et al. (1996) followed De Angelo and De Angelo (1990) by focusing on the annual and not the interim dividend information as they concluded that statistical analysis and questionnaire survey evidence from managers suggests dividend policy is determined on a yearly basis. In their study, they used the daily share return information to assess the presence or lack of abnormal share performance in the event window surrounding the dividend announcement day (Lonie et al., 1996). They used “day  $t - 1$  to the day  $t$ ” as the designated announcement period, where  $t$  is the day the dividend was published. These days were jointly defined as the announcement period because the disclosure of the dividend information to the market may have happened on the day before the formal reporting of the news in the press. Their study looked into the dividend announcements of 620 companies. While Lonie et al. used the event window to

assess the impact of the release of dividend information on corporate share holdings, other studies assessed the impact of other financial and non-financial information on the share prices of listed corporations.

In their discussion paper, Barnes and Ma (2001) assert that the event study is the usual methodology employed to evaluate the reaction of share prices to public announcements, used as early as 1933. They contend that the improved sophistication of event studies enables researchers to understand the impact of the information released to stakeholders by first determining an “event window” or “estimation window”. The “event” is what has occurred to potentially influence the share prices. For the study by Barnes and Ma, the focus was on the Chinese stock market the event was the announcement of bonus proposals or approvals. The event window is when the happening of the event is announced. The event window in their study was combined with the day of the announcement and the days before and after the announcement day, expressed as  $-1$ ,  $0$  and  $+1$ . The abnormal returns occurring during the event window and the abnormal returns occurring in the periods around the event window were investigated to evaluate whether the market anticipated the information (or implied inside information) contained in the event, while the abnormal returns in the interval after the event window served to demonstrate whether the market over- or under-reacted to the event. Barnes and Ma were able to conclude that the direction and magnitude of the stock price reaction to the announcement of bonus issues does depend upon the specified bonus schemes.

Their study presents evidence of the stock prices reacting properly to the announcements for the middle-bonus proposals of A-shares, for the large-bonus proposals



of A-shares, for the small-bonus approvals of A-shares, and for the small-bonus and middle-large-bonus approvals of B-shares. Under-reaction is evident for the small-bonus proposals of A-shares, and the overall bonus approval of B-shares, and, overreaction is uncovered in the overall bonus proposals of A-shares and in the overall bonus approvals of B-shares. They suggest that it is not right to refer to the entire market as semi-strong form efficient, and, as for previous studies on the other markets, the assessment here is unable to take account of trading with insider information as “insider trading can manifest itself in the form of significant cumulative abnormal returns (CARs) in the intervals before an announcement date” (Barnes & Ma, 2001, p. 25). This is an understandable limitation of this study and any similar studies as one cannot know for sure about the impact of insider trading on data relating to CARs.

Preceding and similar to Barnes and Ma (2001), and Desai (2000) also utilizes an event study methodology to examine the market values of companies during the time period that the companies revealed information about their strategic planning focus, function and/or orientation. In wanting to assess the value of strategic, long-term planning to corporations, Desai conducted an empirical investigation into the impact on share prices of share investment decisions and announcements relating to changes in the overall policies of companies. Fundamentally, the study combines the strategic planning perspective with the concepts derived from literature relating to corporate finance. Of interest to the researcher were the perceptions of the stock market in relation to the existence of established strategic planning practices. The research by Desai was specifically set out to test whether strategic planning was rewarded by the stock market. The research results demonstrate that the stock market favoured the long range-planning

horizon adopted by companies. Desai found that on average, the announcements indicating an emphasis on the institutionalized strategic planning by companies were linked with increases in the corporate stock prices. He concluded that the indicative reaction on the day of the announcement demonstrates that the market reacts efficiently to these announcements, and the reward is instantaneous.

Most recently, Dumay and Tull (2007) examined whether the disclosure of IC elements through “price sensitive” disclosures to the Australian Stock Exchange (ASX) has an effect on the short-term share price of a firm. They too used empirical “event studies” for the 2004 to 2005 financial year, as components of intellectual capital were used to classify price-sensitive company announcements to the ASX, and to examine any relationship between the disclosure of human, internal, and external IC and the cumulative abnormal returns (CAR) of a firm’s share price. Disclosure of IC elements in price sensitive company announcements can have a significant effect on the CAR of a company’s share price as the market was found to be most responsive to the disclosures of internal capital elements. Their research was limited to an analysis of the Australian stock market for a period of one year and did not look at the timing of announcements as a variable and it did not consider disparities in regulation or operations involving other stock markets.

In summary, researchers have used event windows to study the impact of events and announcements on share markets and individual share prices. Event study windows represent a conventional methodology in examining stock market reaction to the firm-specific events. Research conducted by Barnes and Ma (2000), Desai (2000), Dumay and Tull (2007), and Lonie et al. (1996) provided precedent for methodology for part of this

research study. An event study window was used in assessing if IC disclosure by the ABSC, within the context of their annual reports, has a positive relationship with the share prices of the banks for the period in which they were studied.

#### **2.2.8 The reporting of HRC and RC information by Australian corporations.**

Most researchers are in agreement about the importance of IC and its capacity to facilitate corporate effectiveness and improve corporate value. The critical intangibles such as the company's ability to maintain and attract key employees, its innovative capacity and its customer approach are the indicators to be measured in relation to the leveraging of corporate growth (Bukowitz, Chaminade, Jensen, Roberts, & Williams, 2003). For Australian organizations, as for the rest of the world, it is evident that "there is pressure on fund managers and equity analysts from stakeholders to understand more complex "soft" variables such as management quality, leadership, remuneration and corporate governance" (Royal & O'Donnell, 2004, p. 14). Royal and O'Donnell assert that the need for hard analysis of soft variables generates further questions such as: "How can qualitative data on corporate behaviour and other soft variables be made available to analysts, given the continuous disclosure rules?", "How can corporate behaviour be analysed systematically?", and "Do analysts have to be devious or simply creative when gathering soft variable data?". Royal and O'Donnell recognize that the analysis of human capital is tremendously important for general managed funds and securities analysts as this enables them to anticipate future events within corporations. They suggest a structured form of human capital analysis or what they refer to as sustainable human capital classification (SHCC) as an indicator of future corporate performance rather than an analysis of purely financial data which provides only

historical performance measurement. However, what Royal and O'Donnell propose may be valid for both analysts and individual shareholders depending on the perceptions held by individual shareholders.

The theorizing on the concept of human capital analysis has served as the precursor to the contemporary research by Royal and O'Donnell. Most notably, research by Royal and O'Donnell (2008) involved the conducting of a case study analysis in an attempt to understand how organizations, and their main stakeholders, may take advantage of an enhanced understanding of the role of intangible assets. Their case study involved the development and testing of four tools to be used in human capital analysis. The four tools included a macro analysis of drivers of the value of human capital conducted through observation of trading floor actions in Australia and Hong Kong and interviews; a human capital systems wheel used to isolate human capital systems that support strategy; a human capital rating relative to industry best practice; and, a human capital SWOT analysis pertaining to human capital in companies within the Australian biotechnology industry, for example, plotting of leadership styles. The tools were designed for all investors to use, both the professional and non-professional investors. The focus of the research was on how intangible assets, human capital in particular, have the power to create corporate value for organizations. With reference to key stakeholder groups, financial institutions were regarded by the researchers as key stakeholders of the biotechnology firms. They were involved in the study to the extent that Royal and O'Donnell suggest they face the challenge to create innovative investment products established on analysis of intangible assets which include human capital.

*“Human capital analysis provides opportunities for financial analysts, traders and fund managers to potentially recognize the resilience of a listed stock, ahead of time. The secret to investors’ performance, irrespective of their role in the market, lies within each individual’s ability to read all the information, quantitative and qualitative, based on tangible and intangible value creation processes and act upon this information in a timely way. These tools assume that information on intangibles is available in the public arena. This is increasingly the case, as technology expands in depth and breadth and intangible information on listed firms increases exponentially”.* (Royal & O’Donnell, 2008, p. 680)

Royal and O’Donnell (2008) regard human capital as a lead indicator of a corporation’s future financial performance and suggest that a requirement for qualitative research specialist expertise in finance houses may exist. They use qualitative data from the trading floor of Merrill Lynch in Sydney and Hong Kong, focusing on participatory action research. Their study also relies on field research interview data with executives from the Australian biotechnology sector, utilizing a case study approach. Their research also involves the description of an evolution of a set of analysis models relating to corporate human capital and the application of the analysis models to the biotechnology sector. As a result, Royal and O’Donnell assert that the results demonstrate that it is possible to analyse and interpret qualitative information about public corporations to enable the investment process to be increasingly transparent to all stakeholders, including securities analysts. They suggest that this may sway other researchers in the field to extend these approaches in an attempt to enhance the quality of intangible asset analysis, to make the tacit assets more explicit. Their research supports their contention that

information on human capital is valuable and that it is being used unsystematically by equity markets and hedge fund managers in their investment decision processes. Their research findings also suggest that a human capital lens proposes a systematic approach to examining the future potential performance of listed stocks and can be utilized as a type of risk management which is critically important to knowledge-intensive corporations. The research findings indicate that the financial sector may be required to push past the use of indices and ethical investment screens to provide a better understanding of the role of intangible assets, such as human capital, in corporate value creation and improvement. The results indicate that more qualitative information on listed companies can be analysed and interpreted to make the investment process more transparent to all stakeholders, including securities analysts. This may influence other researchers to extend these approaches to improve the quality of intangibles analysis.

Royal and O'Donnell (2008) deemed their research as valuable in adding to the literature by producing theoretical links between the independent disciplines of SHRM, the analysis of intangible assets, and innovation in investment. They apply their HC tools as a link between a resource-based analysis of the firm and an investment perspective. Their HC tools take on the idea of having HC as a lead indicator of future financial performance. They provide a fundamental analysis approach to the assessment of intangible assets in listed companies. Royal and O'Donnell used qualitative, systemic information, analysed in a systematic way. Their HC analysis tools correspond to elements of intangible asset analysis framework. Royal and O'Donnell were successful in ensuring their approach to HC analysis was relevant to any regulatory environment by

focusing on management systems as their unit of analysis, and by focusing on practical analytical methods; by using information that was publicly available.

Also, as mentioned previously in this chapter, Guthrie and Petty (2000) were successful in building on the research in the field of IC reporting by using content analysis in the inquiry into the level of intellectual capital disclosure by Australian firms. Guthrie and Petty found that Australian firms lagged behind Scandinavian firms in the reporting of IC information in annual reports. It is valuable to understand how Australian corporations compare with others both in terms of the measurement and reporting of IC and in terms of our perceptions about the importance of IC information disclosure. By using content analysis methods to assess the level of corporate disclosure on IC from the annual reports of the top twenty Australian listed companies, as at the end of 1998, Guthrie and Petty reported on the scope of IC disclosed in the annual reports to carry out a comparison with those of European companies. In carrying out the empirical research, they utilized Sveiby's framework for understanding IC, in which the IC is recognized as being a focus on human resources, or technology and intellectual property rights, or organizational and workplace structure (1997; Guthrie & Petty, 2000). As mentioned previously, Guthrie and Petty criticized the lack of a standardized model for corporations to report on their intangibles and concluded that corporate managers tend to link the development of IC with internal management practices, not necessarily an external concern worthy of inclusion in corporate annual reports.

As the substance of the disclosures made by companies in their annual reports continues to be a topic of interest to many researchers, Guthrie, Petty, and Ricceri (2006) conducted an empirical, two-stage study to investigate the voluntary reporting of IC by

listed companies in Australia and Hong Kong and to evaluate size, industry and time effects on IC disclosure levels. Stage one was an exploratory study of voluntary IC disclosure for the 20 largest listed Australian companies in 1998, and Stage Two, using 2002 data, examined voluntary disclosure of IC attributes for 50 listed companies in Australia and 100 listed companies in Hong Kong. The researchers used content analysis to collect the data and wanted to build on previous research linking the reluctance to report on IC items to making IC rich companies appear less valuable than they actually are (Guthrie & Petty, 2000; Guthrie et al., 2006). Guthrie, Petty, and Ricceri assert that seldom is it the case that the value shown in the books of a company even closely resembles actual market value. The aim of their study was to gain a better understanding of this problem, and in the hope of improving disclosure and reporting practices, they used content analysis to study the voluntary disclosure of IC by large listed companies in both Australia and Hong Kong. The content classifications and material used for the content analysis were categorised as per Sveiby's (1997) IC Framework, which is made up of three components: internal structures (organisational capital); external structures (customer/relational capital); and employee competence (human capital). Guthrie, Petty, and Ricceri assert that as an earlier study into IC disclosure used content analysis to obtain IC data from annual reports (Guthrie & Petty, 2000), many later studies have also used this research method to collect a range of empirical data. Guthrie, Petty, and Ricceri refer to the research conducted in Australia (Guthrie & Petty, 2000), Hong Kong (Petty, 2003a), Italy (Bozzolan, Favotto, & Ricceri, 2003), Sri Lanka (Abeysekera & Guthrie, 2004), Ireland (Brennan, 2001), and Sweden (Olsson, 2001).



The researchers chose to focus on the reporting practices of the companies following on from the results of the 1998 Australian study in which the literature review and early investigations revealed annual reports to be a key communication tool used to legitimize corporate activity (Guthrie et al., 2006; Lang & Lundholm, 1993). This is why they chose the annual report as the primary source for examining voluntary disclosure. Their published results of the exploratory 1998 Australian study (Guthrie & Petty, 2000) established a methodology and developed a recording instrument that has been used in its pure or derivative form in several other studies since (Bozzolan et al., 2003; Brennan, 2001; Guthrie et al., 2006). The second stage of the study uses a larger sample size than the previous studies, uses data taken from companies listed in Asia, and is the first study to compare data from two countries in the broader Australasian region.

As a result of the study, researchers found that levels of IC disclosure were low in qualitative rather than quantitative form in both Australia and Hong Kong and that disclosure level was positively related to company size, which is consistent with the previous research on voluntary reporting. However, the study does indicate that as a limitation or implication of the research, external validity may be somewhat compromised by the relatively small sample size and by the inference of management intent as managers were not observed in the process of making decisions.

With reference to some of their findings, Guthrie, Petty, and Ricceri (2006) concluded that Australian companies in 2002 disclosed greater IC information than Australian companies in 1998 and Hong Kong companies in 2002. Yet, in the three studies, every instance of IC reporting involved expression in discursive rather than in numerical terms. There is no clear attempt to translate the rhetoric of IC reporting into

benchmark measures that help the performance of a company in managing IC to be assessed in a systematic fashion. This is quite difficult to put a numerical value on what is, in many cases, fundamentally a qualitative item. This finding was not unexpected. The low incidence of quantitative expressions of IC items seems to support the widely held belief that companies are not motivated to assign dollar values to IC. Also, it was concluded that the most voluntary IC disclosure was in the “business/operational” section of the annual report. In all the studies, the external capital category is the category with the greatest level of disclosure. Theoretically, the research study provided an overview of the evolution of IC reporting over a period of four years, suggesting that there is a growing awareness of the need to report IC. Also, it provided useful comparative insights into IC reporting, by comparing the findings using Australian and Hong Kong data. From a practical point of view, the study may help regulators to evaluate and establish mandatory disclosure. The study confirmed that a common accepted framework for IC reporting is needed and that market forces, on their own, are not enough to ensure company stakeholders get all the information they need.

Also recently, Petty, Ricceri, and Guthrie (2008) were able to offer an empirical assessment of how a group of financial professionals in Hong Kong used IC information, and how valuable they perceived IC reporting to be. The researchers wanted to understand the group’s ability to privately obtain information that had the potential to help them determine the value of a company’s IC in support of their decision-making. The researchers used a questionnaire that was designed using Kelly’s Repertory Grid procedure for extracting the respondents’ vocabulary (Kelly, 1955). Kelly’s procedure ensures that the vocabulary used in a survey instrument is consistent with vocabulary the

respondents are familiar with and would ordinarily use to describe a particular concept. Eighteen respondents pre-tested the questionnaire, which contained 20 questions, as a check on wording, clarity and construct validity. Three of the questions were open-ended and the rest of the questions were closed but several permitted the respondents to expand on their answer. The survey was administered randomly to 238 members of CPA Australia, during professional development sessions and office visits in 2004.

The surveys were administered face-to-face as a control on the identity of the respondent and on the integrity of the data (Petty et al., 2008). Random data collection procedures were followed as much as possible by randomly choosing and attending compulsory professional development events attended by the members of CPA Australia in Hong Kong, as the researchers aimed to collect information that would describe practice as well as enable suggestions to be made regarding the regulation of financial reporting. Petty, Ricceri, and Guthrie found that the results of the survey clearly indicated that respondents did not find information provided by the traditional financial accounting model all that useful and that this set of results agrees with the literature that suggests the lost relevance of accounting data. Yet, despite this finding, the researchers were able to conclude that those members of CPA Australia, who work in Hong Kong, were still using the annual report to learn about a company. They were also able to conclude that the respondents would prefer companies to be more transparent and provide more information about their IC. Respondents think that increased IC disclosure would be rewarded with an increase in the company's share price – even though few respondents thought that they would pay more themselves for enhanced disclosure. The researchers also found that most respondents seem to be addressing their IC information needs

through private information channels, and regard the publicly provided information as not well suited to their needs. Petty, Ricceri, and Guthrie also concluded that an implication of their research is the need for greater regulatory control to ensure that the information that is being communicated privately also enters the public domain in a timely fashion, and that making market participants more aware of the positive effects of voluntary disclosure on stock prices may lead to an increase in voluntary disclosure.

Further to the recognition of the corporate annual report as a tool in the communication of critical IC information is a fairly recent study by Dumay and Tull (2007) which highlights the impact of IC announcements on the relevant share prices of Australian corporations. Dumay and Tull examined how companies can disclose their IC to external stakeholders who have an influence on their share price. The researchers applied empirical “event studies” methodology for the 2004 to 2005 financial year and the components of intellectual capital, including internal, external, and human capital, were used to classify price-sensitive company announcements to the ASX, and to examine any relationship between the disclosure of IC and the CAR of a company’s share price. Two event windows were utilized in the study. A two-day event window of the disclosure date and +1 day was used to assess the immediate reaction of the stock market to the disclosure and a longer event window of +5 to -3 days from disclosure was utilized to take into consideration the “anticipation and expectation effects” of the disclosures, allowing users of the information to absorb it (Dumay & Tull, 2007, p. 242).

Changes in stock prices were measured relative to all or part of the underlying market to derive the CARs associated with the event; thus event effects were normalized for movements in the broader market or specific sectors (Dumay & Tull, 2007). The

CAR for each stock and each announcement was then analysed by its comparison to the different market indices. In this study the ASX20 and the ASX200 indices were chosen for such comparison, as these represent the most widely quoted indices of Australian stocks (Dumay & Tull, 2007, p. 241). The company shares chosen for analysis are based on the ASX20 and ASX200, which represent the top 20 and top 200 stocks respectively with regard to market capitalization in Australia. Dumay and Tull maintain that, on its own, the ASX20 is made up of over 56 percent of the total value of the ASX, as at 30 June 2005.

Dumay and Tull (2007) refer to Abdolmohammadi's (2005) empirical study of Fortune 500 company annual reports which supports the argument that IC disclosure has an effect on market valuations. Carrying on from that idea, the findings of this study partially support the argument that, in the context of price-sensitive disclosures to the ASX, the disclosure of IC is perceived differentially by the market and has a different valuation effect depending on whether the disclosure relates to human, internal, or external capital. Dumay and Tull found that the disclosure of IC elements in price sensitive company announcements can have an effect on the CAR of a company's share price as the market was found to be most responsive to the disclosures of internal capital elements. Their research was limited to an analysis of the Australian stock market for a one-year period and did not account for the timing of announcements as a variable and it did not consider differences in regulation or operations relating to other stock market. The communication of IC measures to external stakeholders, especially those stakeholders that influence the share price of a company, was of particular interest to these researchers because the measures of IC value are regarded to be the difference

between a company's balance sheet value and its market capitalization (Burgman & Roos, 2004; Dumay & Tull, 2007; Fernandez, 2003). Dumay and Tull were able to conclude that price-sensitive disclosures to the market containing intellectual capital elements have a marginal effect on the subsequent market valuation of a firm beyond conventional financial reports and external intellectual capital reports.

Their research supports the argument that companies should examine how they manage and report on their IC, as, in doing so, both performance and competitive benefits may be realized (Dumay & Tull, 2007). With this knowledge, more companies may be encouraged to disclose more information to the market about their internal dealings, rather than keep them hidden from the view of their stakeholders, as the evidence supports the view their stakeholders respond favourably to such disclosures. Regular and timely disclosures also present a method by which firms can share IC information, without making stakeholders wait until the publication of formal company annual reports or external IC reports. The limitations of the research by Dumay and Tull also open up the prospect of further research in the area of IC disclosure in which research is based on other forms of disclosure such as through company web sites, blogs or promotional activities. They argue that continued research in areas such as these may add considerably to the discussion of IC disclosure.

In summary, Australian researchers have used various methods, including content analysis methods, questionnaires, and event study windows to assess the IC disclosure practices of Australian companies, the perceptions of accountants as users of IC information, and share market reactions to IC information disclosure. As a result, they called for greater transparency in the corporate annual reports of Australian companies to

enable all stakeholders to analyse and interpret data to make informed investment choices (Royal & O'Donnell, 2008). They argued that Australia continued to lag behind other countries with regard to the IC disclosure practices of listed companies (Guthrie & Petty, 2000). They suggested that the inclusion of qualitative information on tacit IC assets is valuable and necessary to ensure its systematic use by stakeholders in their investment choices (Royal & O'Donnell, 2008). They suggested that disclosure on price-sensitive IC information, in the corporate annual reports did influence share prices of relevant stocks (Dumay & Tull, 2007). Furthermore, they were also able to conclude that members of CPA Australia would prefer companies to be more transparent and provide more information about their IC (Petty et al., 2008). Notably, what was missing from the research was information about what individual investors were looking for with regard to HRC and RC disclosure within the annual reports; what “mum and dad” investors are calling for.

## **Chapter Three**

### **Pilot Study**

#### **3.1 An Initial Exploratory Study**

There were two elements to this research study, an initial pilot study and a main, two-part, hypotheses-testing study. For the pilot study, both quantitative and qualitative data collection and analyses were used. While quantitative research has long been considered easier to understand and explain, and, as a result, easier to argue (Marschan-Piekkari & Welch, 2004), qualitative data has the ability to enrich research and to convey messages and context, especially in the assessment of organizational communication (Goldenberg, 1996). This is especially true for the fields of Management and Organizational Development. Qualitative research is undertaken with regard for the context in which the research is being conducted (Marschan-Piekkari & Welch, 2004) and has the potential to make an effective contribution to the development of quantitative diagnostic tools, including of surveys and questionnaires.

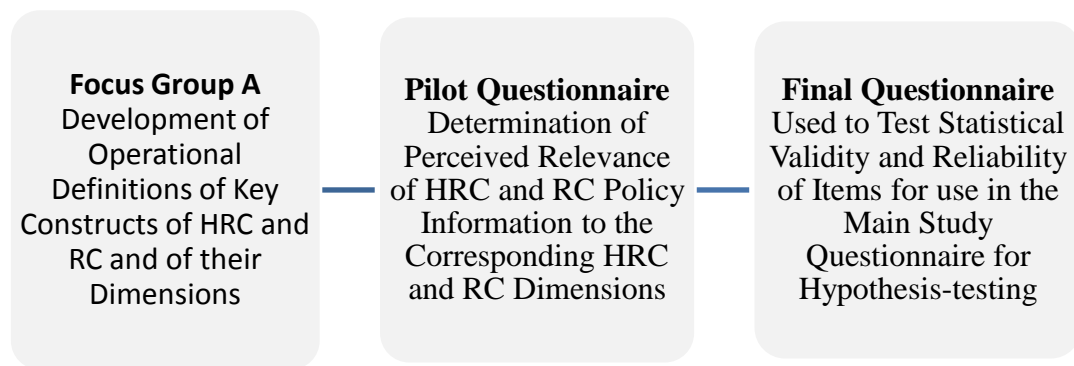
The objective of the pilot study was quite specific. The pilot study was designed to validate a tool to measure the perceptions of individuals, ABSC shareholders, about how relevant HRC and RC policy information is to their decisions regarding purchasing ABSC stocks. In order to do this, it was necessary to determine and validate the applied definitions of the terms to ensure the common HRM functions and activities investigated were understood from the 'lay person' perspective of individual shareholders of ABSC. The operational definitions were needed to help determine the perceived relevance of HRC and RC policy information to the corresponding dimensions of HRC and RC. This was necessary to develop items for the final questionnaire, which would be used to test



the statistical reliability and statistical validity of the items for use in the hypothesis-testing questionnaire. This would ensure the questionnaire was able to measure the dimensions of HRC and RC properly and consistently.

The objective of the pilot study was achieved in a succession of testing activities.

Figure 3.1 sets out the design of the pilot study.



*Figure 3.1.* Design of the pilot study

The pilot study followed the literature review which was conducted, in part, to identify and define the IC dimensions of HRC and RC. Prior to conducting the pilot study, the researcher documented the academic definitions and explanations of the constructs and dimensions investigated in this research. This was necessary because, while academic definitions of the constructs and dimensions exist, individual “mum and dad” shareholders may not understand the meanings of those definitions. This study requires “mum and dad” investors to know and understand the constructs under investigation in this research and to know and understand the definitions of their dimensions. Hence, to do that, individual investors in ABSC stocks were given academic

definitions to work with and to reword into operational definitions. The results of this activity are presented in Section 3.3.1.

### **3.2 Key Constructs and Dimensions - Definitions and Explanations**

Prior to presenting a summary of the pilot study activities, it was important for the reader to obtain a full understanding of key constructs and dimensions used in this research. Both are elements used in the pilot study, each of which is described in detail in subsequent sections of this chapter.

In part, this research elicited, through a review of literature in the field of IC, a list of the HRC and RC dimensions of the construct of IC. The list of HRC and RC dimensions was used in the pilot study and identified what HRC and RC information individual investors regarded as relevant to making investment decisions about ABSC.

#### **3.2.1 Human resource capital (HRC).**

HRC is defined by Stockley (2005) as the collective attitudes, skills and abilities of human resources contributing to organizational performance and productivity. The combined list of HRC dimensions used in this research was extracted from research performed by Brooking (1996), Edvinsson and Malone (1997), Roos and Roos (1997), Sveiby (1997), Bontis (1998), Lynn (1998), Becker (2005), Bollen, Vergauwen, and Schnieders (2005), Chen et al. (2005), and Johanson (2005). The works of these researchers resulted in a list of HRC dimensions that includes innate human capabilities including intelligence; learning capability and talent; learned abilities including knowledge, skills, education from learning from others, education from learning from training, experience, ability and expertise; management and leadership qualities including motivation by monetary and non-monetary rewards, creativity and innovativeness;

employee values; and problem solving capability including the ability to adapt and the ability to change.

#### ***3.2.1.1 Innate human capabilities.***

The word innate is defined as that which is natural to an organism or existing in a person from birth, inborn, native, or natural, as opposed to that which is acquired (ITS, 2010; Oxford University Press, 1989). The word human, as an adjective, refers to anything that relates to or focuses on human beings and their experiences (Oxford University Press, 1998). The word capabilities is defined as undeveloped faculty or property; a condition, physical or otherwise, capable of being converted or turned to use (Oxford University Press, 1989). By combining the three definitions, innate human capabilities are, for the purpose of this research, those undeveloped faculties people have to use that exist from birth. They are faculties that are inherent, rather than learned. Researchers found that innate human capabilities include intelligence, learning capability and talent (Bollen et al., 2005).

#### ***3.2.1.2 Learned abilities.***

The word learned is defined as things pertaining to, manifesting in, or characterized by the profound knowledge gained by study (Oxford University Press, 1998). It is knowledge that is gained through theory, instruction and practice. The word ability is defined as a faculty or a mental power or capacity (Oxford University Press, 1998). By combining the two definitions, learned abilities are those faculties or capacities resulting from the knowledge gained by theoretical and/or practical study. Researchers concluded that learned abilities include knowledge, skills, and education from learning from each other, from learning from training, experience, ability and expertise (Bollen et al., 2005).

Making a distinction between abilities that are either purely innate or purely learned is not possible (Howe, Davidson, & Sloboda, 1998). Though it is widely accepted that certain individuals have extra capacity for learning or reasoning, the ability to understand or measure those capacities is limited. Innate abilities differ in individuals and account for the differing levels of achievement by individuals in the workplace; however, it is impossible to measure, purely, these abilities. It is not possible to separate, completely, these abilities from those which are learned, as nature and nurture work together in the development of the potential of an individual (Howe, Davidson, & Sloboda, 1998).

The presence of innate abilities is often inferred (Howe, Davidson, & Sloboda, 1998). This is due to the fact that, even when using various psychometric measurement tools, it is considerably difficult to assess which are the innate human capabilities and which are the learned abilities of employees, the result of causal influences (Howe, Davidson, & Sloboda, 1998). While this research presents definitions of both of these dimensions of HRC, their existence within corporations must be inferred through a focus on the employee recruitment and employee retention practices and policies of those corporations. This is because, in order for organizations to succeed, they need to facilitate the acquisition of a workforce that demonstrates desired innate and learned capabilities and skills. This relates to companies in particular because, due to the requirement to succeed in business, companies must hire and retain a workforce of appropriately talented and skilled employees. The HR functions of employee recruitment and employee retention become the dimensions used to assess the activities related to the innate and learned abilities of employees.

### ***3.2.1.3 Management and leadership qualities.***

Management is defined as a set of processes that ensures that complicated systems of people and technology flow smoothly (Kotter, 1996). Leadership is defined as a set of processes that produces organizations in the first place or adjusts them to changing situations (Kotter, 1996). Finally, the word quality is defined as the nature, kind, or character of something; it is an attribute or a manner (Oxford University Press, 1998). Therefore, by combining the three definitions, management and leadership qualities may be defined as the nature, kind, character, or manner of those individuals and groups who use a set of processes that ensure that complicated systems of people and technology flow smoothly to produce organizations in the first place or to adjust them to changing situations. Researchers found that this includes the use of motivation by monetary and non-monetary rewards, creativity and innovativeness (Bollen et al., 2005).

Management and leadership qualities are those traits and qualities that refer to the character of a person in terms of how they control and guide the overall resources and the performance of an organization. Specifically, it refers to the will and ability of people or groups to influence the output of an organization.

Transformational leadership and the successful management of change is a critical requirement for the success of the overall strategic focus of an organization (Kaplan & Norton, 2004). Kotter (1996) asserts that leadership is about bringing change and that effective change requires vision, inspiration and effective communication. It is the leader who is positioned to energize and support the transformation program of an organization (Kaplan & Norton, 2004). Aligned with the definition presented, Kaplan and Norton (2004) have identified leadership competencies that are considered valuable

to an organization. These competencies deal with what a leader is and what traits are necessary for the superior performance of a leader.

As proposed by Kaplan and Norton (2004), desired leadership competencies can be classified into three categories. These three categories include the ability to create value, the ability to execute strategy and the ability to develop human capital. The ability to create value allows the leader to provide the bottom-line results necessary to the company. The attributes associated with creating value are being customer-focused, understanding the customers and solving their problems; being innovative and taking risks, challenging assumptions and proposing novel ways of doing things; and delivering results, for both customers and shareholders.

The ability to execute strategy effectively, allows the leader to activate and steer the process of change. The attributes linked to the execution of strategy include understanding the strategy, clearly defining the mission, vision, values and strategy; accountability, setting direction and targets and establishing accountability; communications, communicating openly and providing feedback; and teamwork, the ability to work across boundaries and to share knowledge.

The ability to develop the human capital of an organization occurs when the leader builds the capabilities of the employees and sets high standards for the company. The attributes linked to developing human capital include learning, the ability to learn from others and from self; coaching and developing, investing time in the development of others; and personal contribution, leading by example and setting high personal standards (Kaplan & Norton, 2004).

While all leadership competencies are important, creating value and executing strategy result in organizational readiness. Developing the human capital creates the human capital readiness (Kaplan & Norton, 2004). This is necessary for all corporations, especially those in the knowledge-based industries that are inherently reliant on human capital. Therefore, information on the management and leadership qualities will consist of information about a range of the specific competencies previously discussed.

#### ***3.2.1.4 Employee values.***

An employee is defined as a worker who trades services for remuneration in a relationship of subordination towards a contracting party (Blanpain & Baker, 2007). Employee values are all of the beliefs held by an employee, in terms of principles, values and judgments, about what is important, true and relevant to the role at work of that, individual employee (Kaplan & Norton, 2004). Employee values decide the attitudes and behaviours employees make use of in their commitment to achieving organizational success.

Employee values are important because they enable the development and evolution of corporate culture. Corporate culture refers to a set of values, beliefs and patterns of behaviour that shape the central identity of an organization and help in forming the work behaviour of its employees (Abdul Rashid, Sambasivan, & Johari, 2003). Culture is a dynamic, living phenomenon, by which people jointly create, and recreate, the worlds in which they live (Morgan, 1997). It identifies the symbolism, myths, stories and rituals implanted in the organization and endeavours to encapsulate its systems of shared meanings, assumptions and values (Kaplan & Norton, 2004). It relates to the set of shared meanings among employees about corporate goals, problems and practices

(Kaplan & Norton, 2004) and, though unseen, it is the fusing force that assigns corporate meaning and direction (Abdul Rashid et al., 2003). Corporate culture has also been identified as the total of the values, customs, traditions and meanings that make a corporation one of a kind, the character of a corporation, embodying the vision of the creators of the corporation (Montana & Charnov, 2008). Corporate culture refers to the dominant corporate values advocated by an organization, that offer the selection methods, or norms and values, against which employees perform and are measured (Abdul Rashid et al., 2003).

While corporate values are the beliefs advocated by senior executives, including communication, respect, integrity and excellence (Kaplan & Norton, 2004), corporate norms refer to how ideas and actions are carried out; corporate norms refer to the manner in which work is performed and employees interact. Corporate culture and organizational commitment have an impact on the financial performance of companies (Abdul Rashid et al., 2003). Developing an understanding of the culture of a company leads to an understanding of the context of the company and the people who run it, as company culture influences the potential for both the company and its people for successfully achieving corporate goals and objectives (Abdul Rashid et al., 2003). Equally important to the achievement of organizational goals, through appropriate plans and policies, is the commitment of the employees of the company to achieving set goals (Abdul Rashid et al., 2003). The values of a corporate culture impact the ethical standards of a company and the behaviour of the managers within a company (Montana & Charnov, 2008).



### ***3.2.1.5 Problem solving capabilities.***

Problem solving capabilities are defined as the ability of the employee to identify problems, the ability of the employee to adapt and the ability of the employee to change (Bollen et al., 2005). In addition to having insight into a problem, the use of analysis, logic and reason are key elements of problem solving. Innovation is often the result of creative problem solving and, therefore, by measuring corporate innovation, organizations are, as a result, also measuring their problem solving capabilities (Dundon, 2002).

With reference to the value of corporate innovation, the Australian economy earns most of its income from industries that draw their competitive edge from ideas or knowledge, and the most successful organizations are those that are able to invent, rather than to copy from others (Jarrard, 2007). Successful organizations are those that are able to adapt and those that are willing to think and re-conceptualize their products, services, processes, procedures and programs in a proactive, rather than a reactive manner (Jarrard, 2007). Companies already considered successful and striving to maintain product leadership need to set up a culture of creativity and product innovation to have the opportunity to remain successful (Kaplan & Norton, 2004). They must invest in innovation to continue to be successful.

Innovation, itself, has been defined as the beneficial implementation of strategic creativity (Dundon, 2002). Dundon (2002) asserts that innovation necessitates the amalgamation of creativity, strategy, implementation and profitability. Both problem solving and its related innovation are performed at an individual or at a group level. Innovation may be applied to internal processes, including those used to complete cross-

functional planning, human resource performance reviews and production planning. Innovation is also applied in the following of external processes that are necessary to the interaction with external stakeholders of a company.

Companies must be prepared to take action, to encourage innovation throughout their organizations. Companies must make their employees aware of what innovation really is and of what value it is to the company by promoting policies that persuade employees to develop strong beliefs in a number of truths about innovation (Dundon, 2002). These beliefs include the assertions that innovation is more than just new technology and that innovation relates to all internal and external processes; innovation is applicable to companies in all business sectors and industries; innovation occurs at all stages of corporate planning processes; innovation is not isolated to one department in an organization, but relates to the day-to-day activities of all company departments; innovation involves the provision of various tangible and intangible resources and a culture that is conducive to innovative outcomes; innovation must be regarded as an ongoing and sustained activity; innovation must include all, equally-valuable, dimensions of creativity, strategy and implementation to realize corporate profitability; and innovation can be applied to a variety of corporate areas including new and existing products, services and programs.

#### ***3.2.1.6 Summary of HRC dimensions.***

The dimensions of HRC identify their importance and make clear their definitions. These definitions are the foundation of their use in the pilot study. The academic definitions are the foundation on which the operational definitions are created in the pilot study. The definitions of the HRC dimensions are complemented by the definitions and

use of the dimensions of RC, also key to the work performed in the pilot study. The definitions of the dimensions of RC are discussed in the following section.

### **3.2.2 Relational capital.**

Relational Capital (RC) includes contacts between the economic links needed to acquire inputs and to sell outputs. These are a directly productive aspect of social capital (Bezemer et al., 2004). The RC of an organization refers to the productive contacts that individuals use in selling outputs. In some central features, RC does not differ from other types of capital, including currency and equipment (Robison et al, 2002). RC makes up the individual feature of social capital that is enduringly productive (Bezemer et al., 2004; Woolcock & Narayan, 2000). A list of the dimensions of RC includes customer capital, supplier chain relations and competitors (Bollen et al., 2005; Bontis, 1998; Brooking, 1996; Chen et al., 2005; Edvinsson & Malone, 1997; Johanson, 2005; Lynn, 1998; Roos & Roos, 1997; Sveiby, 1997). These dimensions of RC are discussed in the following sections.

#### ***3.2.2.1 Customer capital.***

Customer capital includes a number of items that serve to define it. These items include knowledge of marketing channels, knowledge of customer relationships, customer orientation (accessibility of customer feedback), customer orientation (image of the company), numbers and types of customers, strong relationships with customers, and the satisfaction of customers of products and services.

#### ***3.2.2.2 Supplier chain relations.***

The RC dimension of supplier chain relations includes items that serve to define it. These items include the knowledge of employees about customer relations and the

number of customers, items related to competitors (including relationships with other organizations and competitor orientation), general aspects to be accounted for when engaging in relationships (including long term focus related to customer and supplier relations), and profit objectives related to customer and supplier relations.

#### ***3.2.2.3 Competitors.***

The RC dimension of competitors includes items that serve to define it. These items include relationships with other organizations, competitor orientation, and general aspects to be accounted for when engaging in relationships.

#### ***3.2.2.4 Summary of RC dimensions.***

The dimensions of RC identify their importance and make clear their definitions by focusing on what those dimensions include. These definitions are the foundation of their use in the pilot study. The academic definitions are the foundation on which the operational definitions were created. The definitions of the RC dimensions are complemented by the definitions and use of the dimensions of HRC, also key to the work performed in the pilot study.

#### ***3.2.3 Summary.***

Both HRC and RC dimensions of IC are the critical dimensions explored in this research. For ease of reference, refer to Table 3.1 and Table 3.2 for alignment between the dimensions and the IC components. Table 3.1 provides a concise summary for the academic definitions provided for the construct of HRC and for each of its dimensions. The academic definitions are needed as a basis on which the operational definitions of the variables are developed in the pilot study.

Table 3.1  
*Academic definitions of key construct of HRC and of its dimensions*

Variable	Academic Definition
Human Resource Capital (HRC)	The collective attitudes, skills and abilities of human resources contributing to the organizational performance and productivity.
Innate Human Capabilities	The undeveloped faculties people have to use that exist from birth; those faculties inherent rather than learned. They include intelligence, learning capability and talent.
Learned Abilities	The faculties or capacities resulting from the knowledge gained by theoretical and/or practical study. They include knowledge, skills, and education from learning from each other, education from learning from training, experience, ability and expertise.
Management and Leadership Qualities	The nature, kind, character, or manner of those individuals and groups who use a set of processes that ensure that complicated systems of people and technology flow smoothly to produces organizations in the first place or to adjust them to changing situations.
Employee Values	The beliefs held by an employee, in terms of principles, values and judgments, about what is important, true and relevant to the role at work of that, individual employee. Employee values decide the attitudes and behaviours employees make use of in their commitment to achieving organizational success.
Problem Solving Capabilities	An employee's ability to identify problems, the ability of the employee to adapt and the ability of the employee to change.

Table 3.2 provides a concise summary for the academic definitions provided for the construct of RC and for each of its dimensions. The academic definitions are based on what each of the dimensions includes, talking about the dimension by talking about its components. As with HRC, the definitions of RC and of its dimensions are needed as a basis on which the operational definitions of the variables are developed in the pilot study.

Table 3.2  
*Academic definitions of key construct of RC and of its dimensions*

Variable	Academic Definition
Relational Capital ( <b>RC</b> )	The contacts between economic links needed to acquire inputs and to sell outputs; a directly productive aspect of social capital. RC refers to the productive contacts that individuals use in achieving sold output. In some essential features, RC will not differ from other forms of capital, such as money and machinery. These contacts form the individual aspect of social capital that is directly productive.
Customer Capital	Includes items such as: Knowledge of marketing channel Knowledge of customer relationships Customer orientation (accessibility of customer feedback) Customer orientation (image of the company) Customers (amount of customers) Customers (strong relationships) Customers (satisfaction of products and services)
Supplier Chain Relations	Includes items such as: Employee knowledge of customer relations Number of customers

Variable	Academic Definition
Competitors	Includes items such as: Relationships with other organizations, and Competitor orientation
General Aspects to be accounted for when engaging in Relationships (included in each of the RC dimensions)	These include items relating to general aspects to be accounted for when engaging in relationships including: Long term focus related to customer and supplier relations, and Profit objective related to customer and supplier relations.

### 3.3 Pilot Study - Method

The main research study was performed to undertake research into the importance of HRC and RC information to owners of shares in ABSC. The pilot study, however, was performed to determine the practicability of a main study on these topics and to optimize the design of the main study in a manner that would provide enough information to obtain statistically valid information. The information sought was from shareholders of ABSC. The pilot study involved three sets of pretesting activities. These were completed using Focus Group A, followed by a pilot questionnaire and then followed by the final questionnaire. Members of Focus Group A and respondents of the pilot questionnaire and the final questionnaire were shareholders of stocks in ABSC and were asked for their consideration of each of the dimensions of HRC and RC.

The first pretesting activity was creating the operational definitions of the constructs of HRC and RC and of their dimensions. This involved the use of Focus

Group A, a purposive group of participants, comprised of five individuals who focused on using the academic definitions of the IC dimensions of HRC and RC and of each of their dimensions to develop the operational definitions.

As a result of the output from Focus Group A, a questionnaire was created that included the operational definitions of each of the dimensions of HRC and RC and a range of policy statements for each. For the second pretesting activity, that questionnaire, the pilot questionnaire, was used with a sample group of 17 shareholders of ABSC. The responses to the questionnaire helped determine if a range of items, in the form of statements relating to the HRC and RC of a company, were perceived to be relevant to the HRC or RC dimensions indicated in each section, and if HRC and RC information was relevant to ABSC.

The pilot questionnaire helped to determine the perceived relevance of a range of statements representing items relating to the HRC and RC of a company. The final questionnaire, the third pretesting activity, was derived from the output of the pilot questionnaire. This was required to test the construct reliability and construct validity of the findings to enable the use of the items in the hypothesis-testing stage of the research study. The final questionnaire involved the administering of a HRC and RC perception scale that represented a diagnostic tool which had the potential to enable the testing of the proposed hypotheses.

### **3.3.1 Development of operational definitions of HRC and RC and of their dimensions – Focus Group A.**

Qualitative methods, including focus groups, allow researchers to gain meaningful insight into specific human behaviour and into the reasons behind the behaviours of



individuals, what they do and why they do it. Focus groups facilitate meaningful insight by allowing researchers to focus on the relevant experiences of group participants and on their perceptions relating to concepts and events (Greenbaum, 1998). Focus Group A included five individuals to define common business words in terms of their being understood by shareholders of ABSC.

Because the business terms Human Resource Capital (HRC) and Relational Capital (RC) are often exchanged between parties, in both everyday business and in academic discussion, the research study sought to confirm how these terms were understood and used by representatives of shareholders of ABSC. Much has been written about focus groups, their purpose, effective ways of hosting them, and the value of the data they provide (Greenbaum, 1998; Krueger & Casey, 2000). Krueger and Casey (2000) state that focus group discussions tap into human tendencies. Attitudes and perceptions about a topic are developed, in part, with other people. IC is comprised of HRC and structural capital, and that structural capital includes the intangible capital related to human resources, referred to as RC (Bollen et al., 2005). In investigating the dimensions of IC, related to corporate human resources, this research study investigates the five dimensions of HRC and the three dimensions of RC. The Focus Group A was presented with academic definitions of those dimensions and asked to validate these definitions as terms used when stock purchases were being considered. The combined list of HRC dimensions was extracted from the studies of researchers including Becker (2005), Bollen, Vergauwen, and Schnieders (2005), Bontis (1998), Brooking (1996), Chen, Cheng, and Hwang (2005), Edvinsson and Malone (1997), Johanson (2005), Lynn (1998), Roos and Roos (1997), and Sveiby (1997). The HRC dimensions investigated were innate human

capabilities, learned abilities, management and leadership qualities, employee values, and problem solving capability. The RC dimensions investigated were customer capital, supplier chain relations, and competitors.

Focus Group A was provided, in writing, with the academic definitions of each of the HRC and RC dimensions (refer to Tables 3.1 and 3.2). Focus Group A was asked to read, interpret, discuss, and rewrite the terms in their personal everyday language. This was to develop the operational definitions of the dimensions of HRC and RC (refer to Appendix B). Appendix B includes both inputs and outputs; it includes the academic definitions provided to participants, their responses to defining the variables in their own terms (on the heels of the group discussion), and the operational definitions that were developed as a result of the exercise. An output of Focus Group A was the development of a questionnaire concerning the operational definitions of the constructs of HRC and RC and of their dimensions under investigation. The pilot questionnaire included a list of items relating to each of the dimensions of HRC and RC and a page detailing the operational definitions of each of the variables. Respondents to the pilot questionnaire would be asked to read and understand the definitions prior to indicating if they believed the statements regarding HRC and RC information was relevant to each of the dimensions of HRC and RC. As a result, it was necessary to ensure that the questions posed in the surveys relating to the research were clear, easy to understand and user-friendly for the sample groups of investors, and to ensure the definitions were clear for use in the content analysis of the corporate annual reports. The results, from the information provided by Focus Group A, ensured that this could be achieved.

#### **3.3.1.1 Participants.**

A focus group needs to have the representation of the types of participants that are relevant to the study. In this case, judgment sampling was used to select individuals to participate in the focus group. It allowed the extraction of data that, within the limits of the research objectives, facilitates the ability of the researcher to make accurate and relevant generalizations through the perspective of the sample group (Gibbs, Kealy, Willis, Green, Welch, & Daly, 2007). In this research, the perspectives sought were from individuals who were either current or past shareholders of ABSC. The participants had invested directly in those shares. In selecting the candidates to participate in Focus Group A, participants were chosen with the acknowledgement that the larger population which the sample represented had its one *a priori* being shareholders of stocks in at least one Australian bank. That representation of the larger sample group includes only individual shareholders of ABSC, purchased as part of individual stock portfolios. It is acknowledged that none of the participants in Focus Group A were shareholders as corporate investors or as professional stock traders. Also, the participants held the following professional functions that ensured a range of individual investors were represented. These included one housewife, one teacher, one accountant, one lawyer, and one undergraduate university student.

#### **3.3.1.2 Procedure.**

Prior to hosting the event, the researcher outlined a set of definitions to present to the participants in Focus Group A. The definitions presented were drawn from the literature review completed. This exploratory part of the research study contributed to the development of new, operational definitions of the key constructs. Focus Group A, five

shareholders of ABSC, engaged in discussion to gain an understanding of the academic constructs of IC dimensions of HRC and RC and their dimensions.

At this stage, as at each part of the research study, whenever participants were required to be involved in the focus groups or in completing any of the questionnaires posed to them, they were required to provide informed written consent as per the Human Research Ethics Committee requirement (HREC) (refer to Appendix C). The objective of the focus group approach was to get the participants thinking, to enable them to make conclusions and create operational definitions that were useful to the rest of the study. The information gained from Focus Group A was of a qualitative nature; it allowed the participants to express themselves naturally, to use their own language to explain the variables with which they were dealing. This enabled the researcher to use the data to create a subsequent questionnaire to be used for the next step in the pilot study.

#### ***3.3.1.3 Results and analysis.***

The academic definitions given to participants of Focus Group A and the final revisions made by Focus Group A (refer to Appendix B) are aligned and contain only minor variations. Thematic analysis was performed on the revised definitions delivered by Focus Group A. The revised definitions were analysed manually, in detail, without the use of a software application, to identify the important distinguishing and common words applied by the respondents (refer to Appendix B). The analysis revealed how the respondents understood the academic definitions of HRC and RC and of their dimensions.

Thematic analysis, the output of which is included in Appendix B, revealed that Focus Group A was able to define, in common language, the variables, of HRC and RC and their dimensions, to be used in this study. It also revealed that both HRC and RC

were distinct concepts; there were identified no overlapping features or constructs that would contribute to confusion when either concept was applied in the selection of ABSC stock purchases. Additionally, there were identified no overlapping features or constructs that would contribute to confusion when either concept was applied in the selection of ABSC stock purchases that were considered. The definitions of HRC and its dimensions provided by Focus Group A, as well as those of RC and its dimensions, were combined to create the operational definitions used in this research (refer to Table 3.3 and Table 3.4).

Table 3.3  
*Operational definitions of key constructs of HRC and its dimensions as proposed for this research project*

Variable	Operational Definition
Human Resource Capital (HRC)	The collective physical and intellectual skills and abilities of employees that they bring with them to an organization in order to contribute to its overall performance and success
Innate Human Capabilities	The natural abilities and qualities a person is born with that, with time and through experience, may develop as behaviours, skills and talents (relating to how investors perceive the HRM functions of employee recruitment and employee retention).
Learned Abilities	The knowledge and skills that are taught, through formal and informal education and practice, rather than inherited (relating to how investors perceive the HRM functions of employee recruitment and employee retention).
Management and Leadership Qualities	Those traits and qualities that refer to a person's character in terms of how they would control and guide the overall resources and performance of an organization. Leaders will use incentives such as rewards and consequences to control the behaviour of employees. Incentives may or may not include money.

Variable	Operational Definition
Employee Values	All those beliefs about what is important, in terms of principles, values and judgments, that an employee believes to be true and is influenced by in his/her role at work.
Problem Solving Capabilities	The abilities of employees to identify and solve difficult problems or situations at work, usually through the ability to adapt and change. This may be done at an individual or at a group level.

Table 3.4  
*Operational definitions of key constructs of RC and its dimensions as proposed for this research project*

Variable	Operational Definition
Relational Capital (RC)	The economic value of the working relationships between all kinds of resources needed for an organization to be productive.
Customer Capital	Any and all items that provide a company with a good knowledge of its target market, in order to meet the market's needs and wants and to build a strong relationship with its customers. Customer capital includes the ability to access the market, to deal productively with customers by knowing what motivates them, to find ways to get feedback from customers, and to build and improve the image of the company within the market.
Supplier Chain Relations	The awareness employees have about their customers, including knowledge about the number of customers and what their feedback about the company is. Positive feedback is dependent on the relationship between employees of the company and their customers.
Competitors	The cooperative or competitive relationships a company has with its competitors

Variable	Operational Definition
	in its relevant market. This takes into account its position in the market relative to its competition, its networking ability and its competitive strengths and weaknesses.
General Aspects to be accounted for when engaging in Relationships (included in each of the RC dimensions)	A company being able to achieve its strategic goals and to make good profits in the long run based on building strong relationships with both customers and suppliers. By nurturing productive relationships, customers and suppliers will provide the company with positive feedback, long term loyalty and flexibility.

The HRC dimensions investigated by Focus Group A were innate human capabilities, learned abilities, management and leadership qualities, employee values, and problem solving capability. The RC dimensions investigated by Focus Group A were customer capital, supplier chain relations, and competitors. However, what the research study does investigate from here on are the variables representing the dimensions of HRC and RC, based on the results of both the literature review and Focus Group A.

#### ***3.3.1.4 Discussion.***

The HRC dimensions of innate human capabilities and of learned abilities are difficult to isolate and measure. This research, however, has established that both dimensions relate to the HR functions of employee recruitment and employee retention (refer to Table 3.3). Recruitment is concerned with sourcing and hiring suitably qualified, capable and skilled employees to fulfil their work roles and retention involves keeping

and maintaining those suitably qualified, capable and skilled employees. As a result, the researcher was armed with a list of variables relating to the dimensions of HRC and RC.

The five variables representing the dimensions of HRC were determined to include employee recruitment, employee retention, development of management and leadership qualities, employee values, and developing employee problem solving skills. The three variables representing the dimensions of RC include, as discussed in this chapter and in the literature review, customer capital, supplier chain relations, and competitors. Table 3.5 provides a summary of the dimensions of HRC and RC.

Table 3.5  
*Dimensions of HRC and RC*

HRC Dimension	RC Dimension
Employee recruitment	Customer capital
Employee retention	Supplier chain relations
Employee values	Competitors
Development of management and leadership qualities	
Developing employee problem solving skills	

Similar to previous research, this research study infers that the dissection of the construct of IC leads to the understanding of its components of HRC and RC (Bollen et al., 2005; Bontis, 1998; Brooking, 1996; Edvinsson & Malone, 1997; Johanson, 2005; Lynn, 1998; Roos & Roos, 1997; Sveiby, 1997). This research study supports the assertion that IC is comprised of the dimensions of human capital and structural capital



including relational capital (Bollen et al., 2005). However, dissimilar to past research, this study focuses specifically on the IC dimensions of HRC and RC and on the related functions of managing HR within a company. In taking this perspective, the research study has the potential to shed light on the value of information disclosure, relating to the two HR components of IC, to a knowledge-based company such as those within the Australian banking sector.

#### ***3.3.1.5 Summary.***

Focus Group A resulted in the operational definitions of the IC dimensions of HRC and RC and in the determination of a list of variables that represent those dimensions. Armed with the operational definitions, and with knowledge of the list of variables to be investigated in this research study, the researcher then sought to carry out two tasks. The first was to determine the perceived relevance of HRC and RC policy information to the corresponding dimensions of HRC and RC, as this was needed to develop items for the final questionnaire of the pilot study. The second was to have the operational definitions utilized in the content analysis of the 2007 annual reports published by each of the Australian banks investigated.

#### **3.3.2 Pilot Questionnaire – Determination of perceived relevance of HRC and RC policy information.**

From the results of the thematic analysis performed on the data collected from Focus Group A, a questionnaire was created that incorporated the operational definitions of the individual dimensions of HRC and RC and a range of policy statements developed for each. The pilot questionnaire (refer to Appendix D), was distributed to 20 individuals. The response rate for the pilot questionnaire was 85 percent (N = 17).

