Risk analysis framework for investors in emerging markets: A South African perspective

by

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Submitted in accordance with the requirement for the degree

of

DOCTOR OF PHILOSOPHY

In the subject

BUSINESS MANAGEMENT

At the

UNIVERSITY OF SOUTH AFRICA

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August 2021

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Declaration

I, Ntwanano Jethro Godi hereby certify that this thesis, which is submitted to the University of South Africa, is my own work except where otherwise indicated and acknowledged by means of complete references. This thesis has not, either in whole or part, been submitted for a degree or diploma at any other universities. Error and omission noted in this work can be attributed to my own imperfection.

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Abstract

Brazil, Russia, India, China and South Africa (BRICS) have had divergent fortunes in the past decade (2009–2019), with Brazil and Russia, both large oil producers, plunging into recession, the Chinese economy slowing down, and the South African economy getting weaker, while the Indian economy shows momentum. Despite all this, emerging markets showed remarkable resilience during and after the global financial and economic crisis of 2008–2009. Their resilience is remarkable considering that they managed the global crisis and the subsequent Eurozone sovereign debt crisis better than expected. Emerging markets were not entirely immune from the effects of the global crisis, as evident in the dwindle of their exports and growth in the fourth quarter of 2008 and the first quarter of 2009. Therefore, whilst investors may invest in emerging markets, the realities of investing in emerging markets are sometimes far from the perceived truth as there are risk exposures.

A sound investment is crucial for investors as it endeavours to provide a level of comfort especially when investing in emerging markets. Therefore, risk management can be applied as tool to ensure that a sound investment is made. Risk management frameworks are somewhat new management concepts in emerging markets but are very important disciplines for investors who are keen on investing in these markets. The aim of this study was to develop a risk analysis framework for investors in emerging markets, using South Africa as a gateway to BRICS countries. A risk analysis framework provides a structured approach to investing, and could be used by investors when considering investments in emerging markets. The study provided insight into emerging market risks, risk exposures, economic data and outlook from a BRICS perspective. BRICS countries are regarded as the most advanced emerging markets, with huge growth potential, which should have a very sound financial system in place to mitigate any form of risk exposures that could be detrimental to investment objectives. Should a sound financial system and risk analysis framework be lacking and or not adequately developed and implemented, the afore-mentioned potential could be nullified and could negatively affect the economic growth and well-being of any emerging market. The literature of the study was conducted in 2017 and 2018; thus, the effects of the Covid-19 pandemic are not included in the findings. However, this might be a topic for further research, using this study as a platform.

Keywords: BRICS, risks, risk analysis, risk management, emerging markets, investments, framework, emerging market investors.

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List of acronyms and abbreviations

ABSA	-	Amalgamated Banks of South Africa
ALSI	-	JSE All-Share Index
BESA	-	Bond Exchange of South Africa
BCBS	-	Basel Committee on Bank Supervision
BRICS	-	Brazil, Russia, India, China, South Africa
CIVET	-	Colombia, Indonesia, Vietnam, Egypt, and Turkey
CNBC	-	Consumer News and Business Channel
CPI	-	consumer price index
CRS	-	Country Risk Service
DTA	-	double taxation agreement
EMNCs	-	Emerging Market Multinational Corporations
ETFs	-	exchange-traded funds
EU	-	European Union
FDI	-	foreign direct investment
FAIS	-	Financial Advisory and Intermediary Services
FSCA	-	Financial Sector Conduct Authority
FTSE	-	Financial Times Stock Exchange
JSE	-	Johannesburg Stock Exchange
GDP	-	gross domestic product
GST	-	Good and Services Tax
IFA	-	Independent Financial Advisers
IFC	-	International Finance Corporation
IFE	-	International Fisher effect
IMF	-	International Monetary Fund
IMC	-	Investable Market Capitalisation
KSF IOM	-	Kaupthing, Singer and Friedlander's Isle of Man subsidiary
MNC	-	multinational corporation
MSCI	-	Morgan Stanley Capital International
PMI	-	Purchasing Managers Index
PPP	-	purchasing power parity
R&D	-	research and development
SAFEX	-	South African Futures Exchange
SARB	-	South African Reserve Bank
SPSS	-	Statistical Package for the Social Sciences
UAE	-	United Arab Emirates
UNCTAD	-	United Nations Conference on Trade and Development
U.S. IRS	-	United States Internal Revenue Services
USSR	-	Union of Soviet Socialist Republics
WGBI	-	World Government Bond Index

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1. Background

Investors in emerging markets have suffered losses in the past, forcing several major investors into bankruptcy and throwing many businesses and families into disarray through job losses (Ramsey, 2009). According to Piper (2010), uncontrolled risks could be the main reason that leads to unfavourable results, such as financial losses or below average returns. Generally, investors strive toward an investment that produces the greatest possible income with the least possible risk. According to Sanlam (2008), investments and financial planning in South Africa has been a process of evolution as they move from being a sales-orientated industry to be a fully-fledged profession where investors are capitalising on market fluctuations as they tap into different markets around the world.

Investment planning in South Africa, which has been going on for the past number of years, has recently picked up momentum because of the introduction of the regulatory framework in the form of the Financial Advisory and Intermediary Services Act 37 of 2002 (referred to as the FAIS Act) in the industry. Financial planning means different things to different people. According to Ramsey (2009), financial planning is regarded as the process of meeting life goals through the proper management of finances. Life goals include among other things buying a property, investing in children's education, or saving for retirement (Financial Planning Institute, 2008). As such, this process involves gathering relevant financial information, setting life goals and examining current financial status (Sanlam, 2008). Once the goals are set, a strategic plan on how to meet the set goals, given the current situation should be developed. The strategic plan should be reviewed on an ongoing basis to detect any deviations from the investment objectives (Ramsey, 2009). According to Botha *et al*. (2012), the financial planning process consists of six steps: (1) establish the objectives; (2) collect data; (3) analyse and assess the financial status and position; (4) develop a financial plan; (5) implement the financial plan; and (6) continuously review the situation. This six-step process is discussed in detail in the next chapters.

Therefore, the need for financial planning is critical, irrespective of the size of income or number of assets owned by an individual or household, the only difference is the complexity of the planning (Hull, 2018). For investors to achieve objectives such as buying asset classes such as equities, bonds, cash, derivatives and certain types of property investments and commodities,

risks need to be controlled, for risks to be controlled, they should first be identified, evaluated and ranked in order of importance (Hull, 2018).