The objective of using the pilot questionnaire was to determine if a range of items and statements relating to the HRC and RC of a company was perceived to be relevant to the HRC or RC definitions provided within the questionnaire. The respondents were invited to read each statement and indicate the perceived level of relevance by circling the appropriate responses.

The questionnaire items relating to HRC and RC dimensions were developed from the operational definitions established by Focus Group A of the pilot study. The definitions of the constructs and dimensions were used to develop a range of policy statements for respondents to consider. It was proposed that the responses to the questionnaire were to be analysed using percentage analysis. The purpose of completing this part of the research was to lead to the creation of the final questionnaire, to be used to be further factor analysed and tested for statistical validity and reliability in the pilot study and, based on the outcome of confirmatory factor analysis, to be used in the main study.

Questionnaires permit researchers to query respondents with minimal intrusion into the life or time of the respondents, as respondents can complete the questionnaires at their convenience. With regard to this questionnaire, as with the entire research study, Human Research Ethics Committee (HREC) approval was obtained from the university to enable the researcher to conduct an investigation into the perceptions of respondents through a series of questionnaires. Both judgment sampling and snowball sampling were used to engage participants and invite them to respond to the pilot questionnaire. All invited participants were assured anonymity in their responses.

There were two parts to the pilot questionnaire. The first part was designed to extract demographic information and information on the banking sector shareholdings of respondents. The second part of the pilot questionnaire was designed to extract information on how the respondents perceived a range of items, as relating to the corresponding HRC and RC dimensions.

Participants invited to reply to the pilot questionnaire included a group of shareholders of ABSC. Paper copies of the questionnaires were given to family, friends and colleagues of the researcher to distribute to suitably eligible individuals, those who were either previous or current holders of ABSC shares. Participants were provided with sealed A3 envelopes containing the pilot questionnaire, definitions of the constructs investigated, Expression of Interest Letter (refer to Appendix E), two printed copies of the Participant Consent Form (refer to Appendix F), and postage-paid, researcher-addressed reply envelopes. In responding to the pilot questionnaire, participants were invited to read each of the statements provided and to indicate the perceived level of relevance by identifying appropriate responses, recording how relevant they perceived each of the items was to the corresponding dimensions of HRC and RC. The participants were given two weeks to complete and return the questionnaires.

Each participant was requested to return the completed questionnaire and a signed copy of the Participant Consent Form. Upon receiving the documents, questionnaires and consent forms were separated immediately before data was extracted and processed for analysis. The consent forms were placed into a single sealed file and the questionnaires were placed in a separate sealed file for bulk processing by the researcher. This was to ensure the anonymity of respondents. Percentage analysis was used for analysis of the

data. It was needed to establish if the majority of respondents agreed as to whether each of the items related to each of the corresponding dimensions of HRC and RC.

### ***3.3.2.1 Participants.***

The pilot questionnaire was distributed and on forwarded to a total of 20 individuals, each of whom, at the time of distribution, was a current or previous shareholder in at least one of the eight banks under investigation. A response rate of 85 percent was attained (N = 17). Of the 17 respondents to the pilot questionnaire, 65 percent were male and 35 percent were female.

The ages of the respondents are shown in Table 3.6. Of the respondents for the pilot questionnaire, 42 percent were aged between 26 and 35 years and 35 percent were aged 36 to 45 years. In total, 77 percent of respondents ranged in age from 26 to 45 years.

Table 3.6  
*Age-range of respondents for the pilot questionnaire*

<b>Age Range of Respondents (Years)</b>	<b>Number of Respondents</b>	<b>Percent of Respondents</b>
25 or under	2	11.76
26 – 35	7	41.18
36 – 45	6	35.29
46 – 55	1	05.88
56 – 65	0	00.00
66 or over	1	05.88
N = 17		

Table 3.7 identifies the levels of education attained by the respondents. The majority of respondents, 53 percent, identified themselves as having a university education.

Table 3.7  
*Education level attained by respondents for the pilot questionnaire*

Education Level Attained	Number of Respondents	Percent of Respondents
Primary	0	00.00
Secondary	4	23.53
TAFE (Technical & Further Education)	2	11.76
University	9	52.94
Undisclosed	2	11.76
N = 17		

Respondents reported that their employment was in one of two areas. Of the respondents, 88.24 percent (15 people) referred to their selves as professionals and 11.76 percent (2 people) referred to their selves as tradespersons (refer to Table 3.8).

Table 3.8  
*Occupation of respondents to the pilot questionnaire*

Occupation of Respondents	Number of Respondents	Percent of Respondents
Professional	15	88.24
Tradesperson	2	11.76
N = 17		

Annual income was reported by participants and 53 percent (9 people) reported an income range of \$40,001 to \$80,000 AUD, while 29.4 percent (5 people) reported an income range of \$80,001 to \$120,000 (refer to Table 3.9).

Table 3.9  
*Income range of respondents to the pilot questionnaire*

Income Range (AUD)	Number of Respondents	Percent of Respondents
Up to 40 000	0	00.00
40 001 – 80 000	9	52.94
80 001 – 120 000	5	29.41
120 001 or more	1	05.88
Not disclosed	2	11.76

N = 17

### **3.3.2.2 Procedure.**

The participants in this part of the study were provided with the operational definitions of the constructs of HRC and RC and of their dimensions. The participants were asked to consider policy statements that they considered relevant to each of the dimensions under investigation. For example, the critical intangibles such as the ability of a company to “attract” and “maintain” key employees, its “innovative capacity” and its “customer” approach were some of the indicators that were to be measured. A copy of the questionnaire is provided in the appendices (refer to Appendix D). Table 3.10 is an indicative set of policy statements provided on how one of the HRC dimensions, employee recruitment, enabling the company to attract people with appropriate abilities, skills and knowledge needed for the corporate role, was measured.

Table 3.10

*Example of policy statement items to determine relevance*

<b>How do you perceive the relevance of each of the following statements to the HRC dimension of employee recruitment?</b>
1. The company attracts valuable employees, with industry-specific knowledge, from competitor firms
2. The company offers higher starting salaries than the industry average
3. The company hires the best trained graduates in the field
4. Graduate recruits are fast-tracked to a management position quickly in the company compared to competitor firms
5. The company uses targeted marketing campaigns to potential recruits to show it values the individual achievements of its current star performers
6. The company uses in-house employee recruitment officers, with complete knowledge of the firm's business, to match appropriate recruits to available roles

A three-point scale was used to measure the responses to the policy statements in the pilot questionnaire. The responses were presented in the following range: 1 = Not Relevant, 2 = Unsure, 3 = Relevant. A percentage analysis was used to identify a list of relevant policy statements relating to the dimensions of HRC and RC. For each of the eight dimensions of HRC and RC, five policy statements, of those identified as having relevance to that dimension, were proposed to be used further in this research study. The policy statements were proposed to be used for the final questionnaire necessary to the main study, subject to passing validation and reliability testing in the final questionnaire of the pilot study.

### ***3.3.2.3 Results and analysis.***

The primary focus of this research study is the perceptions of shareholders, either past or present, of ABSC stocks. To ensure a commitment to this focus, all respondents were asked, within the pilot questionnaire, if they held ABSC stocks at some stage, whether in the past or present. All 17 respondents indicated that they had owned stocks in one or more of the ABSC and all disclosed the ABSC stocks they owned. This information is shown in Table 3.11. Of the respondents, 13 people stated they had shares in the Commonwealth Bank of Australia (CBA). This represented 76.47 percent of the respondents. As for the other banks, 35.29 percent (6 people) held shares in Westpac Banking Corporation (WBC), 29.41 percent (5 people) in Australia and New Zealand Banking Group Ltd (ANZ) and 17.65 percent (3 people) held shares in the National Australia Bank (NAB).

Table 3.11  
*Banking shares held by respondents to the pilot questionnaire*

<b>Banking shares held</b>	<b>Number of Respondents</b>	<b>Percent of Respondents</b>
ADB	0	00.00
ANZ	5	29.41
BEN	0	00.00
BOQ	0	00.00
CBA	13	76.47
NAB	3	17.65
SGB	0	00.00
WBC	6	35.29
Other	0	00.00



At this stage, it is important to briefly discuss the notion of SHRM and the value HRC and RC policy information represents for companies seeking sustained competitive advantage. This is required because there is a list of items in the second part of the questionnaire that relates to HRC and RC policy information.

SHRM involves creating and enacting a set of internally consistent HRM policies and practices that enable the human capital of a firm to augment the accomplishment of business objectives (Wei, 2006). The practice of SHRM is concerned with combining HRM policies and practices into corporate strategy in an attempt to achieve competitive advantage (Wei, 2006). To do this successfully, companies need to develop and use their key competencies, facilitated and enhanced by a range of HRM activities, functions and processes (Lado & Wilson, 1994; Wei, 2006). Research has established that SHRM results in the utilization of HRM practices and the design of an HR system that is compatible with corporate strategy (Wei, 2006).

Information on the HRC and RC of a corporation is regarded as information on intangible assets. Researchers argue that companies must be able to measure and report on their intangible assets in order to adopt a strategic orientation necessary to corporate success (Flamholtz et al., 1998). They argue that this needs to be carried out for both managing an organization and for communicating its value to both internal and external stakeholders. As an example, researchers argue that when organizational-specific scorecards are used, they can help align organizational strategy with HR capabilities and can provide greater transparency to users of the information (Flamholtz et al., 1998).

Banking sector corporations, like other publicly listed corporations, report on their financial performance in their annual reports. However, annual reports contain more

information than just the financials. For example, CBA, in its annual report for the end of the 2007 financial year, refers to the role of the Board in endorsing key HR policies and supervising strategy development for senior and high performing executives (CBA, 2007). The CBA also refers to “ethical policies” within the annual report. The policies are those that relate to “values”, “employee behaviours”, “professional practice” and what CBA refers to as “our people”. HRC and RC policies demonstrate the link between corporate strategy and the role of SHRM within a company. Understanding corporate HRC and RC policies helps managers to manage and information-users to make informed decisions.

With regard to the analysis, provided the majority of respondents agreed the information was relevant to the specific dimension, the five most-relevant statements for each dimension would be used to develop the main study questionnaire, subject to passing reliability and validation testing in the final questionnaire of the pilot study. A percentage analysis was used to identify which statements were relevant to each of the dimensions of HRC and RC.

### **Employee Recruitment**

Six statements in the pilot questionnaire were presented for employee recruitment, a dimension of HRC. Greater than 82 percent of respondents (14 people) perceived all six statements to be relevant to the dimension of employee recruitment, as presented in Table 3.12. Also, 17.65 percent of respondents (3 people) perceived statement 4 to be not relevant to the dimension. The analysis of the data from the pilot questionnaire resulted in five of the six items being incorporated into the final questionnaire.

Table 3.12

*Employee recruitment policy statement items to determine relevance*

How do you perceive the relevance of each of the following statements to the HRC dimension of employee recruitment?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1. The company attracts valuable employees, with industry-specific knowledge, from competitor firms	0	00.00	0	00.00	17	100.0
2. The company offers higher starting salaries than the industry average	2	11.76	1	05.88	14	82.35
3. The company hires the best trained graduates in the field	1	05.88	0	00.00	16	94.12
4. Graduate recruits are fast-tracked to a management position quickly in the company compared to competitor firms	3	17.65	0	00.00	14	82.35
5. The company uses targeted marketing campaigns to potential recruits to show it values the individual achievements of its current star performers	2	11.76	0	00.00	15	88.24
6. The company uses in-house employee recruitment officers, with complete knowledge of the firm's business, to match appropriate recruits to available roles	1	05.88	1	05.88	15	88.24

N = 17

For the purpose of confirmatory factor analysis, for the HRC dimension of employee recruitment, relevant items 1, 2, 3, 5 and 6 (refer to Table 3.12) were chosen to design the final questionnaire for the research study. Item 4 was not chosen as it had the greatest frequency of “not relevant” responses, 17.65 percent.

### **Employee Retention**

Seven statements in the pilot questionnaire were presented to address the HRC dimension of employee retention. All statements were perceived, by a majority of respondents, to be relevant to the HRC dimension of employee retention. Notably, for five of the seven statements, at least 88.24 percent of respondents perceived the items to be relevant to the HRC dimension of employee retention, as presented in Table 3.13. Also, 17.65 percent of respondents perceived statements 2 and 4 to be not relevant to the dimension.

Table 3.13

*Employee retention policy statement items to determine relevance*

How do you perceive the relevance of each of the following statements to the HRC dimension of employee retention?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1. The company encourages current employees with good performance results to nominate themselves for future management positions	0	00.00	0	00.00	17	100.0
2. The company is committed to retaining employees by making the job interesting for them	3	17.65	1	05.88	13	76.47

How do you perceive the relevance of each of the following statements to the HRC dimension of employee retention?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
3. The company uses training and development to improve interpersonal communication and teamwork	0	00.00	1	05.88	16	94.12
4. The company facilitates workplace diversity and workplace harmony by employing females, mature-aged staff, and those from multi-cultural backgrounds	3	17.65	0	00.00	14	82.35
5. Specialist external firms provide training to employees with specialized product knowledge/skills	1	05.88	1	05.88	15	88.24
6. The careers of junior employees are developed through the formal mentoring by experienced staff	1	05.88	1	05.88	15	88.24
7. A formal performance appraisal program provides employees with constructive feedback and remedial intervention	0	00.00	1	05.88	16	94.12

N = 17

For the purpose of confirmatory factor analysis, for the HRC dimension of employee retention, relevant items 1, 3, 5, 6, and 7 (refer to Table 3.13) were chosen for use in the final questionnaire. Items 2 and 4 were not chosen as they had the greatest frequency of “not relevant” responses, 17.65 percent.

### **Development of Management and Leadership Qualities**

Five statements were presented for the HRC dimension of the development of management and leadership qualities. All statements were perceived, by the majority of respondents, to be relevant to the HRC dimension of development of management and leadership qualities. Notably, 82.35 percent of respondents (14 people) perceived all five statements to be relevant to the HRC dimension of the development of management and leadership qualities, as presented in Table 3.14. The analysis of the data from the pilot questionnaire resulted in confirmation that all the five items could be incorporated into the final questionnaire.

Table 3.14

*Development of management and leadership qualities policy statement items to determine relevance*

How do you perceive the relevance of each of the following statements to the HRC dimension of management and leadership qualities of managers?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1. Training and development is used to improve the leadership qualities and styles of company managers	1	05.88	0	00.00	16	94.12
2. Managers are allowed to use	1	05.88	0	00.00	16	94.12

How do you perceive the relevance of each of the following statements to the HRC dimension of management and leadership qualities of managers?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
flexibility with leave and other time allowances to control and encourage employee behaviour						
3. Providing managers with technical skills to decide on the level of training required to reduce employee skills gaps	0	00.00	2	11.76	15	88.24
4. Managers are empowered to motivate subordinates by offering employee salaries above the industry average	2	11.76	1	05.88	14	82.35
5. Providing managers with share options and other bonuses directly linked to the output levels of their departments and of their direct subordinates	0	00.00	1	05.88	16	94.12

N = 17

For the HRC dimension of the development of management and leadership qualities, relevant items 1, 2, 3, 4, and 5 (refer to Table 3.14) were chosen for use in the final questionnaire.

### Employee Values

Five statements were presented for the HRC dimension of employee values. All statements were perceived, by the majority of respondents, to be relevant to the HRC dimension of employee values. Notably, 76.47 percent of respondents (13 people) perceived all five statements to be relevant to the HRC dimension of employee values, as

presented in Table 3.15. The analysis of the data from the pilot questionnaire confirmed that all the five items could be incorporated into the final questionnaire.

Table 3.15

*Employee values policy statement items to determine relevance*

How do you perceive the relevance of each of the following statements to the HRC dimension of employee values?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1. Managers build corporate trust and goodwill with their subordinates by negotiating difficult situations in an open environment	2	11.76	2	11.76	13	76.47
2. Organizational synergy, which improves company output, is a result of a decentralized decision-making process	2	11.76	2	11.76	13	76.47
3. The company motivates less competitive employees by linking output to a highly competitive reward system	1	05.88	2	11.76	14	82.35
4. The company uses weekly statistical analysis of staff productivity to encourage employees to reset goals and targets	0	00.00	2	11.76	15	88.24
5. Weekend workshops are used to improve employee productivity by encouraging them to broaden their perspective in relation to their work roles	0	00.00	1	05.88	16	94.12

N = 17



For the HRC dimension of employee values, relevant items 1, 2, 3, 4, and 5 (refer to Table 3.15) were chosen for use in the final questionnaire.

### **Developing Employee Problem Solving Skills**

Five statements were presented for the HRC dimension developing employee problem solving skills. All statements were perceived, by the majority of respondents, to be relevant to the HRC dimension of developing employee problem solving skills. Notably, 82.35 percent of respondents perceived all five statements to be relevant to the HRC dimension of developing employee problem solving skills, as presented in Table 3.16. Analysis confirmed the five items could be used in the final questionnaire.

Table 3.16

*Developing employee problem solving skills policy statement items to determine relevance*

How do you perceive the relevance of each of the following statements to the HRC dimension of developing employee problem solving skills?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1. Managers facilitate the creation of an organizational culture based on work-groups and teams in the pursuit of creating new products and services	1	05.88	2	11.76	14	82.35
2. Managers are encouraged to facilitate employees who are proven and successful risk-takers	0	00.00	2	11.76	15	88.24
3. Managers readily encourage staff to practice self-confidence and to demonstrate authority as a result of	2	11.76	0	00.00	15	88.24

How do you perceive the relevance of each of the following statements to the HRC dimension of developing employee problem solving skills?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
their own successful management styles						
4. Managers are empowered to select, as mentors and role models, employees who are creative and can make their own decisions without the help of others	0	00.00	0	00.00	17	100.0
5. Managers select, as supervisors, employees that demonstrate the ability to use their imagination to develop original ideas for their market	1	05.88	0	00.00	16	94.12

N = 17

For the HRC dimension of developing employee problem solving skills, the relevant items 1, 2, 3, 4, and 5 (refer to Table 3.16) were chosen for use in the final questionnaire. This was further contingent to passing reliability and validation testing in the final questionnaire of the pilot study.

### Customer Capital

Five statements were presented for the RC dimension of customer capital. All statements were perceived, by a majority of respondents, to be relevant to the RC dimension of customer capital. Notably, 88.24 percent of respondents (15 people) perceived all five statements to be relevant to the RC dimension of customer capital, as

presented in Table 3.17. The analysis of the data from the pilot questionnaire resulted in confirmation that all five items could be incorporated into the final questionnaire.

Table 3.17

*Customer capital policy statement items to determine relevance*

How do you perceive the relevance of each of the following statements to the RC dimension of customer capital?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1. Structured training programs improve sales staff responsiveness and levels of customer courtesy	0	00.00	0	00.00	17	100.0
2. Company obligations to corporate customers are met in a timely and individualized manner	0	00.00	0	00.00	17	100.0
3. Innovative practices are used to actively and consistently increase market share	0	00.00	0	00.00	17	100.0
4. The company's reputation with its current customers has facilitated the potential to grow its customer base	0	00.00	1	05.88	16	94.12
5. Whether the company has negotiated long term contracts with customers	0	00.00	2	11.76	15	88.24

N = 17

For the RC dimension of customer capital, relevant items 1, 2, 3, 4, and 5 (refer to Table 3.17) were chosen for use in the final questionnaire. This was further contingent to passing reliability and validation testing in the final questionnaire of the pilot study,

### Supplier Chain Relations

Seven statements were presented for the RC dimension of supplier chain relations. All statements were perceived, by the majority of respondents, to be relevant to the RC dimension of supplier chain relations. Notably, 82.35 percent of respondents (14 people) perceived all seven statements to be relevant to the RC dimension of supplier chain relations, as presented in Table 3.18. The analysis of the data from the pilot questionnaire resulted in five of the seven items being incorporated into the final questionnaire.

Table 3.18  
*Supplier chain relations policy statement items to determine relevance*

How do you perceive the relevance of each of the following statements to the RC dimension of supplier chain relations?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1. The company's high customer retention is due to the specialized work of their customer relationship managers	0	00.00	1	05.88	16	94.12
2. When surveyed for feedback, the degree of customer satisfaction reported on the service the company provides in response to their contemporary	0	00.00	1	05.88	16	94.12

How do you perceive the relevance of each of the following statements to the RC dimension of supplier chain relations?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
needs						
3. Whether the company has negotiated long term contracts with suppliers	1	05.88	1	05.88	15	88.24
4. Customer feedback is encouraged through the promptness of employees responding to feedback	0	00.00	1	05.88	16	94.12
5. Management and staff at all levels understand the size of their share of the market	3	17.65	1	05.88	13	76.47
6. Employees know how their customers want to be treated	3	17.65	0	00.00	14	82.35
7. Whether corporate stakeholders are aware of where the company wants to be in 3 to 5 years – strategic objective	0	00.00	0	00.00	17	100.0

N = 17

For the RC dimension of supplier chain relations, relevant items 1, 2, 3, 4, and 7 (refer to Table 3.18) were chosen for use in the final questionnaire. This was further contingent to passing reliability and validation testing in the final questionnaire of the pilot study. All statements were perceived to be highly relevant to the RC dimension of supplier chain relations.

## Competitors

Seven statements were presented for the RC dimension of competitors. All statements were perceived, by the majority of respondents, to be relevant to the RC dimension of competitors. Notably, 82.35 percent of respondents (14 people) perceived six of the seven statements to be relevant to the RC dimension of competitors, as presented in Table 3.19. Also, 17.65 percent of respondents (3 people) perceived statements 1 and 4 to be not relevant to the dimension. As a result, the analysis of the data from the pilot questionnaire resulted in five of the seven items being incorporated into the final questionnaire.

Table 3.19  
*Competitors' policy statement items to determine relevance*

How do you perceive the relevance of each of the following statements to the RC dimension of competitors?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
1. Information about the awareness of a company's positioning within its market	3	17.65	0	00.00	14	82.35
2. Relative to itself, an awareness of the positioning of its competitors in the market	0	00.00	1	05.88	16	94.12
3. Information on how management actively tests its performance against its best competitors to improve the company's performance and overall position in the market	0	00.00	0	00.00	17	100.0

How do you perceive the relevance of each of the following statements to the RC dimension of competitors?	NOT RELEVANT		UNSURE		RELEVANT	
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%
4. Knowledge about how the company works together with its competitors to further develop its markets (joint ventures/alliances)	3	17.65	1	05.88	13	76.47
5. Information on how the company seeks to predict market trends	0	17.65	1	05.88	16	94.12
6. Information on how the company uses market intelligence increase its market share	1	05.88	1	05.88	15	88.24
7. Knowledge about the potential for a company to add value through product and/or business diversification	0	00.00	0	00.00	17	100.0

N = 17

For the RC dimension of competitors, relevant items 2, 3, 5, 6, and 7 (refer to Table 3.19) were chosen for use. All statements were perceived to be highly relevant to the RC dimension of Competitors. However, items 1 and 4 were not chosen as they had the greatest frequency of “not relevant” responses, 17.65 percent (3 people).

#### **3.3.2.4 Discussion.**

The development of the pilot questionnaire was influenced, in part, by Flamholtz, Searfoss, and Coff (1998) who asserts that corporations need to provide greater

transparency to information-users. Their assertion is that companies need to understand, measure, and disclose information on their intangible assets in order to manage their companies and in order to communicate with their stakeholders.

The development of the pilot questionnaire was also influenced by research linking SHRM, corporate strategy and competitive advantage (Wei, 2006). The creation and implementation of HRM policies and practices, incorporated into corporate strategy, is recognized as that which enables the human capital of a firm to better accomplish corporate objectives (Wei, 2006).

Most importantly, the pilot questionnaire was developed acknowledging that researchers have asserted the importance and relevance of HRM policies to corporate objectives, about the requirement for strategically focused corporations to use HRM policies to guide them in their practices to achieve competitive advantage (Wei, 2006). This has provided the reasoning for using policy information related to the dimensions of HRC and RC as items to be tested in the pilot questionnaire. The questionnaire dealt with the relevance of the HRC and RC policy statements to each of the dimensions of HRC and RC. For each of the dimensions, policy statements were presented and respondents were asked to indicate whether they perceived each of the statements was either “not relevant”, “unsure”, or “relevant” to the dimension it represented. There was no ready-to-use diagnostic tool for the main study. There was no questionnaire specifically developed to measure the variables under investigation. Hence, this exercise was a necessary prerequisite to the creation of the questionnaire for the main study.



#### **3.3.2.5 Summary.**

The pilot study utilized the operational definitions created by Focus Group A and the list of the HRC and RC dimensions of IC that relate to the functions HR professionals undertake in their roles within a corporation. The final output of the pilot questionnaire was a list of 40 HRC and RC policy statements, tested and determined, by respondents, to be relevant to their corresponding HRC and RC dimensions. Hence, the statements were retained for use as items in the final questionnaire of the pilot study.

#### **3.3.3 Final questionnaire – CFA of items in HRC and RC perception scale.**

The pilot questionnaire, as discussed in section 3.3.2, resulted in the determination of the perceived relevance of a range of policy statements representing items relating to the HRC and RC of a company. Upon completion of percentage analysis on the pilot questionnaire results, a range of policy statements relevant to the dimensions of HRC and RC were chosen for inclusion in the final questionnaire, a HRC and RC perception scale.

This part of the pilot study involved the administering of the final questionnaire, a questionnaire that had the potential to measure shareholder perceptions and to enable the testing of the proposed hypotheses. Respondents were asked to indicate if information disclosure on each of the five HRC and three RC dimensions was perceived to be important to their decisions to purchase banking sector shares. The objective of the final questionnaire was twofold. First, it was to test the construct validity and construct reliability of each of the 40 policy statement items, critical to this part of the research. Second, it would allow the main study to be undertaken. Confirmatory factor analysis was used to test the items in this, the final questionnaire of the pilot study.

#### ***3.3.3.1 Participants.***

The final questionnaire was distributed and on forwarded to a total of 220 individuals, each of whom, at the time of distribution, was a current or previous shareholder in at least one of the eight banks investigated, and none of whom had been included in the group of 17 respondents to the preceding questionnaire. A response rate of 37 percent was attained ( $N = 81$ ). Of the 81 respondents to the final questionnaire, 65.43 percent (53 respondents) were male and 34.57 percent (28 respondents) were female. Respondents to the final questionnaire were in a variety of age ranges; 38.17 percent of respondents (31 people) for the final questionnaire were aged between 26 and 35 years and 23.46 percent of respondents (19 people) were aged between 36 and 45 years.

This part of the pilot study was critical because the reliability and validity of the constructs measured through the questionnaire needed to be established before the questionnaire could be used in the testing of hypotheses. This part of the research involved the application of a Confirmatory Factor Analysis (CFA) to determine construct reliability and validity. Once CFA established reliability and validity, the final questionnaire could be used in the main study.

#### ***3.3.3.2 Procedure.***

Both judgment sampling and snowball sampling were used to engage participants and invite them to respond to the questionnaire. Invited participants were assured anonymity in that their identities and in their responses would remain anonymous. Participants invited to reply to the final questionnaire included a group of shareholders of ABSC. Paper copies of the final questionnaire were given to family, friends and

colleagues of the researcher to complete and/or further distribute to suitably eligible individuals, those who were either previous or current holders of ABSC shares. Participants were provided with sealed A3 envelopes containing the final questionnaire, Expression of Interest Letter, two printed copies of the Participant Consent Form, and postage-paid, researcher-addressed reply envelopes.

In responding to the final questionnaire, participants were invited to read and complete each of the parts of the questionnaire by identifying the appropriate responses. The participants were given four weeks to complete and return the questionnaires. However, if the questionnaires arrived after the four week period, and before statistical analysis commenced, they were included in the study. Participants were requested to return the completed questionnaire and a signed copy of the Participant Consent Form.

Upon receipt of the completed questionnaires and the consent form by the researcher, the questionnaires and consent forms were separated immediately ahead of data extraction and analysis. The consent forms were gathered and put into a sealed file. The questionnaires were also put into a separate sealed file for bulk processing by the researcher. This was necessary to ensure the anonymity of respondents.

The findings from the analysis of the pilot questionnaire were used to create the final questionnaire of the pilot study (refer to Appendix G). The final questionnaire was comprised of two parts. The first part of the questionnaire was designed to extract demographic information and information on the banking sector shareholdings of respondents. The second part of the final questionnaire included statements relating to information about the dimensions of HRC and RC. This was designed to extract information on whether the respondents perceived the range of statements, relating to the

eight HRC and RC dimensions, as important to the decision to purchase banking sector shares.

The final questionnaire provided items, in the form of policy statements, for each of the eight HRC and RC dimensions. Eighty-one completed questionnaires were collected from ABSC shareholders. A five-point Likert scale was used to indicate and measure the responses from the participants. The Likert scale used by the final questionnaire respondents included 1 = Not Important, 2 = Less Important, 3 = Unsure, 4 = Important, and 5 = Very Important. The respondents were instructed to identify the importance of each statement in their decision to purchase stocks by using the five-point Likert scale.

In developing the final questionnaire, 40 policy statements relating to each of the five dimensions of HRC and three dimensions of RC were randomly dispersed throughout the questionnaire. Microsoft Excel<sup>TM</sup> software was used to create a random distribution of the items. The respondents were unaware of which policy statements referred to which dimensions of HRC and RC. Table 3.20 provides a breakdown of which policy statement items relate to which dimensions of HRC and RC.

Table 3.20  
*Items in the final questionnaire relating to specific dimensions of HRC and RC*

Dimension	Policy Statement Items				
Employee Recruitment	1	11	17	21	24
Employee Retention	2	12	14	29	35
Development of Management & Leadership Qualities	3	9	13	28	31
Employee Values	4	26	32	34	40

Dimension	Policy Statement Items				
Developing Employee Problem solving Skills	5	16	22	25	37
Customer Capital	6	8	18	23	30
Supplier Chain Relations	7	19	33	36	38
Competitors	10	15	20	27	39

There were five policy statements for each of the eight dimensions of HRC and RC. The 40 policy statements were presented to the respondents to measure their perceptions about the importance of HRC dimensions including employee recruitment, employee retention, development of management and leadership qualities, employee values, and developing employee problem solving skills, and the three RC factors including customer capital, supplier chain relations, and competitors. The data obtained from the final questionnaire was subjected to validity and reliability testing of the individual and overall constructs of HRC and RC and their dimensions.

### ***3.3.3.3 Reliability and validation testing.***

It was necessary to test the validity of the constructs to ensure the questionnaire actually measured what should be measured. Confirmatory Factor Analysis (CFA) using LISREL 8.7 and Reliability Analysis, using SPSS™ Version 15, was performed to test psychometric properties of the construct including the sub dimensions of construct validity including reliability, unidimensionality, and convergent validity (Bagozzi & Phillips, 1982; Venkatraman & Grant, 1986).

It was necessary to test the reliability of the constructs to ensure the questionnaire provided consistency in measurement. The reliability of the constructs was assessed using Cronbach's alpha coefficient which ranges from 0 to 1 (Cortina, 1993). An alpha value of 0.70 and above is considered to be the criterion for demonstrating internal consistency of established scale (Nunnally, 1988). In this case, an alpha value of 0.70 and above means that the reliability of the constructs used can be measured consistently.

#### ***3.3.3.4 Results and Analysis - Demographic Variables.***

The demographic variables considered for the study were three categorical variables. The variable of gender was used for descriptive analysis. Table 3.21 shows the gender of the participants in this part of the pilot study. The sample of shareholders was comprised of 53 males (65.43%) and 28 females (34.57%).

Table 3.21  
*Distribution of the demographic data categorized in a dichotomous manner among gender*

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
Male	53	65.43
Female	28	34.57

N = 81

The variable of age was also used for descriptive analysis. Table 3.22 shows the ages of the participants in this part of the pilot study. The majority of the shareholders, 50 of the 81 respondents, belong to the age ranges of 26 to 45 years old (61.73%).

Table 3.22

*Distribution of the demographic data categorized among age*

Age	Frequency	Percent
25 or Under	11	13.58
26-35	31	38.27
36-45	19	23.46
46-55	14	17.28
56-65	5	06.17
66 or Over	1	01.23

N = 81

The variable of education was also used for descriptive analysis. Table 3.23 shows the education levels of the participants in this part of the research study. The majority of shareholders, 43 of the 81 respondents (53.09%), were University educated.

Table 3.23

*Distribution of the demographic data categorized among educational qualification*

Education	Frequency	Percent
Primary	4	04.94
Secondary	19	23.46
TAFE	15	18.52
University	43	53.09

N = 81

Output from the final questionnaire also included information on the shareholdings of the current and previous shareholders of ABSC stocks. That information is presented in Table 3.24.

Table 3.24

*Distribution of the current and previous bank shares held by respondents*

<b>Bank</b>	<b>Frequency</b>	<b>Percent</b>
ADB	02	02.47
ANZ	32	38.27
BEN	03	03.70
BOQ	01	01.23
CBA	46	56.79
NAB	33	40.74
SGB	02	02.47
WBC	19	23.46
Other	02	02.47

The majority of shareholders, 46 of the 81 respondents (56.79%), held CBA shares, either currently or previously. Over 40 percent of respondents (33 people) indicated they held NAB shares and over 38 percent of respondents (32 people) indicated they held ANZ shares. Further to this, 46 respondents indicated they held shares in only one bank while 35 respondents indicated they held shares in multiple banks. This is shown in Table 3.25.

Table 3.25

*Distribution of the current and previous single or multiple bank shareholdings held by respondents*

	<b>Frequency</b>	<b>Percent</b>
<b>Shareholders of multiple banks</b>	35	43.21
<b>Shareholders of only one bank</b>	46	56.79

N = 81



As identified in Table 3.25, the majority, 56.79 percent of respondents, either currently or previously held shares in only one ABSC. Also, only 43.21 percent of respondents indicated they held shares, either currently or previously, in multiple banks.

### ***3.3.3.5 Results and Analysis – Reliability and Validation Testing.***

The HRC and RC perception scale, the second part of the final questionnaire, was developed to measure the perceived importance of the HRC and RC information to both current and prospective shareholders when deciding to invest in ABSC. The Cronbach's Alpha value for the overall scale (40 HRC and RC policy statement items) was 0.96. The independent constructs also each obtained a reliability value of greater than 0.7. Consequently, the scale was taken to consistently measure the underlying concept of importance of HRC and RC information. The results of the reliability analysis are shown in Table 3.26.

Table 3.26  
*Reliability coefficients of the HRC and RC dimensions*

<b>Name of Construct</b>	<b>Reliability Coefficient (Cronbach's Alpha)</b>
<b>Overall Reliability</b>	<b>0.96</b>
Employee Recruitment	0.78
Employee Retention	0.82
Development of Management & Leadership Qualities	0.81
Employee Values	0.80
Developing Employee Problem solving Skills	0.81
Customer Capital	0.73
Supplier Chain Relations	0.73
Competitors	0.71

CFA was conducted to establish the validity of the constructs in reference to unidimensionality, convergent validity and internal consistency. The purpose of performing the CFA was to test the unidimensionality of the multi-item constructs and to eliminate unreliable items. The CFA contains inferential statistics that allow for a strict and objective interpretation of validity (Byrne, 2006; Gerbing & Anderson, 1988). Additionally, unidimensionality, convergent and discriminant validity tests can be assessed. Two sets of statistics are used for the verification of unidimensionality and convergent validity (Byrne, 2006; Venkatraman, 1989). These include the significance of the factor loadings and the overall acceptability of the measurement model in terms of its fit to the data using a  $\chi^2$  test and adjunct fit indexes which should exceed the cut-off point of 0.90. The Goodness of Fit Index (GFI) was devised by Joreskog and Sorbom (1984) for maximum likelihood estimation and has been generalized to other estimation criteria by Tanaka and Huba (1985). GFI has a value which ranges from zero to one; the value of one indicates a perfect fit. The Normed Fit Index (NFI), also called Bentler-Bonnett Coefficient, is an indication of convergent validity (Ahire, 1996; Byrne, 2006). A Normed Fit Index (NFI) of 0.90 or above indicates that there is a strong evidence of convergent validity for the construct (Ahire, 1996; Byrne, 2006). Unidimensionality indicates the items of the factor/construct measure one common latent variable. To measure unidimensionality, using CFA, a measurement model is specified for each construct (Ahire, 1996; Byrne, 2006). A Comparative Fit Index (CFI) of 0.90 or above indicates that there is strong evidence of unidimensionality for the construct (Ahire, 1996; Byrne, 2006). While CFA terminology is used in a variety of ways in the literature, here CFA was used as presented by Hunter and Gerbing (1982; Rubio, Berg-Weger, & Tebb,

2001); that is, CFA is a test of a theoretical model, as opposed to a random ordering of factors based on matrix algebra and a varimax rotation formula embedded within the principal components approach to factor analysis. CFA generates only the number of factors that are specified. CFA also does not rely on Eigen values to compute the amount of variance accounted for by each factor or to identify the appropriate number of factors (Hunter & Gerbing, 1982; Rubio et al., 2001). CFA is an excellent method of factor analysis in the identification and specification of item errors within a model (Hunter & Gerbing, 1982; Rubio et al., 2001). Thus, CFA is a superior technique when the *a priori* specification of items expected to cluster together is possible (Fink & Monge, 1985; Hunter & Gerbing, 1982; Rubio et al., 2001). As shown in Table 3.27, the factor loadings and CFI, GFI, and NFI values, respectively, are indicative of a good fit, which means the scale demonstrated unidimensionality.

Table 3.27  
Factor Loadings and Fit indices for CFA of HRC and RC Perception Scale

Construct	Item No.	Factor loadings	CFI	NFI	GFI
Employee Recruitment	1	0.65	0.990	0.981	0.98
	11	0.70			
	17	0.64			
	21	0.71			
	24	0.57			
Employee Retention	2	0.77	0.992	0.972	0.97
	12	0.63			
	14	0.75			
	29	0.67			
	35	0.66			
	3	0.69			

Construct	Item No.	Factor loadings	CFI	NFI	GFI
Development of Management and Leadership Qualities	9	0.71	0.994	0.972	0.97
	13	0.73			
	28	0.71			
	31	0.57			
Employee Values	4	0.59	0.990	0.976	0.98
	26	0.74			
	32	0.54			
	34	0.68			
	40	0.79			
Developing Employee Problem solving Skills	5	0.55	0.964	0.944	0.94
	16	0.75			
	22	0.77			
	25	0.72			
	37	0.62			
Customer Capital	6	0.58	0.950	0.919	0.95
	8	0.72			
	18	0.64			
	23	0.65			
	30	0.42			
Supplier Chain Relations	7	0.69	0.990	0.963	0.98
	19	0.55			
	33	0.66			
	36	0.58			
	38	0.50			
Competitors	10	0.45	0.990	0.969	0.98
	15	0.71			
	20	0.62			
	27	0.49			
	39	0.60			

The eight dimensions properly measured the overall perceived importance of HRC and RC information. Therefore, all the items were retained for further analysis.

### **3.3.3.6 Discussion.**

Of the 81 respondents to the final questionnaire, 65.43 percent were male and 34.57 percent were female. The majority of the shareholders, 61.73 percent of respondents, belonged to the age ranges of 26 to 45 years old. The majority of shareholders, 53.09 percent, responded they were university educated. Also, the majority of shareholders, 56.79 percent, held CBA shares, either currently or previously. More than 40 percent of respondents indicated they held NAB shares and more than 38 percent of respondents indicated they held ANZ shares. Additionally, 56.79 percent of respondents indicated they held shares in only one bank while 43.21 percent of respondents indicated they held shares in multiple banks. The majority of shareholders, 56.79 percent, either currently or previously held shares in only one of the ABSC. However, only 43.21 percent of respondents indicated they held shares, either currently or previously, in multiple banks.

The HRC and RC perception scale, the final questionnaire which includes the 40 HRC and RC policy statement items, was developed to measure the perceived importance of HRC and RC information to shareholders when deciding on investing in banking sector companies. The perception scale was subjected to CFA tests to establish reliability and validity, to determine whether the items measured the constructs in a correct and consistent manner.

CFA was conducted to establish the validity of the constructs in reference to unidimensionality, convergent validity, and internal consistency. This was based on the fact that CFA is a superior technique when the *a priori* specification of items expected to cluster together is possible (Fink & Monge, 1985; Hunter & Gerbing, 1982; Rubio et al., 2001). CFA is used to test if the measures of a given construct are consistent with the

understanding of the nature of that construct, to ensure that items presented by a researcher are able to measure correctly the underlying concept.

Reliability analysis on the perception scale was conducted using Cronbach's Alpha Coefficient. The Cronbach's Alpha value for the overall scale was 0.96. Each independent construct also obtained a reliability value of greater than 0.7. As a result, the scale was taken to measure consistently the underlying concept of the importance of HRC and RC information to the decision to purchase banking sector stocks.

Based on the analysis, it was also found that the factor loadings and CFI, GFI, and NFI values, respectively, were indicative of a good fit, which meant the scale demonstrated construct validity. The eight HRC and RC dimensions were found to measure properly the overall perceived importance of HRC and RC information to the decision to purchase banking sector stocks. Therefore, all of the 40 HRC and RC policy statements were retained for further analysis.

While the 40 HRC and RC policy statements were found to be both reliable and valid items, the results of the CFA also represent a limitation of the study. In carrying out CFA on a set of items, statisticians refer to a broad range of guidelines relating to adequacy of sample size. CFA involves the testing of the null hypothesis, relating to absolute confidence in the probability of model reproduction. However, the restrictive nature of conventional CFA analysis has been questioned in relation to error of approximation and confidence levels (Gagné & Hancock, 2006; Raycov, 1997). This is especially in relation to the affect of sample size. Of significance to this research is the awareness that, while all items were found to be reliable and valid, the use of CFA presented a limitation to the research in terms of absolute confidence in the findings.

With regard to sample size, Raycov (1997) argues that the results of CFA may be flawed and erroneous. This is because, in relation to personality testing, a traditional approach to CFA is subject to a number of restrictive assumptions, including the need for an optimal sample size (Raycov, 1997). Raycov suggests that both the size of the sample and complexity of the factors tested needs to be considered by researchers. In proposing a non-conventional method to CFA, Raycov suggests that the testing of the null hypothesis is too rigid, and that testing for reasonable rather than absolute fit may be what is needed in personality research in order to extract quality information.

Gagné and Hancock (2006) also assert that although there has been some disputation concerning the size that represents “*enough*” two things have generally been accepted. The first is that larger sample sizes appear to provide greater confidence in CFA results, and the second is that any claims made in relation to a specific minimum necessary sample size have little empirical support.

The research by Gagné and Hancock (2006) supports the contention that larger samples, more indicators for each factor, and stronger factor loadings broadly improve model convergence and parameter estimation. However, their research does not support the idea of an absolute minimum sample size for CFA, nor does it support the idea of a critical ratio of sample size to number of factors.

With the studies of Gagné and Hancock (2006) and Raycov (1997) in mind, it is suggested that a limitation of the research study, in relation to the CFA, is that the sample size used was not large. However, for the purpose of this current research, it means that the CFA will not result in an absolute level of confidence but rather in a reasonable level of confidence in the validation of the construct measures. The constraints posed by the

limited sample size also represent the potential for future research to test the perception scale with a much larger sample size. Future research has the potential to determine whether the perception scale will continue to be reliable and valid when CFA can be carried out with a much larger sample size or whether changes will need to be made to the perception scale.

#### **3.3.3.7 Summary.**

The pilot study successfully established the construct reliability and validity of the final questionnaire. The Cronbach's Alpha value was used to confirm reliability for the overall scale and for the independent constructs and CFA was also used to establish the validity of the constructs. The testing confirmed that the HRC and RC perception scale questionnaire was both reliable and valid and could be used in the main study.

### **3.4 Overview of the Pilot Study**

The completion of the pilot questionnaire resulted in the determination of a list of the functions of HRM that represent the HRC and RC dimensions of IC. The dimensions of HRC were determined to include employee recruitment, employee retention, employee values, development of management and leadership qualities, and developing employee problem solving skills. The dimensions of RC were determined to include customer capital, supplier chain relations, and competitors. The five HRC dimensions and three RC dimensions were determined to be relevant to decisions to purchase ABSC stocks. Derived from the five HRC dimensions and three RC dimensions, 40 items, set out as HRC and RC policy statements, were developed and presented to respondents in the pilot questionnaire. Following this, the objective of the pilot study was successfully achieved.



In achieving the objective of the pilot study, CFA was used to successfully validate the 40 policy statement items within the final questionnaire. This was necessary to ensure the items within the final questionnaire were able to be used to properly measure the five dimensions of HRC and three dimensions of RC. This was needed to measure the perceptions of individual, ABSC shareholders, in relation to how relevant HRC and RC policy information is to their decisions regarding purchasing ABSC stocks. The items within the final questionnaire were determined to be reliable and valid and the questionnaire was retained for use in the main study.

The completion of the pilot study represents the foundation for the main, hypotheses-testing study. The main study is discussed in Chapter 4.

## **Chapter Four**

### **Main Study Research Method**

#### **4.1 Research Methods – Supporting the Purpose of the Main Study**

Previous research such as that conducted by Lev (2001) contends that information asymmetry produces uncharacteristic gains to informed investors and chips away at investor confidence in the integrity of capital markets. Lev contends that share market volatility may be attributed to such deterioration in investor confidence (Lev, 2001). As such, this research is driven by ideas aligned to behavioural economic theories and the field of behavioural finance which infer that investors do not have equal access to corporate information regarding HRC and RC dimensions and are not always rational in their stock transaction decisions as they are influenced by psychological biases (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). Behavioural economic theories attempt to explain market bubbles and crashes and suggest that market reactions may be attributed to several cognitive biases including biased self-attribution and overconfidence (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). The researchers contend that stock investors overreact to private information and under-react to public information signals due to their biased self-attribution and over-confidence, and that behavioural economics is a complement to rational economic theories by providing insight into instances of irrational consumer decision-making and behaviour.

This research is also driven by the principle of HC representing a lead indicator of future financial performance, and the idea that HC analysis is required for knowledge-based industries which include banking sector industries (Chen, Cheng, & Hwang, 2005; Royal & O'Donnell, 2008). It is further driven by the underlying theoretical principles

regarding tacit assets that suggest that a lack of reporting on intangible assets may make intangible-rich companies appear less valuable than they really are (Guthrie & Petty, 1999; Guthrie, Petty, & Ricceri, 2006), and by what has been established about company performance, that it is directly related to corporate SHRM practices and policies (Huselid et al., 1997).

Past research in the fields of HR and IC Management, measurement and reporting, has yielded a number of contentions. For example, this research study recognizes that IC information, which includes information on the HRC and RC dimensions within a firm, is likely considered by shareholders in their investment decisions (Ballow et al., 2004; Bontis & Fitz-Enz, 2002; Bukh, 2003; Chen et al., 2005; Guthrie et al., 2006; Lev, 2000; Saenz, 2005). The research study also recognizes that corporations infer their total value from the difference between their market and book values (Ballow et al., 2004). As such, the research study considers the contention that IC rich companies who fail to report on their IC dimensions short-sell themselves by appearing to be of less value than they really are (Guthrie & Petty, 1999; Guthrie et al., 2006). Finally, the research study is concerned with the contention that the results of information asymmetry include abnormal gains to informed investors, deterioration of investor confidence in capital markets based on intangibles and information asymmetry, broadening of bid-ask spreads of securities and, as a consequence, soaring transaction costs to investors and an increase in the cost of capital (Lev, 1996; 2000).

As for the Australian banking sector, the public is often unaware of the positive HRC and RC policy initiatives the banks carry out in an effort to grow the business, as much of the focus of the annual reports is on the financial information. This therefore

leaves individual investors in the dark. Australian banking corporations stand to realize an appreciation in their stock prices with the disclosure of HRC and RC information which may prompt them to go beyond voluntary disclosure and work on an industry-wide reporting template. Demonstrating a positive relationship between disclosure and stock price appreciation may be the motivator needed to encourage and improve levels of voluntary corporate transparency on the non-financial factors of HRC and RC.

Contingent on the results of the research, the ABSC may be encouraged to come together to develop a structured and uniform way of reporting on their HRC and RC policies within their annual reports. This will make it easier for individual shareholders and potential investors to compare the HRC and RC policies of the corporations in question and may ease the disparity between what HRC and RC policy information professional investors have access to and what “mum and dad” investors have access to in their investment decisions. Therefore, the main study is undertaken in two parts to impress on the banks the importance of reporting on HRC and RC dimensions in their annual reports to increase the market value of their shares.

The first part of the main study focuses on the perceptions of individual shareholders about the importance of HRC and RC dimensions and focuses on the impact of their perceptions on share investment decisions. The second part of the main study focuses on assessing the frequency and quality of disclosure of HRC and RC dimensions by the ABSC and whether disclosure leads to a net appreciation of share price for each of the relevant ABSC. This research study was undertaken to achieve four specific aims. These include: (1) to investigate the perceptions of individual investors about information concerning the IC components of HRC and RC; (2) to understand the sources of share

investment advice individual investors turn to in their investment decisions; (3) to determine if, in the corporate annual reports of ABSC, information on HRC and RC dimensions is provided to investors, seeking an understanding of the differences in how ABSC report on HRC and RC dimensions; and (4) to provide an assessment of the relationship between the disclosure of HRC and RC and its impact on share value, as share market volatility and share price fluctuation are issues that impact all investors.

Figure 4.1 demonstrates the design of the main study.

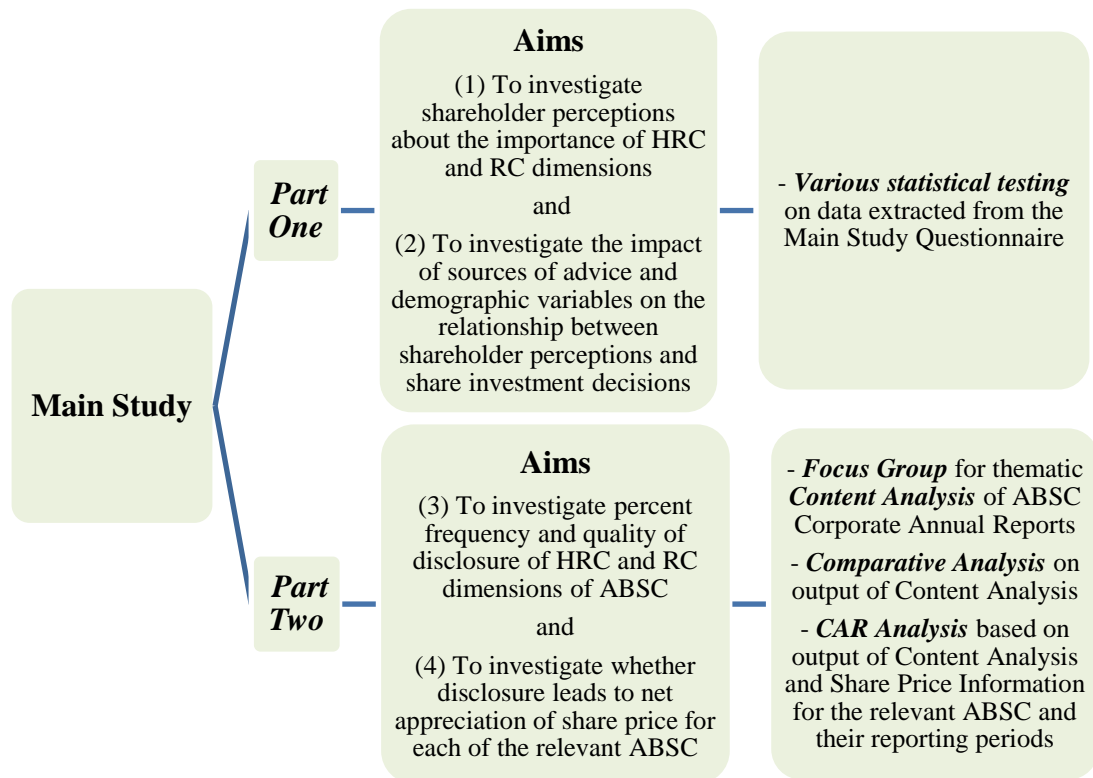


Figure 4.1. Design of the main study

The first two aims of the study are discussed in detail in Section 4.2. The second two aims are discussed in detail in Section 4.3. To achieve these four aims, investigations pertaining to the seven research questions were completed by testing fourteen hypotheses and their related sub-hypotheses. The related research questions, hypotheses, and their related sub-hypotheses are provided in both parts of the main study.

#### **4.2 Main Study Part One - Importance and use of HRC and RC Dimensions**

The first part of the main study is designed to achieve two aims of the research study. The first research aim is to understand how important the individual shareholders of ABSC perceive HRC and RC dimensions are and how they use information relating to those dimensions. This is necessary to help determine the impact of those perceptions on their investment decisions/choices to purchase, hold on to, and sell shares in ABSC. The second aim of the research study is to provide an understanding of how individual shareholder perceptions, sources of share investment advice individual investors refer to in making their share investment choices, and the demographic profiles of shareholders, impact on their investment decisions. The ASX shareholder survey 2006 (ASX, 2007) identified a list of sources of advice used by Australian shareholders, and this research study is set out to test whether the respondents are influenced by the same sources of investment advice in their share investment decisions. Specifically relating to sources of advice, the intention is to determine whether the advice has a moderating effect on the share investment decisions of shareholders, given their own perceptions of importance of the information about the HRC and RC dimensions.

#### **4.2.1 Research questions, hypotheses, and sub-hypotheses.**

Behavioural economic theories and the field of behavioural finance have suggested that investors do not have equal access to corporate information (which includes HRC and RC dimensions) and do not always make rational stock transaction decisions as investors are influenced by psychological biases (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). Behavioural economic theories, therefore, may be used to explain market bubbles and crashes, as irrational market reactions have been attributed to several cognitive biases including biased self-attribution and overconfidence (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). The contention is that stock investors tend to overreact to private information and under-react to public information signals due to their biased self-attribution and over-confidence. The previous research has suggested that behavioural economics is a complement to rational economic theories, in that it has the capacity to provide insight into instances of irrational decisions by investors and of investor behaviour.

In addition to highlighting the application of behavioural economic theories, this research also refers to previous research that contends that IC information, provided to stakeholders of organizations, enhances the transparency of organizations by allowing them to illustrate their hidden value and long term development options (Alwert et al., 2009; Ax & Marton, 2008; Petty et al., 2008; Royal & O'Donnell, 2004, 2008). In light of this contention, researchers have studied the perceptions and behaviours of various groups of stakeholders, including analysts and bankers (Alwert et al, 2009; Royal & O'Donnell, 2004, 2008), the perceptions of management (Ax & Marton, 2008) and the perceptions of accountants (Petty et al., 2008) in relation to the importance they place on

the disclosure of IC information in corporate annual reports, to their assessments of corporate values. Royal and O'Donnell (2008), go a step further by focusing specifically on the human capital elements of IC. Also, research by the ASX (2005, 2007) has provided an insight into the demographic information and investment actions of Australian investors in the ASX listed companies.

Royal and O'Donnell (2004) found that the analysis of human capital is tremendously important for general managed funds and securities analysts to enable them to anticipate future events within corporations. They suggest a structured form of human capital analysis as an indicator of future corporate performance rather than an analysis of purely financial data which provides only historical performance measurement. This current research has the potential to suggest that what Royal and O'Donnell (2004) propose may be valid for both analysts and individual shareholders alike, depending on the perceptions held by individual shareholders.