Therefore, Botha *et al*. (2012), warns that there are various methods that investors can use to measure their returns. The most common one is the return reported by an asset manager, such as a 12% return over the last financial year. This can, however, be misleading as a 12% return may not take into account the risk that has been taken to achieve this return nor does it reflect the impact of inflation, taxes or fees for the investor, for example, where a nominal return of 11.24% translates into an actual real return of 5.21%. The measuring of investment returns is a broad topic which covers among others: the risk-free rate of return, the nominal rate of return, the real rate of return, the required rate of return, the holding period and holding period yield, the expected rate of return, the real return after tax, as well as the net present and internal rate of return (Botha *et al*., 2012). These subtopics are explained into the following chapters.

According to Solnik and McLeavey (2003), measuring and evaluating the return on a single asset is easier than measuring the performance of a portfolio. When evaluating the performance of a portfolio, a performance attribution analysis must be performed to determine from where the return came, how much risk was taken to achieve the reported return and how much of the performance of the portfolio was through the market versus the skill of a portfolio manager. Therefore, since financial planning is possibly one of the most important activities undertaken by an investor in order to achieve financial and lifestyle goals, it ought to be taken seriously. It is also important for an investor to understand that financial planning does not necessarily mean that the investor will gain great wealth, but rather that the investor has taken control of his or her own financial affairs (Blanchard, 2009).

Additionally, Blanchard (2009) warns that investors must plan for the risks and uncertainties as well as the threats and opportunities, of investing in emerging markets, regardless of its investment size or structure in order to improve prospects for long-term survival. An investor could be an individual, institution or company, corporation, unit trust, and many more. However, what is important is that a potential investor should be knowledgeable and have a good understanding of the principles of investments and the risk exposures of investing in emerging markets. If an investor has not identified risks associated with emerging markets, immeasurable losses may be suffered, although these investments may generally sound like a good investment.

In conclusion, the study aims at developing a risk analysis framework for investors in emerging markets from a South African perspective. The next section focuses on the overview of investments in South Africa, an overview of the financial sector in South Africa, as well as the emerging market. These will then be followed by a discussion covering the background to the research problem, the research objectives, the justification of the study, and the scope of the thesis. The next section focuses on the overview of investments in South Africa.

1.2. Overview of investments in South Africa

According to Beere (2013), the South African economy has developed rapidly in the past number of years, however, it is affected by global market fluctuations. South African investors are becoming critical emerging markets players, as such there is need to develop a risk analysis framework that can guide them (investors) when investing in the emerging markets. According to Lester (2012), investments in other countries were almost completely illegal in South Africa due to exchange control regulations. However, through a wide range of procedures, South Africans exported fortunes abroad between 1976 and 1994 (Beere, 2013).

Lester (2012) indicates that the South African desire for foreign investments prior to 1994 was driven by the following factors:

- Political fears – after the 1976 township riots many feared that South Africa would degenerate into chaos and they would one day have to flee the country;
- The enormous devaluation of the rand during the period 1976 to 1995;
- Blatant tax evasion was easily facilitated and sometimes never detected;
- Representatives from tax havens openly marketed their services in South Africa, which aggravated the situation; and
- Stringent exchange control regulations.

Even after 1994, the exchange control contravention remained a popular topic of discussion (Beere, 2013). According to Lester (2012), many liked the new image of South Africa, but their enthusiasm did not extend to faith in the South African currency. It was not until the South African government, through the office of the finance minister, created the R250 000 offshore investment allowances in 1997 that offshore investment began to be taken seriously (Beere, 2013).

Initially, the allowance was embraced by many South Africans. This is according to Power (2014), who indicates that the total allowance (only R250 000 at the time) was invested in foreign countries through the offshore allowance and asset swap packages. Initially, some South African investors earned worthwhile returns on their offshore investments due to further devaluation of the rand and extensive investment in equities linked to the National Association of Securities Dealers Automated Quotations (NASDAQ) index (Beere, 2013). These returns, however, did not last long and some investors lost substantial amounts following the NASDAQ crash in early 2000 (Power, 2014). Therefore, the desire for offshore equity investments declined.

According to Beere (2013), in 2001, South Africa implemented the residence-based taxation system that aimed to tax a South African resident taxpayer on worldwide earnings. Therefore, investors faced the prospect of falling foul of both exchange control regulations and tax legislation followed by extensive fines. The restructuring of the South African Revenue Service (SARS) also made detection of unscrupulous conduct a reality for investors contravening the regulations of offshore investments. The issue was mostly resolved by the exchange control and the introduction of income tax amnesty of 2003/2004 (Lester, 2012). Approximately 43 000 South African taxpayers managed to legitimise their offshore investments. This was followed by an offshore investment allowance increase to R750 000 and later to R4 million per taxpayer of good standing over 18 years (Milazi, 2009). The allowance has not been increased further as there would be a minimum increase in offshore investments (Lester, 2012).

Additionally, Lester (2012) indicates that some South African investors lost the desire for offshore investments because the local investment has outperformed offshore investment in the short and medium terms. According to Furter and Middelmann (2012), there are many offshore investment performance scenarios to consider. Perhaps the simplest demonstration is a comparison of the major indices over the past three years (2009–2011). Starting at a base of 100 in January 2009, the Johannesburg Securities Exchange (JSE) All Share Index (ALSI) has outperformed the Dow, the Financial Times Stock Exchange (FTSE) 100 and world market indices by a substantial proportion albeit in nominal terms, making domestic investments more attractive (Robertson, 2012).

Additionally, South African interest rates were substantially higher than those offered in the United States (US) and Eurozone (Furter & Middelmann, 2012). At the same time, despite various threats to the rand, such as devaluation against other currencies and or low investors' confidence, no major threats were found. Over a three-year period (2010–2012), the rand has appreciated against major currencies, as described by Gwala (2016). Therefore, if the performance of the JSE ALSI is compared to major indices and adjusted for exchange rate, it is quite clear that South Africans, over the last three years, have done much better by investing their funds locally (Lester, 2012).