Royal and O'Donnell (2008) involved using a case study analysis to understand how organizations, and their main stakeholders, may benefit from an enhanced understanding of the role of intangible assets. In relation to the professional and non-professional investors, the focus of the research was on how human capital has the power to create corporate value for organizations. The focus was on biotechnology firms and financial institutions were regarded as key stakeholders of the biotechnology firms. They found that human capital analysis enables financial analysts, traders and fund managers to potentially identify the resilience of a listed stock, ahead of time. They recognised that each individual's ability to read all the information, quantitative and qualitative, based on tangible and intangible value creation processes and to act upon the information in a



timely manner, gave them a competitive edge, this was assuming that information on intangibles was available to the public.

Royal and O'Donnell (2008) assert it is possible to analyse and interpret qualitative information about public corporations to enable the investment process to be increasingly transparent to all stakeholders, including securities analysts. They suggest that this may convince other researchers in the field to build on intangible asset analysis approaches to make the tacit assets more explicit. Their research supports their contention that information on human capital is valuable and that it is being used unsystematically by equity markets and hedge fund managers in their investment decision processes and that a human capital lens proposes a systematic approach to examining the future potential performance of listed stocks and can be utilized as a type of risk management which is critically important to knowledge-intensive firms. Their research findings indicate that the financial sector may be required to push past the use of indices and ethical investment screens to provide a better understanding of the role of intangible assets in corporate value creation and improvement. They argue that more qualitative information on listed companies can be analysed and interpreted to make the investment process more transparent to all stakeholders, including securities analysts. This has the potential to influence other researchers to extend these approaches to improve the quality of intangibles analysis.

Royal and O'Donnell (2008) deemed their research as valuable in adding to the literature by creating the theoretical connection between the independent disciplines of SHRM, intangible assets analysis, and innovation in investment. Unlike Royal and O'Donnell (2008), this current research relates more to non-professional, rather than

professional investors. It does, however, share the idea of providing a link between SHRM and analysis of information on intangibles, focusing on the ability of stakeholders to analyse and interpret qualitative data. However, it does not have a focus on innovation on investment, but rather on the specific components of HRC and RC dimensions and on how important they are perceived to be by individual shareholders in their decision-making.

Petty, Ricceri, and Guthrie (2008) also provide some valuable research in the field of IC management and reporting. They provide an empirical assessment of how a group of financial professionals in Hong Kong used IC information, and how valuable they perceived IC reporting to be. They wanted to understand the group's ability to privately obtain information that had the potential to help them determine the value of a company's IC to support their decision-making. The researchers used a questionnaire, designed using Kelly's Repertory Grid procedure for extracting the respondents' vocabulary (Kelly, 1955). The survey was administered randomly to 238 members of CPA Australia, during professional development sessions and office visits in 2004. Petty, Ricceri, and Guthrie found that respondents did not find information provided by the traditional financial accounting model all that useful and that this set of results agrees with the literature that suggests a loss of relevance of accounting data. Despite this finding, they were able to conclude that those members of CPA Australia, who work in Hong Kong, were still using the annual reports to learn about a companies, and that the respondents would prefer companies to be more transparent and provide more information about their IC. Respondents indicated that they thought that increased IC disclosure would be. However, what is generally missing from their research is information into the

perceptions of “mum and dad” investors, specifically, what their HRC and RC information expectations and needs are, and how important they perceive the HRC and RC information provided in corporate annual reports to be. Therefore, this also represents a gap in the research and the prospect for the further expansion of knowledge in the field of IC management and reporting from an HRM perspective. That is, as distinct from most previous research, this research deals only with the HR components of IC, deals only with the perceptions of “mum and dad” investors, and deals only with the shareholders of ABSC.

To achieve the aims of Part One of the Main Study, it is necessary to provide the requisite answers and insight into five research questions by testing 10 hypotheses through the testing of their related sub-hypotheses. The research questions, hypotheses, and their related sub-hypotheses are provided within this section.

Research Questions One to Five, focus on the perceptions of ABSC shareholders, whether of single or multiple ABSC, on how their perceptions about the importance of HRC and RC dimensions influence their share investment decisions, and on whether sources of advice and demographic variables have a moderating influence between their perceptions and their use of information regarding the HRC and RC dimensions of ABSC. The dimensions of HRC and RC, as identified and developed in the pilot study, have been thoroughly researched and set out in the pilot study, and have provided the foundation for this component of the research study.

Broadly speaking, the utilization and evolution of IC management, measurement and reporting practices is recognition of the high value attached to the disclosure of IC information. However, what is missing from the research is information about what HRC

and RC dimensions individual “mum and dad” shareholders consider in their decisions and what value they place on the information.

Building on what has already in the literature on IC management, measurement, and reporting, this research study endeavours to extend the literature. This study attaches importance to understanding, not only the perceptions of individual “mum and dad” shareholders, but also the related actions of this group of investors as a result of their individual perceptions. No research has gone so far as to focus on this specific segment of the market in relation to their requirements for information about HRC and RC dimensions.

Complementing prior research that investigated stock investments made by professional investors, the research presented here, within the first part of the main study, focuses on what is referred to as individual “mum and dad” investors. These investors are identified as conservative in their investment choices and selective of shares in companies that are household names, easily recognized in the community. Australia’s banking sector was also selected for this research as it provides common and familiar brand names and a conservative investment opportunity for “mum and dad” investors.

However, while this research study considers and draws on what has been investigated in the past there is limited research available in the literature to use in developing the hypotheses for research questions One to Five. The questions and hypotheses have no specific, previous research to build on as what has been investigated in the past is more broad-based and only provides a vague backdrop for this research. The questions here are quite specific to this research study. The research intention is explorative in nature, designed to assess whether there exists a relationship between

specific ABSC share ownership, ABSC share transaction decisions, and perceptions of importance of HRC and RC dimensions to ABSC share transaction decisions. As such, Part One of this current research study represents an exploratory study. The explorative research focuses quite specifically on the perceptions of individual, “mum and dad” investors, on how they perceive information on HRC and RC dimensions, especially in the context of the corporate annual reports of ABSC.

### **Research Question One**

What are the differences in the perceptions of individual shareholders of the importance of HRC and RC dimensions between ownership of stocks in the different ABSC?

### **Hypothesis 1**

Shareholders of Australia’s four biggest banks, including the CBA, WBC, NAB and ANZ, have significant differences in perception of the importance of HRC dimensions in the decision to purchase ABSC stocks.

#### **Sub-hypothesis 1 (a)**

There is a significant difference in perception of the importance of “employee recruitment” information in the decision to purchase ABSC stocks.

#### **Sub-hypothesis 1 (b)**

There is a significant difference in perception of the importance of “employee retention” information in the decision to purchase ABSC stocks.

#### **Sub-hypothesis 1 (c)**

There is a significant difference in perception of the importance of “employee values” information in the decision to purchase ABSC stocks.

**Sub-hypothesis 1 (d)**

There is a significant difference in perception of the importance of “management and leadership qualities” information in the decision to purchase ABSC stocks.

**Sub-hypothesis 1 (e)**

There is a significant difference in perception of the importance of employee problem solving skills information in the decision to purchase ABSC stocks.

**Hypothesis 2**

Shareholders of Australia’s four biggest banks, including the CBA, WBC, NAB and ANZ have significant differences in perception of the importance of RC dimensions in the decision to purchase ABSC stocks.

**Sub-hypothesis 2 (a)**

There is a significant difference in perception of the importance of “customer capital” information in the decision to purchase ABSC stocks.

**Sub-hypothesis 2 (b)**

There is a significant difference in perception of the importance of “supplier chain relations” information in the decision to purchase ABSC stocks.

**Sub-hypothesis 2 (c)**

There is a significant difference in perception of the importance of “competitors” information in the decision to purchase ABSC stocks.

**Research Question Two**

What are the differences in the perceptions of individual shareholders of the importance of HRC and RC dimensions between ownership of stocks in only a single Australian bank and ownership of stocks in multiple ABSC?

### **Hypothesis 3**

There is a significant difference in the perceptions of importance of HRC dimensions in the decision to purchase ABSC stocks of shareholders who have ownership in only one of the big four Australian banks, and of shareholders who have ownership in multiple banks, including one of the big four banks.

#### **Sub-hypothesis 3.1**

(a) There is a significant difference in the perceptions of importance of “employee recruitment” information in the decision to purchase ABSC stocks of shareholders who have ownership in CBA and of shareholders who have ownership in both CBA and multiple banks.

(b) There is a significant difference in the perceptions of importance of “employee retention” information in the decision to purchase ABSC stocks of shareholders who have ownership in CBA and of shareholders who have ownership in both CBA and multiple banks.

(c) There is a significant difference in the perceptions of importance of “employee values” information in the decision to purchase ABSC stocks of shareholders who have ownership in CBA and of shareholders who have ownership in both CBA and multiple banks.

(d) There is a significant difference in the perceptions of importance of “management and leadership qualities” information in the decision to purchase ABSC stocks of shareholders who have ownership in CBA and of shareholders who have ownership in both CBA and multiple banks.

(e) There is a significant difference in the perceptions of importance of “employee problem solving skills” information in the decision to purchase ABSC stocks of shareholders who have ownership in CBA and of shareholders who have ownership in both CBA and multiple banks.

### **Sub-hypothesis 3.2**

3.2 (a) to (e) is tested in relation to shareholders of WBC;

### **Sub-hypothesis 3.3**

3.3 (a) to (e) is tested in relation to shareholders of NAB; and,

### **Sub-hypothesis 3.4**

3.4 (a) to (e) is tested in relation to shareholders of ANZ.

## **Hypothesis 4**

There is a significant difference in the perceptions of importance of RC dimensions in the decision to purchase ABSC stocks of shareholders who have ownership in only one of the big four Australian banks, and of shareholders who have ownership in multiple banks, including one of the big four banks.

### **Sub-hypothesis 4.1**

(a) There is a significant difference in the perceptions of importance of “customer capital” information in the decision to purchase ABSC stocks of shareholders who have ownership in CBA and of shareholders who have ownership in both CBA and multiple banks.

(b) There is a significant difference in the perceptions of importance of “supplier chain relations” information in the decision to purchase ABSC stocks of shareholders



who have ownership in CBA and of shareholders who have ownership in both CBA and multiple banks.

(c) There is a significant difference in the perceptions of importance of “competitors” information in the decision to purchase ABSC stocks of shareholders who have ownership in CBA and of shareholders who have ownership in both CBA and multiple banks.

#### **Sub-hypothesis 4.2**

4.2 (a) to (c) is tested in relation to shareholders of WBC;

#### **Sub-hypothesis 4.3**

4.3 (a) to (c) is tested in relation to shareholders of NAB; and,

#### **Sub-hypothesis 4.4**

4.4 (a) to (c) is tested in relation to shareholders of ANZ.

### **Research Question Three**

Do individual shareholders’ perceptions of the importance of HRC and RC dimensions relate to their decisions to purchase ABSC stocks?

#### **Hypothesis 5**

There is a significant relationship between an individual shareholder’s perception of the importance of HRC dimensions and the use of HRC dimensions in the decision to purchase ABSC stocks.

#### **Sub-hypothesis 5 (a)**

There is a significant relationship between an individual shareholder’s perception of the importance of “employee recruitment” information and the use of that information in the decision to purchase ABSC stocks.

**Sub-hypothesis 5 (b)**

There is a significant relationship between an individual shareholder's perception of the importance of "employee retention" information and the use of that information in the decision to purchase ABSC stocks.

**Sub-hypothesis 5 (c)**

There is a significant relationship between an individual shareholder's perception of the importance of "employee values" information and the use of that information in the decision to purchase ABSC stocks.

**Sub-hypothesis 5 (d)**

There is a significant relationship between an individual shareholder's perception of the importance of "management and leadership qualities" information and the use of that information in the decision to purchase ABSC stocks.

**Sub-hypothesis 5 (e)**

There is a significant relationship between an individual shareholder's perception of the importance of "problem solving skills" information and the use of that information in the decision to purchase ABSC stocks.

**Hypothesis 6**

There is a significant relationship between an individual shareholder's perception of the importance of RC dimensions and the use of RC dimensions in the decision to purchase ABSC stocks.

**Sub-hypothesis 6 (a)**

There is a significant relationship between an individual shareholder's perception of the importance of "customer capital" information and the use of that information in the decision to purchase ABSC stocks.

**Sub-hypothesis 6 (b)**

There is a significant relationship between an individual shareholder's perception of the importance of "supplier chain relations" information and the use of that information in the decision to purchase ABSC stocks.

**Sub-hypothesis 6 (c)**

There is a significant relationship between an individual shareholder's perception of the importance of "competitors" information and the use of that information in the decision to purchase ABSC stocks.

**Research Question Four**

Do individual shareholders perceive HRC and RC dimensions to differ in importance for use in the purchase, holding on to, or selling of ABSC stocks?

**Hypothesis 7**

There is a significant difference in the importance attributed to HRC dimensions among the decisions to purchase, hold on to, or sell ABSC stocks.

**Sub-hypothesis 7.1**

There is a significant difference in the importance attributed to "employee recruitment" information among the decisions to (a) purchase, (b) hold on to, or (c) sell ABSC stocks.

**Sub-hypothesis 7.2**

There is a significant difference in the importance attributed to “employee retention” information among the decisions to (a) purchase, (b) hold on to, or (c) sell ABSC stocks.

**Sub-hypothesis 7.3**

There is a significant difference in the importance attributed to “employee values” information among the decisions to (a) purchase, (b) hold on to, or (c) sell ABSC stocks.

**Sub-hypothesis 7.4**

There is a significant difference in the importance attributed to “management and leadership qualities” information among the decisions to (a) purchase, (b) hold on to, or (c) sell ABSC stocks.

**Sub-hypothesis 7.5**

There is a significant difference in the importance attributed to “employee problem solving skills” information among the decisions to (a) purchase, (b) hold on to, or (c) sell ABSC stocks.

**Hypothesis 8**

There is a significant difference in the importance attributed to RC dimensions among the decision to purchase, hold on to, or sell ABSC stocks.

**Sub-hypothesis 8.1**

There is a significant difference in the importance attributed to “customer capital” information among the decisions to (a) purchase, (b) hold on to, or (c) sell ABSC stocks.

### **Sub-hypothesis 8.2**

There is a significant difference in the importance attributed to “supplier chain relations” information among the decisions to (a) purchase, (b) hold on to, or (c) sell ABSC stocks.

### **Sub-hypothesis 8.3**

There is a significant difference in the importance attributed to “competitors” information among the decisions to (a) purchase, (b) hold on to, or (c) sell ABSC stocks.

Additionally, Research Question Five is developed based on the findings of the ASX (2004, 2007). Quite specifically, the ASX Shareholder Study 2006 (2007) resulted in a list of sources of advice Australian shareholders refer to in their share investment decisions. Building on from the fact that there is little to no research conducted on the perceptions and actions of “mum and dad” shareholders, relating to the HRC and RC dimensions of ABSC, this question also seeks to use the nominal information extracted from the questionnaire administered in the first part of the main study, to assess if the variables of gender, age, and education impact on shareholder decisions as a moderator. The aim is to understand the influence of the advice of others and of the demographic variables on the relationship between perception and action. The result of testing Hypothesis 9 and Hypothesis 10 is that it will build on the research conducted by the ASX (2004, 2007) and add a new dimension to what is understood about individual investors, within the context of the Australian banking sector.

### **Research Question Five**

In the ABSC stock transaction decisions of individual shareholders, is the individual shareholder’s perception of the importance of HRC and RC dimensions

moderated by information provided by differing sources of advice and demographic variables?

### **Hypothesis 9**

Differing sources of advice (including “media”, “family and friends” and “professional investment advisors”) and gender, age or education of individual shareholders have a significant moderating effect on the relationship between the individual shareholder’s perceptions of the importance of HRC dimensions and the individual shareholder’s use of HRC dimensions in ABSC stock transactions.

#### **Sub-hypothesis 9.1**

Differing sources of investment advice, as moderators, have a significant effect on the relationship between the individual shareholder’s perceptions of the importance of HRC dimensions and the individual shareholder’s use of HRC dimensions in ABSC stock transactions.

#### **Sub-hypothesis 9.2**

Gender, age and education of individual shareholders, as moderators, have a significant effect on the relationship between the individual shareholder’s perceptions of the importance of HRC dimensions and the individual shareholder’s use of HRC dimensions in ABSC stock transactions.

### **Hypothesis 10**

Differing sources of advice (including “media”, “family and friends” and “professional investment advisors”) and gender, age or education of individual shareholders have a significant moderating effect on the relationship between the

individual shareholder's perceptions of the importance of RC dimensions and the individual shareholder's use of RC dimensions in ABSC stock transactions.

#### **Sub-hypothesis 10.1**

Differing sources of investment advice, as moderators, have a significant effect on the relationship between the individual shareholder's perceptions of the importance of HRC dimensions and the individual shareholder's use of RC dimensions in ABSC stock transactions.

#### **Sub-hypothesis 10.2**

Gender, age and education of individual shareholders, as moderators, have a significant effect on the relationship between the individual shareholder's perceptions of the importance of HRC dimensions and the individual shareholder's use of RC dimensions in ABSC stock transactions.

#### **4.2.2 Research sample.**

The questionnaire is the diagnostic tool from which the necessary data is extracted, this to be able to achieve the aims of the first part of the main study. The questionnaire was distributed and on forwarded to a total of 200 individuals, each of whom, at the time of distribution, was a current or previous shareholder in at least one of the eight ABSC investigated. This was achieved by having the researcher, the researcher's network of friends and family, and the researcher's professional colleagues voluntarily take part in contacting suitable participants, ABSC shareholders. A response rate of 58.5 percent was attained ( $N = 117$ ) for this part of the research study. Again, this study was dependent on snowball sampling (Rubio et al., 2001) to augment the sample size.

#### ***4.2.2.1 Demographic profile of the research sample.***

The demographic variables considered for the first part of the main study are three categorical variables. The variables of gender, age, and education are used for descriptive analysis. Table 4.1 sets out the distribution of the demographic data categorized in a dichotomous manner among gender. The sample of shareholders of Australian banking sector stock is comprised of 67.5 percent males (79 men) and 32.5 percent females (38 women).

Table 4.1  
*Distribution of demographic data categorized in a dichotomous manner among gender*

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>
<b>Male</b>	79	67.50
<b>Female</b>	38	32.50

N = 117

Table 4.2 sets out the distribution of the demographic data categorized among age. Five different age ranges are used to extract the information about the ages of the individuals in the sample of shareholders of ABSC stocks. The majority of the shareholders (43 people) belong to the age range of 26 to 45 years old. They represent 36.80 percent of the respondents.



Table 4.2

*Distribution of the demographic data categorized among age*

Age	Frequency	Percent
<b>25 or Under</b>	16	13.70
<b>26-35</b>	43	36.80
<b>36-45</b>	29	24.80
<b>46-55</b>	21	17.90
<b>56-65</b>	8	6.80
<b>66 or Over</b>	0	0.00

N = 117

Respondents were asked to provide information on their level of education. Table 4.3 sets out the distribution of the demographic data categorized among educational qualification.

Table 4.3

*Demographic data categorized among educational qualification*

Education	Frequency	Percent
<b>Primary</b>	6	5.10
<b>Secondary</b>	26	22.20
<b>TAFE</b>	23	19.70
<b>University</b>	62	53.00

N = 117

Table 4.3 sets out the range of response options relating to the educational qualifications of respondents. The range includes Primary, Secondary, TAFE, and University level education. The majority of shareholders, 53 percent, indicated they have a University level education.

#### **4.2.3 Tools.**

The first part of the main study focuses specifically on shareholder perceptions about information concerning the IC dimensions of HRC and RC, and on where the shareholders source information on HRC and RC dimensions relevant to their share investment decisions. This research is presented from a purely HR perspective. In achieving the research aims of the first part of the main study, it was necessary to distribute a perception measurement tool, the questionnaire, to current and/or previous shareholders of ABSC. The questionnaire is an output of the pilot study, through which the research successfully established the validity and reliability of the constructs. The questionnaire was found to correctly and consistently measure each of the HRC and RC dimensions. The dimensions of HRC include employee recruitment, employee retention, employee values, development of management and leadership qualities, and developing problem solving skills. The dimensions of RC include customer capital, supplier chain relations, and competitors. The data extracted from the questionnaire provides insight into the first five research questions by testing the proposed hypotheses.

To test the hypotheses, the research study utilises data extracted from the formal structured questionnaire that resulted from the assessment of the Final Questionnaire in the initial pilot study. The questionnaire for the main study (refer Appendix H) consists of three parts. The first part, the preliminary section, includes definitions of the constructs of HRC and RC, for the respondents to refer to. The first part is also devised to extract demographic information and information on the banking sector shareholdings of respondents. Respondents are asked to indicate their gender, age, level of education, and Australian banking sector shares held either currently or previously. For ease of

reference, Figure 4.2 is an extract that represents the first, preliminary part of the Questionnaire.

PLEASE TICK (✓) THE RELEVANT RESPONSES FOR THE FOLLOWING QUESTIONS:			
Gender	Male <input type="checkbox"/>	Female <input type="checkbox"/>	
Age	25 or under <input type="checkbox"/>	26-35 <input type="checkbox"/>	36-45 <input type="checkbox"/> 46-55 <input type="checkbox"/> 56-65 <input type="checkbox"/> 66 or over <input type="checkbox"/>
Level of education	Primary <input type="checkbox"/>	Secondary <input type="checkbox"/>	TAFE <input type="checkbox"/> University <input type="checkbox"/>
Do you have, or have you had, Australian banking sector shares? Yes <input type="checkbox"/> No <input type="checkbox"/>			
If you responded “yes” to having banking sector shares, in what banks do you have shares?			
ADB (Adelaide Bank Ltd)	<input type="checkbox"/>	ANZ (Australia & New Zealand Banking Group Ltd)	<input type="checkbox"/>
BEN (Bendigo Bank Ltd)	<input type="checkbox"/>	BOQ (Bank of Queensland Ltd)	<input type="checkbox"/>
CBA (Commonwealth Bank of Australia)	<input type="checkbox"/>	NAB (National Australia Bank)	<input type="checkbox"/>
SGB (St. George Bank Ltd)	<input type="checkbox"/>	WBC (Westpac Banking Corporation)	<input type="checkbox"/>
Other banks (please specify which) _____			
If you responded “no” to having banking sector shares, you are no longer required to proceed with the questionnaire. Thank you for your time and effort.			
The definitions below are provided for your convenience, to help clarify what this questionnaire is trying to explore.			
<p><b>Human resource capital</b> (HRC) is the collective physical and intellectual skills and abilities of employees that they bring with them to an organization in order to contribute to its overall performance and success. Factors of HRC include learned abilities, management &amp; leadership qualities, employee values and problem solving capabilities.</p> <p><b>Relational capital</b> (RC) is the economic value of the working relationships between stakeholders, including shareholders, management, staff, suppliers, customers, competitors, etc., needed for an organization to be productive. Generally, and for the purpose of this study, both short and long term aspects of customer capital, supplier chain relations and competitors make up the RC of a firm.</p>			

Figure 4.2. First part of the questionnaire

The second part of the questionnaire consists of questions one to five. Question one is devised to extract information on whether respondents perceive HRC and RC information to be important to making decisions regarding buying, holding on to, or selling Australian banking sector shares. Respondents are asked to indicate if they used HRC and/or RC information to decide on which Australian banking sector shares to buy, hold on to, or sell. They are then asked, in question two, to indicate the importance of the sources of investment advice. This question is based on the list of information sources referred to in the ASX Shareholder Survey 2006 (ASX, 2007). The second part also includes questions three to five. The questions ask the respondents to indicate the importance of HRC and RC information in decisions to buy, hold on to, and sell Australian banking sector shares. For ease of reference, Figure 4.3 is an extract that represents the second part of the questionnaire.

<b>1. Indicate with a tick (✓) if you have used Human Resource Capital (HRC) and/or Relational Capital (RC) policy information to decide on which Australian banking sector shares to buy, hold on to, or sell? (please refer to the definitions provided above)</b>											
HRC		YES		NO		RC		YES		NO	
To <u>buy</u> shares						To <u>buy</u> shares					
To <u>hold on to</u> Shares						To <u>hold on to</u> shares					
To <u>sell</u> shares						To <u>sell</u> shares					
<b>2. Indicate the importance of the sources of advice below as either 1 – not important; 2 – important; or 3 - most important, in providing HRC and/or RC information. Place a tick (✓) in the box representing the appropriate response.</b>											
HRC				RC							
Newspapers		1	2	3		Newspapers		1	2	3	
Family & Friends		1	2	3		Family & Friends		1	2	3	

Financial Planner / Advisor	1	2	3		Financial Planner / Advisor	1	2	3
Stock Broker	1	2	3		Stock Broker	1	2	3
Internet	1	2	3		Internet	1	2	3
Investment Newsletters	1	2	3		Investment Newsletters	1	2	3
Accountant	1	2	3		Accountant	1	2	3
Work Colleague	1	2	3		Work Colleague	1	2	3
Magazines	1	2	3		Magazines	1	2	3
Radio	1	2	3		Radio	1	2	3
Other Source of Advice (please specify) _____	1	2	3		Other Source of Advice (please specify) _____	1	2	3

**3. Indicate the importance of Human Resource Capital (HRC) and Relational Capital (RC) policy information as either 1 – not important; 2 – important; or 3 - most important, in the decision to buy Australian banking sector shares. Place a tick (✓) in the box representing the appropriate response.**

HRC					RC				
Employee recruitment process	1	2	3		Customer capital	1	2	3	
Employee retention	1	2	3		Supplier chain relations	1	2	3	
Employee values	1	2	3		Competitors	1	2	3	
Development of management & leadership qualities	1	2	3						
Developing employee problem solving skills	1	2	3						

**4. Indicate the importance of Human Resource Capital (HRC) and Relational Capital (RC) policy information as either 1 – not important; 2 – important; or 3 - most important, in the decision to hold on to Australian banking sector shares. Place a tick (✓) in the box representing the appropriate response.**

HRC					RC				
Employee recruitment process	1	2	3		Customer capital	1	2	3	
Employee retention	1	2	3		Supplier chain relations	1	2	3	
Employee values	1	2	3		Competitors	1	2	3	
Development of management & leadership qualities	1	2	3						
Developing employee problem solving skills	1	2	3						

**5. Indicate the importance of Human Resource Capital (HRC) and Relational Capital (RC) policy information as either 1 – not important; 2 – important; or 3 - most important, in the decision to sell Australian banking sector shares. Place a tick (✓) in the box representing the appropriate response.**

HRC				RC				
Employee recruitment process	1	2	3		Customer capital	1	2	3
Employee retention	1	2	3		Supplier chain relations	1	2	3
Employee values	1	2	3		Competitors	1	2	3
Development of management & leadership qualities	1	2	3					
Developing employee problem solving skills	1	2	3					

*Figure 4.3. The second part of the questionnaire*

The third part of the questionnaire is devised to extract information on whether the respondents perceive a range of HRC and RC policy statements as relevant to the decision to purchase ABSC shares. Question six provides respondents with a range of statements relating to the HRC and RC of a company and asks the respondents to indicate how important they perceive the items, HRC and RC policy statements, to be to their decision to purchase banking sector shares. Respondents are asked to read each statement and to indicate the perceived importance of each in accordance with the five-point Likert scale provided. For ease of reference, Figure 4.4 is an extract that represents the third and final part of the questionnaire.

## 6. Instructions

You are provided with a range of statements relating to the HRC and RC of a company. You are required to indicate how important you perceive these items are to your decision to purchase banking sector shares. Please read each statement and, by placing a tick (✓) for the appropriate response, indicate the perceived importance of each in accordance with the scale provided below. There are no right or wrong answers.

**Scale:** 1 =“Not Important”, 2 =“Less Important”, 3 =“Unsure”, 4 =“Important” and 5 =“Very Important”

1. The company attracts valuable employees, with industry-specific knowledge, from competitor firms	1	2	3	4	5
2. The company encourages current employees with good performance results to nominate themselves for future management positions	1	2	3	4	5
3. Training and development is used to improve the leadership qualities and styles of company managers	1	2	3	4	5
4. Managers build corporate trust & goodwill with their subordinates by negotiating difficult situations in an open environment	1	2	3	4	5
5. Managers facilitate the creation of an organizational culture based on work-groups and teams in the pursuit of creating new products and services	1	2	3	4	5
6. Structured training programs improve sales staff responsiveness and levels of customer courtesy	1	2	3	4	5
7. The company's high customer retention is due to the specialized work of their customer relationship managers	1	2	3	4	5
8. Company obligations to corporate customers are met in a timely and individualized manner	1	2	3	4	5
9. Managers are allowed to use flexibility with leave and other time allowances to control and encourage employee behaviour	1	2	3	4	5
10. Relative to itself, an awareness of the positioning of its competitors in the market	1	2	3	4	5
11. The company offers higher starting salaries than the industry average	1	2	3	4	5
12. The company uses training and development to improve interpersonal communication and teamwork	1	2	3	4	5
13. Providing managers with technical skills to decide on the level of training required to reduce employee skills gaps	1	2	3	4	5
14. The careers of junior employees are developed through the formal mentoring by experienced staff	1	2	3	4	5
15. Information on how management actively tests its performance against its best competitors to improve the company's performance and overall position in the market	1	2	3	4	5
16. Managers readily encourage staff to practice self-confidence and to demonstrate authority as a result of their own successful management styles	1	2	3	4	5
17. The company hires the best trained graduates in the field	1	2	3	4	5
18. Innovative practices are used to actively and consistently increase market share	1	2	3	4	5
19. Employees know how their customers want to be treated	1	2	3	4	5

20. Knowledge about the potential for a company to add value through product and/or business diversification	1	2	3	4	5
21. The company uses targeted marketing campaigns to potential recruits to show it values the individual achievements of its current star performers	1	2	3	4	5
22. Managers are encouraged to facilitate employees who are proven and successful risk-takers	1	2	3	4	5
23. The company's reputation with its current customers has facilitated the potential to grow its customer base	1	2	3	4	5
24. The company uses in-house employee recruitment officers, with complete knowledge of the firm's business, to match appropriate recruits to available roles	1	2	3	4	5
25. Managers are empowered to select, as mentors and role models, employees who are creative and can make their own decisions without the help of others	1	2	3	4	5
26. The company motivates less competitive employees by linking output to a highly competitive reward system	1	2	3	4	5
27. Information on how the company uses market intelligence increase its market share	1	2	3	4	5
28. Managers are empowered to motivate subordinates by offering employee salaries above the industry average	1	2	3	4	5
29. Specialist external firms provide training to employees with specialized product knowledge/skills	1	2	3	4	5
30. Whether the company has negotiated long term contracts with customers	1	2	3	4	5
31. Providing managers with share options and other bonuses directly linked to the output levels of their departments and of their direct subordinates	1	2	3	4	5
32. Organizational synergy, which improves company output, is a result of a decentralized decision-making process	1	2	3	4	5
33. When surveyed for feedback, the degree of customer satisfaction reported on the service the company provides in response to their contemporary needs	1	2	3	4	5
34. Weekend workshops are used to improve employee productivity by encouraging them to broaden their perspective in relation to their work roles	1	2	3	4	5
35. A formal performance appraisal program provides employees with constructive feedback and remedial intervention	1	2	3	4	5
36. Whether the company has negotiated long term contracts with suppliers	1	2	3	4	5
37. Managers select, as supervisors, employees that demonstrate the ability to use their imagination to develop original ideas for their market	1	2	3	4	5
38. Whether corporate stakeholders are aware of where the company wants to be in 3 to 5 years – strategic objective	1	2	3	4	5
39. Information on how the company seeks to predict market trends	1	2	3	4	5
40. The company uses weekly statistical analysis of staff productivity to encourage employees to reset goals & targets	1	2	3	4	5
<b>Scale:</b> 1 = "Not Important", 2 = "Less Important", 3 = "Unsure", 4 = "Important" and 5 = "Very Important"					

Figure 4.4. The third part of the questionnaire



As with the Final Questionnaire used in the pilot study, the questionnaire for the main study includes the 40 policy statements relating to each of the five dimensions of HRC and the three dimensions of RC. For ease of reference, Table 4.4 provides the breakdown of policy statement items and their associated dimensions of HRC and RC.

Table 4.4  
*Items in questionnaire relating to dimensions of HRC and RC*

Dimension	Policy Statement Items				
Employee Recruitment	1	11	17	21	24
Employee Retention	2	12	14	29	35
Development of Management and Leadership Qualities	3	9	13	28	31
Employee Values	4	26	32	34	40
Developing Employee Problem Solving Skills	5	16	22	25	37
Customer Capital	6	8	18	23	30
Supplier Chain Relations	7	19	33	36	38
Competitors	10	15	20	27	39

There are five policy statements for each of the five dimensions of HRC and the three dimensions of RC. The 40 policy statements were presented to the respondents and the data extracted from the questionnaire as a whole is analysed using SPSS™ Version 15.

#### **4.2.4 Procedure.**

Snowball sampling was used to engage participants and to invite them to respond to the study. Invited participants were assured anonymity as their identities and their responses remain anonymous. Participants invited to reply to the questionnaire include only previous and current shareholders of ABSC. Paper copies of the questionnaire were provided to family, friends and colleagues of the researcher to complete and/or further distribute to suitably eligible individuals, those who are either previous or current holders of ABSC shares. The participants were provided with sealed A3 envelopes containing the questionnaire, Expression of Interest Letter, two printed copies of the Participant Consent Form, and postage-paid, researcher-addressed reply envelopes.

In responding to the questionnaire, participants were requested to read and to fill out each of the three parts of the questionnaire by indicating the appropriate responses. The participants were allowed one month to complete and return the questionnaires. However, if the questionnaires arrived after the one month period, and before statistical analysis started, they were included in the study. Participants were asked to return the completed questionnaire together with a signed copy of the Participant Consent Form.

Upon receipt of the completed questionnaires and the Participant Consent Form by the researcher, the questionnaires and consent forms were separated without delay, before data extraction and analysis was conducted. Consent forms were collected and placed into a sealed file. The questionnaires were also placed into a separate sealed file for bulk processing by the researcher. This process is carried out to ensure the anonymity of respondents.

#### 4.2.5 Data analysis.

Multiple statistical tests were performed on the data collected in this research. Refer to Table 4.5 for a summary of the tests performed. This section provides a detailed discussion about these tests and their application.

Table 4.5  
*Statistical Analysis of Hypothesis 1 to Hypothesis 10*

Hypothesis	Independent Variable	Dependent Variable	Moderator	Statistical Analysis
H 1	Share ownership in one of Australia's big four banks	Perceived importance of HRC dimensions		One-Way ANOVA and post hoc testing (Bonferroni test)
H 2	Share ownership in one of Australia's big four banks	Perceived importance of RC dimensions		One-Way ANOVA and post hoc testing (Bonferroni test)
H 3	Share ownership in one of Australia's big four banks <b>Or</b> Share ownership in multiple banks including one of Australia's big four banks	Perceived importance of HRC dimensions in decision to purchase ABSC stocks		T-test
H 4	Share ownership in one of Australia's big four banks <b>Or</b> Share ownership in multiple banks including one of Australia's big four banks	Perceived importance of RC dimensions in decision to purchase ABSC stocks		T-test
H 5	Perceived importance of HRC dimension	Use of HRC dimension in decision to purchase ABSC stocks		Logistic Regression
H 6	Perceived importance of RC dimension	Use of RC dimension in decision to purchase ABSC stocks		Logistic Regression
H 7	Perceived importance of HRC dimension to each decision	Decision to "purchase", "hold on to" <b>Or</b> "sell" ABSC stocks		Discriminatory Analysis Friedman's Test
H 8	Perceived importance of RC dimension to each decision	Decision to "purchase", "hold on to" <b>Or</b> "sell" ABSC stocks		Discriminatory Analysis Friedman's Test

Hypothesis	Independent Variable	Dependent Variable	Moderator	Statistical Analysis
H 9	Perceived importance of HRC dimensions	Use of HRC dimensions in the decision to purchase ABSC stocks	Sources of Advice <b>And</b> Gender, Age, and Education of shareholder	Hierarchical Logistic Regression
H 10	Perceived importance of RC dimensions	Use of RC dimensions in the decision to purchase ABSC stocks	Sources of Advice <b>And</b> Gender, Age, and Education of shareholder	Hierarchical Logistic Regression

#### ***4.2.5.1 Shareholders of ABSC and their perceptions about HRC and RC dimensions.***

The first two hypotheses are concerned with testing for significant differences on the importance of HRC and RC dimensions between share ownership in Australia's big four banks, the CBA, WBC, NAB, and ANZ. In testing Hypotheses 1 and Hypothesis 2, the independent variables consist of the specific Australian banking sector stocks held. These are determined from the analysis of responses to the related question in the first part, and on the first page, of the questionnaire (refer Figure 4.2). That question asks respondents if they, either currently or in the past, held shares in ABSC. Respondents are asked to identify, with a "tick", the ABSC they have had shares in.

The dependent variables are perceived importance of HRC and RC dimensions. Figures 4.5 and 4.6 demonstrate the relationship between the independent and dependent variables. Data on the dependent variables is extracted from question six of the questionnaire (refer to Figure 4.4).



*Figure 4.5.* Variables for Hypothesis 1



*Figure 4.6.* Variables for Hypothesis 2

### **One-way ANOVA**

One-way ANOVA (Analysis of Variance) is used to test the statistical significance of the hypotheses. One-way ANOVA tests differences in a single interval dependent variable among two, three, or more groups formed by the categories of a single categorical independent variable. Also known as Univariate ANOVA, Simple ANOVA, Single Classification ANOVA, or One-factor ANOVA, this design deals with one independent variable and one dependent variable. It tests whether the groups formed by the categories of the independent variable seem similar (specifically that they have the same pattern of dispersion as measured by comparing estimates of group variances). If the groups seem different, then it is concluded that the independent variable has an effect on the dependent.

After ANOVA is carried out, a more stringent post hoc test (Bonferroni test) is conducted on the data. Since there are four groups of ABSC shareholders being compared in these hypotheses, the research requires this pair-wise comparison to determine in which pair of ABSC shareholders there is a statistically significant difference (Burns & Burns, 2008). Sometimes, even though the overall F-test is found to be statistically significant at a 0.05 confidence level, none of the pairs are found to be significant due to the stringent level of significance applied in the Bonferroni T-test (Burns & Burns, 2008).

#### ***4.2.5.2 Differences between perceptions of shareholders of either single or multiple ABSC.***

The second two hypotheses (Hypothesis 3 and Hypothesis 4) are concerned with testing whether there is a significant difference in the perceptions of importance of HRC and RC dimensions to the decision to purchase ABSC stocks, between shareholders of single and multiple ABSC stocks. As the independent variable, the two samples selected to test these hypotheses include shareholders of ABSC stocks in only a single bank of the big four banks and shareholders of ABSC shares in multiple banks including, at least, one of the big four banks. This is determined from the analysis of responses to the related question in the first part of the questionnaire (refer to Figure 4.2). That question asks respondents if they, either currently or in the past, held shares in ABSC. Respondents are asked to identify the ABSC they have had shares in.

The dependent variables are the HRC and RC dimensions measured by items in question six of the questionnaire, and extracted for analysis (refer to Figure 4.4). Figures 4.7 and 4.8 define the relationship between the variables.

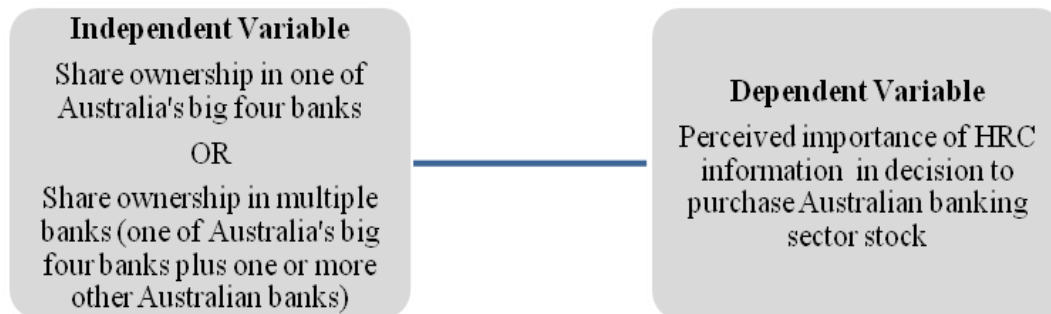


Figure 4.7. Variables for Hypothesis 3

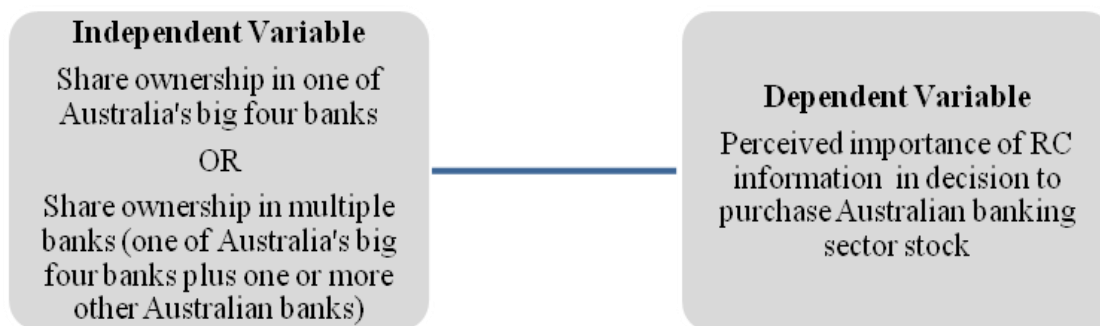


Figure 4.8. Variables for Hypothesis 4

### T-test

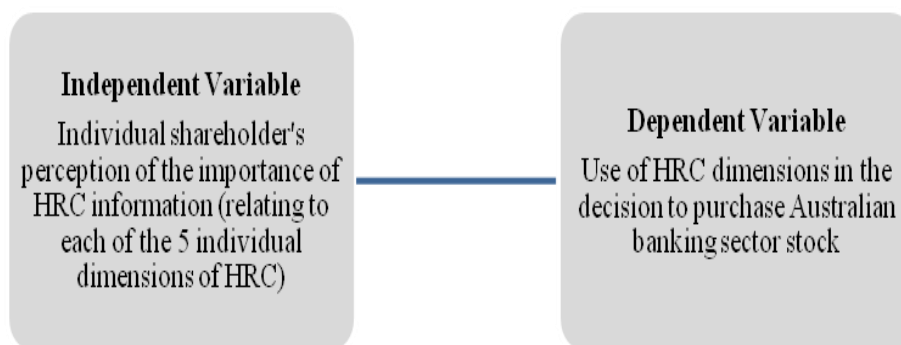
Hypothesis 3 and Hypothesis 4 for Research Question Two are tested and analysed using a t-test. The t-test is appropriate when you have a single interval dependent and a dichotomous independent, and wish to test the difference of means (for example, test mean differences between samples of men and women). The t-test may be used to compare the means of a criterion variable for two independent samples or for two dependent samples or between a sample mean and a known mean (One Sample T-test). Independent Two Sample T-test is used to test the statistical significance of the hypotheses, to test mean differences between the samples of single and of multiple ABSC

shareholders and their perceptions of importance given to HRC and RC dimensions in the decision to purchase ABSC.

***4.2.5.3 Shareholder perceptions and the use of HRC and RC dimensions to purchase ABSC stocks.***

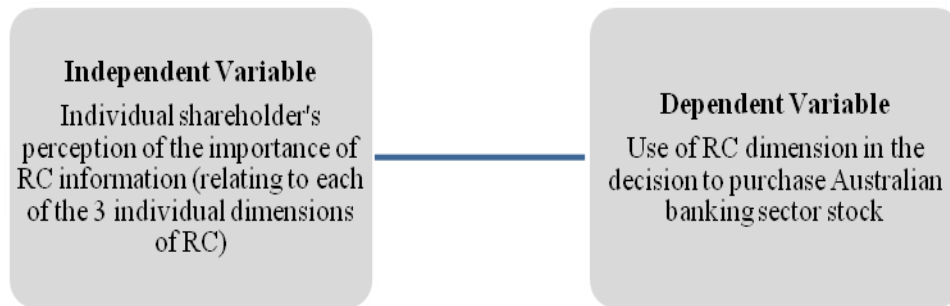
The third pair of hypotheses (Hypothesis 5 and Hypothesis 6) tests the relationship between the independent variables of shareholder perception of the importance of HRC and RC dimensions to the banking share purchase decision and the use of HRC and RC dimensions in the purchase of ABSC stocks. Data on the independent variable is taken from question six of the questionnaire (refer to Figure 4.4). The question presents respondents with 40 policy statements for the dimensions of HRC and RC.

Data on the dependent variables is extracted from question one in the second part of the questionnaire (refer to Figure 4.3). Figures 4.9 and 4.10 define the variables used when testing the hypotheses to identify the relationship between shareholder perception of the importance of HRC and RC dimensions to the banking share purchase decision and the use of HRC and RC dimensions in the purchase of ABSC stocks.



*Figure 4.9. Variables for Hypothesis 5*





*Figure 4.10.* Variables for Hypothesis 6

### **Logistic Regression**

Logistic regression modelling is used to test the relationship between individual shareholders' perceptions about the importance of each of the HRC and RC dimensions to the banking share purchase decision. Binomial (or binary) logistic regression is a type of regression used when the dependent is a dichotomy and the independents are of any type (Agresti & Franklin, 2009). Logistic regression can be used to predict a dependent variable based on continuous and/or categorical independents and to determine the percent variance in the dependent variable explained by the independents; to rank the relative importance of independents; to assess interaction effects; and to understand the impact of covariate control variables. The impact of predictor variables is usually explained in terms of odds ratios. Logistic regression applies maximum likelihood estimation after transforming the dependent into a logit variable (the natural log of the odds of the dependent occurring or not). In this way, logistic regression estimates the odds of a certain event occurring.

The Wald Test is used to test the significance of individual logistic regression coefficients (B) for each independent variable. Odds Ratio:  $\exp(B)$  is the natural log base,  $e$ , to the exponent,  $B$ , where  $B$  = Logistic Regression Coefficient. Odds Ratio

represents the factor by which the odds change for a one-unit change in the independent variable. An  $\text{Exp}(B) > 1$  means the independent variable increases the odds. If  $\text{Exp}(B) = 1.0$ , the independent variable has no effect. If an  $\text{Exp}(B) < 1$ , then the independent variable decreases the odds.

As Hypothesis 5 and Hypothesis 6 test if there is a significant positive relationship between an individual shareholder's perception of the importance of the five HRC dimensions and three RC dimensions, and the use of those HRC and RC dimensions in the decision to purchase ABSC stocks, logistic regression is used to model the relationship. In this, Wald Test is used to test the relationship of each of the HRC and RC dimensions on the decision to purchase ABSC stocks.

#### ***4.2.5.4 Investment transaction decisions of shareholders and the influence of HRC and RC dimensions.***

The fourth pair of hypotheses (Hypothesis 7 and Hypothesis 8) test whether there is a significant difference in the importance attributed to HRC and RC dimensions among the decisions to purchase, hold on to or sell ABSC stocks. The independent variable is the importance attributed to each of the five HRC and to each of the three RC dimensions. The dependent variable is the decision on banking stock transactions, which includes the purchase, holding on to, and selling of ABSC stocks. Figure 4.11 and Figure 4.12 set out the relationship between the variables. Discriminatory analysis testing is conducted on the information extracted from questions related to the investor transaction decisions in the questionnaire to examine empirically whether there is a significant difference in the importance attributed to HRC and RC dimensions among the decisions to purchase, hold on to or sell ABSC stocks (refer to Figure 4.3).

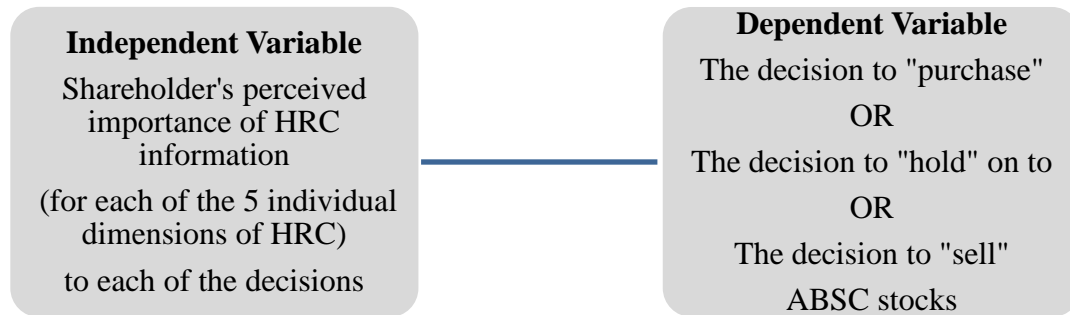


Figure 4.11. Variables for Hypothesis 7

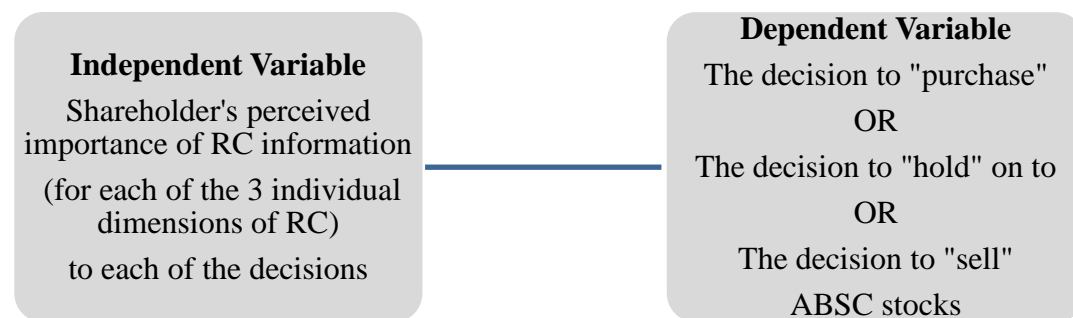


Figure 4.12. Variables for Hypothesis 8

### Discriminatory Analysis - Friedman's Test

For Research Question Four, the Friedman's Test, a non-parametric randomized analysis of variance, is used for the data analysis relating to both Hypotheses 7 and 8. The Friedman's Test is used in situations where the data are nominal or ordinal in orientation. This test is used to compare observations repeated on the same subjects. This is also called a non-parametric randomized block analysis of variance. This test is an alternative to the ANOVA, when the assumption of normality or equality of variance is not met. This, like many non-parametric tests, uses the ranks of the data rather than their raw values to calculate the statistic. If the p-Value is  $< 0.05$  for any of the sub-hypotheses for Hypothesis 7, then the sub-hypothesis is accepted and it can be concluded

that there exists a significant difference in mean importance attributed to the relevant dimensions of HRC among the decisions to purchase, hold on to, or sell ABSC stocks.

***4.2.5.5 Moderating the relationship between investment transaction decisions of ABSC shareholders and the influence of HRC and RC dimensions.***

There are a variety of data sources to which individuals may refer when considering the purchase of stocks from ABSC shares; some of these are available for purchase via the ASX and stock brokerage companies. These include highly specialized stock reports and investment analyst reports. Additionally, current and potential investors may investigate their prospective purchases by using information provided through newspapers, friends and family, financial planners and advisors, stock brokers, the internet, investment newsletters, accountants, work colleagues, magazines, radio, and other sources (ASX, 2007). Furthermore, any combination of these sources may be used, or not used, when contemplating the acquisition of ABSC shares.

The fifth pair of hypotheses (Hypothesis 9 and Hypothesis 10) tests whether differing sources of advice (including “media”, “family and friends” and “professional investment advisors”) and gender, age or education of individual shareholders have a significant moderating effect on the relationship between the individual shareholder’s perceptions of the importance of HRC and RC dimensions and the individual shareholder’s use of information on HRC and RC dimensions in ABSC stock transactions. For these hypotheses, the independent variable is information relating to the importance placed on information about the five HRC and three RC dimensions, to banking stock transaction decisions. This information is extracted from question six of the questionnaire (refer to Figure 4.4). The question presents respondents with 40 policy

statements for the dimensions of HRC and RC. They are asked how important each of the statements, or items, is to their ABSC share transaction decisions.

The dependent variable for Hypothesis 9 and Hypothesis 10 is the use of information about the dimensions of HRC and RC in ABSC stock transactions, as extracted from question one of the questionnaire (refer to Figure 4.3). Also for testing Hypothesis 9 and Hypothesis 10, the moderating variables, are sources of share investment advice (ASX, 2007) and gender, age and education of individual shareholders. The data relating to the moderating variables is extracted from the first part (refer to Figure 4.2) and from question two, of the second part of the questionnaire (refer to Figure 4.4). Also, question two of the questionnaire provides a list of 11 alternatives as sources of share investment advice as proposed by the ASX Shareholder Survey 2006 (ASX, 2007). The question asks respondents to indicate the importance of sources of advice on a scale from one to three. Figure 4.13 and Figure 4.14 help to define the relationship between the independent, dependent, and moderating variables for the effect of moderating variables upon the relationship between the use of HRC and RC dimensions in investment transactions and the importance of the dimensions.