According to Furter and Middelmann (2012), following the market uncertainty after the global credit crunch, many investors preferred to invest in interest-bearing assets and guaranteed products. Despite the South African repo rate declining from 6% to 5%, it remained an attractive alternative to the almost non-existent interest rates offered abroad (Furter & Middelmann, 2012). It should further be noted that investment returns generated from foreign investments are fully taxable, since the implementation of residence-based taxation in 2001 (Lester, 2012). However, any investment losses sustained are ring-fenced from deduction against South African-sourced income, making local investments attractive to some degree (Milazi, 2009).

The attractiveness of local investments is based on certain aspects of investment philosophy in South Africa that have not changed and probably never will. Therefore, the favourable performance of South African markets is heavily dependent on commodity prices driven by the enormous growth rates in emerging markets such as China and India (Gwala, 2016). According to Robertson (2012), political risk remains ever present, and the balance of payments current account remains reliant on short-term investment into South African money markets. There is an almost level playing field between local and offshore investment, especially in emerging markets (Hassan, 2013). However, the risk inherent to the rand denominated investments is always with the South African investors, thus, if the rand underperforms, losses will be suffered (Suleman, 2014).

According to Smith (2014), limiting an investment in one currency is not advisable as currencies are not fully protected from fluctuations. Secondly, the risk of a currency decline is a threat to any investment strategy. Therefore, investors should always diversify and have a balanced portfolio of investments, both onshore and offshore, to minimise the risks (Suleman, 2014). When one investment performs poorly over a certain period, other investments may perform

better over the same period, thus, reducing the potential losses of the investment portfolio from concentrating all capital under one type of investment market (Hassan, 2013).

It can, therefore, be concluded that there is a definite need for an investment exposure to emerging markets in any portfolio. Therefore, investing in emerging markets remains relevant, even if the world markets remain in difficult times. The next section focuses on the overview of the financial sector in South Africa.

1.3. Overview of the financial sector in South Africa

According to Akinboade and Makina (2006), the financial sector in South Africa is made up of the banking sector, stock market and the Bond Exchange of South Africa (BESA). Since 1995, the South African financial sector has embarked on efforts further to develop the financial sector (Odhiambo, 2011). However, the banking sector has been somewhat unsuccessful in introducing new non-deposit financial products to attract more savings from the wider population (Akinboade & Makina, 2006). Yet financial markets are the ones in which funds are transferred from those with surplus funds to those in a deficit position. Financial markets, such as bond and stock markets, can be important in channelling funds from those who do not have a productive use for them to those who do, thereby resulting in higher economic efficiency (Mishkin, 1992). By the financial standards of the economies of emerging markets, South Africa is considered to have one of the most developed and highly sophisticated financial systems (Odhiambo, 2011). The next section focuses on the sectors that comprise the South African financial sector, which are the key drivers of investments in emerging markets.

1.3.1. The banking industry

The South African Reserve Bank (SARB) is at the helm of the banking sector (Akinboade & Makina, 2006). As the central bank of the Republic of South Africa, the SARB has several responsibilities, such as, to ensure that the South African money, banking and financial system as a whole is sound, meets the requirements of the community and keeps abreast of international developments (Mishkin, 1992). Established in 1921, the primary objective of the SARB is to achieve and maintain price stability, and in pursuit of this objective, it governs monetary policy within a flexible inflation-targeting framework (Odhiambo, 2011). Over and above its monetary policy management function and contribution to financial stability, the SARB

is also responsible for the management of the domestic money market liquidity, the production and issuing of notes and coins, the management of gold and foreign exchange reserves, oversight of the national payment system, bank regulation and supervision and administration of exchange control measures (Lester, 2012). SARB operates as an autonomous institution. However, there is constant liaison with the National Treasury, assisting in the formulation and implementation of macroeconomic policy (Odhiambo, 2011).

South Africa was characterised by a dominant private banking sector until the 1950s (Lester, 2012). During this era, products such as personal loans, property leasing, and credit card facilities were not being offered by commercial banks. Since then, new institutions such as merchant banks, discount houses and general banks emerged and started to close the gap (Robertson, 2012). In response, commercial banks started to diversify their portfolios, introducing medium-term credit facilities. Commercial banks acquired hire-purchase firms and leasing activities and introduced their members to insurance, manufacturing and commercial enterprises (Akinboade & Makina, 2006). Further developments were witnessed as building societies were abolished in terms of the Deposit-taking Institutions Act of 1991 to avoid overlaps between services offered by commercial banks and building societies (Odhiambo, 2011).

The 1990s witnessed further changes in the banking sector, leading to the amalgamation of four of the leading banks in South Africa, namely Allied Bank, United Bank, Volkskas and Sage Bank, to form the Amalgamated Banks of South Africa (ABSA) in February 1991. More developments followed, as many banking services were introduced to communities in the mid-1990s. According to Fuzile (2018), the banking sector has reached all sectors of the South African economy, playing the all-important financial intermediary role, thus, taking deposits, exploring investments opportunities and issuing loans.

According to Odhiambo (2011), South Africa has a developed and well-regulated banking system, which compares favourably with those of developed countries. Although the South African banking sector has been through a process of volatility and change in the past, it has attracted interest from abroad with several foreign banks establishing a presence in the country and others acquiring shares in major banks (Smith, 2014). Therefore, the South African banking sector has been ranked third out of 148 countries in the 2013/2014 World Economic Forum Global Competitiveness Survey (Fuzile, 2018). The South African banking industry is currently made up of 17 registered banks, two mutual banks, 14 local branches of foreign banks, two

cooperative banks and 43 foreign banks with approved local representative offices (Goodson, 2014). Therefore, it can be deduced that the South African banking industry has the capacity to compete in the global financial arena. The next section focuses on the South African stock market, which is the vehicle used to channel investments in emerging markets.

1.3.2. The stock market

The Johannesburg Stock Exchange (JSE) was formed in 1887, it is one of the most developed financial markets outside North America, Europe and Japan (Smith, 2014). In addition, Hassan (2013) claims that, in terms of market capitalisation, the JSE is regarded as one of the largest exchanges in the world. The JSE is also included in the Morgan Stanley Index and the International Finance Corporation Emerging Markets indices, which means that, South African securities are traded simultaneously in Johannesburg, London, New York, Frankfurt and Zurich (Smith, 2014). The JSE involvement in global financial markets should give South African investors a degree of comfort when investing in emerging markets. According to Hassan (2013), the main purpose for founding the JSE was to fund the development of mining companies in the wake of the discovery of gold on the Witwatersrand in 1886. It is evident that the development of the stock exchange was demand-driven rather than being a deliberate government policy (supply-leading approach) to set up an exchange as is being advocated by the World Bank for many countries in Africa (Akinboade & Makina, 2006).