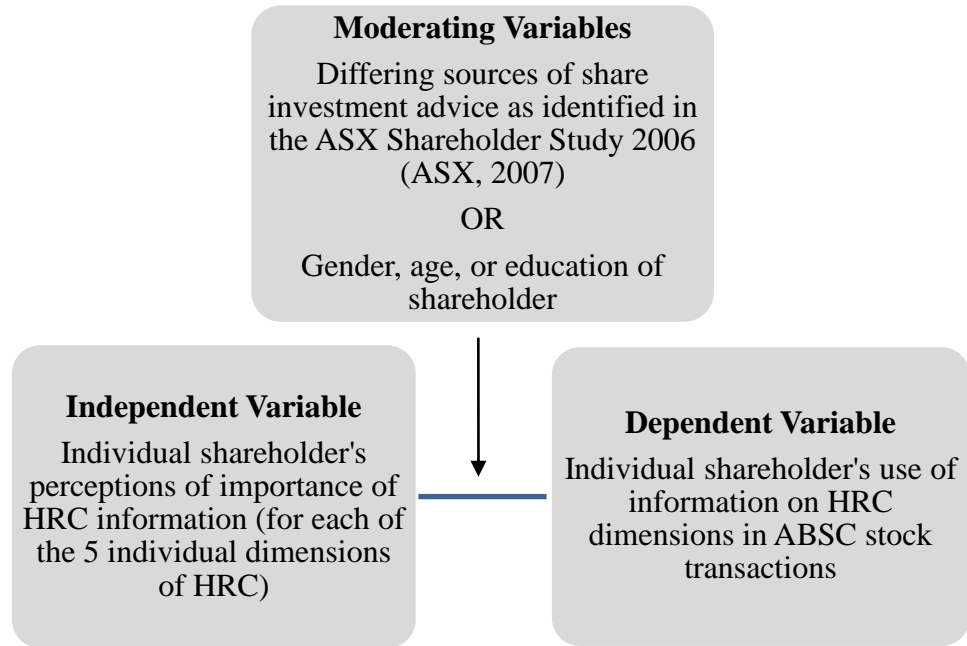


Figure 4.13. Variables for Hypothesis 9

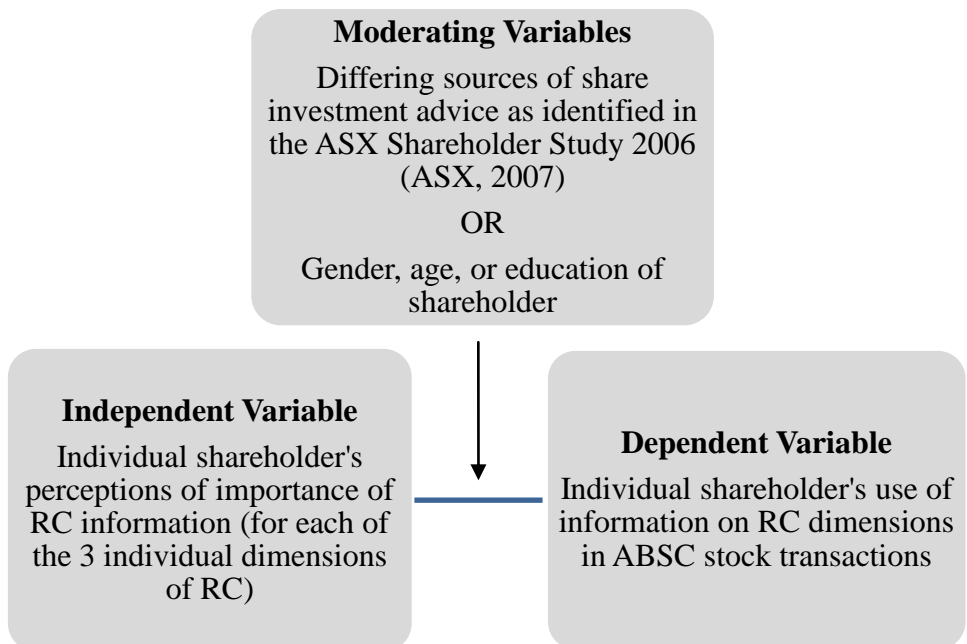


Figure 4.14. Variables for Hypothesis 10

### **Hierarchical Logistic Regression and Model Fit Change**

As stated previously, logistic regression is used to predict probability of occurrence. Hierarchical Logistic Regression involves testing multiple independent variables. In testing Hypothesis 9 and Hypothesis 10, Hierarchical Logistic Regression is used. In this, at Stage One, the initial model is tested with the dependent and independent variables and in Stage Two moderator variables are added to test if the addition of moderator variables significantly impacts the dependent variable by testing the significance of the Model Fit Change. If  $p\text{-Value} < 0.05$  for Model Fit Change in Stage Two, the Hypothesis can be accepted and it can be concluded that the moderators do significantly impact the use of HRC and/or RC information in the decision to transact on ABSC stocks.

### **4.3 Main Study Part Two – Disclosure on HRC and RC Dimensions in Corporate Annual Reports and its Relationship to Share Prices of ABSC**

The annual reports of corporations provide valuable investment information. These documents are created by the individual corporation responsible for their publication, about their own organizations. They are required by the federal government to be published and publically available (Australia, Treasury, 1999). They are to obtain and incur no financial cost to interested parties to do so. Additionally, Alwert, Bornemann, and Will (2009) found that business analysts reacted favourably to the addition of subsidiary IC reports to traditional annual reports, enabling more homogenous results in the credit ratings of companies and more homogenous results in the expert assessment of the future growth of companies. They found that disclosure of information on IC contributes to the improved transparency of organizations by allowing them to

demonstrate their unseen value and long term growth options (Alwert et al., 2009; Edvinsson & Malone, 1997).

Alwert, Bornemann, and Will (2009) confirm that IC information is evaluated by business practitioners including banks and financial institutions because they result in a more homogeneous evaluation of the company, considering more than just current financial performance. They suggested that by combining the annual report with the IC report, a company fulfils its requirement for efficient communication with the capital markets and, therefore, reduces risks of financial loss for investors, banks and small-to-medium enterprises. However, Alwert, Bornemann, and Will did not go so far as to suggest whether the IC report should be integrated into the annual report or whether it should be in the explanatory section of the annual report.

Both internal and external stakeholders represent groups legitimately requiring IC information about corporations. However, it is assumed that management, staff, customers, suppliers and investors have different perceptions about the importance of IC information disclosure. Concerning the investigation of the purchase decisions of investors within the Australian banking sector, and in investigating the conclusions of Alwert, Bornemann, and Will (2009) and Edvinsson and Malone (1997), the researcher hosted Focus Group B (this Focus group is named as 'B' to avoid confusion with the Focus group A used in the pilot study). Focus Group B was required to perform a thematic content analysis of the corporate annual reports of the eight banking institutions investigated in this research. This is needed to identify the HRC and RC information that is provided to potential buyers, by the corporations themselves.



For the first part of the main study, the research aims are to provide an understanding of the importance of HRC and RC dimensions, and to provide an understanding of the impact of sources of share investment advice and of demographic variables on the share investment choices of shareholders. Following on from this, is to test the second part of the main study.

Given that HRC and RC dimensions are likely considered by shareholders in their investment decisions (Ballow et al., 2004; Bontis & Fitz-Enz, 2002; Bukh, 2003; Chen et al., 2005; Guthrie et al., 2006; Lev, 2000; Saenz, 2005), it is necessary to understand whether ABSC are actually disclosing information on their HRC and RC dimensions and if so, to what extent. Gaining an understanding of the differences between ABSC in the quality and percent frequency of reporting HRC and RC dimensions, in their corporate annual reports, is a vital first step in making a link between reporting and share price performance.

This leads to the remaining two research aims. The first of which is to determine if information on HRC and RC dimensions is provided to investors, to develop an understanding of the differences in how ABSC report on HRC and RC dimensions. The final research aim is designed to determine if there exists a link between the provision of specific information about HRC and RC dimensions and ABSC share price appreciation. By demonstrating a link between the two, the research has the potential to provide the stimulus to ABSC to further voluntarily disclose such information, leading to greater transparency and a more level playing field for both individual and corporate investors alike. Figure 4.15 presents the aims of this part of the study and the study design.

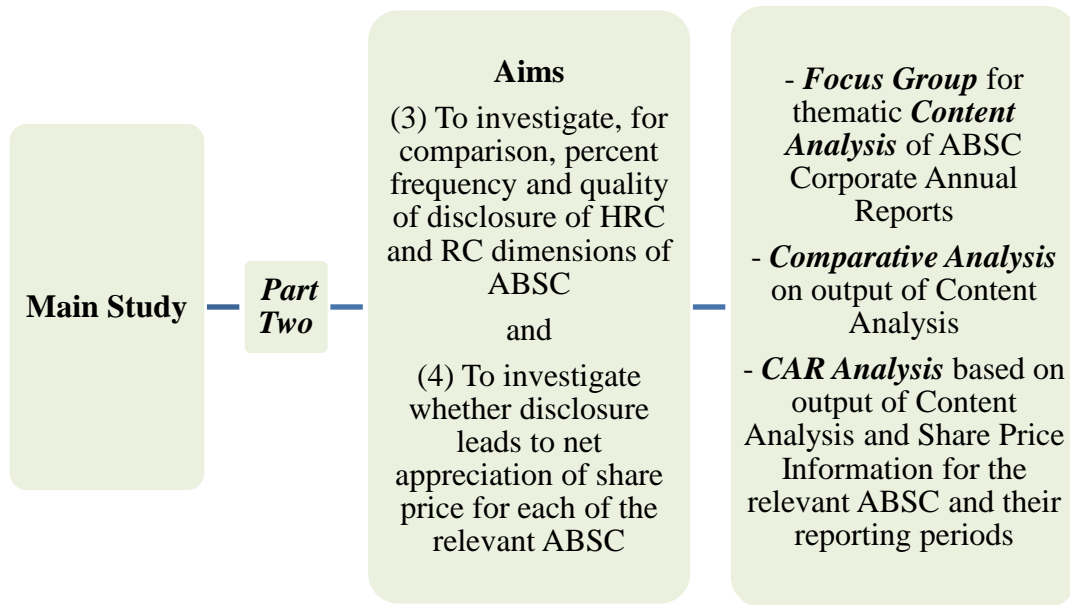


Figure 4.15. Design of part two of the main study

#### 4.3.1 Research questions, hypotheses, and sub-hypotheses.

In relation to the second part of the main study, this research study recognises that researchers have long argued that the measurement and reporting of intangible resources, such as IC, is critical to corporations in order to adopt a strategic orientation (Flamholtz et al., 1998). They contend that knowledge-based, IC rich companies, who do not report on their IC, suffer unjustly by appearing to be less valuable than they are. They argue for the measurement of IC, a necessary prerequisite for managing an organization and for communicating its value to all its stakeholders. For example, Kaye (1999) contends that SHRM is a system-wide intervention linking HRM to an organization's strategic planning and cultural transformation. SHRM considers the integration of employee needs and organizational culture with organizational strategy to create long-term, sustained competitive benefit. Corporations recognised for achieving sustained competitive

advantage are those with leaders who have a strategic focus, who actively work to support organizational strategy and to encourage a SHRM perspective.

This second part of the main study also considers that the IC of an organization is regarded as having the potential to impact positively on the market value of a company (Chen et al., 2005) and on its financial performance (Bontis, 1998, 2002; Bontis & Fitzenz, 2002). In his research findings, Bontis (1998, 2002) identified a causal link between a company's IC and its business performance. Chen, Cheng, and Hwang (2005) have also successfully established a positive link between IC and market value. However, regardless of the value IC represents to a corporation, public legislation in Australia, as in most countries, does not require IC information disclosure in corporate annual reports. Due to this fact, there exists a deficiency of disclosure on strategically important organizational resources and corporate behaviour (Guthrie et al., 2005). Corporations fail to meet the expectations and needs of the information users and, as a result, individual investors find it difficult to analyse and compare the information that they are provided. Therefore, since a causal link has been identified between IC and business performance, researchers argue for the inclusion of IC information in the corporate annual reports, either directly or as subsidiary reports (Chen et al., 2005; Guthrie et al., 2005).

Australian researchers have used a number of methods, including content analysis methods, questionnaires, and event study windows to investigate the IC disclosure practices of Australian companies and the share market reactions to IC information disclosure. As a result, they argue for improved transparency in the corporate annual reports of Australian companies to help all information users to analyse and interpret data to make informed investment choices (Royal & O'Donnell, 2008). Researchers argue

that Australia continues to lag behind other countries in the IC disclosure practices of listed companies (Guthrie & Petty, 2000). Researchers suggest that by including qualitative information on tacit IC assets value is added, value that is needed to ensure the systematic use of such information by stakeholders in their investment choices (Royal & O'Donnell, 2008). Researchers suggest that disclosure on price-sensitive IC information, in the corporate annual reports does influence the share prices of the relevant stocks (Dumay & Tull, 2007) and they conclude that stakeholders, such as members of CPA Australia, would prefer companies to be more transparent and provide more information about their IC (Petty et al., 2008). Notably, what is missing from the research is information about what individual investors are looking for with regard to HRC and RC disclosure within the annual reports; what “mum and dad” investors are calling for. This is what this current research study provides.

The objective of Hypothesis 11 and Hypothesis 12 is to determine whether ABSC similarly report the information on HRC and RC dimensions in their corporate annual reports. This current research study seeks to shed some light on whether the dimensions of HRC and RC are perceived by ABSC shareholders to be contained in the corporate annual reports of ABSC. This is to determine if the assumption that the information is included in the annual reports is legitimate and useful to investors. Quite specifically, this research also relates to the significance between being “Bank of the Year 2008” and reporting RC information, to conclude whether there is a significant link between the two variables. Testing these two hypotheses has the potential to present empirically the efforts of corporations to disclose information about their HRM policies and their

strategic orientation, and to present a snapshot of what an awarded ABSC reports on in terms of HRC and RC dimensions information.

This second part of the main study is concerned with testing the hypotheses relating to the quality and frequency of the inclusion of HRC and RC dimensions information in the annual reports and the impact of HRC and RC dimensions on share prices. The associated research questions, and their related hypotheses and sub-hypotheses are presented here:

### **Research Question Six**

How does the CBA, Money Magazine's "Bank of the Year 2008", compare to the other banks in the provision of HRC and RC information in the corporate annual reports?

### **Hypothesis 11**

The CBA has significantly higher frequency and quality of disclosure on HRC dimensions information in the corporate annual reports, in comparison to the other seven ABSC.

#### **Sub-hypothesis 11.1**

The CBA has significantly higher perceived frequency of disclosure on HRC dimensions information in the corporate annual reports, in comparison to the other seven ABSC.

#### **Sub-hypothesis 11.2**

The CBA has significantly higher perceived quality of disclosure on HRC dimensions information in the corporate annual reports, in comparison to the other seven ABSC.

## **Hypothesis 12**

The CBA has significantly higher frequency and quality of disclosure on RC dimensions information in the corporate annual reports, in comparison to the other seven ABSC.

### **Sub-hypothesis 12.1**

The CBA has significantly higher perceived frequency of disclosure on RC dimensions information in the corporate annual reports, in comparison to the other seven ABSC.

### **Sub-hypothesis 12.2**

The CBA has significantly higher perceived quality of disclosure on RC dimensions information in the corporate annual reports, in comparison to the other seven ABSC.

Event study windows help researchers examine stock market reaction to the firm-specific events. Research conducted by Barnes and Ma (2001), Desai (2000), Dumay and Tull (2007), and Lonie et al. (1996) provide the precedent for this part of the research study. An event study window is used in assessing if IC disclosure by the ABSC, within the context of their annual reports, has a positive relationship with the share prices of the banks for the period in which they were studied.

Based on the research, the assumption is that corporations that create strategic and tactical plans to voluntarily disclose IC information, through their corporate annual reports, are potentially rewarded in their relationships with investors and with the capital markets (Chen et al., 2005; Dumay & Tull, 2007; Guthrie & Petty, 2000; 2008; Royal & O'Donnell, 2008). However, past research has shed no light on the relationship between

the reporting of information about HRC and RC dimensions in the corporate annual reports of ABSC and the share prices of those ABSC.

As stated previously, a corporation's IC is considered to have the potential to impact positively on the market value and on the financial performance of the corporation (Bontis, 1998, 2002; Bontis & Fitz-enz, 2002; Chen et al., 2005). However, this study investigates, specifically, the HRC and RC dimensions of IC. The objective of Hypothesis 13 and Hypothesis 14 is to present quantitative evidence on the relationship between the reporting of information about HRC and RC dimensions in the corporate annual reports of ABSC and the share prices of those ABSC. By filling this gap in the research, ABSC may be motivated to voluntarily disclose the information in an effort to affect a positive result in their share prices, and, as a result, make information availability fairer to all investors, professional investors and "mum and dad" investors.

### **Research Question Seven**

For ABSC, is there a positive relationship between the provision of information on HRC and RC dimensions in the corporate annual reports and the corporation's share price?

### **Hypothesis 13**

There is a positive relationship between the provision of information on HRC dimensions in the corporate annual reports and the corporation's share price

#### **Sub-hypothesis 13.1**

There is a significant positive relationship between the perceived frequency of reporting on HRC dimensions in the corporate annual reports of ABSC and the CAR of the related stocks during the relevant reporting period.

### **Sub-hypothesis 13.2**

There is a significant positive relationship between the perceived quality of reporting on HRC dimensions in the corporate annual reports of ABSC and the CAR of the related stocks during the relevant reporting period.

### **Hypothesis 14**

There is a positive relationship between the provision of information on RC dimensions in the corporate annual reports and the corporation's share price?

#### **Sub-hypothesis 14.1**

There is a significant positive relationship between the perceived frequency of reporting on RC dimensions in the corporate annual reports of ABSC and the CAR of the related stocks during the relevant reporting period.

#### **Sub-hypothesis 14.2**

There is a significant positive relationship between the perceived quality of reporting on RC dimensions in the corporate annual reports of ABSC and the CAR of the related stocks during the relevant reporting period.

#### **4.3.2 Research sample.**

The participants in Focus Group B (N = 7) were simply individual shareholders, not corporate investors or professional stock traders. It is acknowledged that none of the participants in Focus Group B were participants in Focus Group A of the pilot study. Finally, it is ensured that all participants in Focus Group B owned shares in at least one of the eight corporations whose annual reports were reviewed. The sample range in age from 22 to 59 years, these included two housewives, two retail salespersons, an accountant, a bookkeeper, and university student.



The research sample under analysis for this part of the main study is the group of eight ABSC listed on the ASX 200 at the end of the 2006/2007 financial year. The 2006/2007 financial year reports were the most recent reports available at the time (2008) of conducting the focus group to apply the thematic content analysis. The names of those members, and their ASX stock codes, are shown in Table 4.6.

Table 4.6

*ABSC and their stock codes as per the ASX 200 as at the end of the financial year 2006/2007*

Bank Name	Stock Code
Adelaide Bank Limited	ADB
Australia and New Zealand Banking Group Limited	ANZ
Bendigo Bank Limited	BEN
Bank of Queensland Limited	BOQ
Commonwealth Bank of Australia	CBA
National Australia Bank Limited	NAB
St.George Bank Limited	SGB
Westpac Banking Corporation	WBC

The CBA is the sample bank chosen to be compared against the other seven ABSC based on its public profile and reputation as Money Magazine’s “Bank of the Year 2008”. This is necessary to determine if there is a positive relationship between being the “Bank

of the Year” and the reporting to shareholders of information regarding HRC and RC dimensions.

The research sample under analysis for testing the relationship between HRC and RC dimensions and the share prices of ABSC is the group of eight ABSC listed on the ASX 200 at the end of the 2006/2007 financial year. The share prices of those ABSC are extracted from the Computershare and Commonwealth Securities websites. The share prices under investigation are for the event windows linked to the reporting periods of each of the ABSC.

#### **4.3.3 Tools.**

##### ***4.3.3.1 HRC and RC dimensions disclosure by CBA, “Bank of the Year 2008”, in comparison to disclosure by other ABSC.***

In conducting the thematic analysis of the corporate annual reports, the seven members of the focus group used the predetermined operational definitions, those derived from the pilot study, Focus Group A, for application. The group’s involvement in the initial content analysis study, involves discussion and reporting, in writing or by highlighting, on the perceived frequency and perceived quality of HRC and RC dimensions disclosure in the annual reports of the eight ABSC listed on the ASX200 as at financial year 2006/2007. The output is used for analyses for both parts of this, the second part of the main study.

##### ***4.3.3.2 HRC and RC dimensions and the share prices of ABSC.***

Event windows have been used successfully by past researchers when assessing the impact of specific events on share prices (Barnes & Ma, 2001; Desai, 2000; Dumay & Tull, 2007; Lonie, Abeyratna, Power, & Sinclair, 1996). An event window allows a

researcher to study an occurrence within a specified stated time frame, a time frame that relates to the occurrence of a specific event (Barnes & Ma, 2001). In much the same way as research conducted by others, this research study also utilises an event window to empirically assess the share price movements of the banks to provide a relative comparison between the fluctuations of the banks stock prices in an effort to identify a positive relationship between HRC and RC reporting and stock prices (Barnes & Ma, 2001; Desai, 2000; Dumay & Tull, 2007; Lonie et al., 1996). Their share price increases and decreases within their individual reporting periods provide the variables needed for CAR analysis.

#### **4.3.4 Procedure.**

This part of the main study is performed with the data available from the content analysis of the corporate annual report inclusion of HRC and RC dimensions information. This includes the use of a comparative analysis of the corporate annual report information, followed by a CAR analysis of share prices, to determine the significance of the relationship between the inclusion of HRC and RC dimensions information in annual corporate reporting and share prices of ABSC.

##### ***4.3.4.1 HRC and RC dimensions and the CBA “Bank of the Year 2008” -***

##### ***Comparative analysis of the corporate annual report information.***

Following on from the thematic content analysis, a comparative analysis is conducted on the output. The CBA is chosen to be compared against the other ABSC as it was, at the time of analysis, recognized as Money Magazine’s “Bank of the Year 2008”. This represents the period of time just after the 2006/2007 reporting period. Comparison

on HRC and RC dimensions reporting is used to determine the significance of being “Bank of the Year” in terms of reporting.

In selecting the candidates to participate in Focus Group B, engaged to analyse the content of the aforementioned annual reports, participants were chosen with the acknowledgement that the larger population which the sample represents has its one *a priori* being individuals familiar with corporate annual reports, with a general understanding of the layout, format, and intent of the content of annual reports. The operational definitions of HRC and RC, developed through Focus Group A in the pilot study, are used in this, the content analysis by Focus Group B. The members of the focus group were asked to apply the operational definitions in the thematic content analysis of the annual reports of the eight Australian banks investigated as at the end of the 2006/2007 financial year.

Throughout this entire research study, participants involved in the focus groups or in completing any of the questionnaires provided to them, are required to provide informed, written consent in accordance with the HREC requirements. These requirements were met prior to the first Focus Group B meeting held.

During the first discussion, the Focus Group B participants were introduced to one another by the researcher, being unknown to each other, although all known to the researcher. The researcher provided a brief overview of the purpose of the focus group and the goals the researcher sought to attain from the participants and their contributions. Each participant was given a written copy of the definitions of HRC and RC, and of the dimensions of each, as finalized by Focus Group A. HRC was represented through the dimensions of employee recruitment, employee retention, employee values, development

of management and leadership qualities, and developing employee problem solving skills. RC was represented through the dimensions of customer capital, supplier chain relations and competitors. The participants became familiar with the terms as defined by reading the definitions and discussing them; clarifying any of the wording that was either unclear or unfamiliar to them. Each participant was then given copies of the corporate annual reports of two of the eight ABSC listed on the ASX 200 at the end of the 2006/2007 financial year. They were asked by the researcher to review the two of them for one hour, individually, without discussion. They were allowed to make notes on the documents relating to what and where HRC and RC was reported, to be able to reference their notes during the focus group discussion. Upon completion of the individual review, the reviewed annual reports of the companies were discussed. The remaining six annual reports were distributed and reviewed in the second and third meetings, three on each occasion.

During the first meeting, the participants reviewed the annual reports of CBA and WBC and discussed where and what HRC and RC information was evident to each of the participants. During the second meeting, they analysed the annual reports of ADB, ANZ, and BEN. During the third meeting, they analysed the reports of BOQ, NAB, and SGB.

At each session, the reports were initially reviewed by individuals without discourse; the second hour was spent in discussing and making a written list of their findings. There was no formal break taken during any of the two hours sessions; however, individuals were free to attend and leave the meetings as necessary. None left during any meeting and failed to return.

The participants were asked to identify the inclusion of information on HRC and RC dimensions identified within the annual reports. They identified what HRC and RC information they perceived was provided by each of the banks in their financial year 2006/2007 annual reports and how frequently, based on the number of instances the information was cited, the HRC and RC information they perceived was provided in the corporate annual reports. Also, based on their perceptions, they were asked to identify those banks that had provided HRC and RC information in their annual reports and they were asked to rank them against the others in terms of perceived quantity and quality of information.

At each focus group meeting, of which there were three, participants in Focus Group B read through the annual reports and manually highlighted the HRC and RC information they evidenced in the reports. The outcomes of the discussions of Focus Group B were documented by the researcher and a set of data, based on the detection and manual coding of statements relating to HRC and RC information, was collected and referred to the perceived frequency. Perceived frequency relates to the number of times the information of HRC and RC was perceived to have been reported throughout all the corporate annual reports. Quantitative analysis of the collected data provided the researcher the ability to perform content analysis and identify the frequency of use of and references to the HRC constructs in the 2006/2007 annual reports of each organization. Subsequently, the members discussed their individual findings with the other participants and a list of statements relating to the HRC and RC dimensions was compiled for each of the reports analysed. The researcher compiled the summary of information into a single document. The summarized information on the perceived number of times companies

reported HRC and RC dimensions information in the annual reports of the eight Australian banks was tallied manually.

As for the perceived quality of the HRC and RC information provided, participants used the discussion to conclude how each of the banks ranked, relative to the others, on the value of the HRC and RC information provided. Members of Focus Group B were asked to rank, collectively, for each of the eight dimensions of HRC and RC, the quality of the information provided relative to the quality of information provided by each of the others of the eight banks. They were asked to rank the banks on each dimension from 1, being the top-ranked and best on quality disclosure, to 8, being the bottom-ranked on quality disclosure.

#### ***4.3.4.2 HRC and RC dimensions and the share prices of ABSC - CAR analysis of share prices.***

To analyse the relationship between the HRC and RC dimensions and the share price of each bank, CAR analysis is used in this part of the research study. This work is performed using the information extracted from the 2006/2007 financial year corporate annual reports of all eight ABSC listed on the ASX 200 at the end of the 2006/2007 financial year. As with Dumay and Tull (2007), the CAR occurring during the event window is investigated to evaluate whether the market reacts favourably to disclosure. An event window period of +5 to -3 days of release of the corporate annual report, for each of the ABSC being investigated is used. This is to include the period of anticipation and speculation and, the period in which the information provided is sifted through by shareholders. By giving an adequate period of time for the shareholders to assess and

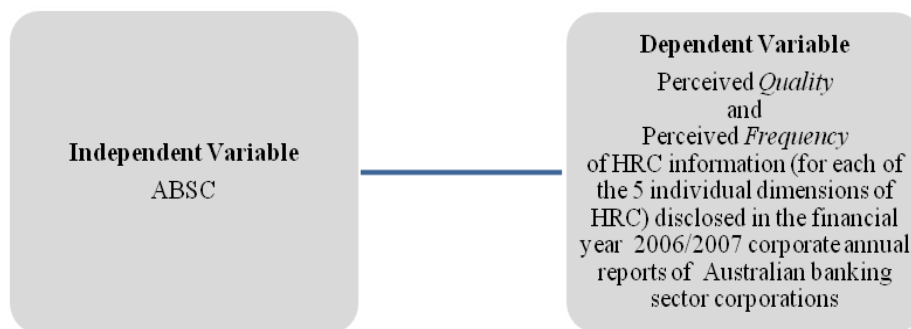
react to the information disclosed in the corporate annual reports, the potential for measuring only a knee-jerk reaction is diminished.

#### **4.3.5 Data analysis.**

##### ***4.3.5.1 HRC and RC dimensions and the CBA “Bank of the Year 2008”.***

The purpose of the content analysis is to obtain information regarding the frequency and quality of HRC and RC dimensions reported in each of the annual reports of eight banks represented in the list of ABSC. Output from the content analysis of ABSC corporate annual reports for the financial year 2006/2007 is used for the analysis for this part of the research.

The sixth pair of hypotheses (Hypothesis 11 and Hypothesis 12) is concerned with determining whether there is a significant difference between the CBA and the other ABSC in the provision of information about HRC and RC dimensions in the corporate annual reports. For these hypotheses, the dependent variables are perceived frequency and perceived quality of reporting on HRC and RC dimensions. The independent variable is each one of the eight ABSC under investigation in this research study. Figure 4.16 and Figure 4.17 define the variables for Hypothesis 11 and Hypothesis 12.



*Figure 4.16.* Variables for Hypothesis 11



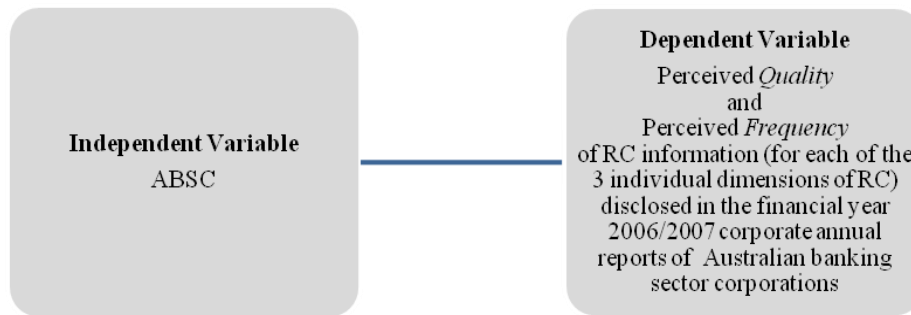


Figure 4.17. Variables for Hypothesis 12

### **Discriminatory Analysis - Friedman's Test**

For Research Question Six, the Friedman's Test, a non-parametric randomized block analysis of variance, is used for the data analysis relating to both Hypotheses 11 and 12. Used in situations where the data is nominal or ordinal in orientation, this test is used to compare observations repeated on the same subjects. An alternative to the ANOVA, when the assumption of normality or equality of variance is not met, this, like many non-parametric tests, uses the ranks of the data rather than their raw values to calculate the statistic. For the hypothesis to be accepted, the p-Value must be  $< 0.05$ .

#### ***4.3.5.2 HRC and RC dimensions and the share prices of ABSC.***

Among the aims of this research study was to investigate the relationship between the perceptions of HRC and RC dimensions information and the share prices of ABSC. This is first to identify which of the eight ABSC report information on their HRC and RC in their annual reports, what they reported on their HRC and RC, and to what extent it was reported. In addition to this, comparisons are also made between the ABSC based on their share price movements and CAR during their related corporate reporting periods. To carry this out, a list of the relevant share prices is needed. A list of the relevant share

prices of the ABSC stocks, used for analysis in this part of the study, is provided in Figure 4.18. The information was sourced from both Computershare and Commonwealth Securities websites.

<b>ADB</b> ANNUAL REPORT 31/10/2007									
DATE	26/10	29/10	30/10	<b>31/10</b>	1/11	2/11	5/11	6/11	7/11
PRICE	14.66	14.70	14.80	14.67	15.00	14.90	14.46	14.42	14.42
<b>ANZ</b> ANNUAL REPORT 14/11/2007									
DATE	9/11	12/11	13/11	<b>14/11</b>	15/11	16/11	19/11	20/11	21/11
PRICE	27.95	27.40	28.38	28.70	28.14	27.70	28.05	28.34	27.83
<b>BEN</b> ANNUAL REPORT 27/09/2007									
DATE	24/09	25/09	26/09	<b>27/09</b>	28/09	1/10	2/10	3/10	4/10
PRICE	13.79	13.63	13.53	13.65	13.70	13.71	13.91	13.77	13.65
<b>BOQ</b> ANNUAL REPORT 07/11/2007									
DATE	2/11	5 /11	6/11	<b>7/11</b>	8/11	9/11	12/11	13/11	14/11
PRICE	19.10	18.76	19.30	19.29	18.80	18.27	17.90	18.39	18.23
<b>CBA</b> ANNUAL REPORT 29/08/2007									
DATE	24/08	27/08	28/08	<b>29/08</b>	30/08	31/08	3/09	4/09	5/09
PRICE	54.81	55.20	54.62	54.20	53.86	55.15	55.27	55.65	55.10
<b>NAB</b> ANNUAL REPORT 07/12/2007									
DATE	4/12	5/12	6/12	<b>7/12</b>	10/12	11/12	12/12	13/12	14/12
PRICE	39.10	38.90	39.06	39.22	38.88	38.91	39.16	39.18	38.45
<b>SGB</b> ANNUAL REPORT 31/10/2007									
DATE	26/10	29/10	30/10	<b>31/10</b>	1/11	2/11	5/11	6/11	7/11
PRICE	36.23	36.35	35.33	36.35	37.10	36.76	36.25	36.84	37.56
<b>WBC</b> ANNUAL REPORT 08/11/2007									
DATE	5/11	6/11	7/11	<b>8/11</b>	9/11	12/11	13/11	14/11	15/11
PRICE	30.15	30.46	29.80	28.98	28.62	28.00	28.35	28.71	28.22

Stock share prices are expressed in AUD

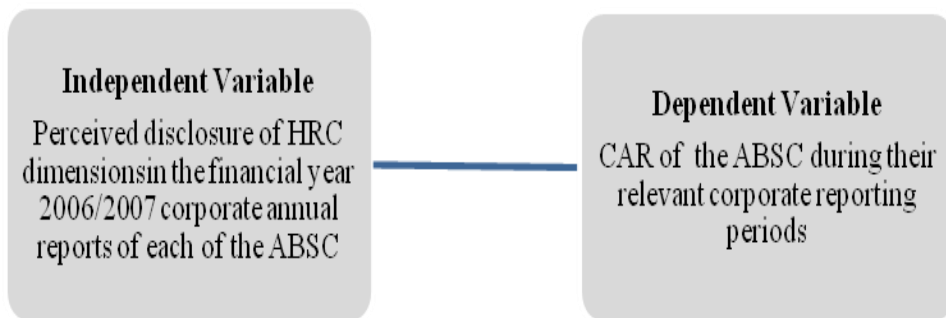
**Sources:**

[www.au.computershare.com](http://www.au.computershare.com), accessed 21/07/08

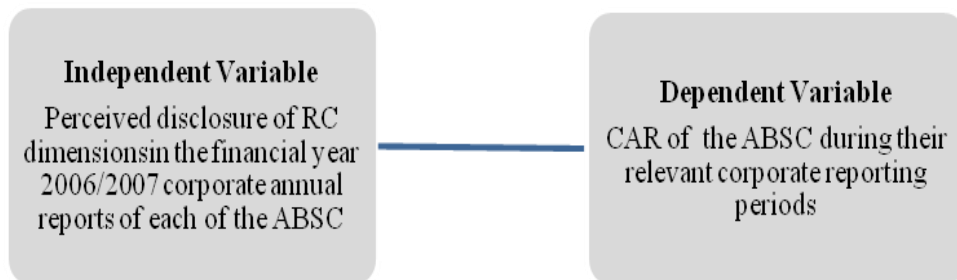
[www.commsec.com.au](http://www.commsec.com.au), accessed 21/07/08

*Figure 4.18.* Share prices for banks listed on the ASX 200, as at end financial year 2006/2007, for disclosure periods of +5 to -3 days (relating to release of annual reports)

The seventh pair of hypotheses (Hypothesis 13 and Hypothesis 14) is concerned with testing whether there is a positive relationship between the provision of information on HRC and RC dimensions in the corporate annual reports of ABSC and the corporation's share price. The independent variables for both hypotheses are the frequency and the quality of reporting on HRC and RC dimensions in the corporate annual reports of each of the ABSC representing the sample group. Also, for both hypotheses, the dependent variable is the CAR of the ABSC. Figure 4.19 and Figure 4.20 set out the variables for Hypothesis 13 and Hypothesis 14.



*Figure 4.19.* Variables for Hypothesis 13



*Figure 4.20.* Variables for Hypothesis 14

The CAR on the share price of ABSC is used to measure its change in market value. This study uses the same method to determine CAR as employed by Dumay and Tull (2007). For the event window +5 to -3 days of releasing the annual report, the cumulative return (stock) is calculated by applying the company's closing share price at Day +5 and subtracting the closing share price at Day -3. That is then divided by the closing share price at Day -3 and the total is then converted into a percentage by multiplying the figure by 100. Figure 4.21 demonstrates this process.

$$\text{Cumulative return (Stock)} = \frac{(\text{Closing price (Day +5)} - \text{Closing price (Day -3)}) \times 100}{\text{Closing price (Day -3)}} \quad 1$$

Therefore, **Cumulative return (Banking sector stock on ASX 200 as at 30 June 2007)**

$$= \frac{(\text{Total of closing prices (Day +5)} - \text{Total of closing prices (Day -3)}) \times 100}{\text{Total of Closing prices (Day -3)}} \quad 1$$

*Figure 4.21.* Process to determine cumulative return (stock) and cumulative return (banking sector stock on ASX 200 as at 30 June 2007)

To calculate each company's CAR for the event window +5 to -3 days of releasing the annual report, the cumulative return (banking sector stock on ASX 200 as at 30 June 2007) is subtracted from the cumulative return (stock). Figure 4.22 demonstrates the process.

$$\text{CAR of each stock} = \text{Cumulative return (Stock)} - \text{Cumulative return (Banking sector stock on ASX 200 as at 30 June 2007)}$$

*Figure 4.22.* Process to determine CAR of each bank stock

### **Hypothesis Rank Correlation**

For both Hypothesis 13 and Hypothesis 14, Hypothesis Rank Correlation test is used to assess the relationship between frequency and quality of HRC and RC information disclosure, CAR, and p-value. The correlations are used to identify whether there exists a positive relationship between reporting on the HRC and RC dimensions and share price appreciation of the related ABSC stocks. The implication is that it should be easier to convince companies to be more transparent and to provide their stakeholders with more information on their HRC and RC dimensions if they held the view that such disclosure would be rewarded with an appreciation in the corporation's share price.

### **4.4 Summary**

The main study is set out in two distinct parts. The first part relates to the importance of HRC and RC dimensions to shareholders in their investment decisions. The second part relates to the disclosure practices of ABSC in relation to HRC and RC dimensions and to the implications of disclosure on share prices of ABSC.

The main study is undertaken to accomplish four distinct research aims. Each research aim is achieved through the testing of a number of hypotheses. The first two research aims relate to the first part of the main study and require the testing of the hypotheses relating to research questions one to five. This is made possible by analysing the output of the questionnaire. The questionnaire provides the necessary data as the output of the questionnaire provides insight into the perceptions and behaviours of the individual shareholders of ABSC.

The second part of the main study is concerned with the final two aims of the research study. The third research aim involves testing the hypotheses relating to

research question six. This is made possible by analysing the output of the content analysis of the ABSC corporate annual reports for the financial year 2006/2007. The content analysis is conducted through the use of Focus Group B, a focus group of seven individual shareholders of ABSC. The data extracted from the analysis makes it possible to compare disclosure practices of the CBA, “Australian Bank of the Year 2008”, to the disclosure practices of the other seven ABSC identified for this study. Finally, the fourth research aim involves an event window study of the share price movements of the eight ABSC. This is for the event window relating to the release of the 2006/2007 financial year annual reports of each of those individual banks. This process makes it possible to measure for potential share price appreciation, within the period of the corporate annual reporting disclosure. The relationship between disclosure on HRC and RC dimensions within the corporate annual reports of ABSC and the share price of the ABSC stocks is assessed in a way that is simple, clear, and relevant to this research study. Chapter Five provides a discussion of the results of the main study.

## **Chapter Five**

### **Main Study Results**

The purpose of this chapter is to provide the results of data analysis within the main study. Analysis of the data followed the testing of each of the fourteen hypotheses, developed to investigate the seven research questions. A range of statistical tests were used for analysis. The first part of the study included the use of ANOVA and post hoc analysis, t-test, logistic regression, and discriminatory analysis. The second part of the study included the use of a comparative analysis on the data obtained from the content analysis and a CAR analysis on the share prices of ABSC. The statistical tests and the variables tested were discussed in detail in Chapter Four. The test results are set out in detail in this chapter.

#### **5.1 Aims of Main Study**

This research study was undertaken to achieve four specific aims (refer to Figure 4.1). Just to recapitulate, the first part of this study focuses on two of the four aims. These include to investigate the perceptions of individual investors about information concerning the IC components of HRC and RC, and to provide an assessment of the relationship between the disclosure of HRC and RC and its impact on share value, as share market volatility and share price fluctuation are issues that impact all investors.

The second part of the main study focuses on the remaining two aims. These aims include, to investigate if, in the corporate annual reports of ABSC, information on HRC and RC dimensions is provided to investors, seeking an understanding of the differences in how ABSC report on HRC and RC dimensions, and, to understand the sources of share investment advice individual investors turn to in their investment decisions.

A questionnaire was used for a large component of this study (for Part One). The questionnaire was used to investigate demographic information, shareholder perceptions, and shareholder behaviour relating to the first five research questions and their related hypotheses. The demographic information obtained from the questionnaire was discussed in Chapter Four. This chapter focuses on the results of the testing of hypotheses.

## **5.2 Demographic Results**

The demographic data captured in this research study included descriptive measures on gender, age, and education of the research participants. While demographic results are not presented here, all are discussed in section 4.1.2.1 and the conclusions regarding the demographic data, drawn from the research, are tested for their moderating influence on the perceptions and investment behaviours of investors. This is discussed further in section 5.3.1.5.

## **5.3 Results of Testing Hypotheses**

This section deals with the results of hypotheses testing for the first part of the main study. These include tests of: (1) the relationship between ownership in ABSC and shareholder perceptions about the importance of HRC and RC dimensions, (2) the relationship between shareholder perceptions about the importance of HRC and RC dimensions and the investment decisions of those shareholders regarding ABSC, (3) the comparison of ABSC on the quality and percent frequency of disclosure of HRC and RC dimensions information in their corporate annual reports of ABSC, and (4) the relationship between disclosure on HRC and RC dimensions and share prices of ABSC.



The data for analysis is extracted from a number of sources including the questionnaire; the content analysis of the financial year 2006/2007 corporate annual reports of the eight ABSC stocks investigated, and the list of share prices of the ABSC stock during the event window +5 to -3 days of release of their corporate annual reports.

### **5.3.1 Part One - Importance and use of HRC and RC dimensions.**

Part One investigated how important the “mum and dad” shareholders of ABSC perceived HRC and RC dimensions to be and how they used the information relating to those dimensions. This was necessary to assess the impact of their perceptions on their investment decisions, especially in the case of purchasing, holding on to, and selling shares in ABSC. Furthermore, Part One investigated how individual shareholder perceptions, sources of share investment advice individual investors refer to in making their share investment choices, and the demographic profiles of shareholders, impacted on their investment decisions.

As such, Part One was designed to provide answers to five research questions and, as a result, tested a total of ten related hypotheses. Each of the ten hypotheses is made up of a number of sub-hypotheses relating to each of the relevant variables. This section deals with the various hypotheses findings.

#### ***5.3.1.1 Relationship between shareholders of ABSC and their perceptions about HRC and RC dimensions.***

In assessing differences in the perceptions of individual shareholders of the importance of HRC and RC dimensions between ownership of stocks in the different ABSC, One-way ANOVA (Analysis of Variance) was used. This was to test the statistical significance of the relationship between the variables of ownership in specific

ABSC and shareholder perceptions about the importance of HRC and RC dimensions. Since One-way ANOVA tests the differences in a single interval dependent variable between two, three, or more groups formed by the categories of a single categorical independent variable, it was used to analyse the information captured in this part of the research undertaken.

After ANOVA testing was concluded, a more stringent post hoc test, Bonferroni test (Burns & Burns, 2008), was also conducted on the data. As there were four groups of ABSC shareholders being compared in these hypotheses, the research required this pair-wise comparison to determine in which pair of ABSC shareholders there was a statistically significant difference (Burns & Burns, 2008). This is because sometimes, even though the overall F-test is found to be statistically significant at a 95 percent confidence level, none of the pairs of variables analysed can be found to be significant. This is due to a stringent level of significance applied in the Bonferroni test.

Hypotheses 1 was concerned with testing whether shareholders of Australia's four biggest banks (CBA, WBC, NAB, and ANZ) have significant differences in perceptions of the importance of HRC dimensions in the decision to purchase ABSC stock. For this hypothesis, testing was conducted on each of the independent variables, ownership of shares in only one of the big four banks.

Data extracted from the questionnaire included the necessary information on the share ownership of respondents in relation to ABSC. In relation to this investigation, it was determined that 23.08 percent of respondents indicated they held shares in only CBA, 5.99 percent of respondents indicated they held shares in only WBC, 14.53 percent

of respondents indicated they held shares in only NAB, and 6.84 percent of respondents indicated they held shares in only ANZ (refer to Table 5.1).

Table 5.1  
*Stock ownership of respondents relating to the eight ABSC*

Bank	Ownership	Frequency	Percent
CBA	Yes	27	23.08
	Yes With Other Banks	42	35.90
WBC	Yes	27	05.99
	Yes With Other Banks	19	16.24
NAB	Yes	27	14.53
	Yes With Other Banks	37	31.62
ANZ	Yes	27	06.84
	Yes With Other Banks	41	35.04

For this main study, each hypothesis in itself became a test of numerous sub-hypotheses. In testing Hypothesis 1, One-Way ANOVA was used for testing sub-hypotheses 1 (a) to 1 (e). The dependent variables were the responses about the importance of the HRC dimensions to deciding to purchase bank stocks. These variables were extracted from question six of the questionnaire. Table 5.2 sets out the results of the One-way ANOVA testing for Hypothesis 1.

Table 5.2

*Results for One-way ANOVA testing of differences in perceptions of importance of HRC dimensions in ABSC stock purchase decision*

HRC Variables	Shares Held	N	Mean	SD	ANOVA F-Value DF = (3,55)	ANOVA P-Value	Levene <sup>#</sup> P-Value DF = (3,55)	Kruskal Wallis P- Value DF = 3
Employee Recruitment	CBA	27	3.830	0.762	1.370	0.260	0.209	0.190
	WBC	7	3.686	0.863				
	NAB	17	4.106	0.388				
	ANZ	8	3.600	0.555				
Employee Retention	CBA	27	3.807	0.812	1.270	0.290	0.070	0.150
	WBC	7	3.743	0.991				
	NAB	17	4.094	0.375				
	ANZ	8	3.550	0.463				
Employee Values	CBA	27	3.659	0.824	1.430	0.240	0.040	0.230
	WBC	7	3.571	0.867				
	NAB	17	4.047	0.384				
	ANZ	8	3.550	0.798				
Management & Leadership Qualities	CBA	27	3.741	0.786	3.130*	0.030	0.170	0.020
	WBC	7	3.486	0.747				
	NAB	17	4.235	0.443				
	ANZ	8	3.575	0.654				
Employee Problem Solving Skills	CBA	27	3.719	0.831	2.790*	0.049	0.120	0.030
	WBC	7	3.486	0.807				
	NAB	17	4.224	0.418				
	ANZ	8	3.650	0.542				
*P < 0.05								

The research finds, based on the mean perceptions of NAB shareholders in relation to the HRC dimensions (M = 4.106, M = 4.094, M = 4.047, M = 4.235, and M = 4.224), that only bank shareholders of solely NAB stocks perceive all five dimensions of HRC to

be important to their decisions to purchase ABSC stocks (refer to Table 5.2). Additionally, with a 95 percent level of confidence in the ANOVA results ( $p\text{-value} < 0.05$ ), it is noted in Table 5.2 that the F-value  $[(3, 55) = 3.13, p = 0.030]$  for employee problem solving skills, and F-value  $[(3, 55) = 2.79, p = 0.049]$  management and leadership qualities dimensions of HRC are significant. Also, Levene Test is used for testing Homogeneity of Variances assumption for ANOVA. Since  $p\text{-value}$  for all the HRC variables except employee values is  $> 0.05$ , it is concluded that the assumption is not failed. Finally, non-parametric tests are used against ANOVA if the sample size is small or if any of the assumption of ANOVA fails (Agresti & Franklin, 2009). Kruskal-Wallis is a non-parametric test which is used against ANOVA if the sample size is small ( $< 30$ ) or if any of the assumption of ANOVA fails. Based on the  $p\text{-value}$  for all the HRC variables, it also leads to the same conclusion derived from findings of ANOVA. Taken together, these results suggest that there is a significant difference in perceptions of the importance of the HRC dimension of management and leadership and employee problem solving skills information in the decision to purchase ABSC stock. Additionally, it was found that for employee problem solving skills and management and leadership qualities dimensions, the mean perception ( $M = 4.224$  and  $M = 4.235$ ) of importance is significantly higher for NAB shareholders than other bank's shareholders. This result delivers a calculated mean of less than four for other bank shareholders. Furthermore, given that  $p\text{-value}$  is  $> 0.05$  in Table 5.2 for employee recruitment, employee retention, and employee values dimensions of HRC, sub-hypotheses 1 (a) to 1 (c) are rejected and it is concluded that the perception of importance values for these HRC dimensions are not

significantly different between Australia's four biggest banks (CBA, WBC, NAB, and ANZ).

Hypothesis 2 was concerned with testing whether shareholders of Australia's four biggest banks (CBA, WBC, NAB, and ANZ) have significant differences in perceptions of the importance of RC dimensions in the decision to purchase ABSC stock. Hypothesis 2, including sub-hypotheses 2 (a) to 2 (c), was also analysed using One-way ANOVA. Again, the independent variables for this hypothesis consisted of the specific ABSC stocks held. The dependent variables were the responses about the importance of the RC dimensions to deciding to purchase bank stocks. These variables were extracted from question six of the questionnaire. Table 5.3 sets out the results of the One-way ANOVA testing for Hypothesis 2.

Table 5.3  
*Results for One-way ANOVA testing of differences in perceptions of the importance of HRC dimensions in ABSC stock purchase decision*

HRC Variables	Shares Held	N	Mean	SD	ANOVA F-Value DF = (3,55)	ANOVA P-Value	Levene # P-Value DF = (3,55)	Kruskal Wallis P-Value DF = 3
Customer Capital	CBA	27	4.096	0.539	3.780*	<b>0.020</b>	0.120	<b>0.010</b>
	WBC	7	3.971	0.605				
	NAB	17	4.459	0.262				
	ANZ	8	3.825	0.609				
Supplier Chain Relations	CBA	27	4.037	0.679	3.240*	<b>0.030</b>	0.140	<b>0.020</b>
	WBC	7	4.257	0.755				
	NAB	17	4.459	0.337				
	ANZ	8	3.750	0.475				

HRC Variables	Shares Held	N	Mean	SD	ANOVA F-Value DF = (3,55)	ANOVA P-Value	Levene <sup>#</sup> P-Value DF = (3,55)	Kruskal Wallis P-Value DF = 3
Competitors	CBA	27	4.052	0.556	2.110	0.110	0.620	0.060
	WBC	7	3.914	0.598				
	NAB	17	4.294	0.382				
	ANZ	8	3.800	0.466				
* P < 0.05								

The research finds, based on the mean perceptions of CBA shareholders in relation to RC dimensions (M = 4.096, M = 4.037, M = 4.052), and on the mean perceptions of NAB shareholders in relation to the RC dimensions (M = 4.4459, M = 4.459, and M = 4.294), that both bank shareholders of solely CBA and solely NAB stocks perceive all three dimensions of RC to be important to their decisions to purchase ABSC (refer to Table 5.3). The research finds, based on the mean perceptions of WBC shareholders in relation to RC dimensions (M = 4.257), that bank shareholders of solely WBC stocks perceive the dimension of supplier chain relations to be important to their decisions to purchase ABSC (refer to Table 5.3). Additionally, with a 95 percent level of confidence in the ANOVA results (p-value < 0.05), it is noted in Table 5.3 that the F-value [(3, 55) = 3.78 p = 0.020] for customer capital and F-value [(3, 55) = 3.24, p = 0.030] for supplier chain relations dimensions of RC are significant. Also, Levene Test is used for testing Homogeneity of Variances assumption for ANOVA. Since p-value for all the RC variables is > 0.05, it is concluded that the assumption is not failed. Finally, Kruskal-Wallis is a non-parametric test which is used against ANOVA if the sample size is small

(< 30) or if any of the assumption of ANOVA fails. Based on the p-value for all the RC variables, it also leads to the same conclusion derived from findings of ANOVA. Taken together these results suggest that there is a significant difference in perceptions of the importance of the RC dimension of customer capital and supplier chain relations information in the decision to purchase ABSC stock. Furthermore, given that the p-value is > 0.05 in Table 5.3 for the competitors dimension of RC, the results suggest Hypothesis 2, including only sub-hypotheses 2 (c), is rejected and it is concluded that the perception of importance value for the RC dimension of competitors is not significantly different between Australia's four biggest banks (CBA, WBC, NAB, and ANZ).

Based on the conclusions drawn from the ANOVA testing for both Hypothesis 1 and Hypothesis 2, more stringent post hoc tests were conducted. Bonferroni test was conducted on the results determined to be of statistical significance. The results of post hoc testing are demonstrated in Table 5.4.

Table 5.4  
*Results of post hoc comparisons (Bonferroni test)*

Dependent Variable	Post Hoc Test	Shares Held In	Shares Held In	Mean Difference	Standard Error	P-Value
Management & Leadership Qualities	Bonferroni Adjusted T-test (Dunn Test)	CBA	WBC	0.26	0.29	1.00
		CBA	NAB	-0.49	0.21	0.14
		CBA	ANZ	0.17	0.27	1.00
		WBC	NAB	-0.75	0.31	0.11
		WBC	ANZ	-0.09	0.35	1.00
		NAB	ANZ	0.66	0.29	0.17
Employee Problem-solving Skills	Bonferroni Adjusted T-test (Dunn Test)	CBA	WBC	0.23	0.30	1.00
		CBA	NAB	-0.51	0.22	0.14
		CBA	ANZ	0.07	0.28	1.00
		WBC	NAB	-0.74	0.31	0.13
		WBC	ANZ	-0.16	0.36	1.00
		NAB	ANZ	0.57	0.30	0.36



<b>Customer Capital</b>	<b>Bonferroni Adjusted T- test (Dunn Test)</b>	<b>CBA</b>	<b>WBC</b>	0.12	0.21	1.00
		<b>CBA</b>	<b>NAB</b>	-0.36	0.15	0.13
		<b>CBA</b>	<b>ANZ</b>	0.27	0.20	1.00
		<b>WBC</b>	<b>NAB</b>	-0.49	0.22	0.19
		<b>WBC</b>	<b>ANZ</b>	0.15	0.26	1.00
		<b>NAB</b>	<b>ANZ</b>	0.63	0.21	<b>0.03</b>
<b>Supplier Chain Relations</b>	<b>Bonferroni Adjusted T- test (Dunn Test)</b>	<b>CBA</b>	<b>WBC</b>	-0.22	0.25	1.00
		<b>CBA</b>	<b>NAB</b>	-0.42	0.18	0.14
		<b>CBA</b>	<b>ANZ</b>	0.29	0.24	1.00
		<b>WBC</b>	<b>NAB</b>	-0.20	0.26	1.00
		<b>WBC</b>	<b>ANZ</b>	0.51	0.30	0.60
		<b>NAB</b>	<b>ANZ</b>	0.71	0.25	<b>0.04</b>

Burns and Burns (2008) refer to the use of post hoc tests, including Bonferroni T-test. They suggest Bonferroni Adjusted T-tests, which are also referred to as the *Dunn test*, are used when there are multiple comparisons of means. As a general principle, when comparisons of group means are selected on a post hoc basis simply because they are large, there is an expected increase in variability for which the researcher must compensate by applying a more conservative test, otherwise, the likelihood of type 1 errors will be substantial. The Bonferroni adjustment is perhaps the most common approach to making post-hoc significance tests more conservative.

Post hoc tests help to control type 1 error by demanding a more rigorous level for significance on every successive test (Burns & Burns, 2008). Since  $p\text{-value} < 0.05$  (95% confidence level), the results suggest there is significant difference in the perceptions of importance of customer capital between NAB shareholders and ANZ shareholders (refer to Table 5.4). Since  $p\text{-value} < 0.05$  (95% confidence level), the results also suggest that there is a significant difference in the perceptions of importance of supplier chain relations between NAB shareholders and ANZ shareholders (refer to Table 5.4).