In 1990, the South African Futures Exchange (SAFEX) was formed, consisting of the financial markets' division and the agricultural markets division (Smith, 2014). Equity and interest rate futures and options are traded in the financial markets division. The agricultural markets division trades soft commodities futures and options on maize, sunflower and wheat. As further developments of the capital markets in South Africa unfolded, BESA was licensed to trade in 1996. BESA was licensed as an exchange under the Financial Markets Control Act (No. 55 of 1989) for the listing, trading and settlement of interest-bearing loan stock or debt securities.

Before 1994, South Africa was placed under world economic sanctions meant to weaken the apartheid regime. This slowed down the growth of the JSE. However, since gaining freedom in 1994, the financial markets have been liberalised, resulting in a tremendous recovery. This has seen the JSE being ranked the largest stock exchange in Africa (Lester, 2012). By the year 2000, it had become the seventeenth largest stock exchange in the world (Smith, 2014).

Following the liberalisation of the South African financial markets, the JSE has evolved to become the third largest emerging market after China and Taiwan. According to Hassan (2013), many investment firms are listed on the JSE, notably the big four banks and other high value merchant banks, licenced stockbrokers and fund management companies.

It can, therefore, be deduced that the South African stock market is sound and can be used as a vehicle to invest in emerging markets. The next section focuses on the Bond Exchange of South Africa as another vehicle used in emerging markets.

1.3.3. The Bond Exchange of South Africa (BESA)

In 1996, South Africa issued a licence to BESA under the Financial Markets Control Act (No. 55 of 1989) (see Lester, 2012). The role of BESA is to list, trade and settle interest-bearing loan stock or debt securities (Smith, 2014). According to Investment South Africa, in its (BESA) inaugural year (1996/1997), 430 000 stocks amounting to more than US$700 billion were traded, achieving an annual liquidity of more than 38 times the market capitalisation by 2001 (Knight, 2006). The South African domestic bond market is dominated by government-issued bonds (Smith, 2014). Other issuers of South African bonds are South African state-owned companies, corporates, banks and other African countries. The South African debt market is liquid and well developed in terms of the number of participants and their daily activity (Hassan, 2013). Approximately R25 billion worth of bonds are traded daily, which makes the bond market a good option to consider when making investments (Smith, 2014). Currently, only government, corporate and repo bonds are traded on the JSE. According to Knight (2006), the first corporate bond was issued in 1992 and since then, more than 1 500 corporate debt instruments have been listed on the JSE Debt Market. Liquidity is still relatively low when compared to government debt. However, issuance is observed to be growing (Knight, 2006).

BESA has proven to be a viable option and platform to use when trading bonds. BESA, alongside other financial markets, have put sources in place to trade with other countries, creating a platform for South African investors to invest in other emerging markets. The next section focuses on emerging markets, which form an important part of this study.

1.4. The emerging markets

The term emerging markets was first coined by the International Finance Corporation (IFC) of the World Bank in 1981 (Al-Saleh, 2015). According to its definition, an emerging market is a country trying to improve its economy with the aim of reaching the same level of sophistication as nations defined as developed. According to Cranston (2014), an emerging market is further characterised by the IFC as meeting at least one of the two following criteria:

- It is a low- or middle-income economy as defined by the World Bank;
- Its investable market capitalisation (IMC) is low relative to its most recent gross domestic product (GDP).

According to Cranston (2014), emerging markets account for 82% of the world population and 63% of its natural resources, yet barely 7% of global market capitalisation. The very term emerging markets was designed as a marketing exercise to make these countries sound exciting and positive about their future. The term ‘emerging markets’ replaced what was widely known as ‘third world countries’, less developed nations and poorer nations (Cranston, 2014). The emerging markets considered for this study are countries known as the BRICS countries. These countries are Brazil, Russia, India, China and South Africa.

The story of the largest emerging market in the world, China, which some believe will become the largest economy in the world by 2030, is compelling (Cranston, 2014). China was considered big enough to absorb the rest of the emerging markets with it, due to its insatiable demand for metals, coal and oil. According to Al-Saleh (2015), during the past five years (2010-2014), emerging stock markets have underperformed compared to the developed economies by almost 12% annually. Therefore, the BRICS countries have had divergent fortunes, with Brazil and Russia, both large oil producers, plunging into recession, the Chinese economy slowing down, and the South African economy getting weaker while India is showing momentum as an economy (Mobius, 2014).

Additionally, Mobius (2014) warns that the divergent fortunes should not be regarded as a crisis, as there is no general crisis in emerging markets as they have been growing at an average of 5% per annum. According to Power (2014), the core of the strategy for investors in emerging

markets should be countries that export manufactured goods and have current account surpluses. There was a short-lived cooling in Asian countries, but it would be a mistake to say China is folding up. This could be due to China not growing fast enough to absorb all the new commodity capacity coming onto the market (Smith, 2014). The metrics to measure Chinese growth should no longer be the tonnes of steel produced, but others like movie tickets sold and the number of visits overseas as China is becoming a consumer-based economy (Mobius, 2014).

According to Smith (2014), the countries with current account deficits such as Brazil and India benefit when Western-sourced liquidity is flowing, as their current accounts can be funded, currency risk is reduced, and the domestic credit cycle moves in the right direction (Mobius, 2014). According to Power (2014), India had its crisis early, devaluing its currency significantly, and its stock market typically traded on higher levels than its BRICS counterparts. This is justified by the GDP growth, a large selection of listed shares (at least 5 000), its entrepreneurial management, as well as expansion opportunities both in the huge internal and external markets (Power, 2014). According to Smith (2014), India is unlikely to replace China as the main buyer of commodities in the world, at least for the next five years. However, one day India is expected to overtake China and the US, and will become the largest economy in the world. The performance of emerging markets should give investors the confidence that their investments would grow significantly as some of the BRICS countries continue to perform well in the global markets (Richter, 2014).

This section aimed to give a background of emerging markets and global market activities. Emerging markets will be discussed broadly in the next chapter. The next section focuses on the background to the research problem.