Therefore, Hypothesis 2, including sub-hypotheses 2 (a) and 2 (b), is accepted. That is, there is a significant difference in perceptions of the importance of the RC dimensions of customer capital and supplier chain relations information in the decision to purchase ABSC stock. The research finds that shareholders of solely NAB stocks have significantly higher perceptions of importance of information about the RC dimensions of customer capital and supplier chain relations, to their decisions to purchase ABSC stocks than shareholders of solely ANZ stocks in particular. Additionally, it was found that for all three RC dimensions, the mean perception ( $M = 4.459$ ,  $M = 4.459$ , and  $M = 4.294$ ) of importance is higher for NAB shareholders than other bank's shareholders. This result delivers a calculated mean of less than these mean scores for other bank shareholders. Furthermore, given that the p-value is  $> 0.05$  in Table 5.3 for the competitors dimension of RC, Hypothesis 2, including only sub-hypotheses 2 (c), is rejected and it is concluded that the perception of importance value for the RC dimension of competitors is not significantly different between Australia's four biggest banks (CBA, WBC, NAB, and ANZ). Also, as demonstrated in Table 5.4, post hoc testing does not result in a significant difference in the perception of importance of the two HRC dimensions of management and leadership qualities and employee problem solving skills. As such, it is concluded that Hypothesis 1, including sub-hypotheses 1 (a) to 1 (e), is rejected and it is concluded that the perception of importance value for all HRC dimensions is not significantly different between Australia's four biggest banks, including CBA, WBC, NAB, and ANZ.

### **5.3.1.2 Differences between perceptions of shareholders of either single or multiple ABSC.**

This part of the study is concerned with testing the differences perceptions of individual shareholders of the importance of HRC and RC information between ownership of stocks in only a single Australian bank and ownership of stocks in multiple Australian banks. Table 5.1 sets out the results of the data extracted from the responses to the questionnaire regarding ownership of stocks in the big four banks.

In addition to what was established for Hypothesis 1 and Hypothesis 2 regarding the single bank shareholdings of respondents, this hypothesis utilises data on multiple bank shareholdings (refer to Table 5.1). It was established that 35.90 percent of respondents indicated they held shares in CBA along with other banks, 16.24 percent of respondents indicated they held shares in WBC along with other banks, 31.62 percent of respondents indicated they held shares in NAB along with other banks, and, 35.04 percent of respondents indicated they held shares in ANZ along with other banks.

Hypothesis 3 and Hypothesis 4 are tested for significant differences in the perceptions of importance of HRC and RC dimensions to the decision to purchase ABSC stocks among shareholders of only a single bank of the big four banks and shareholders of multiple banks including, at least, one of the big four banks. As the independent variable, the two samples selected to test these hypotheses included shareholders of ABSC stocks in only a single bank of the big four banks and shareholders of ABSC shares in multiple banks including, at least, one of the big four banks. This was determined from the analysis of responses to the related question in the first part of the questionnaire (refer to Figure 4.2).

The dependent variables were the responses about the importance of the HRC and RC dimensions to deciding to purchase bank stocks. These variables were extracted from question six of the questionnaire (refer to Figure 4.4).

Quite specifically, Hypothesis 3 tested for a significant difference in the perceptions of importance of HRC information in the decision to purchase ABSC stock, of shareholders who have ownership in only one of the big four Australian banks, and of shareholders who have ownership in multiple banks. Similarly, Hypothesis 4 tested for a significant difference in the perceptions of importance of RC information in the decision to purchase ABSC stock of shareholders who have ownership in only one of the big four Australian banks, and of shareholders who have ownership in multiple banks.

Both hypotheses were tested and analysed using a t-test to determine the relationship between the independent and dependent variables. Tables 5.5 to 5.8 set out the results of the t-test for Hypothesis 3.

Table 5.5

*Results for difference in perceptions of HRC in ABSC stock purchase decisions of CBA shareholders and of shareholders of multiple ABSC including CBA*

HRC Variables	CBA Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 67	P-Value	Levene # P-Value DF = (1,67)	Mann-Whitney P-Value
Employee Recruitment	Yes	27	3.830	0.762	0.001	0.006	0.995	0.935	0.920
	Yes With								
	Other Banks	42	3.829	0.675					
Employee Retention	Yes	27	3.807	0.812	-0.050	-0.277	0.783	0.387	0.920
	Yes With								
	Other Banks	42	3.857	0.669					

HRC Variables	CBA Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 67	P-Value	Levene # P-Value DF = (1,67)	Mann-Whitney P-Value
Employee Values	Yes	27	3.659	0.824	0.021	0.108	0.914	0.767	0.890
	Yes With								
	Other Banks	42	3.638	0.776					
Management & Leadership Qualities	Yes	27	3.741	0.786	-0.026	-0.138	0.890	0.678	0.890
	Yes With								
	Other Banks	42	3.767	0.743					
Employee Problem Solving Skills	Yes	27	3.719	0.831	-0.043	-0.227	0.821	0.823	0.850
	Yes With								
	Other Banks	42	3.762	0.739					

Table 5.5 relates to sub-hypothesis 3.1, including 3.1 (a) to 3.1 (e). The independent variable is the ABSC stocks held and the dependent variable is HRC dimensions. Sub-hypothesis 3.1 was tested using Independent Samples T-test.

With a 95 percent confidence level, it is noted that the t-test p-value is  $> 0.05$  (refer to Table 5.5) for all HRC dimensions, and, as such, the sub-hypothesis 3.1 (a) to 3.1 (e) is rejected and it is concluded that the mean values for these dimensions are not significantly different between CBA and other three of the big four ABSC. Also, the Levene test is used for testing Homogeneity of Variances assumption for t-test. Since p-value for all HRC variables is  $> 0.05$ , it is concluded that the assumption is not failed. Further, Mann-Whitney is a non-parametric test that is used against t-test if the sample

size is small ( $< 30$ ) or if any of the assumption of t-test fails. Based on the p-value for all HRC variables, it also leads to the same conclusion derived from the t-test.

Table 5.6 relates to sub-hypothesis 3.2, including 3.2 (a) to 3.1 (e). The independent variable is the ABSC stocks held and the dependent variable is HRC dimensions. Sub-hypothesis 3.2 was tested using Independent Samples T-test.

Table 5.6

*Results for difference in perceptions of HRC in ABSC stock purchase decisions of WBC shareholders and of shareholders of multiple ABSC including WBC*

HRC Variables	WBC Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 24	P-Value	Levene # P-Value DF = (1,24)	Mann-Whitney P-Value
Employee Recruitment	Yes	7	3.686	0.863	0.023	0.067	0.947	0.809	0.810
	Yes With								
	Other Banks	19	3.663	0.727					
Employee Retention	Yes	7	3.743	0.991	-0.120	-0.417	0.680	0.069	0.700
	Yes With								
	Other Banks	19	3.863	0.490					
Employee Values	Yes	7	3.571	0.867	0.108	0.316	0.755	0.870	0.830
	Yes With								
	Other Banks	19	3.463	0.743					
Management & Leadership Qualities	Yes	7	3.486	0.747	-0.146	-0.492	0.627	0.892	0.790
	Yes With								
	Other Banks	19	3.632	0.644					
Employee Problem Solving Skills	Yes	7	3.486	0.807	-0.156	-0.416	0.681	0.630	0.710
	Yes With								
	Other Banks	19	3.642	0.863					

With a 95 percent confidence level, it is noted that the t-test p-value is  $> 0.05$  (refer to Table 5.6) for all HRC dimensions, and, as such, the sub-hypothesis 3.2 (a) to 3.2 (e) is rejected and it is concluded that the mean values for these dimensions are not significantly different between WBC and other three of the big four ABSC. Also, the Levene test is used for testing Homogeneity of Variances assumption for t-test. Since p-value for all HRC variables is  $> 0.05$ , it is concluded that the assumption is not failed. Further, Mann-Whitney is a non-parametric test that is used against t-test if the sample size is small ( $< 30$ ) or if any of the assumption of t-test fails. Based on the p-value for all HRC variables, it also leads to the same conclusion derived from the t-test.

Table 5.7 relates to sub-hypothesis 3.3, including 3.3 (a) to 3.1 (e). The independent variable is the ABSC stocks held and the dependent variable is HRC dimensions. Sub-hypothesis 3.3 was tested using Independent Samples T-test.

Table 5.7

*Results for difference in perceptions of HRC in ABSC stock purchase decisions of NAB shareholders and of shareholders of multiple ABSC including NAB*

HRC Variables	NAB Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 52	P-Value	Levene # P-Value DF = (1,52)	Mann-Whitney P-Value
Employee Recruitment	Yes	17	4.106	0.388	0.225	1.410	0.165	0.042	0.180
	Yes With								
	Other Banks	37	3.881	0.601					
Employee Retention	Yes	17	4.094	0.375	0.051	0.382	0.704	0.286	0.590
	Yes With								
	Other Banks	37	4.043	0.486					
	Yes	17	4.047	0.384	0.198	1.061	0.294	0.001	0.410

HRC Variables	NAB Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 52	P-Value	Levene # P-Value DF = (1,52)	Mann-Whitney P-Value
Employee Values	Yes With Other Banks	37	3.849	0.723					
Management & Leadership Qualities	Yes	17	4.235	0.443					
	Yes With Other Banks	37	3.876	0.677	0.360	1.997*	<b>0.041</b>	0.153	<b>0.060</b>
Employee Problem Solving Skills	Yes	17	4.224	0.418					
	Yes With Other Banks	37	3.881	0.590	0.342	2.154*	<b>0.036</b>	0.160	<b>0.050</b>
*P < 0.05									

The t-test results in Table 5.7, for management and leadership qualities and employee problem solving skills, are 1.997 and 2.154 respectively. Based on these results, with a 95 percent confidence level, it is noted that the p-value is < 0.05 for both these dimensions of HRC. Therefore, sub-hypothesis 3.3, including 3.3 (d) and 3.3 (e), is accepted. That is, there is a significant difference in perceptions of the importance of the HRC dimension of management and leadership and employee problem solving skills information in the decision to purchase ABSC stock. Additionally, it was found that for management and leadership qualities and employee problem solving skills dimensions, the mean perception (M = 4.224 and M = 4.235) of importance is higher for NAB shareholders than other bank's shareholders, which have a calculated mean of less than four. It is concluded that the mean values for these dimensions are significantly different between NAB and the other three of the big four ABSC.



Also, the Levene test is used for testing Homogeneity of Variances assumption for t-test. Since p-value for the HRC dimensions of management and leadership qualities and employee problem solving skills is  $< 0.05$ , it is concluded that the assumption is not failed. Further, Mann-Whitney is a non-parametric test that is used against t-test if the sample size is small ( $< 30$ ) or if any of the assumption of t-test fails. Based on the p-value for all HRC variables, it also leads to the same conclusion derived from the t-test.

Furthermore, based on the results of the t-test, given that the p-value is  $> 0.05$  in Table 5.7 for the HRC dimensions of employee recruitment, employee retention, and employee values, Hypothesis 3.3, including 3.3 (a) to 3.3 (c) is rejected. Therefore, it is concluded that the perception of importance value for the HRC dimensions of employee recruitment, employee retention, and employee values is not significantly different between NAB and the other three of the big four ABSC.

Table 5.8 relates to sub-hypothesis 3.4, including 3.4 (a) to 3.1 (e). The independent variable is the ABSC stocks held and the dependent variable is HRC dimensions. Sub-hypothesis 3.4 was tested using Independent Samples T-test.

Table 5.8

*Results for difference in perceptions of HRC in ABSC stock purchase decisions of ANZ shareholders and of shareholders of multiple ABSC including ANZ*

HRC Variables	ANZ Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 47	P-Value	Levene # P-Value DF = (1,47)	Mann-Whitney P-Value
Employee Recruitment	Yes	8	3.600	0.555	-0.220	-0.926	0.359	0.721	0.280
	Yes With								
	Other Banks	41	3.820	0.623					

HRC Variables	ANZ Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 47	P-Value	Levene # P-Value DF = (1,47)	Mann-Whitney P-Value
Employee Retention	Yes	8	3.550	0.463					
	Yes With				-0.348	-1.534	0.132	0.806	0.050
	Other Banks	41	3.898	0.605					
Employee Values	Yes	8	3.550	0.798					
	Yes With				-0.235	-0.830	0.411	0.755	0.430
	Other Banks	41	3.785	0.722					
Management & Leadership Qualities	Yes	8	3.575	0.654					
	Yes With				-0.201	-0.682	0.499	0.643	0.260
	Other Banks	41	3.776	0.779					
Employee Problem Solving Skills	Yes	8	3.650	0.542					
	Yes With				-0.170	-0.637	0.527	0.306	0.340
	Other Banks	41	3.820	0.711					

With a 95 percent confidence level, it is noted that the t-test p-value is  $> 0.05$  (refer to Table 5.8) for all HRC dimensions, and, as such, the sub-hypothesis 3.4 (a) to 3.1 (e) is rejected and it is concluded that the mean values for these dimensions are not significantly different between ANZ and other three of the big four ABSC. Also, the Levene test is used for testing Homogeneity of Variances assumption for t-test. Since p-value for all HRC variables is  $> 0.05$ , it is concluded that the assumption is not failed. Further, Mann-Whitney is a non-parametric test that is used against t-test if the sample size is small ( $< 30$ ) or if any of the assumption of t-test fails. Based on the p-value for all HRC variables, it also leads to the same conclusion derived from the t-test.

Testing for significant differences in the perceptions of importance of RC dimensions to the decision to purchase ABSC stocks among shareholders of only a single bank of the big four banks and shareholders of multiple banks including, at least, one of the big four ABSC (Hypothesis 4) was necessary to complete this research. The information provided in the tables 5.9 through 5.12 includes results from investigations into Hypothesis 4, including that from sub-hypotheses 4.1 (a) to (c) through to 4.4 (a) to (c).

Table 5.9 relates to sub-hypothesis 4.1, including 4.1 (a) to 4.1 (c). The independent variable is the ABSC stocks held and the dependent variable is RC dimensions. Sub-hypothesis 4.1 was tested using Independent Samples T-test.

Table 5.9

*Results for difference in perceptions of RC in ABSC stock purchase decisions of CBA shareholders and of shareholders of multiple ABSC including CBA*

RC Variables	CBA Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 67	P-Value	Levene # P-Value DF = (1,67)	Mann-Whitney P-Value
Customer Capital	Yes	27	4.096	0.539	-0.042	-0.308	0.759	0.612	0.710
	Yes With								
	Other Banks	42	4.138	0.556					
Supplier Chain Relations	Yes	27	4.037	0.679	0.023	0.138	0.890	0.912	0.990
	Yes With								
	Other Banks	42	4.014	0.659					
Competitors	Yes	27	4.052	0.556	0.123	0.807	0.423	0.339	0.640
	Yes With								
	Other Banks	42	3.929	0.656					

With a 95 percent confidence level, it is noted that the t-test p-value is  $> 0.05$  (refer to Table 5.9) for all RC dimensions, and, as such, the sub-hypothesis 4.1 (a) to 4.1 (c) is rejected and it is concluded that the mean values for these dimensions are not significantly different between CBA and the other three of the big four ABSC. Also, the Levene test is used for testing Homogeneity of Variances assumption for t-test. Since p-value for all RC variables is  $> 0.05$ , it is concluded that the assumption is not failed. Further, Mann-Whitney is a non-parametric test that is used against t-test if the sample size is small ( $< 30$ ) or if any of the assumption of t-test fails. Based on the p-value for all RC variables, it also leads to the same conclusion derived from the t-test.

Table 5.10 relates to sub-hypothesis 4.2, including 4.2 (a) to 4.2 (c). The independent variable is the ABSC stocks held and the dependent variable is RC dimensions. Sub-hypothesis 4.2 was tested using Independent Samples T-test.

Table 5.10

*Results for difference in perceptions of RC in ABSC stock purchase decisions of WBC shareholders and of shareholders of multiple ABSC including WBC*

RC Variables	WBC Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 24	P-Value	Levene # P-Value DF = (1, 24)	Mann-Whitney P-Value
Customer Capital	Yes	7	3.971	0.605					
	Yes With Other Banks	19	4.116	0.543	-0.144	-0.584	0.565	0.875	0.740
Supplier Chain Relations	Yes	7	4.257	0.755					
	Yes With Other Banks	19	4.095	0.567	0.162	0.593	0.559	0.661	0.430

RC Variables	WBC Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 24	P-Value	Levene # P-Value DF = (1, 24)	Mann-Whitney P-Value
Competitors	Yes	7	3.914	0.598	0.072	0.242	0.811	0.463	0.720
	Yes With Other								
	Banks	19	3.842	0.698					

With a 95 percent confidence level, it is noted that the t-test p-value is  $> 0.05$  (refer to Table 5.10) for all RC dimensions, and, as such, the sub-hypothesis 4.2 (a) to 4.2 (c) is rejected and it is concluded that the mean values for these dimensions are not significantly different between WBC and the other three of the big four ABSC. Also, the Levene test is used for testing Homogeneity of Variances assumption for t-test. Since p-value for all RC variables is  $> 0.05$ , it is concluded that the assumption is not failed. Further, Mann-Whitney is a non-parametric test that is used against t-test if the sample size is small ( $< 30$ ) or if any of the assumption of t-test fails. Based on the p-value for all RC variables, it also leads to the same conclusion derived from the t-test.

Table 5.11 relates to sub-hypothesis 4.3, including 4.3 (a) to 4.3 (c). The independent variable is the ABSC stocks held and the dependent variable is RC dimensions. Sub-hypothesis 4.3 was tested using Independent Samples T-test.

Table 5.11

*Results for difference in perceptions of RC in ABSC stock purchase decisions of NAB shareholders and of shareholders of multiple ABSC including NAB*

RC Variables	NAB Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 52	P-Value	Levene # P-Value DF = (1,52)	Mann-Whitney P-Value
Customer Capital	Yes	17	4.459	0.262	0.264	2.230*	<b>0.030</b>	0.060	<b>0.030</b>
	Yes With Other								
	Banks	37	4.195	0.453					
Supplier Chain Relations	Yes	17	4.459	0.337	0.356	2.424*	<b>0.019</b>	0.111	<b>0.020</b>
	Yes With Other								
	Banks	37	4.103	0.559					
Competitors	Yes	17	4.294	0.382	0.294	2.089*	<b>0.042</b>	0.568	<b>0.030</b>
	Yes With Other								
	Banks	37	4.000	0.519					

\*P < 0.05

The t-test values for the RC dimensions of customer capital, supplier chain relations, and competitors are 2.230, 2.424, and 2.089, respectively (refer to Table 5.11). Based on these values, and with a 95 percent confidence level, it is noted that the t-test p-value is < 0.05 (0.030, 0.019, and 0.042 respectively) for all RC dimensions (refer to Table 5.11), and, as such, the sub-hypothesis 4.3 (a) to 4.3 (c) is accepted and it is concluded that the mean values for these dimensions are significantly different between NAB and the other three of the big four ABSC. Also, the Levene test is used for testing Homogeneity of Variances assumption for t-test. Since p-value for all RC variables is > 0.05, it is concluded that the assumption is not failed. Further, Mann-Whitney is a non-parametric

test that is used against t-test if the sample size is small ( $< 30$ ) or if any of the assumption of t-test fails. Based on the p-value for all RC variables, it also leads to the same conclusion derived from the t-test.

Table 5.12 relates to sub-hypothesis 4.4, including 4.4 (a) to 4.4 (c). The independent variable is the ABSC stocks held and the dependent variable is RC dimensions. Sub-hypothesis 4.4 was tested using Independent Samples T-test.

Table 5.12

*Results for difference in perceptions of RC in ABSC stock purchase decisions of ANZ shareholders and of shareholders of multiple ABSC including ANZ*

RC Variables	ANZ Shares Held	N	Mean	SD	Mean Difference	T-Value DF = 47	P-Value	Levene # P-Value DF = (1,47)	Mann-Whitney P-Value
Customer Capital	Yes	8	3.825	0.609					
	Yes With				-0.346	-1.634	0.109	0.623	0.110
	Other Banks	41	4.171	0.536					
Supplier Chain Relations	Yes	8	3.750	0.475					
	Yes With				-0.367	-1.810	0.077	0.713	0.050
	Other Banks	41	4.117	0.533					
Competitors	Yes	8	3.800	0.466					
	Yes With				-0.215	-0.973	0.336	0.461	0.110
	Other Banks	41	4.015	0.587					

\*P < 0.05

Finally, in relation to sub-hypothesis 4.4, with a 95 percent confidence level, it is noted that the t-test p-value is  $> 0.05$  (refer to Table 5.12) for all RC dimensions, and, as such, the sub-hypothesis 4.4 (a) to 4.4 (c) is rejected. It is concluded that the mean values

for these dimensions are not significantly different between ANZ and the other three of the big four ABSC. Also, the Levene test is used for testing Homogeneity of Variances assumption for t-test. Since p-value for all RC variables is  $> 0.05$ , it is concluded that the assumption is not failed. Further, Mann-Whitney is a non-parametric test that is used against t-test if the sample size is small ( $< 30$ ) or if any of the assumption of t-test fails. Based on the p-value for all RC variables, it also leads to the same conclusion derived from the t-test.

#### **5.3.1.3 Relationship between shareholder perceptions and the use of HRC and RC dimensions to purchase ABSC stocks.**

Hypothesis 5 and Hypothesis 6 tested the relationship between the independent variables of shareholder perceptions of the importance of HRC and RC dimensions to the banking share purchase decisions and the use of information on HRC and RC dimensions in the purchase of ABSC stocks. Data on the independent variable was extracted from the responses to question six of the questionnaire (refer to Figure 4.4). That was the question that presented respondents with 40 policy statements for the dimensions of HRC and RC.

Data on the dependent variables was extracted from question one in the second part of the questionnaire (refer to Figure 4.3). That data referred to whether respondents used HRC and RC information to buy ABSC shares. Table 5.13 provides the total responses for that question. The majority of respondents indicated they used HRC and RC dimensions to buy ABSC shares. Of the respondents, 59.80 percent indicated they used information on HRC dimensions to buy ABSC shares. Additionally, 59 percent indicated they used information on RC dimensions to buy ABSC shares.



Table 5.13

*Use of HRC and RC dimensions in “Buy” decisions for ABSC*

Use HRC in “BUY”	Frequency	Percent	Use RC in “BUY”	Frequency	Percent
NO	47.00	40.20	NO	48.00	41.00
YES	70.00	59.80	YES	69.00	59.00
TOTAL	117.00	100.00	TOTAL	117.00	100.00

Hypothesis 5 tested for a significant relationship between an individual shareholder’s perception of the importance of HRC dimensions information and the use of HRC dimensions information in the decision to purchase ABSC stocks. Logistic Regression Modelling was used to test the hypothesis. This is a form of regression used when the dependent is a dichotomy and the independent variables are of any type. Logistic regression can predict a dependent variable on the basis of continuous and/or categorical independents and to determine the percent of variance in the dependent variable described by the independents; to rank the relative importance of independents; to measure interaction effects; and to identify the impact of covariate control variables. The impact of predictor variables is usually explained as odds ratios. Logistic regression applies maximum likelihood estimation after transforming the dependent into a logit variable (the natural log of the odds of the dependent occurring or not). In this way, logistic regression estimates the odds of a certain event occurring. Table 5.14 sets out the results of the logistic regression analysis and the results of the Wald Test, used to test the relationship of each of the HRC dimensions on the decision to buy ABSC stock.

Table 5.14

*Results of testing the relationship between perception and use of HRC dimensions in ABSC stock purchase decision*

Use HRC In Buy (Yes/No)	Exp (B)	Wald Test P-Value DF = 1 (based on Chi- Square	95.0% C.I. for EXP (B)		Model Fit Chi- Square Value DF = 5	Model Fit P- Value
Employee Recruitment	1.105	0.856	0.375	3.260		
Employee Retention	1.942	0.282	0.580	6.497		
Employee Values	1.322	0.583	0.488	3.579	6.337	0.275
Management & Leadership Qualities	0.419	0.184	0.116	1.514		
Employee Problem Solving Skills	1.626	0.472	0.432	6.123		

The Wald Test was used to test the significance of individual logistic regression coefficients\beta (B) for each independent variable. Odds Ratio: Exp (B) is the natural log base, e, to the exponent, B, where B = Logistic Regression Coefficient. Odds Ratio represents the factor by which the odds change for a one-unit change in the independent variable. An  $\text{Exp (B)} > 1$  means the independent variable increases the odds. If  $\text{Exp (B)} = 1.0$ , the independent variable has no effect. If  $\text{Exp (B)} < 1$ , then the independent variable decreases the odds.

Sub-hypothesis 5 (a) to (e) tested if there was a significant relationship between an individual shareholder's perception of the importance of HRC dimensions and the use of HRC dimensions in the decision to purchase ABSC stocks. The independent variable is

HRC dimensions and dependent variable is the use of HRC dimension information in the decision to purchase ABSC stocks. Logistic regression was used to model the relationship. In this, Wald Test was used to test the relationship of each HRC dimension on the decision to purchase ABSC stock. Table 5.14 demonstrates the results of testing Hypothesis 5. Since  $p\text{-value} > 0.05$  (refer to Table 5.14), the hypothesis is rejected and it is concluded that none of the five HRC dimensions significantly impacts the decision to purchase ABSC stocks.

Furthermore, for Hypothesis 6, the independent variables are RC dimensions and dependent variable is the use of RC dimensions in the decision to purchase ABSC stocks. Sub-hypotheses 6 (a) to 6 (c) tested if there was a significant relationship between an individual shareholder's perception of the importance of each of the three RC dimensions, including (a) customer capital, (b) supplier chain relations, and (c) competitors, and the use of the information in the decision to purchase ABSC stocks. Logistic regression was used to model the relationship. In this, Wald Test was also used to test the relationship of each of the RC dimensions on the decision to purchase ABSC stock.

Table 5.15

*Results of testing the relationship between perception and use of RC dimensions in ABSC stock purchase decision*

Use RC In Buy (Yes/No)	Exp (B)	Wald Test P- Value DF = 1 (based on Chi- Square	95.0% C.I. for EXP (B)		Model Fit Chi- Square Value DF = 3	Model Fit P-Value
Customer Capital	2.801	0.100**	0.806	9.740	11.673	<b>0.009*</b>
Supplier Chain Relations	0.903	0.862**	0.283	2.874		

Use RC In Buy (Yes/No)	Exp (B)	Wald Test P- Value DF = 1 (based on Chi- Square)	95.0% C.I. for EXP (B)		Model Fit Chi- Square Value DF = 3	Model Fit P-Value
Competitors	1.526	0.415**	0.553	4.215		
*Since P-Value for Model Fit is < 0.05, Overall Model Fit is significant at 95% Confidence Level						
** Since Wald Test P-Value is > 0.05, Hypothesis 6 is rejected for all HRC variables						

It is noted that in Table 5.15, the Model Fit Chi-Square value is 11.673 (DF = 3). As a result, p-value for Model Fit is < 0.05 for all RC dimensions and the overall Model Fit is significant at a 95 percent confidence level. The result is indicative of the statistical model fitting well with the observed data. However, this in itself is not indicative of an acceptance or rejection of the hypothesis. In this instance, the Wald Test p-value based on Chi-Square is > 0.05 (DF = 1) for all RC variables. This result is in relation to testing for a significant positive relationship between an individual shareholder's perception of the importance of RC dimensions and the use of RC dimensions information in the decision to purchase ABSC stock. Since  $p > 0.05$  for all the RC factors (refer to Wald Test P-Value column), this research rejects the hypothesis. The rejection of the hypothesis, based on the Wald test p-value, results in the conclusion that perceptions about RC dimensions do not significantly impact the decisions to use information on RC dimensions in the purchase of ABSC stocks.

#### 5.3.1.4 Relationship between importance of HRC and RC dimensions and investment transaction decisions of shareholders.

The fourth pair of hypotheses, Hypothesis 7 and Hypothesis 8, tested for differences in the importance given to HRC and RC dimensions among the decisions to purchase, hold on to or sell ABSC stocks. The dependent variable is the decision on banking stock transactions, which includes the purchase, holding on to, and selling of ABSC stocks. The independent variable is the importance given to each of the five HRC and to each of the three RC dimensions. Both dependent and independent variables information was extracted from questions 3, 4, and 5 related to the investor transaction decisions in the questionnaire (refer to Figure 4.3). Table 5.16 provides a summary of the responses to the related questions.

Table 5.16

*Importance of HRC and RC policy information and share investment transaction decisions*

In decision to hold ABSC shares	1	2	3		1	2	3
HRC				RC			
Frequency of rating Employee recruitment process	21	59	37	Frequency of rating Customer capital	5	65	47
Frequency of rating Employee retention	13	63	41	Frequency of rating Supplier chain relations	7	57	53
Frequency of rating Employee values	13	57	47	Frequency of rating Competitors	11	39	67
Frequency of rating Development of management & leadership qualities	4	48	65				
Frequency of rating Developing employee problem solving skills	9	55	53				

<b>In decision to hold ABSC shares HRC</b>				<b>RC</b>			
Frequency of rating Employee recruitment process	23	64	30	Frequency of rating Customer capital	3	58	56
Frequency of rating Employee retention	14	56	47	Frequency of rating Supplier chain relations	11	60	46
Frequency of rating Employee values	13	59	45	Frequency of rating Competitors	6	44	67
Frequency of rating Development of management & leadership qualities	8	53	56				
Frequency of rating Developing employee problem solving skills	11	56	50				

<b>In decision to sell ABSC shares HRC</b>				<b>RC</b>			
Frequency of rating Employee recruitment process	31	57	29	Frequency of rating Customer capital	6	55	56
Frequency of rating Employee retention	18	57	42	Frequency of rating Supplier chain relations	10	61	46
Frequency of rating Employee values	16	55	46	Frequency of rating Competitors	3	46	68
Frequency of rating Development of management & leadership qualities	11	44	62				
Frequency of rating Developing employee problem solving skills	15	48	54				

Discriminatory analysis testing was conducted on the data. The Friedman's test, a non-parametric test, is used in situations where the data are nominal or ordinal in orientation. This test is used to compare observations repeated on the same subjects. This, like many non-parametric tests, uses the ranks of the data rather than their raw values to calculate the statistic.

In relation to Research Question Four, Hypothesis 7 tested the differences in the importance given to HRC information among the decision to purchase, hold on to, or sell ABSC stocks. Table 5.17 sets out the results of the non-parametric randomized analysis of variance for Hypothesis 7.

Table 5.17

*Results of analysis of variance for testing differences given to HRC in transaction decisions involving ABSC stocks*

Importance Given to Employee Recruitment (HRC)	N	Mean	Standard Deviation	Friedman Test Chi-Square Value DF = 2	Friedman Test P-Value
Buying Banking Share	117.000	2.137	0.694	8.052*	0.018
Holding Banking Share	117.000	2.060	0.673		
Selling Banking Share	117.000	1.983	0.719		
* P < 0.05					
Importance Given to Employee Retention (HRC)	N	Mean	Standard Deviation	Friedman Test Chi-Square Value DF = 2	Friedman Test P-Value
Buying Banking Share	117.000	2.239	0.639	1.660	0.436
Holding Banking Share	117.000	2.282	0.668		
Selling Banking Share	117.000	2.205	0.689		
Importance Given to Employee Values (HRC)	N	Mean	Standard Deviation	Friedman Test Chi-Square Value DF = 2	Friedman Test P-Value
Buying Banking Share	117.000	2.291	0.657	0.338	0.845
Holding Banking Share	117.000	2.274	0.652		
Selling Banking Share	117.000	2.256	0.684		

<b>Importance Given to Management &amp; Leadership Qualities (HRC)</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Friedman Test Chi-Square Value DF = 2</b>	<b>Friedman Test P-Value</b>
Buying Banking Share	117.000	2.521	0.566	3.913	0.141
Holding Banking Share	117.000	2.410	0.618		
Selling Banking Share	117.000	2.436	0.662		
<b>Importance Given to Employee Problem Solving Skills (HRC)</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Friedman Test Chi-Square Value DF = 2</b>	<b>Friedman Test P-Value</b>
Buying Banking Share	117.000	2.376	0.626	1.633	0.442
Holding Banking Share	117.000	2.333	0.643		
Selling Banking Share	117.000	2.333	0.695		

Sub-hypotheses 7.1 to 7.5 tested the difference in the importance given to each of the HRC dimensions among the decisions to (a) purchase, (b) hold on to, or (c) sell ABSC stocks. Hypothesis 7 was tested using Friedman's test. The independent variable is the importance given to information on the HRC dimensions and the dependent variable is the decision on banking stock transactions.

It is noted that the p-value in Table 5.17 is  $< 0.05$  for sub-hypothesis 7.1, and, as such, sub-hypothesis 7.1 is accepted and it is concluded that there is a significant difference in the mean importance given to information on the HRC dimension of employee recruitment among the decisions to purchase, hold on to, or sell ABSC stocks.



Also, the mean importance ( $M = 2.137$ ) given to information on employee recruitment is highest for the decision to purchase ABSC stocks.

However, it is also noted that in Table 5.17, the p-value is  $> 0.05$  for sub-hypotheses 7.2 to Hypothesis 7.5. As such, sub-hypotheses 7.2 to 7.5 are rejected and it is concluded that there is no significant difference in mean importance given to information about the HRC dimensions of employee retention, employee values, management and leadership qualities, and employee problem solving skills, among the decisions to purchase, hold on to, or sell ABSC stocks.

Also, in relation to this part of the study, Hypothesis 8 was designed to test for a significant difference in the importance given to information about RC dimensions among the decisions to purchase, hold on to, or sell ABSC stocks. Sub-hypotheses 8.1 to 8.3 tested whether there was a significant difference in the importance given to information about each of the specific RC dimensions, including customer capital, supplier chain relations, and competitors. Table 5.18 presents the results of the non-parametric randomized analysis of variance for Hypothesis 8.

Table 5.18

*Results of analysis of variance for testing differences given to RC in transaction decisions involving ABSC stocks*

Importance Given to Customer Capital (RC)	N	Mean	Standard Deviation	Friedman Test Chi-Square Value DF = 2	Friedman Test P-Value
Buying Banking Share	117.000	2.359	0.564	3.982	0.137
Holding Banking Share	117.000	2.453	0.549		
Selling Banking Share	117.000	2.427	0.592		

Importance Given to Supplier Chain Relations (RC)	N	Mean	Standard Deviation	Friedman Test Chi-Square Value DF = 2	Friedman Test P-Value
Buying Banking Share	117.000	2.393	0.601	2.792	0.248
Holding Banking Share	117.000	2.299	0.633		
Selling Banking Share	117.000	2.308	0.622		
Importance Given to Competitors (RC)	N	Mean	Standard Deviation	Friedman Test Chi-Square Value DF = 2	Friedman Test P-Value
Buying Banking Share	117.000	2.479	0.664	0.810	0.667
Holding Banking Share	117.000	2.521	0.596		
Selling Banking Share	117.000	2.556	0.548		

It is noted that the p-value in Table 5.18 is  $> 0.05$ . As such, Hypothesis 8, including sub-hypotheses 8.1 to 8.3, is rejected. It is concluded that there is no significant difference in mean importance given to information on each of the RC dimensions, including customer capital, supplier chain relations, and competitors, among the decisions to purchase, hold on to, or sell ABSC stocks.

#### **5.3.1.5 Testing for moderators on the relationship between investment transaction decisions of shareholders and the influence of HRC and RC dimensions.**

The ASX shareholder studies (2005, 2007) identified a range of sources of share investment advice used by individual Australian shareholders. These sources of share investment advice include newspapers, family and friends, financial planner/advisor, stock broker, internet, investment newsletters, accountant, work colleague, magazines, radio, and others (not specified) (refer to Table 5.19). These sources of share investment advice are consolidated into “media” (includes newspapers, internet, investment newsletters, magazines, and radio), “family and friends” (includes family and friends and work colleague) and “professional investment advisors” (includes financial planner/advisor, stock broker, and accountant). Hypothesis 9 tested whether these differing sources of advice, and, gender, age and education of individual shareholders as moderators had a significant effect on the relationship between the individual shareholder’s perceptions of the importance of HRC dimensions information and the individual shareholder’s use of the information on HRC dimensions in ABSC stock transactions. For this hypothesis, the independent variables are the perceptions of importance of the HRC dimensions and the dependent variable is the use of HRC information in ABSC stock transactions. Additionally, the moderator variables tested are gender, age and education of individual shareholders as well as sources of share investment advice as identified through the ASX Shareholder Study 2006 (ASX, 2007). The descriptive data relating to the demographic profile of the respondents was extracted from the first part of the questionnaire. The data extracted from question 2 of the

questionnaire is also used in testing and analysis. A summary of the information extracted on sources of advice is provided in table 5.19.

Table 5.19  
*Responses of respondents ranking sources of share investment advice*

HRC	Ranking			RC	Ranking		
	1	2	3		1	2	3
	<i>f</i>	<i>f</i>	<i>f</i>		<i>f</i>	<i>f</i>	<i>f</i>
Newspapers	10	74	33	Newspapers	11	67	39
Family & Friends	23	63	31	Family & Friends	23	62	32
Financial Planner / Advisor	22	56	38	Financial Planner / Advisor	24	49	44
Stock Broker	27	61	29	Stock Broker	23	57	37
Internet	17	65	35	Internet	19	61	37
Investment Newsletters	12	68	37	Investment Newsletters	11	73	33
Accountant	28	49	40	Accountant	21	56	40
Work Colleague	30	61	26	Work Colleague	31	62	24
Magazines	35	56	26	Magazines	31	58	28
Radio	34	52	31	Radio	35	54	28
Other Source of Advice	30	67	20	Other Source of Advice	26	56	35

In addition to the demographic data and responses from question 2 of the questionnaire, the data relating to the perceptions of importance of shareholders of HRC and RC dimensions was also utilized for this analysis. This was extracted from the responses to question 6 of the questionnaire.

Hierarchical Logistic Regression (refer to Table 5.20) was used to test this hypothesis. In this, at Stage One, the initial model was tested with the dependent and independent variables and in Stage Two “moderator” variables were added to test if the addition of moderator variables significantly impacts the dependent variable by testing the significance of the Model Fit Change.

Table 5.20

*Results for moderator variables on relationship between perceptions and use of HRC dimensions information in ABSC stock transactions*

Use HRC In Buy (Yes/No)	Exp (B)	Wald Test P-Value DF = 1 (based on Chi-Square)	95.0% C.I. for EXP (B)		Model Fit Chi-Square Value Stage 1 DF = 5 Stage 2 DF = 11	Model Fit P-Value	Model Fit Chi-Square Value Change due to Moderators DF = 6	Model Fit P-Value Change due to Moderators
Stage 1	Initial Model with HRC Perception Variables							
Employee Recruitment	1.105	0.856	0.375	3.260	6.337	0.275		
Employee Retention	1.942	0.282	0.580	6.497				
Employee Values	1.322	0.583	0.488	3.579				
Management & Leadership Qualities	0.419	0.184	0.116	1.514				
Employee Problem-solving Skills	1.626	0.472	0.432	6.123				
Stage 2	Revised Model with HRC Perception Variables with Moderators Added							
Employee Recruitment	1.398	0.330	0.446	4.380	11.779	0.380	5.442	0.489
Employee Retention	1.264	0.124	0.343	4.664				
Employee Values	1.486	0.517	0.505	4.378				
Management & Leadership Qualities	0.567	0.656	0.143	2.239				
Employee Problem-solving Skills	1.848	0.758	0.464	7.365				
Gender	1.053	0.014	0.455	2.436				
Age	0.641	0.968	0.264	1.555				
Education	0.410	3.453	0.160	1.050				
Media	0.696	0.429	0.236	2.058				
Family and Friends	0.953	0.008	0.320	2.832				
Professional Advisor	0.804	0.220	0.323	2.002				
Use HRC In Hold (Yes/No)	Exp (B)	Wald Test P-Value DF = 1	95.0% C.I. for EXP (B)		Model Fit Chi-Square Value	Model Fit P-Value	Model Fit Chi-Square Value Change	Model Fit P-Value Change due to

		(based on Chi- Square)			Stage 1 DF = 5 Stage 2 DF = 11		due to Moderators DF = 6	Moderators
Stage 1	Initial Model with HRC Perception Variables							
Recruitment	1.237	0.710	0.404	3.789	5.236	0.388		
Retention	2.642	0.122	0.772	9.044				
Employee Values	1.077	0.886	0.390	2.977				
Management & Leadership Qualities	0.992	0.991	0.263	3.746				
Employee Problem-solving Skills	0.517	0.350	0.130	2.061				
Stage 2	Revised Model with HRC Perception Variables with Moderators Added							
Employee Recruitment	1.342	0.628	0.407	4.424	13.422	0.267	8.187	0.225
Employee Retention	2.550	0.176	0.658	9.883				
Employee Values	1.379	0.570	0.455	4.173				
Management & Leadership Qualities	1.378	0.671	0.313	6.060				
Employee Problem-solving Skills	0.508	0.369	0.116	2.230				
Gender	1.421	0.420	0.605	3.334				
Age	0.718	0.464	0.296	1.743				
Education	0.984	0.975	0.374	2.592				
Media	1.526	0.463	0.494	4.715				
Family and Friends	0.306	0.040*	0.099	0.945				
Professional Advisor	0.757	0.559	0.297	1.928				
Use HRC In Sell (Yes/No)	Exp (B)	Wald Test P-Value DF = 1 (based on Chi- Square)	95.0% C.I. for EXP (B)					
Stage 1	Initial Model with HRC Perception Variables							
Employee Recruitment	0.676	0.508	0.212	2.156	14.750	0.011		
Employee Retention	3.524	0.061	0.941	13.191				
Employee Values	2.480	0.086	0.880	6.988				
Management & Leadership Qualities	0.210	0.031	0.051	0.865				
Employee Problem-solving Skills	1.994	0.345	0.475	8.367				
Stage 2	Revised Model with HRC Perception Variables with Moderators Added							
Employee Recruitment	0.596	0.402	0.178	1.998	17.001	0.108	2.251	0.895
Employee Retention	4.136	0.050	1.000	17.102				
Employee Values	2.188	0.156	0.742	6.453				
Management & Leadership Qualities	0.197	0.032	0.045	0.866				
Employee Problem-solving Skills	1.937	0.371	0.455	8.256				
Gender	0.976	0.956	0.410	2.322				
Age	0.984	0.972	0.406	2.388				
Education	0.851	0.742	0.327	2.218				
Media	1.721	0.356	0.543	5.455				
Family and Friends	0.813	0.707	0.276	2.396				
Professional Advisor	1.546	0.369	0.598	3.998				

Sub-hypothesis 9.1 tested whether differing sources of share investment advice, as moderators, have a significant effect on the relationship between the individual shareholder's perceptions of the importance of HRC information and the individual shareholder's use of HRC information in ABSC stock transactions. The hypothesis was tested using Hierarchical Logistic Regression. Table 5.20 provides the results of analysis for the hypothesis.

The results of testing demonstrated that, since  $p\text{-value} > 0.05$  for Model Fit Change in Stage Two of analysis, the hypothesis is rejected. As such, it is concluded that the moderators do not significantly impact the shareholder's use of HRC information in the decision to purchase, hold on to, or sell ABSC stock. The only exception is the source of advice referred to as "family and friends". The odds ratio for "family and friends" (0.306) means that the odds of using HRC information in holding shares is three times more than the odds of not using HRC information, when more importance is given to family and friends as a source of share investment advice. The data suggests that the advice sought in this case, from "family and friends", is three times more likely to be significant if the shareholder is deciding to hold on to shares.

Similarly, sub-hypothesis 9.2 was designed to test whether descriptive variables of gender, age and education of individual shareholders, as moderators, have a significant effect on the relationship between the individual shareholder's perceptions of the importance of HRC information and the individual shareholder's use of HRC information in ABSC stock transactions. The hypothesis was tested using Hierarchical Logistic Regression. Table 5.20 also provides the results of analysis for this sub-hypothesis.

At 95 percent confidence, p-value for model fit is  $> 0.05$ , and as such, overall model fit is not significant. Also, since p-value  $> 0.05$  for Model Fit Change in Stage Two of analysis, Hypothesis 9, including sub-hypotheses 9.1 and 9.2, is rejected and it is concluded that the descriptive variables of gender, age, and education of shareholders, as moderators, do not significantly impact the shareholder's use of HRC information in ABSC stock transaction decisions of ABSC shareholders.

Hypothesis 10, sub-hypotheses 10.1 and 10.2, also tested whether differing sources of advice, gender, age and education of individual shareholders as moderators have a significant effect on the relationship between the individual shareholder's perceptions of the importance of RC information and the individual shareholder's use of RC information in ABSC stock transactions. Hypothesis 10 was tested using Hierarchical Logistic Regression. Table 5.21 provides the results of testing for the hypothesis.

Table 5.21

*Results for moderator variables on relationship between perceptions and use of RC dimensions information in ABSC stock transactions*

Use RC In Buy (Yes/No)	Exp (B)	Wald Test P-Value DF = 1 (based on Chi-Square)	95.0% C.I. for EXP (B)		Model Fit Chi-Square Value Stage 1 DF = 3 Stage 2 DF = 9	Model Fit P-Value	Model Fit Chi-Square Value Change due to Moderators DF = 6	Model Fit P-Value Change due to Moderators
Stage 1	Initial Model with RC Perception Variables							
Customer Capital	2.801	0.100	0.806	9.740	11.673	0.009		
Supplier Chain Relations	0.903	0.862	0.283	2.874				
Competitors	1.526	0.415	0.553	4.215				
Stage 2	Revised Model with RC Perception Variables with Moderators Added							
Customer Capital	2.841	0.107	0.799	10.098	14.719	0.099	3.046	0.803
Supplier Chain Relations	0.704	0.570	0.210	2.364				
Competitors	2.190	0.171	0.712	6.731				
Gender	0.792	0.600	0.332	1.891				
Age	1.069	0.883	0.443	2.574				



Education	0.737	0.521	0.290	1.874				
Media	1.180	0.743	0.439	3.167				
Family and Friends	1.459	0.452	0.545	3.902				
Professional Advisor	0.553	0.225	0.212	1.440				
Use RC In Hold (Yes/No)	Exp (B)	Wald Test P-Value DF = 1 (based on Chi-Square)	95.0% C.I. for EXP (B)		Model Fit Chi-Square Value Stage 1 DF = 3 Stage 2 DF = 9	Model Fit P-Value	Model Fit Chi-Square Value Change due to Moderators DF = 6	Model Fit P-Value Change due to Moderators
Stage 1	Initial Model with RC Perception Variables							
Customer Capital	1.919	0.304	0.554	6.651	10.176	0.017		
Supplier Chain Relations	0.357	0.100	0.105	1.218				
Competitors	4.087	0.016	1.298	12.866				
Stage 2	Revised Model with RC Perception Variables with Moderators Added							
Customer Capital	2.298	0.209	0.627	8.420	14.506	0.105	4.330	0.632
Supplier Chain Relations	0.331	0.098	0.089	1.227				
Competitors	4.933	0.015	1.372	17.737				
Gender	0.795	0.608	0.330	1.911				
Age	0.675	0.379	0.281	1.622				
Education	0.731	0.515	0.285	1.878				
Media	1.501	0.430	0.547	4.117				
Family and Friends	0.721	0.509	0.273	1.905				
Professional Advisor	0.600	0.289	0.233	1.544				
Use RC In Sell (Yes/No)	Exp (B)	Wald Test P-Value DF = 1 (based on Chi-Square)	95.0% C.I. for EXP (B)		Model Fit Chi-Square Value Stage 1 DF = 3 Stage 2 DF = 9	Model Fit P-Value	Model Fit Chi-Square Value Change due to Moderators DF = 6	Model Fit P-Value Change due to Moderators
Stage 1	Initial Model with RC Perception Variables							
Customer Capital	2.312	0.181	0.677	7.902	7.348	0.062		
Supplier Chain Relations	0.587	0.370	0.183	1.882				
Competitors	2.055	0.175	0.726	5.813				
Stage 2	Revised Model with RC Perception Variables with Moderators Added							
Customer Capital	2.020	0.271	0.577	7.064	15.430	0.080	8.082	0.232
Supplier Chain Relations	0.375	0.136	0.103	1.362				
Competitors	3.366	0.057	0.966	11.727				
Gender	0.506	0.140	0.205	1.251				
Age	1.232	0.636	0.519	2.927				
Education	0.640	0.360	0.247	1.662				
Media	2.664	0.062	0.951	7.461				
Family and Friends	1.030	0.952	0.391	2.714				
Professional Advisor	0.778	0.592	0.310	1.953				

Sub-hypothesis 10.1 tested whether differing sources of share investment advice, as moderators, have a significant effect on the relationship between the individual shareholder's perceptions of the importance of RC information and the individual shareholder's use of RC information in ABSC stock transactions. Similarly, sub-hypothesis 10.2 was tested to determine whether gender, age and education of individual shareholders, as moderators, have a significant effect on the relationship between the individual shareholder's perceptions of the importance of RC information and the individual shareholder's use of RC information in ABSC stock transactions.

The sub-hypotheses were tested using Hierarchical Logistic Regression. Table 5.21 provides the results of testing. At Stage One, with a 95 percent confidence level, p-value for Model Fit is  $< 0.05$  for all RC dimensions. The overall Model Fit is statistically significant. The result is indicative of the statistical model fitting well with the observed data. That is, that there is a significant relationship between shareholder perceptions and shareholder use of RC dimensions in ABSC stock purchase decisions. However, since p-value  $> 0.05$  for Model Fit Change in Stage Two of analysis, Hypothesis 10, including sub-hypotheses 10.1 and 10.2, is rejected and it is concluded that the differing sources of advice, gender, age and education of individual shareholders, as moderators, do not have a significant effect on the relationship between the individual shareholder's perceptions of the importance of RC information and the individual shareholder's use of RC information in ABSC stock transactions.

### **5.3.2 Part Two – Disclosure on HRC and RC dimensions in corporate annual reports and its relationship to share prices of ABSC.**

The second part of the main study was designed to provide answers to two research questions and, as a result, tested a total of four related hypotheses. Each of the four hypotheses is made up of a number of sub-hypotheses relating to each of the relevant variables. This section deals with the various hypotheses findings. Interpretation of results is made to accept or reject the null hypothesis.

#### **5.3.2.1 Comparing CBA to other ABSC in the provision of HRC and RC dimensions information in their corporate annual reports**

The objective here was to demonstrate how ABSC compared to each other in the provision of information about their HRC and RC dimensions. In particular, the objective was to determine if CBA, Money Magazine's "Bank of the Year 2008", was significantly different compared to the other seven ABSC, in the provision of HRC and RC information in the financial year 2006/2007 corporate annual reports. Hypothesis 11 tested specifically for a significant difference between the CBA and the other ABSC in the provision of HRC information in their corporate annual reports. In the same way, Hypothesis 12 tested for a significant difference between the CBA and the other ABSC in the provision of RC information in their corporate annual reports. Data extracted from the content analysis of the corporate annual reports of the eight ABSC for the financial year 2006/2007 was analysed. Table 5.22 provides a summary of the perceived frequency of reporting on HRC information in the annual reports of the eight Australian banks by the Focus Group B.

Table 5.22

*Summary of the percent of perceived frequency of reporting HRC dimensions information in the corporate annual reports of the eight ABSC*

Bank	Employee Recruitment		Employee Retention		Developing Management and Leadership Qualities		Employee Values		Developing Employee Problem solving Skills	
	f	%	f	%	f	%	f	%	f	%
ADB	7	11.86	13	8.18	13	9.29	14	8.70	8	8.25
ANZ	7	11.86	15	9.43	11	7.86	8	4.97	7	7.22
BEN	3	5.08	17	10.69	14	10.00	18	11.18	7	7.22
BOQ	8	13.56	17	10.69	22	15.71	16	9.94	10	10.31
CBA	11	18.64	18	11.32	18	12.86	18	11.18	20	20.62
NAB	5	8.47	35	22.01	23	16.43	29	18.01	14	14.43
SGB	7	11.86	15	9.43	17	12.14	19	11.80	11	11.34
WBC	11	18.64	29	18.24	22	15.71	39	24.22	20	20.62
<b>TOTAL</b>	<b>59</b>		<b>159</b>		<b>140</b>		<b>161</b>		<b>97</b>	

In relation to the reporting of HRC information, the banks were perceived to have reported most often on the HRC dimension of employee values ( $f = 161$ ). In relation to the dimension of employee values, WBC was perceived to have disclosed the information most often, accounting for 24.22 percent of the reported information. The ANZ was perceived to have disclosed information on employee values least often, accounting for only 4.97 percent of the reported information.

After that, the HRC dimension of employee retention was perceived to have been reported 159 times. In relation to the dimension of employee retention, NAB was perceived to have disclosed the information most often, accounting for 22.01 percent of the reported information. The ADB was perceived to have disclosed information on

employee retention least often, accounting for only 8.81 percent of the reported information.

Employee retention was followed by the development of management and leadership qualities, perceived to have been reported 140 times. In relation to the dimension of management and leadership qualities, NAB was perceived to have disclosed the information most often, accounting for 16.43 percent of the reported information. The ANZ was perceived to have disclosed information on the dimension of management and leadership qualities least often, accounting for only 7.86 percent of the reported information.

Developing employee problem solving skills was perceived to have been reported 97 times throughout the annual reports. In relation to the dimension of employee problem solving skills, both CBA and WBC were perceived to have disclosed the information most often, each accounting for 20.62 percent of the information reported. Also, both ANZ and BEN were perceived to have disclosed the information on employee problem solving skills least often, each accounting for only 7.22 percent of the reported information.

Perceived to have been reported least times was the HRC dimension of employee recruitment ( $f = 59$ ). In relation to the dimension of employee recruitment, both CBA and WBC were perceived to have disclosed the information most often, each accounting for 18.64 percent of the information reported, and BEN was perceived to have reported the information least often, accounting for 5.08 percent of the employee recruitment information reported.

Quantitative analysis of the collected data also provided the researcher the ability to perform content analysis and identify the frequency of use of and references to the RC constructs in the 2006/2007 annual reports of each organization. Table 5.23 provides a summary of the number of times companies were perceived to have reported RC information in the annual reports of the eight Australian banks.

In relation to the reporting of RC information, the banks were perceived to have reported most often on the RC dimension of supplier chain relations ( $f = 123$ ). In relation to the dimension of supplier chain relations, BOQ was perceived to have disclosed the information most often, accounting for 24.39 percent of the information reported. The ADB was perceived to have reported the information least often, accounting for 4.88 percent of the information reported about supplier chain relations.

The RC dimension of competitors was perceived to have been reported 81 times. In relation to the dimension of competitors, BOQ was perceived to have disclosed the information most often, accounting for 27.16 percent of the information disclosed. The SGB was perceived to have disclosed the information least often, accounting for 1.23 percent of the information reported about the RC dimension of competitors.

Finally, the RC dimension of customer capital was perceived to have been reported 74 times. In relation to the dimension of customer capital, BOQ was perceived to have disclosed the information most often, accounting for 27.03 percent of the information reported. Finally, ADB was perceived to have disclosed the information least often, accounting for 4.05 percent of the customer capital information reported.

Table 5.23

*Summary of the percent of perceived frequency of reporting RC dimensions information in the corporate annual reports of the eight ABSC*

Bank	Customer Capital		Supplier Chain Relations		Competitors	
	f	%	f	%	f	%
ADB	3	4.05	6	4.88	7	8.64
ANZ	6	8.11	9	7.32	10	12.35
BEN	9	12.16	14	11.38	8	9.88
BOQ	20	27.03	30	24.39	22	27.16
CBA	18	24.32	24	19.51	21	25.93
NAB	4	5.41	12	9.76	2	2.47
SGB	4	5.41	8	6.50	1	1.23
WBC	13	17.57	26	21.14	17	20.99
<b>TOTAL</b>	<b>74</b>		<b>123</b>		<b>81</b>	

Perceived quality of HRC and RC information referred to whether the information was deemed to be more or less valuable to investors, by the focus group members. As explained to, and understood by the focus group members, for the information to be considered valuable in this case was for it to be perceived as relevant to the related HRC and RC dimension it reports on, and, for it to be of value to the decision-making of investors. In the content analysis of the 2006/2007 corporate annual reports, the participants of Focus Group B, as a group, ranked, for each of the eight dimensions of HRC and RC, the quality of the information presented relative to the quality of information presented by each of the others of the eight banks. There were eight banks analysed and they were ranked on a scale from one to eight. The bank considered, by the

respondents, to have provided information relevant to the related HRC or RC dimension and most valuable to investors, received a ranking of one for that dimension. The bank considered, by the respondents, to have provided information relevant to the related HRC or RC dimension but least valuable to investors, received a ranking of 8 for that dimension. Tables 5.24 and 5.25 present the data on how the group perceived and ranked each of the banks relative to each other.

Table 5.24

*Summary of ranking of perceived quality of reporting HRC dimensions information in the corporate annual reports of the eight ABSC*

<b>Bank</b>	<b>Employee Recruit- ment</b>	<b>Employee Retention</b>	<b>Developing Manage- ment and Leadership Qualities</b>	<b>Employee Values</b>	<b>Developing Employee Problem solving Skills</b>
ADB	6	7	6	7	7
ANZ	5	5	8	8	6
BEN	8	8	7	6	8
BOQ	7	6	5	5	5
CBA	1	1	2	2	1
NAB	4	3	1	3	3
SGB	3	4	3	4	4
WBC	2	2	4	1	2

In relation to the quality of reporting of HRC information, participants of Focus Group B perceived CBA to have provided the highest quality of information related to the dimension of employee recruitment. The CBA achieved top ranking, a ranking of



one, for three of the five dimensions of HRC and was ranked second out of eight for the other two dimensions of HRC. However, BEN achieved the lowest ranking of the banks, a ranking of eight, for three of the five HRC dimensions and was ranked sixth out of the eight banks once and seventh out of the eight banks once for the remaining two HRC dimensions. The CBA was also perceived to have the highest quality of disclosure of employee retention information, while BEN again was ranked eighth out of the eight banks. For the HRC dimension of developing management and leadership qualities, NAB was ranked first out of the eight banks on quality of information disclosure, while ANZ was ranked eighth out of the eight banks, perceived as having the lowest quality of information disclosure. For the HRC dimension of employee values, WBC was ranked first of the eight banks, perceived to have the highest quality of information disclosure, while ANZ was ranked eighth out of eight banks, perceived as having the lowest quality of information disclosure. Finally, while CBA was perceived to have the highest quality of information disclosure on the HRC dimension of developing employee problem solving skills, BEN was ranked eighth out of the eight banks, perceived as having the lowest quality of information disclosure.

Overall, in relation to the ranking on the quality of reporting of RC information, participants of Focus Group B perceived CBA to have provided the highest quality of information. The CBA achieved top ranking for two of the three RC dimensions, customer capital and supplier chain relations, and was ranked second out of the eight banks for the remaining RC dimension, competitors. However, ADB achieved the lowest ranking of the banks, in eighth position for two of the three RC dimensions, customer capital and supplier chain relations. Also, in relation to perceptions of highest and lowest

quality of information, WBC was perceived to have the highest quality of disclosure of the RC dimension of competitors, ranking first out of the eight banks, while SGB was perceived as having the lowest quality, ranking eighth out of the eight banks.

Table 5.25

*Summary of perceived ranking of quality of reporting RC dimensions information in the corporate annual reports of the eight ABSC*

Bank	Customer capital	Supplier Chain Relations	Competitors
ADB	8	8	7
ANZ	7	6	4
BEN	4	7	5
BOQ	3	3	3
CBA	1	1	2
NAB	6	4	6
SGB	5	5	8
WBC	2	2	1

Finally, Table 5.26 presents a summary of the banks perceived to have the highest and lowest percentage ranking on the frequency of reporting HRC and RC information, and highest and lowest ranking on the quality of reporting HRC and RC information in their corporate annual reports. All eight banking sector corporations reported some HRC and RC information in their annual reports; however, the corporations varied in the frequency and types of HRC and RC information provided in the annual reports.

Table 5.26

*Banks perceived to have highest and lowest percentage and quality of HRC and RC dimensions reporting in their 2006/2007 financial year corporate annual reports*

Dimension	High % of Information Reporting	Low % of Information Reporting	High Quality of Information Reporting	Low Quality of Information Reporting
HRC	WBC	ANZ	CBA	BEN
RC	BOQ	ADB	CBA	ADB

The HRC and RC information under investigation in this research study was perceived as being presented in neither a consistent nor structured manner in the reports, either in individual reports or within the collection of reports. The information was perceived by Focus Group B as being scattered throughout the bodies of the annual reports. The information relating to the dimensions of HRC and RC dimensions was not cited or referenced in a designated section.

Table 5.26 refers to highlights of the findings of the focus group. Focus Group B perceived CBA to have provided the highest quality HRC and RC information disclosure. Focus Group B perceived WBC to have disclosed HRC information more frequently throughout its annual report; additional, Focus Group B found that the BOQ disclosed RC information more frequently than all the other banks within its annual report.

Focus Group B perceived BEN to have provided the lowest quality HRC information. They also perceived ADB to have provided the lowest quality RC information disclosure. Focus Group B perceived ANZ to have disclosed HRC less

frequently than the other banks throughout its report; additional, Focus Group B found that ADB disclosed RC less frequently than all the other banks within its annual report.

To enable comparisons between the CBA and the other seven ABSC with regard to the perceived frequency and quality of reporting information about HRC and RC dimensions, the Friedman's Test, a non-parametric randomized block analysis of variance, was used. Hypothesis 11 relates to reporting on the dimensions of HRC. Tables 5.27 and 5.28 provide the output of the testing Hypothesis 11, which tested for a significant difference between the CBA and the other ABSC in the quality and frequency of provision of information on HRC dimensions in the annual reports.

Table 5.27

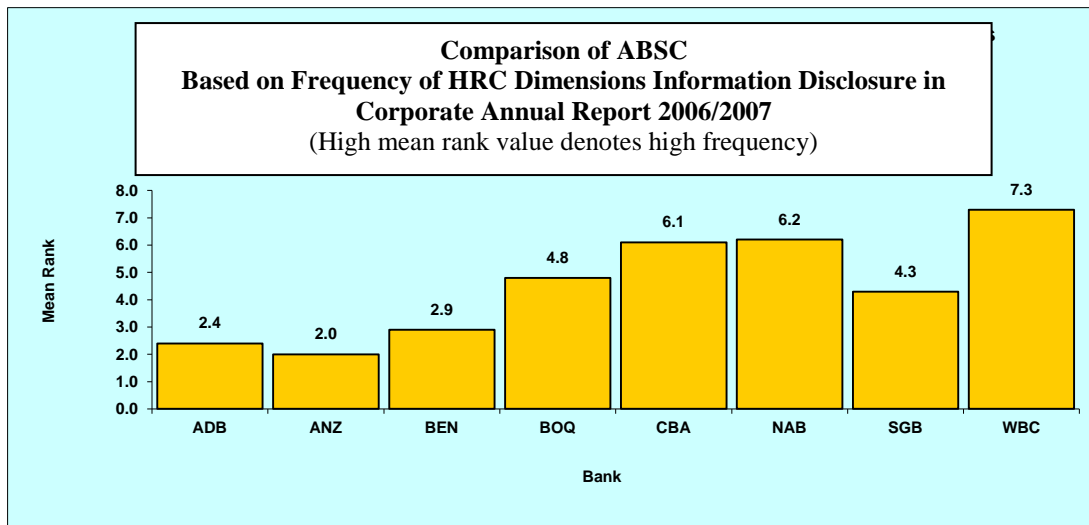
Perceived frequency of HRC dimensions information disclosure in the financial year 2006/2007 corporate annual reports of ABSC

<b>Perceived Frequency of HRC Dimensions Reporting in the Financial Year 2006/2007 Annual Reports of the 8 ABSC</b>								
<b>HRC Variables</b>	<b>ADB</b>	<b>ANZ</b>	<b>BEN</b>	<b>BOQ</b>	<b>CBA</b>	<b>NAB</b>	<b>SGB</b>	<b>WBC</b>
Employee Recruitment	7	7	3	8	11	5	7	11
Employee Retention	13	15	17	17	18	35	15	29
Employee Values	13	11	14	22	18	23	17	22
Management & Leadership Qualities	14	8	18	16	18	29	19	39
Employee Problem Solving Skills	8	7	7	10	20	14	11	20
<b>Mean Rank (based on the Frequency)</b>	<b>2.4</b>	<b>2.0</b>	<b>2.9</b>	<b>4.8</b>	<b>6.1</b>	<b>6.2</b>	<b>4.3</b>	<b>7.3</b>
<b>Friedman Test Chi-Square Value (DF = 7)</b>	<b>22.97**</b>							

**Note : High Mean Rank Value denotes High Frequency**

\*\*P < 0.01

For sub-hypothesis 11.1 and 11.2, the dependent variables are frequency and quality of HRC reporting and the independent variable is the ABSC. Hypothesis 11.1 refers to the frequency of HRC reporting. In testing sub-hypothesis 11.1 the Chi-square value in Table 5.27 is 22.97 and it is significant (p-value is < 0.01) with a 99 percent confidence level. Therefore, the results for Hypothesis 11.1 concluded that there is difference in the frequency of reporting on HRC dimensions among the Australian Banks. However, Hypothesis 11.1 is rejected because the CBA was not the bank found to have the highest mean rank. The bank with the highest mean rank of 7.3 was WBC. This is demonstrated in Figure 5.1. This means that the WBC, and not the CBA, reports more number of times HRC dimensions information in the corporate annual reports. As the research relates to the significance between being “Bank of the Year 2008” and reporting HRC information, this research concludes that there is no significant link between the two variables.



*Figure 5.1.* Comparison of ABSC based on frequency of disclosure on HRC dimensions in corporate annual report 2006/2007

For sub-hypothesis 11.2, the dependent variable is quality of HRC reporting and the independent variable is the ABSC. The Chi-square value is also used to test this hypothesis.

Table 5.28

*Perceived quality of HRC information disclosure in the financial year 2006/2007 corporate annual reports*

Perceived Quality of HRC Reporting in the Financial Year 2006/2007Annual Reports of the 8 Banks								
HRC Variables	ADB	ANZ	BEN	BOQ	CBA	NAB	SGB	WBC
Employee Recruitment	6	5	8	7	1	4	3	2
Employee Retention	7	5	8	6	1	3	4	2
Employee Values	6	8	7	5	2	1	3	4
Management & Leadership Qualities	7	8	6	5	2	3	4	1
Employee Problem Solving Skills	7	6	8	5	1	3	4	2
Mean Rank (based on Focus Group Ranking)	6.6	6.4	7.4	5.6	1.4	2.8	3.6	2.2
Friedman Test Chi-Square Value (DF = 7)	30.2**							
Note : Low Mean Rank Value denotes High Quality								
** P < 0.01								

In testing sub-hypothesis 11.2 the Chi-square value in Table 5.28 is 30.2 and it is significant (p-value is < 0.01) with a 99 percent confidence level. Therefore, Hypothesis 11.2 is accepted and it is concluded that there is difference in quality of reporting on HRC dimensions among the ABSC. Again, the CBA had the lowest mean rank of 1.4 (as low mean denotes high quality). This is demonstrated in Figure 5.2. This result means that the quality of reporting on HRC dimensions by the CBA is ranked as the best in focus group ranking.

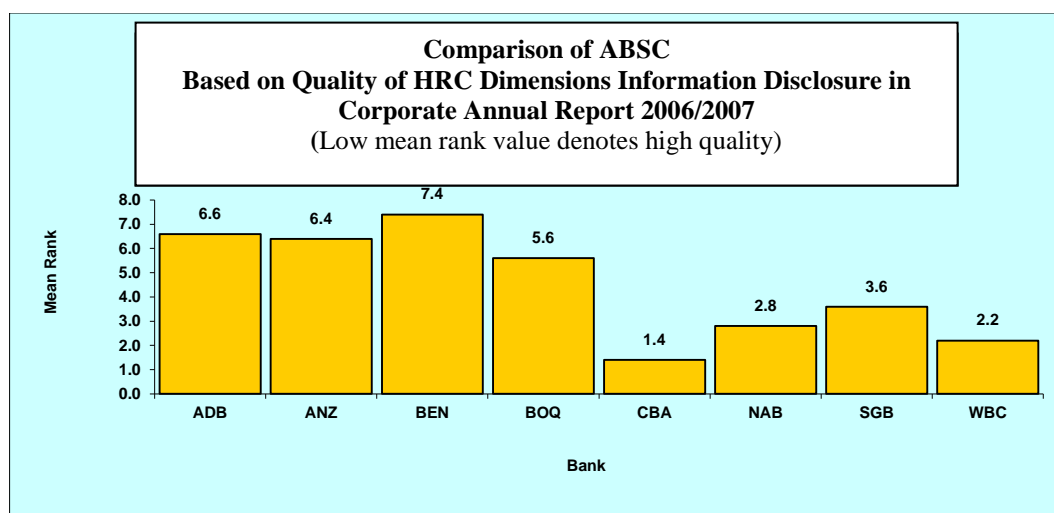


Figure 5.2. Comparison of ABSC based on quality of information disclosure on HRC dimensions in corporate annual report 2006/2007

Hypothesis 12 relates to reporting on the dimensions of RC. Tables 5.29 and 5.30 provide the output of the testing Hypothesis 12, which tested for a significant difference between the CBA and the other ABSC in the quality and frequency of provision of information on RC dimensions in the corporate annual reports.

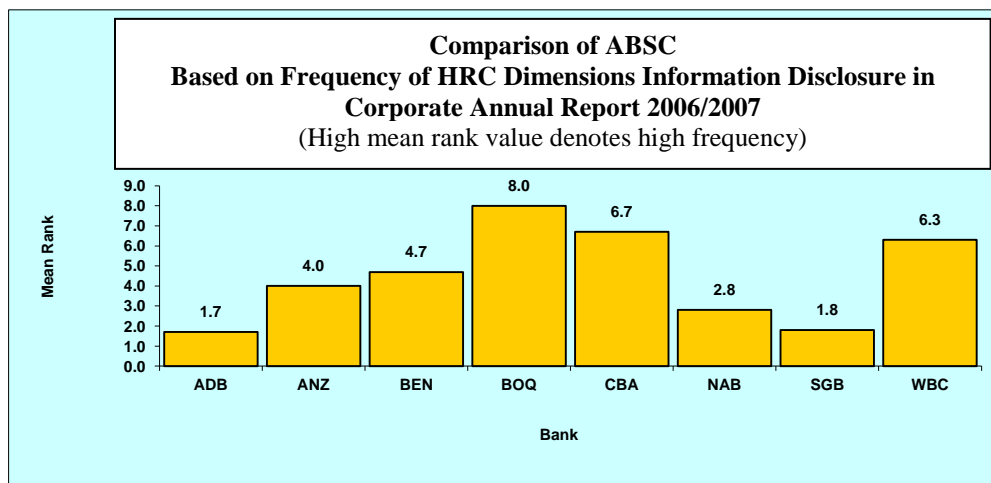
Table 5.29

*Perceived frequency of RC dimensions information disclosure in the financial year 2006/2007 corporate annual reports of ABSC*

Frequency of RC Dimensions Reporting in the Annual Reports of the 8 ABSC								
RC Variables	ADB	ANZ	BEN	BOQ	CBA	NAB	SGB	WBC
Customer Capital	3	6	9	20	18	4	4	13
Supplier Chain Relations	6	9	14	30	24	12	8	26
Competitors	7	10	8	22	21	2	1	17
<b>Mean Rank (based on the Frequency)</b>	<b>1.7</b>	<b>4.0</b>	<b>4.7</b>	<b>8.0</b>	<b>6.7</b>	<b>2.8</b>	<b>1.8</b>	<b>6.3</b>
<b>Friedman Test Chi-Square Value (DF = 7)</b>	<b>19.33**</b>							

\*\*P < 0.01, Note : High Mean Rank Value denotes High Frequency

For sub-hypothesis 12.1 and 12.2, the dependent variables are frequency and quality of RC reporting and the independent variable is the ABSC. Hypothesis 12.1 refers to the frequency of RC reporting. In testing sub-hypothesis 12.1 the Chi-square value in Table 5.29 is 19.33 and it is significant (p-value is < 0.01) with a 99 percent confidence level. Therefore, it is concluded that there is difference in the frequency of reporting on RC dimensions among the Australian Banks. However, Hypothesis 12.1 is rejected because the CBA was not the bank found to have the highest mean rank. The BOQ was found to have the highest mean rank of 8.0. Yet, as the research relates to the significance between being “Bank of the Year 2008” and reporting RC information, this research concludes that there is no significant link between the two variables.



*Figure 5.3.* Comparison of ABSC based on frequency of reporting information about RC dimensions in corporate annual report 2006/2007

Ranking on frequency of reporting RC dimensions information is also demonstrated above in Figure 5.3. This shows more clearly that the CBA does not report more number



of times RC dimensions information in the corporate annual reports, when compared to the other seven ABSC.

As for sub-hypothesis 12.2, the dependent variable is quality of RC reporting and the independent variable is the ABSC. Friedman's Test and the Chi-square value is also used to test this hypothesis. Table 5.30 sets out the results of testing.

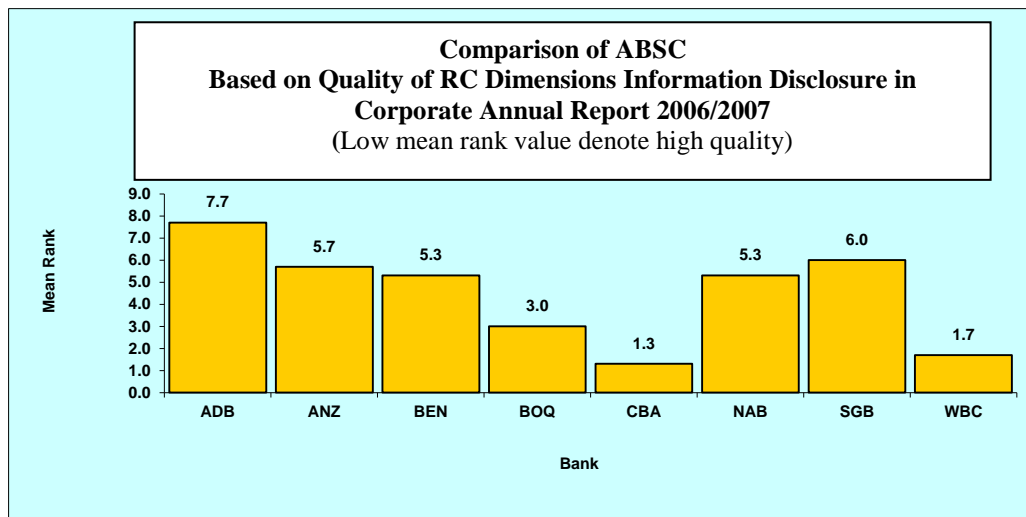
Table 5.30

*Perceived quality of RC dimensions information disclosure in the financial year 2006/2007 corporate annual reports*

<b>Quality of RC Dimensions Reporting in the Annual Reports of the 8 ABSC</b>								
<b>RC Variables</b>	<b>ADB</b>	<b>ANZ</b>	<b>BEN</b>	<b>BOQ</b>	<b>CBA</b>	<b>NAB</b>	<b>SGB</b>	<b>WBC</b>
Customer Capital	8	7	4	3	1	6	5	2
Supplier Chain Relations	8	6	7	3	1	4	5	2
Competitors	7	4	5	3	2	6	8	1
<b>Mean Rank (based on Focus Group Ranking)</b>	<b>7.7</b>	<b>5.7</b>	<b>5.3</b>	<b>3.0</b>	<b>1.3</b>	<b>5.3</b>	<b>6.0</b>	<b>1.7</b>
<b>Friedman Test Chi-Square Value (DF = 7) 17.67**</b>								
Note : Low Mean Rank Value denotes High Quality								
** P < 0.01								

For sub-hypothesis 12.2, in testing for a significant difference in quality of reporting information on RC dimensions among the ABSC, the hypothesis was tested using Friedman's test. The dependent variable is quality of reporting on RC dimensions and the independent variable is the ABSC. In testing sub-hypothesis 12.2 the Chi-square value in Table 5.30 is 17.67 and it is significant (p-value is < 0.01) with a 95 percent

confidence level. Therefore, Hypothesis 12.2 is accepted and it is concluded that there is difference in quality of reporting on HRC dimensions among the ABSC. The CBA had the lowest mean rank of 1.3 (as low mean denotes high quality). Figure 5.4 sets out the results of the mean rank comparisons.



*Figure 5.4.* Comparison of ABSC based on quality of RC information disclosure in corporate annual report 2006/2007

The results demonstrated in Figure 5.4 means that the quality of reporting on RC dimensions by the CBA is ranked as the best in focus group ranking. As such, indicate there is significant difference in the quality of information disclosure on RC dimensions among the ABSC. The hypothesis is accepted. The conclusion is that there is difference between the quality of disclosure by the CBA, Money Magazine’s “Bank of the Year 2008”, and the other seven ABSC as ranked by the focus group.

### **5.3.2.2 Relationship between HRC and RC dimensions and the share prices of ABSC.**

The seventh pair of hypotheses, Hypothesis 13 and Hypothesis 14, tested whether there was a positive relationship between the provision of information on HRC and RC dimensions in the corporate annual reports of ABSC and the corporation's share price. The independent variables for both hypotheses are the frequency and the quality of reporting on HRC and RC dimensions in the corporate annual reports of each of the ABSC representing the sample group. Also, for both hypotheses, 13 and 14, the dependent variable is the CAR of ABSC.

The CAR on the share price of ABSC was used to measure the change in the market value of the ABSC. This study used the same method to determine CAR as employed by Dumay and Tull (2007). For the event window +5 to -3 days of releasing the annual report, the cumulative return (stock) was calculated by applying the company's closing share price at Day +5 and subtracting the closing share price at Day -3. That is then divided by the closing share price at Day -3 and the total was then converted into a percentage. Table 5.31 presents the results of the CAR analysis on the share prices of the eight ABSC. Table 5.32 presents the results of the rankings in regards frequency and quality of reporting information about HRC dimensions. Table 5.32 also details the rank correlation between frequency or quality and CAR and p-value.

Table 5.31

*CAR of ABSC stocks for event window +5 to -3 days of release of 2006/2007 corporate annual reports*

<b>CAR of ABSC Stocks</b>								
<b>For +5 to -3 day Event Window (from highest to lowest)</b>								
	SGB	ANZ	CBA	NAB	ADB	BOQ	BEN	WBC
CAR in -3 to +5 day event window	2.70	1.96	0.90	-2.07	-2.61	-3.91	-4.64	-5.62

Table 5.32

*Rank correlation between frequency and quality of reporting HRC dimensions and CAR*

Bank Name	Ranking based on Frequency of HRC Reporting	Ranking based on Quality of HRC Reporting	Ranking based on CAR	Rank Correlation between Frequency & CAR and P-Value	Rank Correlation between Quality & CAR and P-Value
ADB	7	7	5	<b>-0.357</b>	<b>0.143</b>
ANZ	8	6	2		
BEN	6	8	7		
BOQ	4	5	6	<b>0.385</b>	<b>0.736</b>
CBA	3	1	3		
NAB	2	3	4		
SGB	5	4	1		
WBC	1	2	8		

Note : Ranked From Highest to Lowest

Hypothesis 13 tested the relationship between the frequency and quality of the provision of information on HRC dimensions in the corporate annual reports of ABSC and the corporation's share price. For sub-hypothesis 13.1, CAR analysis was used to

determine if there was a significant positive relationship between the frequency of provision of HRC information in the annual reports of ABSC and the corporation's share price.

Further to CAR analysis, a Hypothesis Rank Correlation was computed for the hypothesis. From the above Table 5.32, with a 95 percent confidence level, the rank correlation was found to be -0.36. The conclusion is that this is not significant. The hypothesis is rejected and it is concluded there is no evidence to support the relationship between frequency of reporting on HRC dimensions and CAR. This can be evidenced by the scatter plot presented in Figure 5.5.

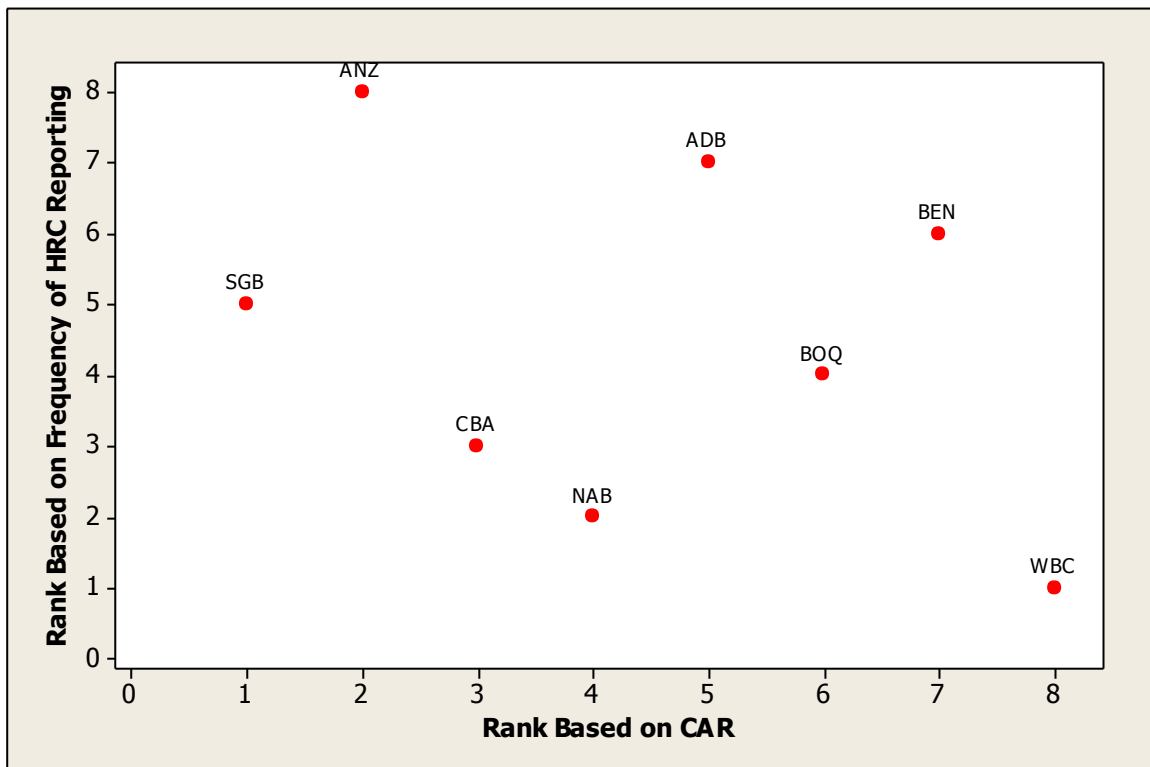


Figure 5.5. Scatter plot demonstrating the relationship between rank based on frequency of reporting HRC dimensions and rank based on CAR

For sub-hypothesis 13.2, CAR analysis was carried out to determine if there was a significant positive relationship between the quality of provision of HRC information in the annual reports of ABSC and the corporation's share price.

Further to CAR analysis, a Hypothesis Rank Correlation was computed for the hypothesis. From the above Table 5.32, with a 95 percent confidence level, the rank correlation was found to be 0.14. The conclusion is that this is not significant. Therefore, the hypothesis is rejected and it is concluded there is no evidence to support the relationship between quality of reporting on HRC dimensions and CAR. This can be evidenced by the scatter plot presented in Figure 5.6.

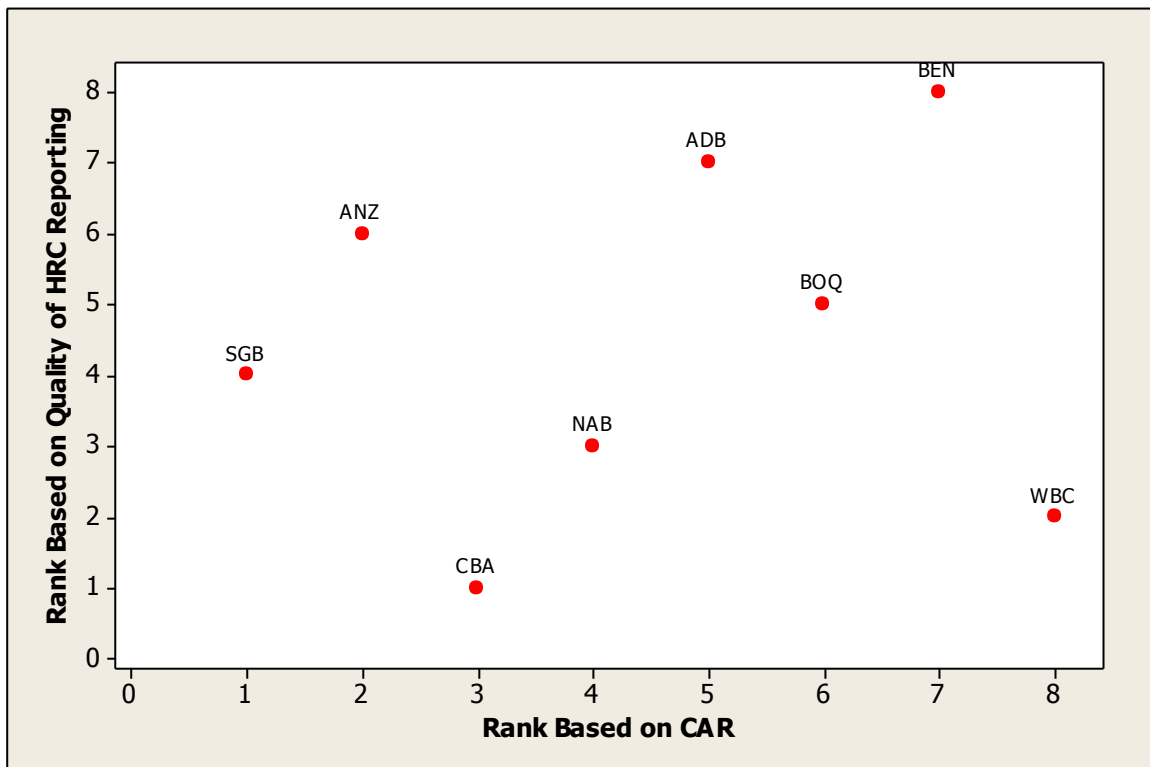


Figure 5.6. Scatter plot demonstrating the relationship between rank based on quality of reporting HRC dimensions and rank based on CAR

Hypothesis 14 also tested the relationship between the frequency and quality of the provision of information on RC dimensions in the corporate annual reports of ABSC and the corporation's share price. Table 5.33 presents the results of the rankings in regards to percent frequency and quality of reporting information about RC dimensions. Table 5.33 also details the rank correlation between frequency or quality and CAR and p-value.

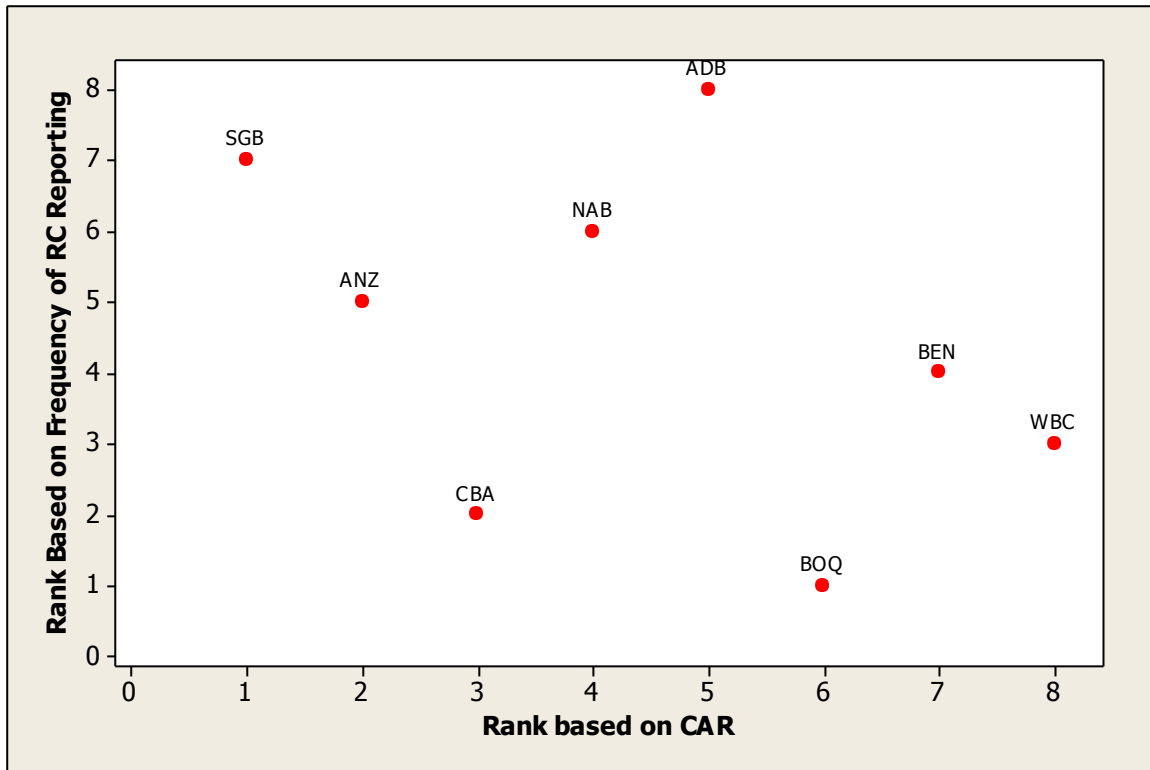
For sub-hypothesis 14.1, CAR analysis was used to determine if there was a significant positive relationship between the frequency of provision of RC information in the annual reports of ABSC and the corporation's share price. Further to CAR analysis, a Hypothesis Rank Correlation was computed for the hypothesis. From Table 5.33, the rank correlation was found to be -0.41. The conclusion is that this is not significant. Therefore, the hypothesis is rejected and it is concluded there is no evidence to support the relationship between frequency of RC reporting and CAR, which is depicted in the scatter plot presented in Figure 5.7.

Table 5.33

*For ABSC, rank correlation between frequency and quality of reporting HRC dimensions and CAR and p-value*

Bank Name	Ranking based on Frequency of RC Reporting	Ranking based on Quality of RC Reporting	Ranking based on CAR	Rank Correlation between Frequency & CAR and P-Value	Rank Correlation between Quality & CAR and P-Value
ADB	8	8	5	<b>-0.405</b>	<b>-0.395</b>
ANZ	5	6	2		
BEN	4	4	7		
BOQ	1	3	6		
CBA	2	1	3	<b>0.320</b>	<b>0.333</b>
NAB	6	5	4		
SGB	7	7	1		
WBC	3	2	8		

**Note : Ranked from highest to lowest**

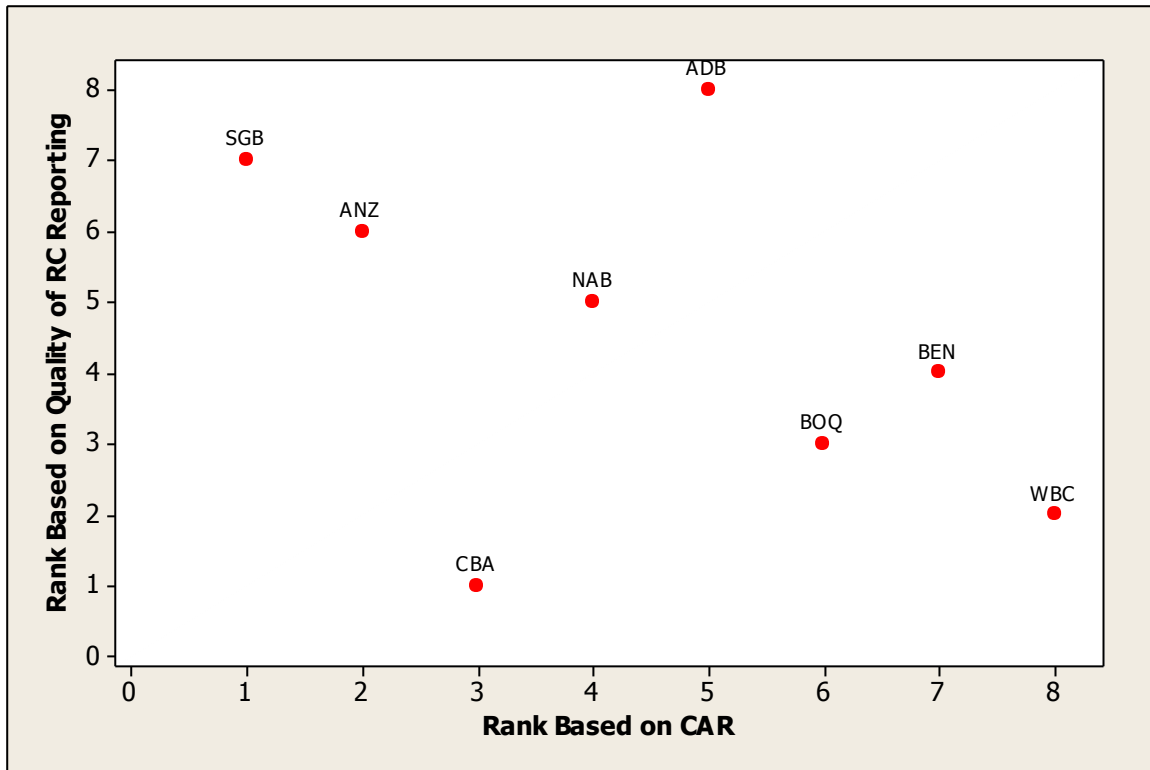


*Figure 5.7. Scatter plot demonstrating the relationship between rank based on frequency of reporting RC dimensions and rank based on CAR comparison*

For sub-hypothesis 14.2, CAR analysis was used to determine if there was a significant positive relationship between the quality of provision of RC information in the annual reports of ABSC and the corporation's share price.

Further to CAR analysis, a Hypothesis Rank Correlation was computed for the hypothesis. From the above Table 5.33, with a 95 percent confidence level, the rank correlation was found to be -0.40. The conclusion is that this is not significant. Therefore, the hypothesis is rejected and it is concluded there is no evidence to support the relationship between quality of reporting on RC dimensions and CAR. This can be evidenced by the scatter plot presented in Figure 5.8.





*Figure 5.8. Scatter plot demonstrating the relationship between rank based on quality of reporting RC dimensions and rank based on CAR*

## 5.4 Summary

This research starts from the assumption that investors are unlikely to have equal access to corporate information regarding HRC and RC dimensions and are not always rational in their stock transaction decisions as they may be influenced by various psychological biases (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). The contention is, however, that IC information, which includes information on the HRC and RC dimensions within a corporation, is most likely considered by shareholders when making investment decisions (Ballow et al., 2004; Bontis & Fitz-enz, 2002; Bukh, 2003; Chen et al., 2005; Guthrie et al., 2006; Lev, 2000; Saenz, 2005). Also, with regard to the Australian banking sector, the public, which includes individual “mum and dad”

investors, is often unaware of the positive HRC and RC policy initiatives the banks carry out in an effort to grow their business, as much of the focus of the annual reports is on the financial performance of the banks. This therefore leaves individual investors in the dark about information on anything other than financial data. ABSC must also consider the potential benefit to be had from improving their disclosure practices. Corporations need to make it easier for individual shareholders and potential investors to compare the HRC and RC policies of their corporations. This may ease the disparity between what HRC and RC policy information professional investors have access to and what “mum and dad” investors have access to in making their investment decisions.

The main study was undertaken in two parts. The first was to focus on the perceptions of individual shareholders about the importance of HRC and RC dimensions and on the impact of their perceptions share investment decisions. The second part focused on assessing the frequency and quality of disclosure of HRC and RC dimensions by the ABSC to determine whether disclosure led to the benefit of a net appreciation of share price for each of the relevant ABSC.

The four aims of the research study included: (1) to conduct an investigation into the perceptions of individual investors regarding information concerning the IC components of HRC and RC; (2) to provide an assessment of the relationship between the disclosure of HRC and RC and its impact on share value, as share market volatility and share price fluctuation remain issues impacting all investors; 3) to determine if, in the corporate annual reports of ABSC, information on HRC and RC dimensions was provided to investors, to those seeking an understanding of the differences in how ABSC

report on HRC and RC dimensions; and (4) to provide an understanding of the sources of share investment advice individual investors turn to in their investment decisions.

To realise the aims of the research, the study undertook seven key investigations. These included: (1) An investigation into the differences in the perceptions of individual shareholders of the importance of HRC and RC dimensions between ownership of stocks in the different ABSC; (2) An investigation into the differences in the perceptions of individual shareholders of the importance of HRC and RC dimensions between ownership of stocks in only a single Australian bank and ownership of stocks in multiple ABSC; (3) An investigation into whether individual shareholders' perceptions of the importance of HRC and RC dimensions relate to their decisions to purchase ABSC stocks; (4) An investigation into whether individual shareholders perceive HRC and RC dimensions to differ in importance for use in the purchase, holding on to, or selling of ABSC stocks; (5) An investigation into whether, in the ABSC stock transaction decisions of individual shareholders, the individual shareholder's perception of the importance of HRC and RC dimensions is moderated by information provided by differing sources of advice and demographic variables; (6) An investigation into how the CBA, Money Magazine's "Bank of the Year 2008", compares to the other banks in the provision of HRC and RC information in the corporate annual reports; and (7) An investigation into whether, for ABSC, there is a significant positive relationship between the provision of information about HRC and RC dimensions in the corporate annual reports of the ABSC and their relevant share prices.

In support of the investigations carried out, a range of statistical tests were used for analysis. The first part of the study, relating to shareholder perceptions and behaviours,

included the use of ANOVA, post hoc Bonferroni test, t-test, logistic regression, and discriminatory analysis on the data extracted from the questionnaire. The questionnaire used was developed as a result of the initial pilot study in which the dimensions of HRC and RC were determined and defined, and in which the items used in measuring perception were determined and successfully tested for validity and reliability.

The second part of the study, relating to the disclosure of information about HRC and RC dimensions, and relating to the resultant share price performance of the ABSC investigated, included the use of a comparative analysis on the data obtained from the content analysis and a CAR analysis on the share prices of ABSC. The eight banks identified for this part of the study were those listed on the ASX 200 as at the end of the 2006/2007 financial year. Both their financial year 2006/2007 corporate reports, as well as their share price movements within the relevant reporting periods were used for analysis. This was to determine if a link could be made between disclosure on HRC and RC dimensions and corporate share price.

By investigating the differences in the perceptions of individual shareholders of the importance of HRC and RC dimensions between ownership of stocks in the different ABSC, this research finds that shareholders of NAB stocks perceive all five dimensions of HRC to be important to their decision to purchase ABSC stocks. What this research also finds is that shareholders of NAB stocks perceive all three RC dimensions to be important to their decision to purchase ABSC stocks; shareholders of CBA stocks perceive all three dimensions of RC to be important to their decision to purchase ABSC stock; and, shareholders of WBC stocks perceive the RC dimension of supplier chain relations to be important to their decision to purchase ABSC stocks. Additionally, this

research concludes that the perceptions of the importance of the RC dimensions of customer capital and supplier chain relations are significantly different between the shareholders of the top four ABSC stocks. It is suggested that shareholders of NAB stocks perceive information regarding the RC dimensions of customer capital and supplier chain relations to be significantly more important to their ABSC stock purchase decisions than shareholders of ANZ stock perceive the information to be. The research identifies shareholders of NAB stocks to perceive information on HRC and RC dimensions to be higher in importance, overall, than shareholders of other ABSC perceived them to be in the decision to purchase ABSC stocks. However, the research also concludes that the perceptions of importance of all five HRC dimensions, as well as of the RC dimension of competitors, are not significantly different between the shareholders of stocks in the CBA, WBC, NAB, and ANZ.

By investigating the differences in the perceptions of individual shareholders of the importance of HRC and RC dimensions between ownership of stocks in only a single Australian bank and ownership of stocks in multiple ABSC, the research identifies them as insignificant except in the instance of shareholders of solely NAB stocks. NAB shareholders perceive information about the HRC dimensions of management and leadership qualities and employee problem solving skills to be more important when compared to perceptions measured for shareholders of multiple ABSC including NAB. Also, the perceptions of importance of all three RC dimensions, including customer capital, supplier chain relations, and competitors, are significantly different for shareholders of solely NAB shares than shareholders of multiple ABSC shares, including NAB shares. However, the research also concludes that the perceptions of individual

shareholders of the importance of the HRC dimensions of employee recruitment, employee retention, and employee values are not significantly different for shareholders of stocks in a sole ABSC or in multiple ABSC.

By investigating if individual shareholders' perceptions of the importance of HRC and RC dimensions relate to their decisions to purchase ABSC stocks, the research identifies that the relationship between an individual shareholder's perception of the importance of HRC and RC dimensions of a corporation and the use of the HRC and RC dimensions in the decision to purchase ABSC stocks is not significant. Also, by investigating if individual shareholders perceive HRC and RC dimensions to differ in importance for use in the purchase, holding on to, or selling of ABSC stocks, the research questionnaire reveals no significance in the perceived importance of HRC and RC dimensions for use by purchasers, holders, or sellers of ABSC stocks. The only exception is that the hypothesis is accepted for the HRC dimension of employee recruitment as a significant difference in the mean importance given to information on employee recruitment exists among the decisions to purchase, hold on to, or sell ABSC stocks. In the decision to purchase of ABSC stocks, the HRC dimension of employee recruitment is perceived to be of greatest importance.

In testing for moderators on the relationship between shareholder perceptions and shareholder decisions, the research also identifies that the shareholders' use of HRC and RC dimensions information, in the decision to purchase, hold on to, or sell ABSC stocks, is not significantly impacted by moderators, including sources of advice and demographic variables. However, the only source of advice that is an exception to this is "family and friends". The data suggests that the advice sought from "family and friends" is three

times more likely to be significant, a critical contributor, if the shareholder is deciding on whether to hold on to ABSC shares.

By investigating how CBA, Money Magazine's "Bank of the Year 2008", compares to the other banks in the provision of HRC and RC information in the corporate annual reports, this research finds that the relationship between the CBA and information disclosure in the corporate annual reports, vis-à-vis information on HRC and RC dimensions, is significant. The research suggests that the CBA has obtained the best ranking in relation to the quality of reporting. As such, the hypothesis is accepted for the quality of information disclosure in relation to HRC and RC dimensions, and is rejected for the frequency of information disclosure in relation to both HRC and RC dimensions. It is concluded that there is a difference between the quality of HRC and RC dimensions information disclosure by the CBA, Money Magazine's Bank of the Year 2008", and the other seven ABSC as ranked by the focus group. However, in reference to the frequency of reporting HRC and RC dimensions information, the research finds there is a significant difference between the ABSC, but the CBA is not perceived to report either HRC or RC more frequently than the others. The honours go to WBC and BOQ respectively. Therefore, the hypothesis, in relation to CBA, is rejected. As such, there is no significance in the relationship between being Money Magazine's "Bank of the Year 2008" and frequency of HRC and RC dimensions reporting in the corporate annual reports.

Finally, in testing for a positive relationship between the provision of information on HRC and RC dimensions in the corporate annual reports and the corporation's share price, the research reveals that there is no evidence to support the relationship between

frequency and quality of reporting on HRC and RC dimensions and CAR. Therefore, it is concluded that there is no significant relationship between corporate annual report content, vis-à-vis information about HRC and/or RC dimensions, and respective share prices. A discussion about the results of the data analysis, arising from the investigations carried out is provided in Chapter Six. Chapter Six also provides information on the limitations of the research study, as well as on the recommendations, and provides conclusions arising from the research study.



## **Chapter Six**

### **Discussion and Conclusions**

Corporations are comprised of both tangible assets and intangible assets and are entities in their own right. Public, listed corporations, however, have a perpetual requirement to obtain funds from investors in order to expand, explore and otherwise continue and improve both their operation and their profitability. These investors come from two distinct groups. The first group is corporate investors who are, often, solely involved in making share investments and/or recommendations for share investments, and in keeping abreast of the changes and activities in the public corporations in which they are likely to invest. The second group is individual investors, “mum and dad” shareholders who invest their own money in share investments. Individual investors, like corporate investors, seek to invest in corporations that are likely to demonstrate a satisfactory income flow and capital growth in order to make more valuable, in the future, shares purchased today.

This research is the first, in Australia, to investigate the perceived importance of very specific intangible assets of a public corporation and their value when assessed by individual “mum and dad” investors in the acquisition of the stocks in ABSC. This research focuses on the ABSC stocks and provides an investigation of the intangible HR based assets of the eight banks listed on the ASX 200 in the financial year 2006/2007. These specific intangible assets, as the subcomponents of IC to which they are aligned, include HRC dimensions and RC dimensions. These dimensions are shown in Table 6.1.

Table 6.1  
*The HRC and RC dimensions of IC*

HRC	RC
Employee Recruitment	Customer Capital
Employee Retention	Supplier Chain Relations
Employee Values	Competitors
Development of Management and Leadership Qualities	
Developing Employee Problem Solving Skills	

Findings include the significance of HRC on the decisions to buy, to hold on to or to sell ABSC stocks made by individual investors. They also include the significance of RC on the decisions to buy, to hold on to, or to sell ABSC stocks. The findings also include insights into the reporting of HRC and RC, in frequency and quality of reference by ABSC in their corporate annual reports, to shareholders and the relationship to stock price. Based on findings from this research, conclusions are drawn and the limitations of the research are identified. Recommendations for future research to be considered are also presented.

## 6.1 Discussion

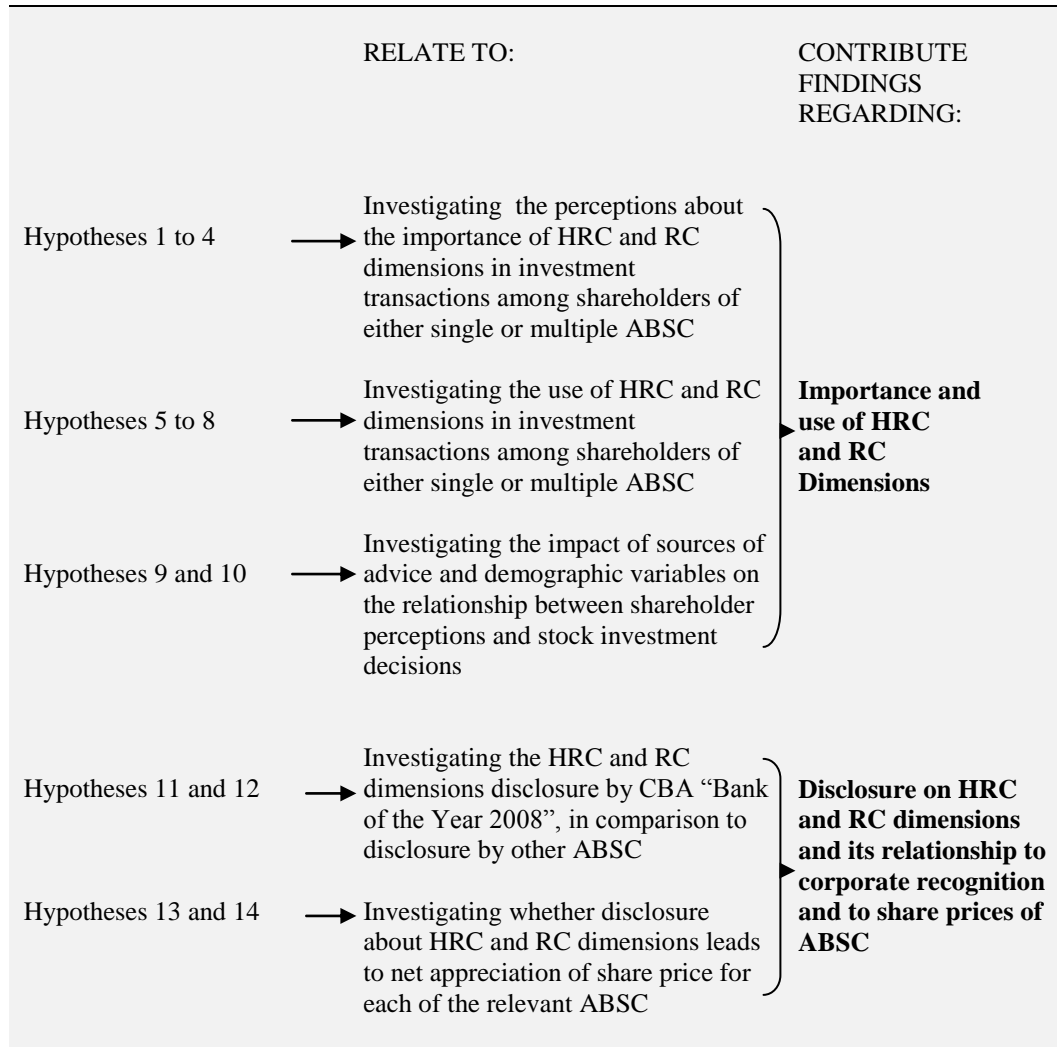
Results from this research contribute findings that are important to the current literature. First, this study adds to the body of literature on the factors that are important to individual share purchasers of publically traded banking sector stocks in Australia. A comprehensive review of current literature, in both the fields of HR and IC Management,

measurement and reporting, reveals that IC is an umbrella over intangible assets in a corporation (Bollen et al., 2005; Bontis, 1998, 2002; Bontis & Fitz-enz, 2002; Brooking, 1996; Edvinsson & Malone, 1997; Johanson, 2005; Lynn, 1998; Sveiby, 1989, 1997). A review of the current literature in business management, financial investments, and behavioural economics and finance confirmed that there is limited work that analyses the considerations included by individual shareholders in their purchase of Australian banking shares (Alwert, Bornemann, & Will, 2009; Ax & Marton, 2008; Petty, Ricceri, & Guthrie, 2008; Royal & O'Donnell, 2004, 2008). More specifically, there is no published research that addresses the perceptions of individual investors with regard for only the HRC and RC factors as reported by the corporations in their annual reports.

This research was undertaken to investigate and analyse: (1) the perceptions of individual investors about information concerning the IC components of HRC and RC; (2) the sources of share investment advice individual investors turn to in their investment decisions; (3) if, in the corporate annual reports of ABSC, information on HRC and RC dimensions is provided to investors, seeking an understanding of the differences in how ABSC report on HRC and RC dimensions; and (4) the relationship between the disclosure of HRC and RC and its impact on share value, as share market volatility and share price fluctuation are issues that impact all investors.

The focus of this research is on information regarding HRC and RC dimensions. This research builds on the previous literature which has suggested that HRC and RC, as dimensions of IC, are both clearly identifiable subcomponents of the IC owned by a corporation (Bollen et al., 2005; Bontis, 1998, 2002; Bontis & Fitz-enz, 2002; Brooking, 1996; Edvinsson & Malone, 1997; Johanson, 2005; Lynn, 1998; Sveiby, 1989, 1997).