1.5. Background to the research problem

This study is based on a general shortfall of risk analysis methods, techniques and processes during the management of risks by investors in emerging markets. There are some risks involved with the utilisation of emerging markets as a means of guarding and protecting assets and it may not be wise to have a complete portfolio invested in emerging markets (Richter, 2014). Beere (2013) emphasises that popular investment destinations such as the islands of Jersey, Guernsey, the Bahamas, Bermuda, the Cayman and the Isle of Man were known to offer

secure investment opportunities. However, the collapse of Kaupthing, Singer and Friedlander's Isle of Man subsidiary (KSF IOM) has brought the safety of emerging markets investment products and centres under scrutiny (Richter, 2014).

According to Discovery Invest (2014), offshore investment providers and independent financial advisers (IFAs) are warning that while there are risks involved in investing onshore and offshore, the latter can still be beneficial for the right clients. By investing offshore, bonds investors may be able to allow their investments to grow tax-free and use tax deferral benefits, for example. Certain offshore structures can also play a role in estate and trust planning, which is particularly useful for investors who plan to live or retire abroad. Beere (2013) warns that the collapse of KSF IOM has highlighted that there are risks, particularly for investors who made cash deposits through offshore bonds, as opposed to those who made deposits directly into offshore institutions.

According to Milazi (2009), investors who invest cash in offshore investment bonds, face two main risks. The failure of the life insurance company or the failure of the investment itself, as it happened with KSF IOM. The problem with investing cash or external funds in offshore bonds is that if the financial institution goes bankrupt, investors have no protection from the financial protection scheme in their own country, if any exists. However, if investors are investing through an offshore bond provider, protection would apply through insurance and or other protection means. The pros and cons of cash investments justifies the investment risk analysis is key and should form part of the risk analysis framework.

Milazi (2009) warns that tax laws are becoming tighter in many countries as the financial squeeze forces governments to look for new ways to claw back cash. According to Al-Saleh (2015), legitimate loopholes still exist to keep away the receiver of revenue, but such loopholes are decreasing and punishments for deliberate tax evasion are severe. In 2004, the United States Internal Revenue Services (US IRS) amended the internal revenue code, allowing them to collect taxes from all its citizens and institutions wherever they are earning money (Milazi, 2009).

In addition, Al-Saleh (2015), warns that the costs for establishing an offshore account can be expensive depending on investors' needs. Several offshore investment funds have minimum investment levels, and, in some instances, investors need to set up holding companies or

offshore corporations. Once investors decide on investing offshore, especially in emerging markets, they need to work with an independent adviser to ensure that they get the right advice and solutions to suit their investment needs (Beere, 2013). Therefore, the inclusion of independent adviser should form part of the risk analysis framework.

Investing in emerging markets is not without risks, but it can be a method of investing with a lower tax burden, investing for greater flexibility, better potential returns and for wider diversification than other options (Al-Saleh, 2015). Therefore, investors need to conduct proper research, otherwise they may lose more than they could have saved had they known when to withdraw or change to other market classes (Hassan, 2013). Market research is even more advisable for the new market entrants than for established investors. This is according to Smith (2014), who emphasises that the South African investors are relative newcomers to the offshore investment arena. Therefore, if the South African investment arena is perceived as complex, this is so much more the case in the global marketplace. The complexity can be attributed to factors such as foreign language, culture, business sentiments, and different currencies. As such, it is crucial that certain emerging market risk factors and risk exposures that may be encountered are highlighted and should form part of the investment risk analysis. This can be done by analysing risks and risk factors for investors in emerging markets using a risk analysis framework (Power, 2014).

The primary research problem for this study focuses on the following two related questions.

- How do investors analyse risks in emerging markets? Do they use specific tools, guides, methods, procedures, processes, techniques, or skills?
- What are the most critical risk exposures that need to be managed when investing in emerging markets?

In support of these research questions, the next section deals with the research objectives identified for the purposes of this study.

1.6. Research objectives

In order to address the research problem and arrive at answers to the research questions, the purpose of the study is to research and investigate risks faced by investors in emerging markets and to develop a risk analysis framework to ensure a structured approach to investment

decisions. Therefore, the objectives of the study can be summarised in terms of the following primary and secondary objectives:

- primary objective: To develop a risk analysis framework to serve as a guideline for investors in emerging markets from a South African perspective;
- secondary objective 1: To determine the risks faced by investors by means of a literature review to serve as a platform to develop a framework for risk analysis;
- secondary objective 2: To determine the significance of potential risks for investors in emerging markets;
- secondary objective 3: To identify and analyse the potential risk factors for investors in emerging markets, using South Africa as a gateway to BRICS countries; and
- secondary objective 4: To confirm empirically the components of a risk analysis framework for investing in emerging markets that is developed by using the literature review as a platform.

The next section focuses on the research methodology applicable to this study.

1.7. Research methodology

According to Leedy and Ormrod (2015), research is regarded as a systematic process of collecting, analysing and interpreting information in order to increase an interesting or concerning phenomenon. Therefore, the literature review aimed to collate the most recent information on risks for investors in emerging markets

This study can be described as exploratory, which means the gathering of preliminary information that will assist to define problems and source possible solutions (Leedy & Ormrod, 2018). The study was quantitative in nature. The research methodology of the study aimed to reveal and verify the nature of certain assumptions, claims and theories about risks and risk factors in emerging markets. The research was conducted in the form of a questionnaire, which aimed to collate relevant data regarding the risks for investors in emerging markets. A risk analysis framework will be developed by considering all the steps, factors, risk exposure discussed above as key component of an investment risk analysis.

The results were analysed statistically using descriptive analysis. Therefore, Statistical Package for the Social Sciences (SPSS) software was used to analyse data received from respondents.

The target group was the South African asset managers licenced to trade in emerging markets. The reason for choosing the South African asset managers was that these asset managers were considered to be amongst the leading emerging markets experts, and they trade in many countries including the BRICS countries. The BRICS countries played a huge role in the study as a leading emerging market group, to which South Africa also belongs. This study further discussed and compared economic activities across all BRICS countries in the ensuing sections to reveal any similarities.