Furthermore, published works by Abdolmohammadi (2005), Alwert, Bornemann, and Will (2009), Ax and Marton (2008), Petty, Ricceri, and Guthrie (2008), and Royal and O'Donnell (2004, 2008), provide a foundation on which one can begin understanding the importance of these intangible assets in the decisions to buy, hold on to, or sell particular stocks. However, none addresses the work performed in this research – the investigation of the perception of those intangible assets by individual investors of Australian banking stocks. Also within the literature, it is evidenced that all investors, corporate and individual, make investments with the intent to grow the value of the funds invested (ASX, 2005, 2007; Petty, Ricceri, & Guthrie, 2008). In relation to the research aims, the answers to each of the seven questions raised in this research were determined through the testing of multiple hypotheses. Ten of the fourteen hypotheses presented are in relation to the importance and use of HRC and RC dimensions, while the remaining four hypotheses are in relation to disclosure on HRC and RC dimensions in corporate annual reports and the relationship to share prices of ABSC. In all cases, the hypotheses were able to be investigated and analysed. Figure 6.2 sets out the relationship between the testing of hypotheses, the research aims, and the focus of this research.



*Figure 6.1.* Relationship between hypotheses, research aims, and research focus

Put simply, this research is about gaining an understanding about whether individual shareholders perceive HRC and RC dimensions to be important to their stock transaction decisions, and whether they use that information in their stock transactions. It is about gaining an understanding about whether individual shareholders’ perception and use of HRC and RC dimensions information is moderated by other sources of advice and demographic variables such as age, gender, education, and income. It is about gaining an understanding about the HRC and RC dimensions information individual shareholders

perceive ABSC to have disclosed in the corporate annual reports; and, in light of behavioural economic theories and behavioural finance, it is about gaining an understanding about whether the provision of HRC and RC dimensions information does benefit ABSC through a positive corporate recognition and/or an appreciation in their share prices.

This discussion of the research findings is set out in five clusters, based on the information provided in Figure 6.1. At the end of each cluster, this chapter provides a discussion of the research findings in light of the findings of previous studies.

#### **6.1.1 Importance and use of HRC and RC dimensions.**

This research was designed to provide a further expansion of knowledge in the field of IC management and reporting from a HRM perspective. As distinct from other research, this research deals only with the HR components of IC, the HRC and RC dimensions of a corporation, deals only with the perceptions of individual “mum and dad” investors, and deals only with the shareholders of ABSC.

Hypothesis 1 to Hypothesis 4 relate to “the perceived importance of HRC and RC dimensions to ABSC stock transactions” (refer to Figure 6.1). Hypothesis 5 to Hypothesis 8 relate to the “use of HRC and RC dimensions information in ABSC stock transactions” (refer to Figure 6.1). Hypothesis 9 and Hypothesis 10 relate to the “moderation effect on the relationship between the importance of and use of HRC and RC dimensions information” (refer to Figure 6.1).

***6.1.1.1 The perceptions of HRC and RC dimensions in investment transactions among shareholders of either single or multiple ABSC.***

The investigation into the perceived importance of HRC and RC dimensions finds that shareholders of NAB stocks perceive all five dimensions of HRC and all three dimensions of RC to be important in their decisions to buy ABSC stocks. The research also finds that shareholders of CBA stock perceive all three dimensions of RC to be of value to their decisions to buy ABSC stock and that shareholders of WBC stocks perceive only the RC dimension of supplier chain relations as valuable to their decisions to buy ABSC stocks. In relation to Hypothesis 1, however, this research finds that there are no significant differences in shareholders' perceptions regarding any of the five HRC dimensions, in the decision to purchase ABSC stocks, between individual shareholders of CBA, WBC, NAB, and ANZ. Additionally, the research identifies that, in making a decision to buy ABSC stocks, NAB shareholders tend to value HRC dimensions information more than shareholders of the others of the big four ABSC do.

This research also finds, for Hypothesis 2, significant differences in the perceptions of the importance of the RC dimensions of customer capital and supplier chain relations, in the decision to purchase ABSC stocks, between individual shareholders of CBA, WBC, NAB, and ANZ. The suggestion is that "mum and dad" shareholders of Australia's four biggest banks (CBA, WBC, NAB, and ANZ) have significant differences in perceptions of the importance of RC dimensions in the decision to purchase ABSC stock. Quite specifically, the research identifies that "mum and dad" shareholders of NAB stocks believe information on the RC dimensions of customer capital and supplier chain relations, to be higher in importance than shareholders of ANZ stocks believe them

to be to the decision to buy ABSC stocks. The research finds, however, in the decision to buy ABSC stocks, there is no significance in the differences between “mum and dad” shareholders’ perceptions for the RC dimension of competitors.

Expanding on the findings of the first pair of hypotheses, the second pair of hypotheses sought to determine if there are significant differences in the perceptions of importance of HRC and RC dimensions in the decisions to purchase ABSC stocks, of shareholders who have ownership in only one of the big four banks, and of shareholders who have ownership in multiple ABSC, including one of the big four banks. Findings from Hypothesis 3 and Hypothesis 4 suggest that the differences in the perceptions of shareholders are not significant except in the instance of only one of the big four ABSC investigated. Results of significance relate to responses provided by shareholders of solely NAB stocks rather than shareholders of solely one of the other three of the big four ABSC. This research finds that “mum and dad” shareholders of solely NAB stocks perceive selected HRC and all RC dimensions to be more important to the decision to purchase ABSC stocks, when compared to other shareholders, of either single or multiple ABSC stocks. The selected HRC dimensions include management and leadership qualities and employee problem solving skills. The RC dimensions include customer capital, supplier chain relations, and competitors. The findings of significance suggest that, for the specified dimensions of HRC and RC, “mum and dad” shareholders with only NAB stocks, differ in their perceptions from those shareholders who have NAB stocks in conjunction with other ABSC stocks.

From a practical perspective, one may surmise that shareholders of solely NAB stocks place a greater importance on HRC and RC dimensions because of either their



subjective values or their subjective experiences. However, the results from the investigation conducted in this research, into the disclosure practices of ABSC (refer to Hypothesis 11 and Hypothesis 12), suggest that NAB is neither the best ranked in terms of quality nor in terms of frequency of reporting about their HRC and RC dimensions. In terms of frequency, NAB is ranked second and sixth, respectively for HRC and RC dimensions reporting, out of the eight ABSC (refer to Table 5.31). In terms of quality, NAB is ranked third and fifth, respectively, for HRC and RC dimensions reporting, out of the eight ABSC (refer to Table 5.32).

This infers that “mum and dad” shareholders of NAB stock, in particular, intuitively place a higher value on the information because the information is not perceived to be adequately available in the NAB corporate annual report. In support of this contention, this research refers to subjectivist theories of personal good. Subjectivist theories suggest that something is perceived to be good, or of value to an individual, simply because it is desired by that individual and not held (Hooker, 2007). Simply speaking, a person desires something because that person does not have it. This is regardless of how bizarre or uncommon the desire may be. Subjectivist theories focus on a person’s capacity to determine whether or not a specific desire may ultimately bring fulfilment (Hooker, 2007). As such, the “mum and dad” shareholders of NAB stocks want information on specific HRC and RC dimensions because they don’t believe they have the information. This is supported by the finding that NAB is neither the best ranked in terms of quality nor in terms of frequency of reporting about their HRC and RC dimensions (refer to Hypothesis 11 and Hypothesis 12).

The findings of the investigation into perceptions of “mum and dad” shareholders have the capacity to generate even more questions for future investigation. Questions relate to developing an understanding about why shareholders of NAB stock have higher perceptions of importance, whether they buy NAB stocks because of their beliefs, or whether their beliefs are influenced by having NAB stocks in the first place.

Only in the case of solely NAB shareholders, are the perceptions of the importance of information about the specific HRC dimensions (management and leadership qualities and employee problem solving skills) and all RC dimensions higher than those measured for shareholders of multiple ABSC including NAB. The findings infer, as a consequence, that those “mum and dad” shareholders who have stocks in multiple ABSC, including the NAB, place less value on the information. The suggestion is that their needs for the HRC and RC information are being better met; if not by NAB, by the other ABSC. This contention is supported by transfer of learning theories which assert that a person may transfer what he or she knows about one subject to a similar subject (Haskell, 2001). What this research suggests is that if an individual shareholder has “known” information about other shareholdings, WBC for example, they will apply that information to NAB stocks without “new” knowledge being gained. However, unless shareholders apply new learning to their old learning, they are really not transferring learning. While shareholders may think they have the information they need, their judgments, however, are based on similarities and are largely subjective not quantifiable.

This research, therefore, surmises that “mum and dad” shareholders of solely NAB stocks believe the specified HRC and RC dimensions to be of value for them to consider in the decision to purchase of ABSC stocks. They believe this is the case more so than

shareholders of the others of the big four banks, including those who have a combination of ABSC stocks including NAB stocks. It is suggested as a result of testing shareholder perceptions, that the ABSC potentially stand to benefit from a clearer understanding of why differences between perceptions occur and whether all “mum and dad” shareholders of ABSC have the capacity to change their perceptions through improved disclosure and shareholder education. The findings, therefore, give rise to the development of a number of questions that may be addressed in future research.

The investigation into the perceptions of “mum and dad” shareholders has made some significant contributions to current literature. This research is aligned to research conducted by Alwert, Bornemann, and Will (2009), Royal and O’Donnell (2004, 2008) and Petty, Ricceri, and Guthrie (2008), and corresponds with they have found, that stakeholders prefer companies to be transparent and to provide information about their IC assets. This research also supports the research conducted by Ax and Marton (2008), which established that if managers perceived the disclosure of information about ‘practices’ to be important, they would carry out the ‘practices’ even if they didn’t report on them. It also subscribes to the idea of providing a link between SHRM and analysis of information on intangibles, with a particular focus on providing stakeholders with qualitative data necessary for interpretation and analysis. In concert with their work (Alwert, Bornemann, & Will, 2009; Ax & Marton, 2008; Petty, Ricceri, & Guthrie, 2008; Royal & O’Donnell, 2008), this research establishes empirically that the “mum and dad” shareholders of ABSC stocks, and of NAB stocks in particular, have positive perceptions relating to information about specified HRC and RC dimensions.

A major difference here, however, is in the sampling of the studies. The previous research (Alwert, Bornemann, & Will, 2009; Ax & Marton, 2008; Petty, Ricceri, & Guthrie, 2008; Royal & O'Donnell, 2008) has focused on the perceptions of professional investors, of management, and of institutional investors, whilst this research relates to a different user group. This research focuses on collecting information relating to “mum and dad” investors, not professional or institutional investors. This represents a concentration on a wider group of shareholders with many variable characteristics. This research also differs from the research by Royal and O'Donnell (2008) in that it does not share a focus on innovation on investment. Rather, the focus of this research is on proving empirically, how important the specified components of the HRC and RC dimensions to shareholders of ABSC stocks with regard for their ABSC stock transactions. This research, therefore, supports empirically the positive perception of, and desire for information on specific components of the IC dimensions of HRC and RC in investment transaction decisions, not only for professional analysts and institutional investors, as others have found (Alwert, Bornemann, & Will, 2009; Ax & Marton, 2008; Petty, Ricceri, & Guthrie, 2008; Royal & O'Donnell, 2008), but for individual “mum and dad” investors as well.

***6.1.1.2 The use of HRC and RC dimensions in investment transactions among shareholders of either single or multiple ABSC.***

In relation to third pair of hypotheses, Hypothesis 5 and Hypothesis 6, this research sought to determine if there is a significant relationship between an individual shareholder's perception of importance of HRC and RC dimensions and the use of HRC and RC dimensions in the decision to purchase ABSC stocks. This research finds that

while perceptions of importance of HRC and RC dimensions differ for “mum and dad” shareholders of ABSC, “mum and dad” shareholder do perceive specific dimensions of HRC and RC to be valuable to their ABSC stock purchase decisions (Hypothesis 1 to Hypothesis 4). This research, however, fails to identify a statistically significant relationship between an individual shareholder’s perception of the importance of information about the HRC and RC dimensions of a corporation and the use of information about HRC and RC dimensions in the decision to purchase ABSC stocks.

In relation to the fourth pair of hypotheses, Hypothesis 7 and Hypothesis 8, this research also sought to determine if there are significant differences in the importance attributed to HRC and RC dimensions among the decisions to purchase, hold on to, or sell ABSC stocks. This research reveals that there are no significant differences in the perceived importance of HRC and RC dimensions for use by purchasers, holders, or sellers of ABSC stocks. The only exception identified is the perceived importance for the HRC dimension of employee recruitment. The research finds that there is a significant difference in the importance given to information on employee recruitment in the category of the decision to buy, hold on to, or sell ABSC stocks. The importance given to information on the HRC dimension of employee recruitment is the highest with regard to the decision to purchase ABSC stocks. This level of importance is attributed to the stock purchase decision when compared to the other stock transaction decisions considered. Previously, “mum and dad” shareholders indicated that they believe management and leadership qualities and employee problem solving skills to be important (refer to Hypothesis 1 to Hypothesis 4). In exploring this hypothesis, however, “mum and dad” shareholders reveal that employee recruitment information is significant

in their stock “purchase” decisions, rather than in their stock “hold” or “sell” decisions. Research suggests that there is a demand for IC disclosure because corporations are recognised as deriving their success from intangible assets – assets that include employees recruited for their skills base (Bukh, 2003). The function of employee recruitment, along with employee retention, is regarded by researchers as important to shape the organizational culture, learning, routines and entrepreneurship (Lado & Wilson, 1994). This, in turn, creates organizational competencies to enable an organization to achieve competitive advantage through a focus on innovation, cost reduction and/or improved productivity (Lado & Wilson, 1994). Additionally, from a SHRM perspective, the HRM functions are classified into procurement and performance management (McNamara, 2006). Procurement is about attracting and selecting employees and performance management is an on-going process concerned with everything else that follows their recruitment. This research infers that, when “mum and dad” shareholders are probed in relation to the range of stock transactions, they indicate that information about how a corporation selects and attracts the right people is of more value to their decision to “buy” ABSC stocks, than information on how the performance of employees is managed.

In summing up, this research finds that, in investigating the use of HRC and RC dimensions by “mum and dad” shareholders, the HRC dimension of employee recruitment is of more value to “mum and dad” shareholders in their decisions to “buy” ABSC stocks than to “hold” on to or “sell” ABSC stocks. Conversely, no other HRC or RC dimensions are found to differ in importance in the decisions to either “buy”, “hold” on to, or “sell” ABSC stocks.

Furthermore, the findings did not demonstrate the existence of a significant relationship between an individual shareholder's perception of the importance of HRC and RC dimensions and an individual's use of HRC and RC dimensions in the decision to buy ABSC stocks. As such, "perceptions" do not equate to "actions". Attempting to explain the findings, this research refers to the theory of Planned Behaviour which explains the relationship between behavioural intentions and behaviours (Ajzen, 1991, 2002). The theory assumes that behaviour is a result of a person's behavioural intention. It is the mix of a person's attitude concerning the behaviour and the subjective norms, as well as the person's perception regarding his/her behavioural controls, the ability to carry out the behaviour (Ajzen, 1991, 2002). As such, behavioural intention alone is not perceived to equate to behaviour. Put simply in the context of this research, the theory of planned behaviour suggests that if, based on their perceptions, the intention of "mum and dad" shareholders is to purchase ABSC stocks, then they will only do so if their attitude is positive toward the purchase of ABSC stocks, if historically they have been likely to purchase ABSC stocks, and if they have confidence in their ability to produce a positive outcome from their decisions to purchase ABSC stocks. The theory of planned behaviour provides a theoretical tool to explain the rationale for why this research study did not establish a clear link between perceptions and behaviours, or actions, of "mum and dad" shareholders. Another reason behind the finding may also be linked to research conducted by Caldini (2008) who suggests that there are six fundamental principles in applying strategies to achieve influence over others. The six principles referred to include reciprocity, commitment and consistency, social proof, authority, liking, and scarcity. Of the six principles, the principle of "social proof" is relevant to this research

finding. Caldini asserts that under conditions of uncertainty or of similarity, people often view an action as more correct in a specific situation, to the extent to which others are observed performing it. Realistically speaking, this theory leads to the suggestion that if “mum and dad” shareholders are unsure about where to invest and how to invest, they will behave as others behave. They will follow the example of people who are similar to them and accept that they are correct in doing so. Essentially, this strategy becomes a shortcut for them to use in making stock transaction decisions and is in no way related to their own individual perceptions about the information a corporation provides.

Finally, another reason behind the finding may also be linked to behavioural economic theories and the field of behavioural finance which suggests that investors may be influenced by specific psychological biases and are not always rational in their stock transaction decisions (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). Cognitive biases include biased self-attribution and overconfidence and the previous research suggests that stock investors overreact to private information and under-react to public information signals due to their biased self-attribution and over-confidence. This provides some insight into instances of irrational consumer decision-making and behaviour (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). This, therefore, helps to explain why, while investors say the information is important, they do not use the information in their stock transaction decisions.

Intuitively speaking, the findings of the investigation into the use of HRC and RC dimensions by “mum and dad” shareholders may be a result of various cognitive biases and either the negative or positive outcomes of their past stock transaction decisions. Perhaps “mum and dad” shareholders lack the confidence to act on their perceptions



based on bad experiences with buying other types of stocks. Underperforming stocks and capital loss may be factors that impact on shareholder confidence and behaviour. As confidence is eroded, “mum and dad” shareholders may well look to others to follow in their stock transaction decisions. Related to this finding and in support of the inference made, previous research suggests that the experiences of the past are shown to have a bearing on later behaviour (Ajzen, 2002; Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). Previous research also proposes that past behaviour is lessened, when the measures of intention and behaviour are attuned (Ajzen, 2002). The impact of past behaviour disappears when intentions are resilient and well developed, when expectations are reasonable, and when specific plans for the execution of intentions have been work out (Ajzen, 2002). Additionally, to overcome the influence of past experience on later behaviour, the research suggests that simply telling someone that the past has no bearing on present and future decisions is not enough. To succeed in moderating the relationship between perceptions and behaviours, for example, ABSC need to convince “mum and dad” shareholders to change their behavioural intentions by focusing on implementing strategies that change their attitudes, their subjective norms, and their perceived behavioural control; this may result in improving shareholder confidence and efficacy. This cannot be determined beyond a doubt unless further, future research is carried out to explore the impact of capital losses and gains on the relationship between the perceptions and the use of HRC and RC dimensions information.

This thesis and the hypotheses that support the investigation into the use of HRC and RC dimensions by “mum and dad” shareholders have been supported to some degree in the research conducted by Abdolmohammadi (2005), Alwert, Bornemann, and Will

(2009), and Petty, Ricceri, and Guthrie (2008), and corresponds with they have found, that professional and institutional stakeholders use IC information provided to them in the annual reports to make stock transaction decisions. They also found that information-users prefer improved corporate transparency and the provision of IC information as part and parcel of the annual report. Abdolmohammadi found that the needs and expectations of information users are often not met by corporations and as a result, investors experience difficulty in analysing and comparing the information provided to them. Aligned with his findings, this research finds that even though a shareholder may have a positive perception of the value of HRC and RC dimensions, this does not mean they will use the information to make stock transaction decisions, it has not been determined why exactly, but it may be that the information is hard to analyse and interpret, just as Abdolmohammadi suggested. As such, this research provides an extension on his research and establishes empirically that the “mum and dad” shareholders of ABSC stocks and of NAB stocks in particular, have positive perceptions relating to information about specified HRC and RC dimensions, but they generally don’t use the information in their stock transaction decisions.

A major difference here, however, is in the sample and in the sector being investigated. Abdolmohammadi (2005) focused on information disclosed by various corporations and sectors and this research focuses quite specifically on the Australian banking sector. Additionally, the previous research (Abdolmohammadi, 2005; Alwert, Bornemann, & Will, 2009; Petty, Ricceri, & Guthrie, 2008; Royal & O’Donnell, 2008) has focused on the perceptions of professional investors, of management, and of institutional investors, whilst this research relates to a different user group as this research

focuses on information relating to “mum and dad” investors, not professional or institutional investors. Rather, the focus of this part of the research is on proving empirically, whether shareholders have used the HRC and RC dimensions information they determined to be important to their ABSC stock transactions. This research, while supporting empirically the positive perception of, and desire for information on specific components of the IC dimensions of HRC and RC in investment transaction decisions, finds a single significant relationship, in stock transaction decisions, between perceptions of importance and use of HRC and RC dimensions by “mum and dad” shareholders of ABSC.

***6.1.1.3 The impact of sources of advice and demographic variables on the relationship between shareholder perceptions and stock transaction decisions***

The next pair of hypotheses, Hypothesis 9 and Hypothesis 10, provides an expansion on the findings from Hypothesis 7 and Hypothesis 8. The hypotheses sought to determine if differing sources of advice, and demographic variables, have a significant moderating effect on the relationship between the individual shareholder’s perceptions of the importance of HRC and RC dimensions and the individual shareholder’s use of HRC and RC dimensions in ABSC stock transactions. The differing sources of advice investigated include “media”, “family and friends” and “professional investment advisors”. The demographic variables investigated include gender, age, and level of education of shareholders. This research finds that the relationship between the perceptions and use of HRC and RC dimensions information, by “mum and dad” shareholders, in the decisions to purchase, hold on to, or sell ABSC stocks, is not significantly impacted by moderators, including sources of advice and demographic

variables. It is noted, however, that the only source of advice that represents an exception to this is that to which the researcher referred as “family and friends” (this includes friends, family, and work colleagues). This research finds that the likelihood of “mum and dad” shareholders using information on HRC dimensions in deciding whether to hold on to ABSC stocks is three times more than the likelihood of not using information on HRC dimensions, when more importance is attributed to “family and friends” as a source of share investment advice. Since “family and friends” was identified in the studies carried out by the ASX (2005, 2007) as one of the main sources of advice on shares for Australian shareholders, these research findings, therefore, establish empirically that “mum and dad” shareholders turn to family members, friends, and colleagues for investment advice when they are deciding whether to hold on to their ABSC stocks. The research findings represents a confirmation and an extension on the information provided by the ASX studies regarding the influence of “family and friends” in investment transaction decisions.

This research attempts to explain the findings of the investigation into the relationship between the perceptions and use of HRC and RC dimensions information, by “mum and dad” shareholders from a practical perspective. The “mum and dad” shareholders investigated in this research are similar to each other in that the relationship between their perceptions and their use of HRC and RC is unaffected by their age, gender, or education, and, on the most part, unaffected by sources of stock investment advice. In considering the influences on their perceptions and stock transaction decisions, however, this research suggests that perhaps “mum and dad” shareholders are not influenced by these moderating variables because the impact of previous experiences

of the past may be stronger than the power of any other influence on behaviour (Ajzen, 2002). As previously discussed, past behaviour is only lessened, when the measures of intention and behaviour are attuned. What this infers is that sources of advice, for example, are not strong enough to successfully ensure that the measures of intention and behaviour become attuned, and the impact of past behaviour still exists (Ajzen, 2002). The influence of past experience on later behaviour is not overcome simply by telling someone that the past has no bearing on present and future decisions. Explained simply, it is not enough for “media”, “family and friends” and “professional investment advisors” to tell “mum and dad” shareholders that an investment is good, bad, or without merit, they have to successfully change their perceptions and behaviour intentions to be successful. This inference is supported by another perspective presented for the findings presented here, one that asserts that sources of advice need to consider the mindset of investors generally to effect an influence on the relationship between perceptions and behaviours of shareholders. Professional investors, for example, typically behave as stock traders, with the mindset of making immediate gains for their clients. The “mum and dad” investors, however, typically “invest” in corporations with the aim of growing their long term wealth (ASX, 2007). Regardless of how valuable corporations perceive themselves to be to investors, it is how “mum and dad” investors perceive them to be that is important to their attempts to increase the value of their intangible corporate assets (reflected in market-to-book value ratios) (Ulrich & Smallwood, 2011). Researchers have found, for example, that the perceptions and expectations of external corporate stakeholders, such as customers and investors, affect intangible assets including employees (Ulrich & Smallwood, 2011). As such, the onus is on corporations to

influence the relationship between the perceptions and stock transactions of “mum and dad” shareholders. Corporations are encouraged to develop a shared corporate mindset that moves away from being interested in what executives say is important, to being interested in what their customers and specifically their investors demonstrate is important by way of their actions. A shared corporate mindset influences “mum and dad” investors because investors are likely to already have a way of thinking that defines a corporation generally. Furthermore, “mum and dad” shareholders are likely attracted to corporations with positive identities and are detracted from those with negative reputations, and may also be influenced by the extent to which employees have a shared mindset with the corporation, how human resources share corporate identity (Ulrich & Smallwood, 2011). Hence, rather than sources of financial advice and demographic variables, the greatest influence on the relationship between shareholder perceptions and stock transaction decisions of “mum and dad” shareholders may also be explained by how well a corporation communicates a shared mindset with its stakeholders. Since investor behaviour and the increase of value on corporate intangible assets may be influenced by subjective investor perceptions about a corporation (Ulrich & Smallwood, 2011), this research suggests that the potential exists for a corporation to be involved in moderating the relationship through changing the perceptions of shareholders and prospective investors, perhaps through improved corporate communication and shareholder education. The evolution of this concept, based on the ability of a corporation to influence investor actions, can only happen if there is further research, with a focus on the moderating effect of corporate mindset on the relationship between perceptions and behaviours of “mum and dad” shareholders.

This research draws on and extends the ASX studies in that it utilises, in its investigation, the list of sources of investment advice referred to in the studies. In line with the findings of the ASX (2005, 2007), this research proves empirically that “family and friends” is a moderator on the relationship between perceptions and actions only when “mum and dad” shareholders decide on whether to hold on to their ABSC stocks. However, no other variables proved to be moderators on the relationship. Additionally, while both ASX studies provide insight into the investment choices of Australian shareholders and highlight share investment trends, this research is different in that it provides information into the perceptions of “mum and dad” investors, with a specific focus on their HRC and RC information expectations and needs, on how important they perceive the IC information provided in corporate annual reports to be to their ABSC stock transactions. Therefore, this research extends the knowledge to better fill gaps in the literature.

#### **6.1.2 Disclosure on HRC and RC dimensions and its relationship to corporate recognition and to share prices of ABSC.**

Significant and extensive research has been produced that investigates and discusses the importance of including IC among the assets inventoried and valued when determining the net worth of an organization (Bontis, 1998, 2002; Bontis & Fitz-enz, 2002; Edvinsson & Malone, 1997; Johanson, 2005). Researchers agree that the implicit nature of IC makes it hard to measure and report, however, they also agree that understanding and communicating the value of IC is critical to organizational performance (Bontis, 1998, 2002; Bontis & Fitz-enz, 2002; Edvinsson & Malone, 1997; Johanson, 2005; Lev, 2001).

The review of literature highlights a deficiency of disclosure on strategically important organizational resources and activities (Bontis, 2002; Guthrie et al., 2005; Holland, 2000; Rimmel, 2003). It is concluded that private information not included in the annual reports represents 25 to 50 percent of the relevant information used by fund managers in corporate valuations. The literature also suggests that the lack of disclosure on non-financial indicators, important for organizations within a knowledge economy, is leading to a decline in the relevant value of the information in annual reports (Bontis, 2002; Mouritsen et al., 2004; Saenz, 2005). As such, researchers argue that the traditional financial statements fail to provide relevant information for managers or investors to determine how resources, many of which are intangible, create future value and, for external stakeholder communication, additional kinds of reporting are deemed to be required (Mouritsen et al., 2004).

Though investigated and discussed academically, the calculation of the values of intangible assets and their inclusion in annual reports, within the Australian banking sector, is limited, to be generous. While this research seeks to complement the work completed by others in the fields of finance and business (Bontis, 2002; Guthrie & Petty, 2000; Guthrie, Petty, & Ricceri, 2006; Petty, Ricceri, & Guthrie, 2008; Royal and O'Donnell, 2008), it also seeks to provide industry a broader perspective on assets currently under-reported and, potentially, undervalued. Notably, what is missing from prior research is information about what individual investors want, with regard to HRC and RC disclosure within the annual reports. This research, for the first time, identifies the perceptions of “mum and dad” investors regarding the HRC and RC information they



perceive to be included in the corporate annual reports of the eight ABSC under investigation.

***6.1.2.1 HRC and RC dimensions disclosure by CBA, “Bank of the Year 2008”, in comparison to disclosure by other ABSC.***

In relation to the sixth pair of hypotheses, Hypothesis 11 and Hypothesis 12, this research sought to determine if there are significant differences between the CBA, recognised as Money Magazine’s “Bank of the Year 2008”, and the other ABSC in the provision of information about HRC and RC dimensions in their corporate annual reports. This research finds that there is a significant difference in the quality of HRC and RC dimensions information disclosure between the eight ABSC, as ranked by the focus group. This research finds that, when investigating the relationship between the CBA and information disclosure in the corporate annual reports, vis-à-vis information on both HRC and RC dimensions, the CBA has obtained the best ranking in relation to the quality of reporting. Of the eight ABSC studied, however, WBC is found to report most frequently on the HRC dimensions and that BOQ reports most frequently on the RC dimensions. Hence, it is surmised that disclosure of HRC and RC dimensions information is varied between ABSC but the hypotheses are not supported; the CBA, recognised as Money Magazine’s “Bank of the year 2008” has the best quality of disclosure rather than quantity (frequency) of disclosure. As such, it is suggested that quantity (frequency) of information disclosure about HRC and RC dimensions does not equate to quality of information disclosure about HRC and RC dimensions.

This research has established that “mum and dad” shareholders of NAB stock, in particular, intuitively place a higher value on information about specific HRC and RC

(Hypothesis 1 to Hypothesis 4). In testing for significant differences in HRC and RC dimensions disclosure between ABSC, this research finds that, of the eight ABSC, NAB is ranked second for frequency of reporting and sixth for quality of reporting on HRC and RC dimensions (refer to Table 5.32). This research suggests that this is because the information is not perceived to be adequately available in the NAB corporate annual report as the results from the investigation into the disclosure practices of ABSC suggest that NAB is neither the best ranked in terms of quality nor in terms of frequency of reporting on their HRC and RC dimensions. In support of this contention, it is noted that in year 2010, 250 investors of NAB stocks filed a legal action against NAB for failing to keep the market informed, and hence, investors properly informed about problems with “risk” exposure of investments in collateralised debt obligations (CDOs), as a result of corporate policies and practices related to the corporations tolerance for high risk investments (Lannin, 2010). The CDOs slumped in year 2007, in line with the Global Financial Crisis (GFC), and failed in year 2008 (Lannin, 2010). The claimants allege that capital losses in NAB stocks are the result of the corporation’s failure to disclose the necessary information. Simply speaking, they believe that NAB failed its investors. The claimants expressed their dissatisfaction with the disclosure of corporate information regarding risk exposure, suggesting that the information failed to be accurate. Information on the exposure to risk in this case is not of a financial loss realised (which would be included in the financial reports), but rather, it was of the potential risk related to corporate policies regarding its supplier base, its supplier chain relations. Claimants expressed that investors, both professional and individual, rely on the information to make informed decisions, and that if this was not possible, it would undermine the

confidence of investors (Lannin, 2010). The question that arises from this, however, relates to whether investors would have been concerned about having the information had they not experienced capital losses as a result. Is it only when “mum and dad” investors experience monetary losses when they question the degree of corporate disclosure, or do they desire the information regardless of the economic circumstances? This research encourages future research that has the potential to investigate shareholder perceptions in a range of economic contexts, whether a “bull” or “bear” market, in times of inflation and in times of recession, to get a better understanding about the influence of shareholder perceptions.

The findings, on the disclosure of HRC and RC dimensions in corporate annual reports of the ABSC, have been illustrated through similar research studies referred to in the current literature. Previous research by Guthrie and Petty (2000) found that Australian firms lagged behind Scandinavian firms in reporting IC information in corporate annual reports and found a lack of a standardized reporting model for corporations for their intangible assets, concluding that corporate managers link IC development with internal management practices, not as an external concern worthy of inclusion in corporate annual reports. Bontis (2002) also studied the extent of IC disclosures of Canadian companies in the annual reports of ten thousand Canadian companies and found that most IC terms were disclosed only once in the annual reports. Bontis found that IC disclosure to be very much in academic discussions and generally ignored in corporate reporting. He concluded that the companies that voluntarily disclosed more information were from the “new economy” and that there was no statistically significant difference between the companies that disclosed IC information

and the rest of the population with regard to employee size or shareholder equity. Guthrie, Petty, and Ricceri (2006) also found that levels of IC disclosure were low in qualitative rather than quantitative form in both Australia and Hong Kong, and that in every instance of IC reporting by Australian corporations, no clear attempt was made to translate IC reporting rhetoric into benchmark measures. They called for a common accepted framework for IC reporting to ensure corporate stakeholders get all the information they require. Petty, Ricceri, and Guthrie (2008) also found that a sample group of CPA members was addressing their IC information needs through private information channels, and regarded the publicly provided information as not well suited to their needs. They found a need exists for greater regulatory control to ensure that the information that is being communicated privately also enters the public domain in a timely fashion. The findings of this research support and expand on, the conclusions made by previous researchers and confirm that information on the IC components of HRC and RC are reported in the corporate annual reports in neither a standardised nor prescribed manner (Bontis, 2002; Guthrie & Petty, 2000; Guthrie, Petty, & Ricceri, 2006; Petty, Ricceri, & Guthrie, 2008; Royal & O'Donnell, 2008). The findings confirm, empirically, that reporting about HRC and RC is varied in terms of frequency and quality within the annual reports of ABSC. Though the CBA was perceived to have the best quality of disclosure, it was not perceived to have the highest frequency of disclosure in relation to HRC and RC dimensions. These findings extend the work of Royal and O'Donnell (2008) and confirm that quality of disclosure is not linked to quantity of disclosure for information to be of benefit; it needs to be concise, relevant, and timely. Major differences here, however, between this research and previous research, include

the sample group, the corporations, and the tool used in the investigation. Previous research has focused on research from the perspective of professional and institutional investors (Guthrie & Petty, 2000; Guthrie, Petty, & Ricceri, 2006; Petty, Ricceri, & Guthrie, 2008; Royal & O'Donnell, 2008), this research focuses on research from the perspective of “mum and dad” shareholders. Previous research has focused on the annual reports of a variety of corporations in various sectors in Australia and abroad (Bontis, 2002; Guthrie & Petty, 2000; Guthrie, Petty & Ricceri, 2006; Petty, Ricceri, & Guthrie, 2008; Royal & O'Donnell, 2008), this research focuses on the corporate annual reports of only ABSC. Finally, rather than rely on the IC framework developed by Sveiby (1997), as other researchers have done (Guthrie & Petty, 2000; Guthrie, Petty, & Ricceri, 2006), this research takes a broader perspective into the investigation of HRC and RC dimensions. This research applies the components of HRC and RC drawn from the works of a number of researchers (Bollen et al., 2005; Bontis, 1998, 2002; Bontis & Fitzenz, 2002; Brooking, 1996; Edvinsson & Malone, 1997; Johanson, 2005; Lynn, 1998; Sveiby, 1989, 1997) and focuses on the corporate annual reports of the eight ABSC.

#### ***6.1.2.2 HRC and RC dimensions and the share prices of ABSC.***

In relation to the seventh pair of hypotheses, Hypothesis 13 and Hypothesis 14, the research sought to determine if there is a significant positive relationship between the provision of information on HRC and RC dimensions in the corporate annual reports and the corporation's share price. This research finds that there is no evidence to support the significance of the relationship between frequency and quality of reporting on HRC and RC dimensions and a cumulative abnormal return (CAR) on the share prices of the eight specific ABSC.

The research finds that CBA has the best quality of information disclosure about HRC and RC dimensions in their corporate annual report (Hypothesis 11 and Hypothesis 12). The research also finds that BOQ and WBC have the highest frequency of disclosure about HRC and RC dimensions information (Hypothesis 11 and Hypothesis 12). However, in testing for a significant positive relationship between the provision of information on HRC and RC dimensions in the corporate annual reports and the corporation's share price, the research fails to find a significant positive relationship between the quality and frequency of disclosure and share prices of ABSC. The CBA, BOQ, and WBC did not have a higher CAR value as a result of their disclosures. Furthermore, even NAB, whose shareholders perceive the importance of HRC and RC dimensions to be most important to their ABSC stock purchase decisions overall, achieved cumulative returns on stock price within normal parameters of distribution. This supports what is concluded for Hypotheses 5 and 6, that perceptions are not manifested in behaviours. Although perceptions of importance of HRC and RC are perceived to be significant, to the ABSC stock purchase decisions of "mum and dad" shareholders, this is not reflected in shareholder behaviours; although HRC and RC dimensions disclosure is perceived to be significantly different for CBA, in terms of quality, it is not reflected in the CBAs share price; finally, regardless of shareholder perceptions and behaviours, this research finds no positive abnormal returns on share prices of any of the ABSC perceived to be the "best" in quality and frequency of disclosure about HRC and RC dimensions.

Efficient market hypothesis (EMH) is a capital market theory that states the investors cannot out-predict the market because the share prices of stocks include and

reflect all relevant information available (Malkiel, 2003; Van Bergen, 2004). It argues that shares of listed stocks are always being traded on their fair values on stock markets. The theory suggests it is impossible to purchase undervalued shares or to sell shares for more than what they are worth. EMH, therefore, concludes that the only way for an investor to make higher returns is through buying riskier stock investments. In making bigger returns on investment, no value is attributed to the effect of shareholder expectations derived from information that is only available to some stakeholders. The theory assumes corporate information is available to all, equally.

There are, however, behavioural theorists that suggest that the EMH is flawed because it does not account for psychological and behavioural components of share price determination (Malkiel, 2003). These components may, for example, include the “irrational exuberance” of investors and the impact of a “bandwagon effect” (Malkiel, 2003). Hence, this research is driven by ideas aligned to behavioural economic theories and the field of behavioural finance. Behavioural economic theories recognize that investors may not have equal access to corporate information, outside of what all investors are made aware of in the corporate annual reports. With specific regard for HRC and RC dimensions, it is also suggested that investors, including “mum and dad” shareholders, are subject to various psychological and behavioural biases and are not always rational in their stock transaction decisions (Daniel, Hirshleifer, & Subrahmanyam, 1998, 2004). Furthermore, the researchers contend that stock investors overreact to private information and under-react to public information signals due to their individual biases. The research finding seems to support that theory and the suggestion that investors do under-react to public information signals, and lends merit to the theory

of behavioural economics. This infers that biased self-attribution and over-confidence, and that behavioural economics are a complement to rational economic theories by providing insight into instances of irrational consumer decision-making and behaviour.

As this research finds no positive statistical relationship between disclosure about HRC and RC dimensions in the corporate annual returns of ABSC and share price appreciation for the relevant ABSC stocks, the results suggest that behavioural economic theories are supported and serve to explain the implications of the findings in this study. This research proposes to support the view that investors may be influenced by their subjective psychological and behavioural biases and that they may lack the confidence to act on public corporate information regarding HRC and RC dimensions, even despite their perceptions about the value of such information.

Cumulative returns were found to be normal in the reporting periods investigated. Furthermore, risk and return is homogenous for the risk-conservative Australian banking sector. This research, as a result, suggests that while researchers and practitioners claim that components of IC are important to improved share values, these views are not supported through their behaviour or through the research findings. While this research cannot conclude, definitively, the reasons for the findings, the research recognises that investor expectations are not perceived to be influenced by IC information relating to HRC and RC dimensions, in ABSC stock transactions. This research backs the potential for future research to determine the influence of cognitive biases on the relationship between the perceptions and the behaviours of “mum and dad” shareholders. Furthermore, future research is encouraged to determine if the outcome of this research study is able to be duplicated in different contexts, in relation to shareholders of stocks in



other sectors of the ASX, in other markets globally, for various cultures, and for times of economic prosperity.

This part of the research, which investigates the relationship between corporate disclosure on HRC and RC dimensions and the share prices of ABSC, has been similarly researched and reported in current literature. Saenz (2005) studied four Spanish banking sector companies, with respect to their human capital indicators, and successfully demonstrated a positive relationship between human capital indicators and market-to-book value (MBR), in considering a time span of one year between disclosure and MBR assessment. As such, he surmised that a corporations IC equates to the difference between its market and book values. He found, however, almost no relationship between human capital indicators and banks' efficiency and financial return. Similarly, this research uses the output of the content analysis of the annual reports of ABSC and CAR analysis of their share prices to assess the impact of HRC and RC disclosure on share prices. This research provides empirical evidence to support and extend the findings of Saenz; this research finds no significance in the relationship between HRC and RC dimensions disclosure and share price appreciation. Saenz' research and this research use various correlation tests to investigate, empirically, the hypotheses presented. A difference between this research and that of Saenz' is that Saenz studied a smaller sample of banks within the Spanish market and a time lag of one year between disclosure and reaction. This research is unique in that it offers insight into twice as many banks within the context of the Australian market place, and insight into the more immediate reactions within the market. The findings from this research are contrary, however, to the findings of other researchers who suggest that information on intellectual assets, that is provided

to investors, has a positive effect on company performance (Brookings Institution, 2004; Chen et al., 2005; Daum, 2002; Lev, 2001), that there is a generally accepted association between disclosure of IC elements and the CAR of a company's share price (Abdolmohammadi, 2005; Desai, 2000; Dumay & Tull, 2007).

Other researchers (Abdolmohammadi, 2005; Desai, 2000; Dumay & Tull, 2007) conducted similar research but did not focus on banking sector stocks and did not focus only on information extracted from the corporate annual reports. While this research uses similar methods to test hypotheses (content analysis and CAR analysis), the results are different, as are the corporations investigated. Dumay and Tull (2007), for example, investigated the impact of IC announcements on the relevant share prices of a variety of Australian corporations. Stock price changes were measured and the CAR for each stock and each announcement was analysed by its comparison to the different market indices. The company shares chosen for analysis, were based on the ASX20 and ASX200, representing the top 20 and top 200 stocks, respectively, with regard to market capitalization in Australia. Dumay and Tull were able to conclude that price-sensitive disclosures to the market containing IC elements have a marginal effect on subsequent market valuation of an organization beyond conventional financial reports and external intellectual capital reports. Their research contends that companies should examine how they manage and report on their IC, as, in doing so, both performance and competitive benefits may be realized. The evidence supports the view their stakeholders respond favourably to regular IC disclosures. Unlike Dumay and Tull, the focus of this research is purely on ABSC, on their HRC and RC disclosure within their corporate annual reports, and on the share price behaviour for the event window +5 to -3 days of the

corporate reporting period. The results are aligned to and support the findings of Saenz (2005) in that they suggest no significant relationship between information disclosure and CAR on share price (financial performance of company stocks). This research and research conducted by Saenz fail to provide the empirical evidence to link IC disclosure in the corporate annual reports of banking sector corporations and share price performance of these specific stocks.

## **6.2 Limitations**

There are a number of limitations that should be considered in the review of this research. The first limitation is that the research was undertaken on the eve of the slowing world economy and global financial crisis (GFC), recognised as one of the most significant financial disasters experienced internationally (CIA, 2010). A second limitation is that the research was performed during an Australian federal government changeover, moving from a strong, long-term Liberal powerhouse to a new and relatively inexperienced Labour government. Finally, a third limitation is that the sample size may be considered smaller-than-desired by researchers; however, with participants ( $N = 117$ ), the participation rate was 53 percent, a value acknowledged as being statistically viable for the drawings of conclusions (Rubio et al., 2001).

These limitations, however, do not diminish the value of this research. This research was completed and confirms that information on HRC and RC dimensions, in fact, does have some perceived value to buyers of ABSC stocks in the Australian market. Additionally, this research provides a focus on the CBA as Money Magazine's "Bank of the Year 2008". The celebrated Money Magazine awards are judged by a team of experts who assess thousands of products provided by banks, building societies and credit unions

across Australia (Commonwealth Bank of Australia, 2010). This research reveals that the CBA, as well as being Money Magazine's "Bank of the Year 2008", also provides prospective shareholders with the best quality data to inform them as to the value of the HRC and RC assets held by the bank, within the corporate annual report. This research is focused specifically on "mum and dad" shareholders, specifically on HRC and RC components of IC, and specifically on transactions relating to ABSC. The strict nature of this research may be regarded as a limitation in itself, however, the precise focus of the research adds value to the detailed investigation of an important, under-explored section of the stock market; this, therefore, represents an opportunity to future researchers rather than a limitation on this current research.

### **6.3 Practical Implications**

Individual "mum and dad" investors, SHRM practitioners and academics, ABSC, and government legislators are all well-placed to benefit from the results of this research. This research contributes insight into the perceptions of individual investors regarding the disclosure of SHRM policy information, information relating to the HRC and RC dimensions of ABSC. The benefit to the field of SHRM is apparent in the building on current knowledge, adding to what is known, especially about what is being practiced and what is desired in both a theoretical and commercial context.

This research has successfully identified the key information disclosure requirements of investors by providing insight into their perceptions and behaviours. This is beneficial to "mum and dad" investors because it places the onus on publicly listed corporations, and quite specifically ABSC, to make the desired HRC and RC dimensions information known to meet the specific needs of their current and prospective

investors. In raising awareness of the information needs of individual investors, this research offers new insight into whether shareholders of Australia's four biggest banks, have significant differences in perception of the importance of the HRC and RC information in deciding to purchase ABSC stocks. The research also identifies the significance of differences in perceptions of importance of the HRC and RC dimensions in the ABSC stock transaction decisions of shareholders who have ownership in only a single bank (of the big four banks) and of shareholders who have ownership in multiple banks (including one of the big four banks). Before this research was performed, there was a gap in the research in terms of having an understanding about the perceptions of individual "mum and dad" investors.

This research provides the identification of significant positive perceptions of "mum and dad" shareholders in relation to the importance of specific HRC and RC dimensions information to their decisions to purchase ABSC stocks. Determining the HRC and RC dimensions information "mum and dad" shareholders find important in their investment decisions, with specific regard to stocks in ABSC, is research that has not been previously conducted. This study provides insight into whether individual shareholders perceive HRC and RC information to differ in importance for the use in the purchase, holding on to, or selling ABSC stocks. This represents an expansion on previous research, of benefit to academia in its contribution to the knowledge base in the field of SHRM and IC measurement, management, and reporting. This research has also made, based on its findings, various recommendations for future research to further expand the literature and knowledge base.

The eight ABSC investigated were assessed in relation to the provision of HRC and RC dimensions information in their corporate annual reports by reporting on the perceived frequency and quality of the information provided. The relationship between HRC and RC dimensions disclosure and share price was also tested. The data provides ABSC with a better understanding of the gap between the information they disclose and the information investors desire to have prior to making ABSC stock purchase decisions. For ABSC, this is beneficial as it represents the potential for an improvement in their capacity to use the information on HRC and RC dimensions, not only to manage, but also to communicate the value of a company to potential and current individual stakeholders. ABSC may use the information to develop campaigns, information packs, and channels of communication to make investors aware of what they are doing in the realm of the HRC and RC policy.

Past research finds that public legislation in Australia, as in most countries, does not mandate the disclosure of IC information, including information relating to HRC and RC, in corporate annual reports, leading to deficiencies of disclosure on strategically important organizational assets (Guthrie, Boedker, & Cuganesan, 2005). This research contributes findings, based on empirical evidence, which may be useful to government legislators to set guidelines for the disclosure of HRC and RC dimensions information necessary to the share investment decisions of “mum and dad” shareholders. Providing a level playing field for all investors is, in itself, a challenge for business and government. However, legislation may be able to direct corporate reporting guidelines. Future research may be performed to identify a range of HRC and RC dimensions important to considering stock purchase of a range of knowledge-based industries, not just ABSC.

Such research may also provide the basis for improved legislation regarding HRC and RC information disclosure.

This research is significant in that it establishes the level of importance of HRC and RC dimensions to “mum and dad” shareholders of ABSC. This research provides academics, and corporations alike, information, based on empirical investigation, about the perceived value of their intangible HRC and RC assets when communicating with both current and prospective shareholders. This research encourages continued research to further expand on its findings and inspire critical thinking about how a range of information users and corporate stakeholders may benefit from the research. Of potential interest to contemporary researchers may be the potential to further investigate the perceptions of “mum and dad” shareholders, regarding HRC and RC dimensions, in light of behavioural economic theories and with a focus on the application of philosophies linked to the field of behavioural finance. Notably, what may be concluded from this research is that the most important contribution this research makes to the literature, to academia, and to the industry is that there has been a starting point established from which public corporations can move to improve their communication about the real value of their corporations to current and prospective “mum and dad” shareholders.

#### **6.4 Recommendations for Future Research**

Recommendations for future research are based on discoveries from both the pilot study and the main study performed in this research. They are included with the proviso that businesses that can benefit from future research about HRC and RC dimensions and their value to an organization; an organization may also benefit from showcasing those assets and establishing and communicating those financial values in the marketplace.

The investigation into the differences between shareholder perceptions of importance of HRC and RC dimensions resulted in an important recommendation for future research. The findings support the idea of developing of a number of questions that may be addressed in future research. These questions relate to, among other things, understanding why shareholders of solely NAB stocks attribute greater value to HRC and RC information in their stock investment decisions, whether they buy only NAB stocks because of their beliefs, or whether their beliefs are influenced by having only NAB stocks in the first place. The research findings suggest that “mum and dad” shareholders of NAB stock, in particular, intuitively place a higher value on the information because the information is not perceived to be adequately available in the NAB corporate annual report (refer to Hypothesis 11 and Hypothesis 12). Again, the suggestion is that the HRC and RC information requirements of NAB shareholders are not sufficiently met. Future research is encouraged to investigate, not only “what”, but also “why” the differences in shareholder perceptions occur and whether “mum and dad” shareholders of ABSC have the capacity to change their perceptions through improvements in corporate disclosure and greater shareholder education.

The investigation into shareholder use of HRC and RC dimensions in stock transactions also resulted in three specific recommendations for future research. The first was to encourage the investigation into the impact of experiences of capital losses and capital gains on the relationship between the perceptions of importance and use of HRC and RC dimensions in stock transactions. The second was to investigate the moderating influence of shareholder confidence on the relationship between the perceptions of importance and use of HRC and RC dimensions in stock transactions. The third



recommendation was for an investigation into the perceptions of importance “mum and dad” shareholders with regard to HRC and RC dimensions in the decision to purchase a portfolio of stocks, not just ABSC stocks.

The investigation into the moderating influence of sources of stock investment advice and demographic variables also resulted in a recommendation for future research. From an institutional perspective, the research suggests that an investigation may be conducted, into the moderating effect of the corporate mindset in the relationship between the perceptions of importance and use of HRC and RC dimensions by “mum and dad” shareholders in stock transactions.

The investigation into the disclosure of information regarding the HRC and RC dimensions of ABSC within the corporate annual reports also resulted in a recommendation for future research. The suggestion is that future researchers may investigate shareholder perceptions regarding the HRC and RC dimensions in a number of different contexts. This includes a range of economic situations including “bull” and “bear” markets and “inflation” and “recession”. Similar work, within the banking sector, performed during stable financial times may also provide significantly different results, helping researchers and corporate leaders, as well, better understand the impact of the eve of the GFC on prospective shareholders.

Finally, the investigation into the relationship between disclosure of HRC and RC dimensions and share price also resulted in a recommendation for future research. With a focus on varying variables including shareholder characteristics, institutional perspectives, and contexts, this research suggests that an investigation may be conducted to determine whether shareholder expectations are influenced by the IC information about

HRC and RC dimensions in differing situations including in other sectors of the ASX, in other markets globally, for various cultures, and in times of economic prosperity. Similar research may be conducted in the communications sector, the utilities sector, the education sector, the construction sector, the agriculture sector and other industry sectors. Additionally, the perception of shareholders in other markets has not been investigated for all facets of HRC and RC dimensions and stock purchases.

It may also be valuable for future research to be performed to determine if information about intangible assets, confirmed in this research to be conspicuous by its absence in the corporate annual reports, is provided by corporations elsewhere. Research into the disclosure of HRC and RC information in corporate websites, industry conferences, and other communication tools and events would be a valuable contribution to the current literature. Such research has the potential to provide insight into where banks announce their most accurate HRC and RC asset listings.

Finally, the research did identify that friends, family and work colleagues do influence investors when they are deciding whether to hold on to ABSC stocks. Further research may provide insight into why this is so; it may also determine whether the decision is calculated and reasoned or whether the decision is emotional. The investment behaviours of individual “mum and dad” investors, with specific focus on purchasing stocks in knowledge-based corporations, represent the potential for future research to determine how those behaviours are further influenced by other potential moderators such as economic climate, a longer timeframe, and culture. Future research may include the testing of how much information on HRC and RC dimensions is enough information and how much information is too much information.

In summary, the investigation into the differences between shareholder perceptions of importance of HRC and RC dimensions resulted in an important recommendation for future research. Future research is encouraged to investigate, not only “what”, but also “why” the differences in shareholder perceptions occur and whether “mum and dad” shareholders of ABSC have the capacity to change their perceptions through improvements in corporate disclosure and greater shareholder education. The investigation into shareholder use of HRC and RC dimensions in stock transactions also resulted in three specific recommendations for future research. The first was to encourage the investigation into the impact of experiences of capital losses and capital gains on the relationship between the perceptions of importance and use of HRC and RC dimensions in stock transactions. The second was to investigate the moderating influence of shareholder confidence moderates the relationship between the perceptions of importance and use of HRC and RC dimensions in stock transactions. The third recommendation was for an investigation into the perceptions of importance “mum and dad” shareholders hold, with regard to HRC and RC dimensions, in the decision to purchase a portfolio of stocks, not just ABSC stocks. The investigation into the moderating influence of sources of stock investment advice and demographic variables also resulted in a recommendation for future research. The research suggests that an investigation may be conducted, into the moderating effect of the corporate mindset in the relationship between the perceptions of importance and use of HRC and RC dimensions by “mum and dad” shareholders in stock transactions. The investigation into the disclosure of information regarding the HRC and RC dimensions of ABSC within the corporate annual reports also resulted in a recommendation for future research. The

suggestion is that future researchers may investigate shareholder perceptions regarding the HRC and RC dimensions in a range of economic situations including “bull” and “bear” markets and “inflation” and “recession”. Finally, the investigation into the relationship between disclosure of HRC and RC dimensions and share price also resulted in a recommendation for future research. This research suggests that an investigation may be conducted to determine whether shareholder expectations are influenced by the IC information about HRC and RC dimensions in differing situations including in other sectors of the ASX, in other markets globally, for various cultures, and in times of economic prosperity.

## **6.5 Conclusion**

This research was conducted in two stages. These stages involved an initial pilot study and a two-part main study. The pilot study involved both quantitative and qualitative analysis and was designed to validate a tool to measure the perceptions of individual ABSC shareholders, regarding how relevant HRC and RC dimensions information is to their decisions regarding purchasing ABSC stocks. As such, there were three parts to completing the pilot study. These involved: (1) the use of a focus group to develop operational definitions of the key constructs of HRC and RC and of their dimensions; (2) the use of a pilot questionnaire to determine the relevance of HRC and RC policy information to corresponding HRC and RC dimensions; (3) the use of a final questionnaire to test the statistical validity and reliability of items for use in the questionnaire for the main study.

The result of the pilot study was that CFA was used to successfully validate 40 policy statement items within the final questionnaire. This ensured the items within the

final questionnaire could be used to properly measure the five dimensions of HRC and three dimensions of RC, when measuring perceptions of individual, ABSC shareholders, in relation to how relevant HRC and RC policy information is to their decisions to purchase ABSC stocks. The completion of the pilot study represented the foundation for the main study; items within the final questionnaire were determined to be reliable and valid and retained for use in the main study.

It is important to acknowledge that this research did not investigate stock traders or analysts, securities managers, or portfolio managers investigating transaction options for major funds or corporate investments. This research was performed on “mum and dad” investors of ABSC stocks in Australia. It identified the importance of HRC and RC dimensions information to stock investment decisions.

The main research study provides a thorough investigation into the importance, to individual shareholders of ABSC, of the five key components of HRC dimensions. These components, together, comprise the construct of HRC. They include employee recruitment, employee retention, employee values, development of management and leadership qualities, and developing employee problem solving skills. This research also provides a thorough investigation into the importance, to the individual shareholders of ABSC, of the three key components of RC dimensions. These components, together, comprise the construct of RC. They include customer capital, supplier chain relations, and competitors.

Prior to this research being conducted, there was a gap in research in terms of having an understanding about the perceptions of “mum and dad” shareholders. This research uses empirical analysis to identify the key information disclosure requirements

of investors by providing insight into their perceptions and behaviours. This is of benefit to “mum and dad” investors because it places the onus on publicly listed corporations to make the desired HRC and RC dimensions information known to meet the specified requirements of current and prospective shareholders.

This research establishes, empirically, that “mum and dad” shareholders of NAB stocks attribute more value to the RC dimensions of customer capital and supplier chain relations than shareholders of ANZ stocks do. Additionally, it is suggested that, for shareholders of the top four ABSC, in deciding to buy ABSC stocks, there is no significant difference between “mum and dad” shareholders’ perceptions for all five HRC dimensions and for the RC dimension of competitors. This research finds, however, that NAB shareholders tend to value all HRC and RC dimensions information more than shareholders of the others of the big four ABSC do (based on calculated mean). “Mum and dad” shareholders of solely NAB stocks also believe information on the HRC dimensions of management and leadership qualities and employee problem solving skills, and on all RC dimensions, to be higher in importance than shareholders of CBA, WBC, and ANZ stocks (either singular or multiple) believe them to be to the decision to buy ABSC stocks. The research also finds “mum and dad” shareholders of solely NAB stock intuitively place a higher value on the information because the information is not perceived to be adequately available in the NAB corporate annual report, and those who have stocks in multiple ABSC, including the NAB, place less value on the information. These findings are explained, to some extent, through subjectivist theories of personal good, inferring that NAB shareholders perceived the information to be important, or of value, simply because it is desired and not held, and transfer of learning theories,

inferring that NAB shareholders may transfer knowledge about their other ABSC stocks to their NAB stocks. These findings may make an important contribution to ABSC in raising their awareness of why differences between perceptions occur and help them to develop effective HRC and RC communication policies and improved disclosure practices that educate and encourage “mum and dad” shareholders to change their perceptions. The findings also give rise to the development of a number of questions, discussed as recommendations for future research.

This research also identifies, in studying the use of HRC and RC dimensions, by “mum and dad” shareholders, that the HRC dimension of employee recruitment is of significantly more value to their decisions to “buy” than to “hold” on to or “sell” ABSC stocks. No other HRC or RC dimensions are found to differ in importance in the decisions to either “buy”, “hold” on to, or “sell” ABSC stocks. Additionally, the findings suggest there is no significant relationship between an individual shareholder’s perception of the importance of HRC and RC dimensions and an individual’s use of HRC and RC dimensions in the decision to buy ABSC stocks. These findings are explained through a number of theories. The theory of planned behaviour, for example, infers that if, based on their perceptions, the intention of “mum and dad” shareholders is to purchase ABSC stocks, then they will only do so if their attitude is positive toward the purchase of ABSC stocks, if historically they have been likely to purchase ABSC stocks, and if they are confident about their ability to produce a positive outcome from their decisions to purchase ABSC stocks. This explains why the research did not establish a clear link between perceptions and behaviours, or actions, of “mum and dad” shareholders. Caldini’s theory relating to six principles of influence (2008) also suggests that if “mum

and dad” shareholders are unsure about where to invest and how to invest, they will behave as others behave, following the example of people who are similar to them and accept that they are correct in doing so. Furthermore, behavioural economic theories suggest that investors do not have equal access to corporate information, that investors do not always make rational decisions and that various psychological and behavioural biases (cognitive biases such as self-attribution and overconfidence) impact on the decisions of investors. Theory suggests that investors are also likely to overreact to private information and under-react to publicly available information. This serves to explain why investors did not react to HRC and RC information disclosure, providing insight into why investors say specific information is important to their investment decisions and then fail to use such information in their investment decisions.

Notably, a further suggestion of the proposed theories and of this research study is that results of either the negative or positive outcomes of past stock transaction decisions impact on the “mum and dad” shareholders confidence to act on their perceptions. As confidence is eroded, “mum and dad” shareholders follow others in their stock transaction decisions. The inference is that to succeed in moderating the relationship between perceptions and behaviours, for example, ABSC must convince “mum and dad” shareholders to change their behavioural intentions by focusing on implementing strategies that change their attitudes, their subjective norms, and their perceived behavioural control. For ABSC to succeed in doing so, future research is encouraged, which would be of benefit to “mum and dad” shareholders and ABSC alike, to explore the impact of capital losses and gains on the relationship between the perceptions and the use of HRC and RC.



The research identifies that the relationship between the perceptions and use of HRC and RC dimensions information, by “mum and dad” shareholders, in deciding whether or not to hold on to ABSC stocks, is significantly impacted by the advice of “family and friends” (this includes friends, family, and work colleagues). This finding makes a contribution to the literature in that it represents a confirmation and an extension on the information provided by the ASX studies regarding the influence of “family and friends” in share transaction decision. This research also identified that no other sources of advice or demographic variables had an influence on the relationship between perceptions and use of HRC and RC dimensions. This research suggests that perhaps “mum and dad” shareholders are not influenced by these moderating variables because the impact of previous experiences of the past may be stronger than the power of any other influence on behaviour. It is suggested that “media”, “family and friends” and “professional investment advisors” need to do more than just tell “mum and dad” shareholders that an investment is good, bad, or without merit, they have to successfully change their perceptions and behaviour intentions to be successful. This inference is supported by the contention that shared corporate mindset also influences “mum and dad” investors because “mum and dad” shareholders are likely attracted to corporations with positive identities and are detracted from those with negative reputations, and may also be influenced by the extent to which employees share corporate identity. Hence, it is inferred that, rather than sources of financial advice and demographic variables, the greatest influence on the relationship between shareholder perceptions and stock transaction decisions of “mum and dad” shareholders may also be explained by how well a corporation communicates a shared mindset with its stakeholders. From a practical

perspective, this research suggests that corporations must be involved in changing the perceptions of shareholders and prospective investors by improving their corporate communication and shareholder education, better influencing investor actions. Further research, with a focus on the moderating effect of corporate mindset on the relationship between perceptions and behaviours of “mum and dad” shareholders, is of benefit to academics and practitioners of SHRM, and certainly important to corporations to provide them with the knowledge necessary to influence their stakeholders and improve on their competitive position. “Mum and dad” investors also stand to benefit from the improved corporate communication and shareholder education strategies.

This research contributes findings that suggest that the disclosure of HRC and RC dimensions information is significantly varied between ABSC, and that CBA, recognised as Money Magazine’s “Bank of the year 2008” has the best quality of disclosure rather than quantity (frequency) of disclosure. This research suggests that quantity (frequency) of information disclosure about HRC and RC dimensions does not equate to quality of information disclosure about HRC and RC dimensions. These findings contribute to and extend current literature that finds information on intangible assets needs to be clear, concise and timely to be of value to users. This research is of value in that it establishes that ABSC lack a standardised reporting template for their HRC and RC dimensions information. The inference is that quality reporting is associated with positive industry recognition (Money Magazine’s Bank of the Year). As such, this research contributes findings that may be used to help set government guidelines for the disclosure of HRC and RC dimensions information necessary to the share investment decisions of “mum and dad” shareholders. Providing a level playing field for all investors is, in itself, a

challenge for business and government. However, legislation may be able to direct corporate reporting guidelines.

This research contributes valuable insight into the relationship between the provision of information on HRC and RC dimensions in the corporate annual reports and the corporation's share price. This research suggests that although perceptions of importance of HRC and RC are perceived to be significant, to the ABSC stock purchase decisions of "mum and dad" shareholders, this is not reflected in shareholder behaviours. Additionally, although HRC and RC dimensions disclosure is perceived to be significantly better for CBA, in terms of quality, it is not reflected in the CBAs share price. Finally, regardless of shareholder perceptions and behaviours, this research finds no positive abnormal returns on share prices of any of the ABSC perceived to be the "best" in quality and frequency of disclosure about HRC and RC dimensions.

The inference of this finding is that while researchers and practitioners claim that components of IC are important to improved share values, these views are not supported through this research. Investor expectations are not influenced by IC information relating to HRC and RC dimensions, in relation to transactions in ABSC stocks. It is not possible at this stage to make a definitive statement about the reasons why disclosure is not reflected in share price changes. Behavioural economic theories are again used to explain the results of this research. Investors do not always make rational decisions due to their various psychological and behavioural biases, and, they are likely to under-react to publicly available information. This may explain why investors did not react to HRC and RC information disclosure and did not influence a share price appreciation for the relevant ABSC. This research, therefore, backs the potential for future research to

determine the impact of cognitive biases on stock investment decisions. This research also encourages research to determine if the outcome is the same in different contexts, in relation to shareholders of stocks in other sectors of the ASX, in other markets globally, for various cultures and for times of economic prosperity. Also of interest, is future research focused on the influence of strategies to improve corporate communications and strategies to educate shareholders, in an attempt to change shareholder perceptions about the unseen value of corporations. Research in this area has the potential to benefit all stakeholders.

This research is significant in that it establishes the level of importance of HRC and RC dimensions to individual “mum and dad” shareholders of ABSC. This research provides public corporations with information about the perceived value of their intangible HRC and RC assets when communicating with both current and prospective shareholders. The most important contribution this research makes to the literature, to academia, and to the industry is that it has created a starting point from which publicly listed corporations can move to improve their communication about the true value of their organizations to both current and prospective shareholders.

While a variety of research has been completed in this field, this research is the first to address the perceptions and needs of “mum and dad” investors. What was missing from previous research was information about what individual investors are looking for with regard to HRC and RC disclosure within the annual reports, how important the information was perceived to be and what information could influence the relationship between shareholder perceptions about the importance of HRC and RC dimensions and shareholder actions based on the information.

The objectives of this research have been achieved successfully. Individual “mum and dad” investors, SHRM practitioners and academics, ABSC, and government legislators may all potentially benefit from the results of this research. This research contributes insight into the perceptions of investors regarding the disclosure of SHRM policy information, information about the HRC and RC dimensions of ABSC. The benefit to the field of SHRM is apparent in the building on current knowledge, adding to what is known, especially about what is being practiced and what is desired in both a theoretical and commercial context.

This research has resulted in a variety of findings. Most importantly, however, it has expanded the accepted wisdom and produced a list of research questions that may be dealt with by other researchers in an effort to improve and refine the literature in the area of HRC and RC measurement, reporting and disclosure practices and its relationship to shareholder perceptions and share prices of listed stocks.

## Appendix A – Components of IC

Lynn	Value Distinction Tree (Roos <i>et al.</i> )	Intangible Asset Monitor (Sveiby)	Skandia Value Scheme (Edvinsson and Malone)	Technology Broker (Brooking)	Bontis
<i>Human capital</i> Implicit knowledge Skills Number of links to other nodes	<i>Human-centered assets</i> Expertise Creativity Problem-solving capability Leadership Entrepreneurial skills Managerial skills	<i>Human capital</i> Knowledge Skills Innovativeness Talent Values Culture Philosophy Ability	<i>Individual competencies</i> Education Experience	<i>Human capital</i> 1. Competence Skills 2. Attitude 3. Intellectual Agility Innovation Entrepreneurship Ability to adapt	<i>Human capital</i> Intelligence Skills Expertise Learning capability Changing capability Innovativeness Creativity
<i>Structural capital</i> Organizational routines Supportive culture Information systems Efficiency Transaction times Procedural innovativeness Access to information for codification into knowledge Infrastructural activities (methods, technologies, processes)	<i>Infrastructure assets</i> Corporate culture Risk assessment methods Methods to manage a sales force Financial structure Information database Communication systems	<i>Structural capital</i> Hardware Software Database Organizational structure Patents Trademarks	<i>Internal structure</i> Management Legal structure Manual systems Attitudes R&D Software	<i>Structural capital</i> Relationship within the organizations Structure Culture Routines Processes	<i>Routines</i> Proprietary software Networks Corporate culture Policies

(continued)

Linking  
IC and IP

1165

**Table I.**  
Components of  
intellectual capital

Overview of the components of intellectual capital (Bollen *et al.*, 2005, p.1165)

## Appendix A – Components of IC

MD  
43,9

1166

Table I.

Lynn	Value Distinction Tree (Roos <i>et al.</i> )	Intangible Asset Monitor (Sveiby)	Skandia Value Scheme (Edvinsson and Malone)	Technology Broker (Brooking)	Bontis
<i>Relationship/customer capital</i> Knowledge of marketing channels Knowledge of customer relationships Market orientation (customer orientation, competitor orientation, inter-functional co-ordination, long-term focus, profit objective) Relations with other organizations	<i>Market assets</i> Brands Customers Repeat business Backlog Distribution channels Licences/franchises		<i>External structure</i> Brands Customer relations Supplier relations	<i>Structural capital relationships with external organizations</i> Suppliers Customers	
	<i>Intellectual property</i> Know-how Trade secrets Copyrights Patents Trade- and service marks			<i>Structural capital renewal and development</i> R&D New plants New products BPR	<i>Intellectual property</i> Patents Royalty rights

Overview of the components of intellectual capital (Bollen *et al.*, 2005, p. 1166)

## Appendix B - Academic Definitions of HRC & RC as Presented to Focus Group A and Input of Respondents

### Definitions related to the Concept of Human Resource Capital (HRC)

#### Human Resource Capital – Academic Definition

For the organization, its people are its human resources (HR). Therefore, human capital (HC) is human resource capital (HRC), *the collective attitudes, skills and abilities of human resources contributing to organizational performance and productivity* (Stockley, 2005).

#### What Respondents Have Said

1. What **people** or individuals **contribute to improving the overall performance of an organization**.
2. Anything that is **valuable about one's self** that they **bring with them** to an organization, **contributing to its performance**.
3. The **combined workforce** of an organization using their **skills and abilities for the organization's success**.
4. **People** in an organization can be **considered a resource for that organization**, a human resource. Therefore, **human capital is human resource capital**. **HRC = an organization's performance and productivity brought about by human resources**.
5. The **physical and intellectual abilities** of people are **their contribution to an organization**.

#### Human Resource Capital – Operational Definition

Human resource capital is the collective physical and intellectual skills and abilities of employees that they bring with them to an organization in order to contribute to its overall performance and success.

#### Innate Human Capabilities – Academic Definition (a factor of HRC)

Innate human capabilities may be defined as those undeveloped faculties people have to use that are existing from birth; those faculties inherent rather than learned. They include intelligence, learning capability and talent.

#### What Respondents Have Said

1. The **natural ability and skill of an individual which has not been taught**, but instead, they are born with it.
2. Those **qualities existing from birth**.
3. **Natural ability** in terms of **behaviour, based on what a person is born with**.



4. Innate human capabilities are the capabilities that a person is born with, not learned.
5. People are born with certain skills inherited from their parents. Through time their talents are developed and performed according to the requirements of society.

### **Innate Human Capabilities – Operational Definition**

Innate human capabilities are the natural abilities and qualities a person is born with that, with time and through experience, may develop as behaviours, skills and talents.

### **Learned Abilities – Academic Definition (a factor of HRC)**

Learned abilities are those faculties or capacities resulting from the knowledge gained by theoretical and/or practical study. They include knowledge, skills, education from learning from each other, education from learning from training, experience, ability and expertise.

### **What Respondents Have Said**

1. The ability of an individual to understand, as they have been taught to understand.
2. Knowledge gained through learning.
3. Knowledge and skills that are taught rather than inherited.
4. Learned abilities are those abilities which are gained from reading about it, writing about it, or actually seeing and doing it.
5. People are able to learn certain skills from others via formal education from institutions or by watching others via television, family, friends, sportspeople.

### **Learned Abilities– Operational Definition**

Learned abilities are the knowledge and skills that are taught, through formal and informal education and practice, rather than inherited.

### **Management & Leadership Qualities – Academic Definition (a factor of HRC)**

Management & leadership qualities may be defined as the nature, kind, character, or manner of those individuals and groups who use a set of processes that ensure that complicated systems of people and technology flow smoothly to produce organizations in the first place or to adjust them to changing situations.

### **What Respondents Have Said**

1. Traits which assist in leading and representing the overall performance of a company.
2. Qualities helping a manager to better control and guide the resources of a company.
3. Management and leadership qualities are qualities that define a person's character in terms of how they would run an organization. Different incentives apply.
4. \* respondent would comfortably use the academic definition\*
5. The leadership of an institution can control the behaviour of its employees via rewards or consequences.

### **Management & Leadership Qualities – Operational Definition**

Management & leadership qualities are those traits and qualities that refer to a person's character in terms of how they would control and guide the overall resources and performance of an organization. Leaders will use incentives such as rewards and consequences to control the behaviour of employees. Incentives may or may not include money.

### **Employee Values – Academic Definition (a factor of HRC)**

Employee values are all the beliefs held by an employee in terms of principles, values and judgments of what is important, true and relevant to the role of work of that individual employee. Employee values decide the attitudes and behaviours employees make use of in their commitment to achieving organizational success by the company's employees.

### **What Respondents Have Said**

1. The ethics and morals of individuals which influence the company's employees.
2. What the employees of a company consider to be important.
3. All an employee regards as important and true in terms of principles, standards and judgments.
4. Employee values are those principles, standards and judgments of what is important, just and righteous (usually a trait brought about by birth, upbringing and experience).
5. A worker's values are based on what's important to him/her at work.

### **Employee Values – Operational Definition**

Employee values are all those beliefs about what is important, in terms of principles, values and judgments, that an employee believes to be true and is influenced by in his/her role at work.

## **Problem Solving Capabilities – Academic Definition (a factor of HRC)**

Problem solving capabilities refer to an employee's ability to identify problems, the ability of the employee to adapt and the ability of the employee to change

### **What Respondents Have Said**

1. The ability of an individual or groups to solve problems in difficult situations.
2. The employee's ability to find solutions to difficult problems or situations.
3. An employee's ability to identify a problematic situation and to rectify the problem.
4. Problem solving capabilities are an employee's ability to work through difficult problems for a solution. As with Bollen et al., this includes an employee's adapting and changing skills.
5. Employees have difficulties problem solving at work. Therefore, leadership teams guide employees to find solutions.

## **Problem Solving Capabilities – Operational Definition**

Problem solving capabilities are the abilities of employees to identify and solve difficult problems or situations at work, usually through the ability to adapt and change. This may be done at an individual or at a group level.

## **Definitions related to the Concept of Relational Capital (RC)**

### **Relational Capital - Academic Definition**

Relational capital (RC) includes contacts between economic needed to acquire inputs and to sell outputs; a directly productive aspect of social capital (Bezemer, Dulleck and Frijters, 2003). RC refers to the productive contacts that individuals use in achieving sold output. In some essential features, RC will not differ from other forms of capital, such as money and machinery (cf. Robison et al, 2002). These contacts form the individual aspect of social capital that is directly productive (Woolcock & Narayan, 2000, cited in Bezemer *et al.*, 2003).

### **What Respondents Have Said**

1. The relationship between overall resources to acquire inputs, conversion to outputs, irrespective of the form of capital.
2. Productive business contacts used for company turnover. Such contacts are as essential as money & machinery and form the individual aspect of social capital.
3. The economics of the relationship needed to buy and sell, to be productive.
4. RC, like that of money & machinery, is productive contacts that individuals use in achieving solid output. This is how all the resources work together to attain the output.
5. Must have consideration for all aspects of market forces.

### **Relational Capital - Operational Definition**

Relational capital is the economic value of the working relationships between all kinds of resources needed for an organization to be productive.

### **Customer Capital - Academic Definition (factor of RC)**

Customer capital includes items such as:

Knowledge of marketing channel

Knowledge of customer relationships

Customer orientation (accessibility of customer feedback)

Customer orientation (image of the company)

Customers (amount of customers)

Customers (strong relationships)

Customers (satisfaction of products and services)

### **What Respondents Have Said**

1. The knowledge of a company's target market in order to satisfy customers' needs and wants, and creating a strong rapport with customers.
2. Knowledge of different ways to access the market; knowledge of how to deal with customers; devise ways to obtain customer feedback; customers' image of the company.
3. \* respondent would comfortably use the academic definition\*
4. \* respondent would comfortably use the academic definition\*
5. Companies must understand how customers think and what motivates them.

### **Customer Capital - Operational Definition**

Customer capital is any and all items that provide a company with a good knowledge of its target market, in order to meet the market's needs and wants and to build a strong relationship with its customers. Customer capital includes the ability to access the market, to deal productively with customers by knowing what motivates them, to find ways to get feedback from customers, and to build and improve the image of the company within the market.

### **Supplier Chain Relations - Academic Definition (factor of RC)**

Supplier chain relations include items such as:

Employees' knowledge of customer relations

Number of customers

### What Respondents Have Said

1. Employees aware of customers' demand curve and total willingness to pay in the entire market.
2. How employees are able to converse with customers so that the feedback of customers is positive.
3. Employees' awareness of and interaction with customers.
4. Items relating to supplier relations include employee knowledge of customer policies and number of customers.
5. Must know/predict how many customers will buy certain goods.

### Supplier Chain Relations - Operational Definition

Supplier chain relations refer to the awareness employees have about their customers, including knowledge about the number of customers and what their feedback about the company is. Positive feedback is dependent on the relationship between employees of the company and their customers.

### Competitors - Academic Definition (factor of RC)

Competitors include items such as:  
Relationships with other organizations  
Competitor orientation

### What Respondents Have Said

1. Prisoners' Dilemma, whereby there is either cooperation or competition. The position of a competitor respective of the organization.
2. What the competitors' position is in the relevant market. Their target market, their strengths & weaknesses.
3. Knowing your competitive market and knowing your place within that market.
4. Competitor position and factors in the industry.
5. Networking with other companies and being in competition with other companies.

### Competitors - Operational Definition

Competitors refers to the cooperative or competitive relationships a company has with its competitors in its relevant market. This takes into account its position in the market relative to its competition, its networking ability and its competitive strengths and weaknesses.

### General Aspects to be accounted for when engaging in Relationships - Academic Definition (factor of RC)

Items relating to general aspects to be accounted for when engaging in relationships include:

Long term focus related to customer and supplier relations

Profit objective related to customer and supplier relations.

### **What Respondents Have Said**

1. The relationship of the customer and supplier on a grand scale, necessary to meet the profit objective.
2. Building relationships with suppliers in order for the best prices and flexibility when needed. Customer relationship in order for long-term loyalty and positive feedback to company.
3. Strategic objective – Where your company wants to be and how much you want to make.
4. Dealing with customers and suppliers in the long term. Pricing and discounting based on individual customers and suppliers for profit objectives.
5. Ensuring that short term customers become long term customers leading to profit.

### **General Aspects to be accounted for when engaging in Relationships - Operational Definition**

General aspects to be accounted for when engaging in relationships refers to a company being able to achieve its strategic goals and to make good profits in the long run based on building strong relationships with both customers and suppliers. By nurturing productive relationships, customers and suppliers will provide the company with positive feedback, long term loyalty and flexibility.

# HREC Approval

Australian Catholic University  
Brisbane Sydney Canberra Ballarat Melbourne



## Human Research Ethics Committee

### Committee Approval Form

Principal Investigator/Supervisor: Dr Sugumar Mariappanadar Melbourne Campus  
Co-Investigators: Melbourne Campus  
Student Researcher: Alma Sleiman Kairouz Melbourne Campus

Ethics approval has been granted for the following project:  
The perceptions of stock analysts, brokers and shareholders of the importance of human resource and relational capital information in stock investment decisions.  
for the period: 21<sup>st</sup> August 2006 to 14<sup>th</sup> July 2007  
Human Research Ethics Committee (HREC) Register Number: V200607 4

The following standard conditions as stipulated in the *National Statement on Ethical Conduct in Research Involving Humans* (1999) apply:

- (i) that Principal Investigators / Supervisors provide, on the form supplied by the Human Research Ethics Committee, annual reports on matters such as:
  - security of records
  - compliance with approved consent procedures and documentation
  - compliance with special conditions, and
- (ii) that researchers report to the HREC immediately any matter that might affect the ethical acceptability of the protocol, such as:
  - proposed changes to the protocol
  - unforeseen circumstances or events
  - adverse effects on participants

The HREC will conduct an audit each year of all projects deemed to be of more than minimum risk. There will also be random audits of a sample of projects considered to be of minimum risk on all campuses each year.

Within one month of the conclusion of the project, researchers are required to complete a *Final Report Form* and submit it to the local Research Services Officer.

If the project continues for more than one year, researchers are required to complete an *Annual Progress Report Form* and submit it to the local Research Services Officer within one month of the anniversary date of the ethics approval.

Signed: Ray Haydock Date: 21/8/2006  
(Research Services Officer, Melbourne Campus)

## Appendix D - Pilot Questionnaire to Determine Relevance

RESPONDENT NUMBER:

### CONFIDENTIAL QUESTIONNAIRE

#### The Perceptions of Stock Analysts, Brokers and Shareholders of the Importance of Human Resource and Relational Capital Information in Stock Purchase Decisions

RESPONDENT'S NAME:

POST CODE:

**PLEASE TICK THE RELEVANT RESPONSES FOR THE FOLLOWING QUESTIONS:**

**What is your gender?**

Male ☐

Female ☐

**What is your age?**

25 or under ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐ 66 and over ☐

**What level of education have you achieved?**

Primary ☐

Secondary ☐

TAFE ☐

University ☐

**What is your occupation?**

Professional/Manager/Administrator/Consultant/Clerical ☐

Tradesperson/Contractor/Labourer ☐

Other (i.e. home duties/student/unemployed) ☐

**What is your income range?**

Up to \$40,000 ☐ \$40,001 to \$80,000 ☐ \$80,001 to \$120,000 ☐ \$120,001 or more ☐

**Do you have, or have you had, banking sector shares?**

Yes ☐

No ☐

**If you responded "yes" to having banking sector shares, in what banks do you have shares?**

ADB (Adelaide Bank Ltd) ☐ ANZ (Australia & New Zealand Banking Group Ltd) ☐

BEN (Bendigo Bank Ltd) ☐ BOQ (Bank of Queensland Ltd) ☐

CBA (Commonwealth Bank of Australia) ☐ NAB (National Australia Bank) ☐

SGB (St. George Bank Ltd) ☐ WBC (Westpac Banking Corporation) ☐

Other banks (please specify which)

**If you responded "no" to having banking sector shares, you are no longer required to proceed with the questionnaire. Thank you for your time and effort.**

**The definitions below are provided for your convenience, to help clarify what this questionnaire is trying to explore.**

**Human resource capital** (HRC) is the collective physical and intellectual skills and abilities of employees that they bring with them to an organization in order to contribute to its overall performance and success. Factors of HRC include learned abilities, management & leadership qualities, employee values and problem-solving capabilities.

**Relational capital** (RC) is the economic value of the working relationships between stakeholders, including shareholders, management, staff, suppliers, customers, competitors, etc., needed for an organization to be productive. Generally, and for the purpose of this study, both short and long term aspects of customer capital, supplier chain relations and competitors make up the RC of a firm.



Have you used HRC and/or RC policy information to decide on which banking sector shares to buy?

Yes ☐

No ☐

If you responded “yes”, please tick which HRC and/or RC policy information you used in your decision to buy shares.

Employee recruitment process	<input type="checkbox"/>	Employee retention	<input type="checkbox"/>
Development of Management & leadership qualities	<input type="checkbox"/>	Employee values	<input type="checkbox"/>
Developing employee problem-solving skills	<input type="checkbox"/>	Customer capital	<input type="checkbox"/>
Supplier chain relations	<input type="checkbox"/>	Competitors	<input type="checkbox"/>

Have you used HRC and/or RC policy information to decide on which banking sector shares to hold on to?

Yes ☐

No ☐

If you responded “yes”, please tick which HRC and/or RC policy information you used in your decision to hold on to shares.

Employee recruitment process	<input type="checkbox"/>	Employee retention	<input type="checkbox"/>
Development of Management & leadership qualities	<input type="checkbox"/>	Employee values	<input type="checkbox"/>
Developing employee problem-solving skills	<input type="checkbox"/>	Customer capital	<input type="checkbox"/>
Supplier chain relations	<input type="checkbox"/>	Competitors	<input type="checkbox"/>

Have you used HRC and/or RC policy information to decide on which banking sector shares to sell?

Yes ☐

No ☐

If you responded “yes”, please tick which HRC and/or RC policy information you used in your decision to sell shares.

Employee recruitment process	<input type="checkbox"/>	Employee retention	<input type="checkbox"/>
Development of Management & leadership qualities	<input type="checkbox"/>	Employee values	<input type="checkbox"/>
Developing employee problem-solving skills	<input type="checkbox"/>	Customer capital	<input type="checkbox"/>
Supplier chain relations	<input type="checkbox"/>	Competitors	<input type="checkbox"/>

Do you think the HRC and/or RC policy information used should be different for “buying”, “holding on to”, or “selling” banking shares?

Yes ☐

No ☐

If you responded “yes”, please rank the importance of HRC and/or RC policy information from 1(most important) to 8(least important) in the decision to buy banking shares.

Employee recruitment process	<input type="checkbox"/>	Employee retention	<input type="checkbox"/>
Development of Management & leadership qualities	<input type="checkbox"/>	Employee values	<input type="checkbox"/>
Developing employee problem-solving skills	<input type="checkbox"/>	Customer capital	<input type="checkbox"/>
Supplier chain relations	<input type="checkbox"/>	Competitors	<input type="checkbox"/>

If you responded “yes”, please rank the importance of HRC and/or RC policy information from 1(most important) to 8(least important) in the decision to hold on to banking shares.

Employee recruitment process	<input type="checkbox"/>	Employee retention	<input type="checkbox"/>
Development of Management & leadership qualities	<input type="checkbox"/>	Employee values	<input type="checkbox"/>
Developing employee problem-solving skills	<input type="checkbox"/>	Customer capital	<input type="checkbox"/>
Supplier chain relations	<input type="checkbox"/>	Competitors	<input type="checkbox"/>

If you responded “yes”, please rank the importance of HRC and/or RC policy information from 1(most important) to 8(least important) in the decision to sell banking shares.

Employee recruitment process

☐

Development of Management & leadership qualities

☐

Developing employee problem-solving skills

☐

Supplier chain relations

☐

Employee retention

☐

Employee values

☐

Customer capital

☐

Competitors

☐

### **Instructions**

**You are provided with a range of items/statements relating to the HRC and RC of a company. You are required to indicate how relevant you perceive these items are to the HRC or RC factors indicated in each section. Please read each statement and indicate the perceived level of relevance by circling the appropriate response. There are no right or wrong answers.**

<b>How do you perceive the relevance of each of the following statements to the HR factor of employee <u>recruitment</u>?</b>			
1. The company attracts valuable employees, with industry-specific knowledge, from competitor firms	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
2. The company offers higher starting salaries than the industry average	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
3. The company hires the best trained graduates in the field	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
4. Graduate recruits are fast-tracked to a management position quickly in the company compared to competitor firms	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
5. The company uses targeted marketing campaigns to potential recruits to show it values the individual achievements of its current star performers	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
6. The company uses in-house employee recruitment officers, with complete knowledge of the firm's business, to match appropriate recruits to available roles	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
<b>How do you perceive the relevance of each of the following statements to the HR factor of employee <u>retention</u>?</b>			
1. The company encourages current employees with good performance results to nominate themselves for future management positions	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
2. The company is committed to retaining employees by making the job interesting for them	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
3. The company uses training and development to improve interpersonal communication and teamwork	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
4. The company facilitates workplace diversity and workplace harmony by employing females, mature-aged staff, and those from multi-cultural backgrounds	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
5. Specialist external firms provide training to employees with specialized product knowledge/skills	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
6. The careers of junior employees are developed through the formal mentoring by experienced staff	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
7. A formal performance appraisal program provides employees with constructive feedback and remedial intervention	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>

<b>How do you perceive the relevance of each of the following statements to the HR factor of <u>management &amp; leadership qualities</u> of managers?</b>			
1. Training and development is used to improve the leadership qualities and styles of company managers	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
2. Managers are allowed to use flexibility with leave and other time allowances to control and encourage employee behaviour	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
3. Providing managers with technical skills to decide on the level of training required to reduce employee skills gaps	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
4. Managers are empowered to motivate subordinates by offering employee salaries above the industry average	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
5. Providing managers with share options and other bonuses directly linked to the output levels of their departments and of their direct subordinates	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
<b>How do you perceive the relevance of each of the following statements to the HR factor of <u>employee values</u>?</b>			
1. Managers build corporate trust & goodwill with their subordinates by negotiating difficult situations in an open environment	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
2. Organizational synergy, which improves company output, is a result of a decentralized decision-making process	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
3. The company motivates less competitive employees by linking output to a highly competitive reward system	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
4. The company uses weekly statistical analysis of staff productivity to encourage employees to reset goals & targets	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
5. Weekend workshops are used to improve employee productivity by encouraging them to broaden their perspective in relation to their work roles	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
<b>How do you perceive the relevance of each of the following statements to the HR factor of the <u>problem-solving skills</u> of employees?</b>			
1. Managers facilitate the creation of an organizational culture based on work-groups and teams in the pursuit of creating new products and services	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
2. Managers are encouraged to facilitate employees who are proven and successful risk-takers	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
3. Managers readily encourage staff to practice self-confidence and to demonstrate authority as a result of their own successful management styles	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
4. Managers are empowered to select, as mentors and role models, employees who are creative and can make their own decisions without the help of others	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
5. Managers select, as supervisors, employees that demonstrate the ability to use their imagination to develop original ideas for their market	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
<b>How do you perceive the relevance of each of the following statements to the RC factor of <u>customer capital</u>?</b>			
1. Structured training programs improve sales staff responsiveness and levels of customer courtesy	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
2. Company obligations to corporate customers are met in a timely and individualized manner	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>

3. Innovative practices are used to actively and consistently increase market share	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
4. The company's reputation with its current customers has facilitated the potential to grow its customer base	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
5. Whether the company has negotiated long term contracts with customers	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
<b>How do you perceive the relevance of each of the following statements to the RC factor of <u>supplier chain relations</u>?</b>			
1. The company's high customer retention is due to the specialized work of their customer relationship managers	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
2. When surveyed for feedback, the degree of customer satisfaction reported on the service the company provides in response to their contemporary needs	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
3. Whether the company has negotiated long term contracts with suppliers	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
4. Customer feedback is encouraged through the promptness of employees responding to feedback	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
5. Management and staff at all levels understand the size of their share of the market.	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
6. Employees know how their customers want to be treated	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
7. Whether corporate stakeholders are aware of where the company wants to be in 3 to 5 years – strategic objective	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
<b>How do you perceive the relevance of each of the following statements to the RC factor of <u>competitors</u>?</b>			
1. Information about the awareness of a company's positioning within its market	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
2. Relative to itself, an awareness of the positioning of its competitors in the market	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
3. Information on how management actively tests its performance against its best competitors to improve the company's performance and overall position in the market	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
4. Knowledge about how the company works together with its competitors to further develop its markets (joint ventures/alliances)	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
5. Information on how the company seeks to predict market trends	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
6. Information on how the company uses market intelligence increase its market share	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>
7. Knowledge about the potential for a company to add value through product and/or business diversification	<b>NOT RELEVANT</b>	<b>UNSURE</b>	<b>RELEVANT</b>

## Appendix E – Expression of Interest Letter

Australian Catholic University  
Brisbane Sydney Canberra Ballarat Melbourne



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Locked Bag 4115 Fitzroy MDC VIC 3065  
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Facsimile 613 9953 3005  
[www.acu.edu.au](http://www.acu.edu.au)

### EXPRESSION OF INTEREST LETTER TO PARTICIPANTS (Respondents to the questionnaire)

#### RESEARCH PROJECT TITLE:

The Perceptions of Shareholders of the Importance of Human Resource and Relational Capital Information in Stock Purchase Decisions

Name of Research Student: Ms. ALMA S KAIROUZ

Name of Supervisor: Dr. SUGUMAR MARIAPPANADAR

Dear Participant,

I am currently conducting research to explore the perception of importance of human resource and relational capital information by individual shareholders. The focus of the research paper is on the importance of human resource and relational capital information in making investment decisions relating to purchasing equity in organizations within the knowledge-based banking industry within the Australian environment. Specifically, this study will provide an assessment of the perceived importance of human resource and relational capital information disclosure by corporations within Australia's banking sector and the impact of those perceptions on the purchase of shares within that sector.

I am requesting your participation in the study by asking you to respond to the range of questions in the questionnaire. Completion of the questionnaire will take approximately 10 to 15 minutes. Your responses to the questions will clarify the perceptions of importance of items relating to the human resource and relational factors of the banking industry firms. Your responses will also help to test the reliability and validity of the research findings up to this stage.

I assure you that the data collected from you will be maintained in strict confidence. The questionnaires will be securely stored for at least five years, as prescribed by the university regulations. The questions you will be asked about yourself are only to allow

me to group the data in various ways, such as by gender, age, and education and only aggregated group information will be used for analysis and publication. There is no way that you can be personally identified in a report. You may withdraw from the study at any time and are not required to provide a reason.

If you have any queries or would like to be informed of the aggregate research findings, please contact the research supervisor as follows:

Dr. Sugumar Mariappanadar  
Supervisor  
HRM/Management  
Tel: 03 9953 3167  
School of Business & Informatics  
115 Victoria Parade,  
Fitzroy, VIC 3065

The Human Research Ethics Committee at Australian Catholic University has approved this study. In the event that you have any complaint or concern about the way you have been treated during the study, or if you have any query that the researcher has not been able to satisfy, you may write to the Chair of the Human Research Ethics Committee as follows:

Chair, HREC  
c/- Research Services  
Australian Catholic University  
Melbourne Campus  
Locked Bag 4115,  
Fitzroy, VIC 3065  
Tel: 03 9953 3157  
Fax: 03 9953 3315

Any complaint or concern will be treated in confidence and fully investigated. The participant will be informed of the outcome.

If you agree to participate in this research project, you should sign both copies of the Consent Form, retain one copy for your records and return the other copy to the student researcher.

Regards,

Alma S Kairouz  
Student Researcher

Sugumar Mariappanadar  
Supervisor

## Appendix F – Participant Consent Form

Australian Catholic University  
Brisbane Sydney Canberra Ballarat Melbourne



Australian Catholic University Limited  
ABN 15 050 192 660  
Melbourne Campus (St Patrick's)  
115 Victoria Parade Fitzroy VIC 3065  
Locked Bag 4115 Fitzroy MDC VIC 3065  
Telephone 613 9953 3000  
Facsimile 613 9953 3005  
[www.acu.edu.au](http://www.acu.edu.au)

### PARTICIPANT CONSENT FORM

#### RESEARCH PROJECT TITLE:

The Perceptions of Shareholders of the Importance of Human Resource and Relational Capital Information in Stock Purchase Decisions

Name of Research Student: Ms ALMA S KAIROUZ

Name of Supervisor: Dr. SUGUMAR MARIAPPANADAR

I ..... (*the participant*) have read and understood the information provided in the Letter to Participants. Any questions I have asked have been answered to my satisfaction. I agree to participate in the research study by providing responses to questions asked in the questionnaire. I realize that I may be required to respond to subsequent questionnaires and that I may choose to withdraw from the study at any time. I agree that the research data collected for the study may be published or may be provided to other researchers in a form that does not identify me in any way.

NAME OF PARTICIPANT: .....(block letters)

SIGNATURE:..... DATE:.....

SIGNATURE OF RESEARCH STUDENT:.....

DATE:.....

SIGNATURE OF SUPERVISOR:.....

DATE:.....

Researcher's copy

CRICOS registered provider:  
00004G, 00112C,  
00873F, 00885B

## Appendix G – Final Pilot Study Questionnaire for Validity and Reliability Tests

### CONFIDENTIAL QUESTIONNAIRE

### The Perceptions of Individual Shareholders of the Importance of Human Resource and Relational Capital Information in Stock Purchase Decisions

**PLEASE TICK (✓) THE RELEVANT RESPONSES FOR THE FOLLOWING QUESTIONS:**

**Gender** Male ☐ Female ☐

**Age** 25 or under ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐  
66 or over ☐

**Level of education** Primary ☐ Secondary ☐ TAFE ☐ University ☐

**Do you have, or have you had, Australian banking sector shares?** Yes ☐ No ☐

**If you responded “yes” to having banking sector shares, in what banks do you have shares?**

ADB (Adelaide Bank Ltd)	<input type="checkbox"/>	ANZ (Australia & New Zealand Banking Group Ltd)	<input type="checkbox"/>
BEN (Bendigo Bank Ltd)	<input type="checkbox"/>	BOQ (Bank of Queensland Ltd)	<input type="checkbox"/>
CBA (Commonwealth Bank of Australia)	<input type="checkbox"/>	NAB (National Australia Bank)	<input type="checkbox"/>
SGB (St. George Bank Ltd)	<input type="checkbox"/>	WBC (Westpac Banking Corporation)	<input type="checkbox"/>
Other banks (please specify which) _____			<input type="checkbox"/>

**If you responded “no” to having banking sector shares, you are no longer required to proceed with the questionnaire. Thank you for your time and effort.**

**The definitions below are provided for your convenience, to help clarify what this questionnaire is trying to explore.**

**Human resource capital** (HRC) is the collective physical and intellectual skills and abilities of employees that they bring with them to an organization in order to contribute to its overall performance and success. Factors of HRC include learned abilities, management & leadership qualities, employee values and problem-solving capabilities.

**Relational capital** (RC) is the economic value of the working relationships between stakeholders, including shareholders, management, staff, suppliers, customers, competitors, etc., needed for an organization to be productive. Generally, and for the purpose of this study, both short and long term aspects of customer capital, supplier chain relations and competitors make up the RC of a firm.



**Instructions**

You are provided with a range of statements relating to the HRC and RC of a company. You are required to indicate how important you perceive these items are to your decision to purchase banking sector shares. Please read each statement and, by placing a tick (✓) for the appropriate response, indicate the perceived importance of each in accordance with the scale provided below. There are no right or wrong answers.

**Scale:** 1 =“Not Important”, 2 =“Less Important”, 3 =“Unsure”, 4 =“Important” and 5 =“Very Important”

1. The company attracts valuable employees, with industry-specific knowledge, from competitor firms	1	2	3	4	5
2. The company encourages current employees with good performance results to nominate themselves for future management positions	1	2	3	4	5
3. Training and development is used to improve the leadership qualities and styles of company managers	1	2	3	4	5
4. Managers build corporate trust & goodwill with their subordinates by negotiating difficult situations in an open environment	1	2	3	4	5
5. Managers facilitate the creation of an organizational culture based on work-groups and teams in the pursuit of creating new products and services	1	2	3	4	5
6. Structured training programs improve sales staff responsiveness and levels of customer courtesy	1	2	3	4	5
7. The company's high customer retention is due to the specialized work of their customer relationship managers	1	2	3	4	5
8. Company obligations to corporate customers are met in a timely and individualized manner	1	2	3	4	5
9. Managers are allowed to use flexibility with leave and other time allowances to control and encourage employee behaviour	1	2	3	4	5
10. Relative to itself, an awareness of the positioning of its competitors in the market	1	2	3	4	5
11. The company offers higher starting salaries than the industry average	1	2	3	4	5
12. The company uses training and development to improve interpersonal communication and teamwork	1	2	3	4	5
13. Providing managers with technical skills to decide on the level of training required to reduce employee skills gaps	1	2	3	4	5
14. The careers of junior employees are developed through the formal mentoring by experienced staff	1	2	3	4	5
15. Information on how management actively tests its performance against its best competitors to improve the company's performance and overall position in the market	1	2	3	4	5
16. Managers readily encourage staff to practice self-confidence and to demonstrate authority as a result of their own successful management styles	1	2	3	4	5
17. The company hires the best trained graduates in the field	1	2	3	4	5
18. Innovative practices are used to actively and consistently increase market share	1	2	3	4	5

19. Employees know how their customers want to be treated	1	2	3	4	5
20. Knowledge about the potential for a company to add value through product and/or business diversification	1	2	3	4	5
21. The company uses targeted marketing campaigns to potential recruits to show it values the individual achievements of its current star performers	1	2	3	4	5
22. Managers are encouraged to facilitate employees who are proven and successful risk-takers	1	2	3	4	5
23. The company's reputation with its current customers has facilitated the potential to grow its customer base	1	2	3	4	5
24. The company uses in-house employee recruitment officers, with complete knowledge of the firm's business, to match appropriate recruits to available roles	1	2	3	4	5
25. Managers are empowered to select, as mentors and role models, employees who are creative and can make their own decisions without the help of others	1	2	3	4	5
26. The company motivates less competitive employees by linking output to a highly competitive reward system	1	2	3	4	5
27. Information on how the company uses market intelligence increase its market share	1	2	3	4	5
28. Managers are empowered to motivate subordinates by offering employee salaries above the industry average	1	2	3	4	5
29. Specialist external firms provide training to employees with specialized product knowledge/skills	1	2	3	4	5
30. Whether the company has negotiated long term contracts with customers	1	2	3	4	5
31. Providing managers with share options and other bonuses directly linked to the output levels of their departments and of their direct subordinates	1	2	3	4	5
32. Organizational synergy, which improves company output, is a result of a decentralized decision-making process	1	2	3	4	5
33. When surveyed for feedback, the degree of customer satisfaction reported on the service the company provides in response to their contemporary needs	1	2	3	4	5
34. Weekend workshops are used to improve employee productivity by encouraging them to broaden their perspective in relation to their work roles	1	2	3	4	5
35. A formal performance appraisal program provides employees with constructive feedback and remedial intervention	1	2	3	4	5
36. Whether the company has negotiated long term contracts with suppliers	1	2	3	4	5
37. Managers select, as supervisors, employees that demonstrate the ability to use their imagination to develop original ideas for their market	1	2	3	4	5
38. Whether corporate stakeholders are aware of where the company wants to be in 3 to 5 years – strategic objective	1	2	3	4	5
39. Information on how the company seeks to predict market trends	1	2	3	4	5
40. The company uses weekly statistical analysis of staff productivity to encourage employees to reset goals & targets	1	2	3	4	5

**Scale:** 1 =“Not Important”, 2 =“Less Important”, 3 =“Unsure”, 4 =“Important” and 5 =“Very Important”

## Appendix H – Main Study Questionnaire

### CONFIDENTIAL QUESTIONNAIRE

### The Perceptions of Individual Shareholders of the Importance of Human Resource and Relational Capital Information in Stock Purchase Decisions

**PLEASE TICK (✓) THE RELEVANT RESPONSES FOR THE FOLLOWING QUESTIONS:**

**Gender** Male ☐ Female ☐

**Age** 25 or under ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐ 66 or over ☐

**Level of education** Primary ☐ Secondary ☐ TAFE ☐ University ☐

**Do you have, or have you had, Australian banking sector shares?**

Yes ☐ No ☐

**If you responded “yes” to having banking sector shares, in what banks do you have shares?**

ADB (Adelaide Bank Ltd)	<input type="checkbox"/>	ANZ (Australia & New Zealand Banking Group Ltd)	<input type="checkbox"/>
BEN (Bendigo Bank Ltd)	<input type="checkbox"/>	BOQ (Bank of Queensland Ltd)	<input type="checkbox"/>
CBA (Commonwealth Bank of Australia)	<input type="checkbox"/>	NAB (National Australia Bank)	<input type="checkbox"/>
SGB (St. George Bank Ltd)	<input type="checkbox"/>	WBC (Westpac Banking Corporation)	<input type="checkbox"/>
Other banks (please specify which) _____			<input type="checkbox"/>

**If you responded “no” to having banking sector shares, you are no longer required to proceed with the questionnaire. Thank you for your time and effort.**

**The definitions below are provided for your convenience, to help clarify what this questionnaire is trying to explore.**

**Human resource capital (HRC)** is the collective physical and intellectual skills and abilities of employees that they bring with them to an organization in order to contribute to its overall performance and success. Factors of HRC include learned abilities, management & leadership qualities, employee values and problem-solving capabilities.

**Relational capital (RC)** is the economic value of the working relationships between stakeholders, including shareholders, management, staff, suppliers, customers, competitors, etc., needed for an organization to be productive. Generally, and for the purpose of this study, both short and long term aspects of customer capital, supplier chain relations and competitors make up the RC of a firm.

**1. Indicate with a tick (✓) if you have used Human Resource Capital (HRC) and/or Relational Capital (RC) policy information to decide on which Australian banking sector shares to buy, hold on to, or sell? (please refer to the definitions provided above)**

HRC	YES	NO	RC	YES	NO
To <u>buy</u> shares			To <u>buy</u> shares		
To <u>hold on to</u> Shares			To <u>hold on to</u> shares		
To <u>sell</u> shares			To <u>sell</u> shares		

**2. Indicate the importance of the sources of advice below as either 1 – not important; 2 – important; or 3 - most important, in providing HRC and/or RC information. Place a tick (✓) in the box representing the appropriate response.**

HRC	1	2	3	RC	1	2	3
Newspapers				Newspapers			
Family & Friends				Family & Friends			
Financial Planner / Advisor				Financial Planner / Advisor			
Stock Broker				Stock Broker			
Internet				Internet			
Investment Newsletters				Investment Newsletters			
Accountant				Accountant			
Work Colleague				Work Colleague			
Magazines				Magazines			
Radio				Radio			
Other Source of Advice (please specify)_____				Other Source of Advice (please specify)_____			

**3. Indicate the importance of Human Resource Capital (HRC) and Relational Capital (RC) policy information as either 1 – not important; 2 – important; or 3 - most important, in the decision to buy Australian banking sector shares. Place a tick (✓) in the box representing the appropriate response.**

HRC				RC			
Employee recruitment process	1	2	3	Customer capital	1	2	3
Employee retention	1	2	3	Supplier chain relations	1	2	3
Employee values	1	2	3	Competitors	1	2	3
Development of management & leadership qualities	1	2	3				
Developing employee problem-solving skills	1	2	3				

**4. Indicate the importance of Human Resource Capital (HRC) and Relational Capital (RC) policy information as either 1 – not important; 2 – important; or 3 - most important, in the decision to hold on to Australian banking sector shares. Place a tick (✓) in the box representing the appropriate response.**

HRC				RC			
Employee recruitment process	1	2	3	Customer capital	1	2	3
Employee retention	1	2	3	Supplier chain relations	1	2	3
Employee values	1	2	3	Competitors	1	2	3
Development of management & leadership qualities	1	2	3				
Developing employee problem-solving skills	1	2	3				

**5. Indicate the importance of Human Resource Capital (HRC) and Relational Capital (RC) policy information as either 1 – not important; 2 – important; or 3 - most important, in the decision to sell Australian banking sector shares. Place a tick (✓) in the box representing the appropriate response.**

HRC				RC			
Employee recruitment process	1	2	3	Customer capital	1	2	3
Employee retention	1	2	3	Supplier chain relations	1	2	3

Employee values	1	2	3
Development of management & leadership qualities	1	2	3
Developing employee problem-solving skills	1	2	3

Competitors	1	2	3
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## 6. Instructions

You are provided with a range of statements relating to the HRC and RC of a company. You are required to indicate how important you perceive these items are to your decision to purchase banking sector shares. Please read each statement and, by placing a tick (✓) for the appropriate response, indicate the perceived importance of each in accordance with the scale provided below. There are no right or wrong answers.

**Scale:** 1 =“Not Important”, 2 =“Less Important”, 3 =“Unsure”, 4 =“Important” and 5 =“Very Important”

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4. Managers build corporate trust & goodwill with their subordinates by negotiating difficult situations in an open environment	1	2	3	4	5
5. Managers facilitate the creation of an organizational culture based on work-groups and teams in the pursuit of creating new products and services	1	2	3	4	5
6. Structured training programs improve sales staff responsiveness and levels of customer courtesy	1	2	3	4	5
7. The company's high customer retention is due to the specialized work of their customer relationship managers	1	2	3	4	5
8. Company obligations to corporate customers are met in a timely and individualized manner	1	2	3	4	5
9. Managers are allowed to use flexibility with leave and other time allowances to control and encourage employee behaviour	1	2	3	4	5
10. Relative to itself, an awareness of the positioning of its competitors in the market	1	2	3	4	5
11. The company offers higher starting salaries than the industry average	1	2	3	4	5
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13. Providing managers with technical skills to decide on the level of training required to reduce employee skills gaps	1	2	3	4	5
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15. Information on how management actively tests its performance against its best competitors to improve the company's performance and overall position in the market	1	2	3	4	5

16. Managers readily encourage staff to practice self-confidence and to demonstrate authority as a result of their own successful management styles	1	2	3	4	5
17. The company hires the best trained graduates in the field	1	2	3	4	5
18. Innovative practices are used to actively and consistently increase market share	1	2	3	4	5
19. Employees know how their customers want to be treated	1	2	3	4	5
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21. The company uses targeted marketing campaigns to potential recruits to show it values the individual achievements of its current star performers	1	2	3	4	5
22. Managers are encouraged to facilitate employees who are proven and successful risk-takers	1	2	3	4	5
23. The company's reputation with its current customers has facilitated the potential to grow its customer base	1	2	3	4	5
24. The company uses in-house employee recruitment officers, with complete knowledge of the firm's business, to match appropriate recruits to available roles	1	2	3	4	5
25. Managers are empowered to select, as mentors and role models, employees who are creative and can make their own decisions without the help of others	1	2	3	4	5
26. The company motivates less competitive employees by linking output to a highly competitive reward system	1	2	3	4	5
27. Information on how the company uses market intelligence increase its market share	1	2	3	4	5
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30. Whether the company has negotiated long term contracts with customers	1	2	3	4	5
31. Providing managers with share options and other bonuses directly linked to the output levels of their departments and of their direct subordinates	1	2	3	4	5
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36. Whether the company has negotiated long term contracts with suppliers	1	2	3	4	5
37. Managers select, as supervisors, employees that demonstrate the ability to use their imagination to develop original ideas for their market	1	2	3	4	5
38. Whether corporate stakeholders are aware of where the company wants to be in 3 to 5 years – strategic objective	1	2	3	4	5
39. Information on how the company seeks to predict market trends	1	2	3	4	5
40. The company uses weekly statistical analysis of staff productivity to encourage employees to reset goals & targets	1	2	3	4	5

**Scale:** 1 =“Not Important”, 2 =“Less Important”, 3 =“Unsure”, 4 =“Important” and 5 =“Very Important”

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