South African asset managers licensed by the Financial Sector Conduct Authority (formerly the Financial Services Board) to trade in emerging markets were the population for this study. The South African asset managers are leading role-players amongst others in the emerging markets. According to the Financial Sector Conduct Authority (2019), there are forty-four (44) asset managers licensed to trade in emerging markets. Based on the empirical analysis, the study concluded with a risk analysis framework, which can be applied when analysing risks for investors in emerging markets. The next section focuses on the justification of the study.

1.8. Justification of the study

According to Govender (2009), several problems seem to exist in South Africa and other emerging markets in the areas of savings and investments, especially investments in emerging markets, and the risks involved. In the case of South Africa, the study was of national importance for two reasons.

- a lack of clarity regarding risks for investors in emerging markets, leading to a few participants in the global arena; and
- a lack of a risk analysis framework to aid South African investors in making sound risk analysis and investment decisions.

In general, it seems that the analysis and management of risks is regarded from a narrow perspective. For example, the analysis and management of risks is considered as investing in developed countries by some investors (Zeelie *et al*., 1998). The challenge faced by investors is that they could suffer immeasurable losses, if they are unfamiliar with risks and risk factors associated with investing, especially investments in emerging markets. As such, a need has emerged to analyse risks for investors in emerging markets and to manage it effectively according to a structured approach. The next section deals with the layout of the thesis

1.9. The layout of the thesis

This chapter provided a background to the study, particularly addressing the importance of financial planning during an investment decision process. It also covered an overview of investments in South Africa, an overview of the financial sector in South Africa, and the background of offshore investments, particularly in emerging markets. The background to the research problem, research objectives, research methodology and the justification of the study were also addressed in order to provide a solid platform for the remaining chapters of this study.

Chapter 2 provides part one of the literature review, which focused on emerging markets, the difference between a developed, emerging and frontier market as well as the reasons investors invest in emerging markets. In addition, the chapter deals with the risks and risk exposures in emerging markets, using the BRICS countries as a starting point to identify risk factors in emerging markets.

Chapter 3 provides part two of the literature review, which is devoted to risk management in emerging markets. It outlines the rules of risk management, the risk management processes, the risk types facing emerging market investors, the risk factors of each risk type and the possible risk mitigating techniques. The objective of this chapter is the analysis of risks and risk factors in emerging markets, which forms the basis of developing a risk analysis framework.

Chapter 4 focuses on the research design for the study and provided further details of the research methodology that was used to collate data as well as the statistical techniques that was used to analyse data for this study.

Chapter 5 focuses on the analysis and interpretation of the collated data, the results and findings of the research. This chapter also deals with the development of a risk analysis framework for investors in emerging markets.

Chapter 6 summarises the key findings of the study as well as recommendations, limitations and suggestions for further research.

CHAPTER 2: EMERGING MARKETS

2.1. Introduction

The focus of this study was to develop a risk analysis framework for investors in emerging markets, with special focus on South Africa as a gateway to BRICS countries. Therefore, this chapter begins with detailed definitions of the central concepts of this study, which are 'emerging markets', 'risk factors' and 'risk exposure'. The research tools in this study utilised the theoretical aspects of risk factors and risk exposure in emerging markets to conduct a risk analysis. The risk analysis will then deal with the question of how to mitigate risk when investing in emerging markets. This will them create a platform for the development of a risk analysis framework for investors in emerging markets.

2.2. Emerging markets

The purpose of this section is to discuss emerging markets as an alternative investment destination for investors. It is, therefore, important to consider the definition of emerging markets by various authors.

- According to De Rosa (2009), an emerging market is a market that is not just a less developed country, but also one that has adopted the institutional, legal, and financial structures that set it on a potential path to becoming a more developed country over time.

- Kose and Prasad (2010) indicate that emerging markets have either low or lower-middle per capita income, but have a well-developed system in place to allow foreign direct investment (FDI).

- A market is called emerging because it is believed to be on track to a brighter economic future (Zonis, Lefkovitz, Wilkins & Yackley 2011).

- According to Abiad, Bluedorn, Guajardo and Topalova (2012), an emerging market is a country that has become a platform for sustainable economic growth. It has undertaken economic development and reform programmes and has begun to emerge as a significant player in the global economy.

- An emerging market is a market that is sufficiently open to the global economy, that it can freely accommodate international trade and, at the same time, allow international investors to have access to its bond and stock markets (Leeds, 2015).

Based on the above views, an emerging market for the purposes of this study can be defined as a country in the process of rapid growth and development with lower per capita incomes and less mature capital markets than developed countries.

According to Amadeo (2017), not all emerging markets are equally good investment destinations. Since the 2008 financial crisis, some emerging markets took advantage of rising commodity prices to grow their economies. Some emerging markets did not invest in infrastructure, but instead spent the extra revenue on subsidies and creating government jobs (Abiad *et al.,* 2012). As a result, their economies grew quickly, their people bought many imported goods and inflation soon became a problem. Even though inflation started rising, emerging market equities have far outperformed US stocks after the 2008 financial crisis and some market analysts project a further outpace of the US stocks should the dollar continue to weaken (Gundlach, 2017).

Gundlach (2017) warns that emerging markets would likely continue to outperform the US if investors start to rally behind emerging market currencies. Therefore, this could be a positive time to be buying into emerging markets. A strong US dollar relative to foreign currencies, is often seen as unfavourable for emerging markets as it decreases the value of their commodities and hikes US dollar-denominated debt (Sanchez, 2017). The next section focuses on the characteristics of emerging markets.

2.3. Characteristics of emerging markets

This section aims to discuss the characteristics of emerging markets as an investment destination under review. The section further explains how various authors characterise emerging markets for the benefit of an emerging market investor. According to Cerutti, Claessens and Puy (2015), emerging markets have five agreed-upon characteristics. First, they have a lower-than-average per capita income. Low income is the first important characteristic, because it provides an incentive for the second characteristic, which is rapid growth.

Rapid growth leads to the third characteristic, which is high volatility. High volatility comes from three factors: natural disasters, external price shocks, and domestic policy instability (Kuepper, 2016). The fourth characteristic of an emerging market is that growth requires a lot of investment capital. If an investment in an emerging market is successful, the rapid growth can also lead to the fifth characteristic, which is high return on investment for investors. The characteristics of emerging markets will be discussed in detail in the next section.

- Lower-than-average per capita income

According to Meyer and Peng (2016), emerging markets usually achieve a low-middle income per capita relative to other countries, due to their dependence on agricultural activities. As the economy pursues industrialisation and manufacturing activities, income per capita increases with GDP. Lower average incomes also function as incentives for higher economic growth (Kuepper, 2016). Traditional economies such as Haiti, Thailand, and Sudan are reliant on agriculture and are vulnerable to disasters such as earthquakes, tsunamis and droughts. However, these disasters can lay the groundwork for additional commercial development as it did in Thailand (Cerutti *et al*., 2015). Thailand had to rebuilt most of the old buildings and strengthen emergency management as well as create opportunities that could help the country to continue improving its emergency management system (Khunwishit & McEntire, 2016).

- Rapid growth due to a relaxed access for foreign investors

Governments of emerging markets tend to implement policies that favour industrialisation and rapid economic growth. Such policies lead to lower unemployment, higher disposable income per capita, higher investments, and better infrastructure (Meyer & Peng, 2016).

- High volatility

Market volatility stems from political instability, external price movements, and or supply-demand shocks due to natural calamities (Khunwishit & McEntire, 2016). It exposes investors to the risk of fluctuations in exchange rates, as well as market performance. According to Amadeo (2017), emerging markets are more susceptible to volatile exchange rate swings, such as the dollar, and commodities, such as oil or food. That is because emerging markets do not have enough power to influence these movements. For example, when the US subsidised corn-ethanol production in

2008, it caused a drastic increase in oil and food prices (Khunwishit & McEntire, 2016). That caused food disturbances in many emerging market countries.

- Growth requires a lot of investment capital

According to Ciravegna, Fitzgerald and Kundu (2014), many emerging markets requires lots of investments to grow, but do not have a solid track record of FDI, as it is often difficult to get information on companies listed on their stock markets. Meyer and Peng (2016) emphasise that the lack of readily available information may make it difficult to sell debt, such as corporate bonds, on the secondary market. The lack of readily available information increase the risks, which means there are greater rewards if the investors are willing to do the ground-level research and implement a good investment strategy (Ciravegna *et al.,* 2014)

- High return on investment

Emerging markets are often attractive to foreign investors due to the high return on investment these markets can provide (Amadeo, 2017). In the transition from being an agriculture-based economy to a developed economy, countries that do not have large or enough amounts of domestic capital often require a large inflow of capital from foreign sources. Using their competitive advantage, such countries focus on exporting low-cost goods to richer nations, which boosts GDP growth, stock prices, and returns for investors (Cavusgil, Ghauri & Akcal, 2013).

In addition, Amadeo (2017) indicates that many emerging markets do not have the domestic demand for goods and services produced, so they produce lower cost consumer goods and commodities for developed markets. The companies that fuel this growth will profit more, which translates into higher stock prices for investors. It also means a higher return on bonds, which cost more to cover the additional risk of emerging market companies (Meyer & Peng, 2016).

It can, therefore, be concluded that emerging countries are the countries whose economies are rapidly growing, in the respective transition phase to a market economy (Cavusgil *et al*., 2013). These countries have a higher capacity than the developed countries to provide investors with opportunities to achieve higher profits (Amadeo, 2017). The next section focuses on the difference between developed, emerging and frontier markets.

2.4. The difference between developed, emerging and frontier markets

While the previous section dealt with the characteristics of emerging markets, this section focuses on the difference between developed, emerging and frontier markets. The differences are significant for an investor, as discerning what exactly differentiates developed, emerging and frontier markets can be challenging. According to Distler (2016), developed markets are the least complicated to identify, and refers to countries that are usually the most advanced economically. Additionally, developed markets have highly developed capital markets with high levels of liquidity, meaningful regulatory bodies, large market capitalisation, and high levels of per capita income (Distler, 2016). Developed markets are found mostly in North America, Western Europe, and Australasia, and include nations like the United States, Canada, Germany, the United Kingdom and Australia (Ortel, 2017).

Investors should be mindful that different agencies have various ways of defining the concept of a developed market, which can make the issue somewhat confusing (Smith, 2014). Consequently, different countries may be classified as either developed or undeveloped markets based on how an agency chooses to interpret the concept. For example, South Korea is a developed market, according to FTSE, but since 2010, an emerging market according to MSCI (Ortel, 2017). According to Smith (2014), defining emerging markets and frontier markets gets somewhat tricky as a frontier market is a subset of the emerging market category. In other words, frontier markets are emerging markets, but not all emerging markets are frontier markets. Specifically, a frontier market is one with little market liquidity, marginally developed capital markets, and lower per capita incomes in relation to more developed emerging markets like the BRICS countries (Distler, 2016). However, because frontier markets have yet to undergo much meaningful economic development, the potential for rapid growth and outsized returns make these markets interesting to high-risk investors (Logue, 2016).

Frontier markets include the CIVET (Colombia, Indonesia, Vietnam, Egypt and Turkey) and places such as Nigeria, Bangladesh and Botswana. As it is with developed and emerging markets, the difference between a traditional emerging market and a frontier market can differ based on the entity making the distinction (Distler, 2016). For example, Colombia is considered an emerging market by some and a frontier market by others (Xu & Meyer, 2013). Generally, developed markets are considered safer than emerging markets and the developed emerging

markets are safer than frontier markets. However, this is not an absolute rule that can be applied in all cases (Ortel, 2017). When Singapore, Taiwan, and South Korea are called emerging markets by some agencies, whilst Greece and Portugal are categorised as developed markets, it is apparent that developed markets are not always safer than emerging ones. According to Logue (2016), when investing in foreign markets, it is imperative for the differences between developed, emerging and frontier markets to be clear in order to understand the risk, liquidity, and growth potential of a given country better.

According to Xu and Meyer (2013), the main challenges arise from the fact that the contexts of emerging economies vary from those of developed economies regarding a number of elements, such as the following.

- markets are less efficient due to less transparency, more extensive information asymmetries, and higher monitoring and enforcement costs;
- governments and government-related entities not only set the rules, but are active players in the economy, for example through state-owned or state-controlled firms;
- network-based behaviours are common, partly due to less efficient markets, but possibly also due to social traditions, and these influences how firms interact with one another; and
- risk and uncertainty are high due to high volatility of key economic, political, and institutional variables. Hence, businesses find it hard to predict parameters they need for strategic decisions, including, for example, business cycles, government actions, and the outcome of legal proceedings.

These dimensions imply that some of the assumptions of existing theories are not suitable for emerging markets. For example, although the assumption of rational actors optimising their utility under full information is subject to debate, for developed markets, it a workable approximation that is a useful foundation on which to build theory (Ortel, 2017). In emerging markets, however, this assumption becomes less appropriate (Xu & Meyer, 2013). In addition, Ortel (2017) warns that while people may aim to act rationally, they likely face more information asymmetries. Meanwhile, due to deficiencies in formal institutions, individuals and firms in emerging markets are more likely to follow tacit rules and are subject to more complex informal constraints on their behaviours (Distler, 2016). It is, therefore, important to differentiate between developed, emerging and frontier markets to ensure that an investment is channelled to the right market with clear risk exposures.

Furthermore, classifying countries as emerging markets is subjectively carried out and reviewed by an assortment of international financial institutions using different categories, methodologies and degrees of granularity. For example, the FTSE uses its country classification review process to identify nine advanced and thirteen secondary emerging markets, for which it constructs indices for large and small firms (Clarke, 2017). The advanced emerging markets and the secondary emerging markets are listed in Table 2.1 below:

Table 2.1: The advanced emerging and secondary countries

The advanced emerging markets	**The secondary emerging markets**
Brazil	Chile
The Czech Republic	China
Hungary	Colombia
Malaysia	Egypt
Mexico	India
Poland	Indonesia
South Africa	Morocco
Taiwan	Pakistan
Turkey	Peru
	Philippines
	Russia
	Thailand
	The United Arab Emirates (UAE)

Source: Adapted from MSCI (2019)

Table 2.2 represents Bloomberg's MSCI (2019) emerging market index and comprises 26 countries in three regions as follows.

Table 2.2: The regional classifications of emerging markets

The Americas	Europe, Middle East and Africa	Asia
Argentina	The Czech Republic	China
Brazil	Egypt	India
Chile	Hungary	Indonesia
Columbia	Israel	Malaysia
Mexico	Jordan	Pakistan

Peru Venezuela	Morocco Poland Russia South Africa Turkey	Philippines South Korea Taiwan Thailand.

Source: Adapted from MSCI (2019)

The differences are that the FTSE includes the UAE whereas the MSCI includes Argentina, Israel, Jordan, South Korea and Venezuela (MSCI, 2019). Looking at the characteristics of emerging markets in section 2.3 and the classification of emerging markets above by FTSE and MSCI, Baker and Riddick (2012) warn that emerging markets are diverse in culture, language and politics, regardless of how broadly or narrowly they are defined. Emerging markets tend to have quite well-developed physical financial infrastructure including central banks, commercial banks and stock exchanges, but have less well-developed processes and systems of accounting, governance, regulation and other financial infrastructure, and less efficient markets with less liquidity than the most advanced systems in the world (Clarke, 2017). These differences lead to greater uncertainty and risk, and they enhance the international diversification possibilities for investors from all countries in the world.

Although they account for over four fifths of the world's population, they control only one fifth of global GDP, but this is quickly changing. By continuing to develop their economic and social infrastructures, institutions and markets, and by investing in their people's education, they are expected to grow further, to consolidate their economic and business power, and to exceed the GDP of the developed countries within two decades (2017–2027). The BRICS countries are expected to overtake the G7 countries within three decades (Distler, 2016). The two largest emerging markets, China and India, are expected to lead this growth (Clarke, 2017). Together, they currently produce 1.2 million engineering and science graduates every year, which is the same number of graduates produced by the EU, Japan and the United States combined (Stapleton, 2017). This section focused on giving a brief background about emerging markets and how they classified by various institutions. The next sections focus on the reasons why investors invest in emerging markets.

2.5. Reasons investors invest in emerging markets

This section focuses on the reasons why investors invest in emerging markets. There are numerous reasons for investing in emerging markets (Gough, 1998). However, the main motivation for investing in emerging markets should be the protection of assets rather than making money (Swart, 2011). The reason for protecting assets is based on the principles of sound investing, that assets should be protected before measures to create more wealth are put in place (Gough, 1998). According to Swart (2011), it is logical that various investors will invest in emerging markets and this may be fashionable for some, but for those with a secured job or the financial means, it is an essential requirement. It is regarded as an essential requirement since diversification is a key principle of sound investing (Ware & Roper, 2001). The following are regarded as common reasons for investing in emerging markets.

2.5.1. Diversification

Diversification is the process of allocating capital in a way that reduces the exposure to any one particular asset or risk (Swart, 2011). A common path towards diversification is to reduce risk or volatility by investing in a variety of assets. According to Ware and Roper (2001), diversification gives investors an opportunity to spread risks over more than one market with investments in both developed and emerging markets. Emerging markets are considered high risk and can often be very volatile, while developed markets offer the prospect of steadier growth (Mack, 2014). A balance of both high-risk and low-risk market exposures can cater to growth investors' needs without excessive risks (Qian, 2016).

An investment planning should involve diversification, whether across currencies, investment vehicles or markets (Mack, 2014). In this regard, the risks associated with confining investments to the local market alone should be carefully considered. The fluctuation of local market currencies relative to other emerging and developed markets is a motivation to invest in other markets and currencies (Rainbow, 2010). Geographic spread as a reason for investing in emerging markets is discussed in the next section.

2.5.2. Geographic spread

According to Du Preez (2005), geographic spread is regarded as investing in different countries at different stages of growth cycles. Diversifying investments across several economies is regarded as a way of smoothing out returns. This is according to Rainbow (2010) who indicates that smoothing out returns is done by combining investments from economies experiencing varying rates of growth. There is a vast array of investment products available that are not offered locally. As a result, investing offshore increases the range of investment opportunities available to the investor (Mack, 2014). When investing in different emerging markets, the investor spreads geographically and is not limited to the domestic market. Therefore, the investor has a choice of investing in different currencies, investment vehicles and markets, where the best possible opportunities for a good return exists (Qian, 2016). Enhancing returns as a reason for investing in emerging markets is discussed in the next section.

2.5.3. Enhancing returns

The diversification of an investor's portfolio across markets, structures and instruments could mean that the investor who makes informed choices could greatly increase the total return on an investment portfolio (Qian, 2016). Asset managers should ensure that the investor's profile is considered before choosing an emerging market portfolio (Kruger & Roper, 2003). A balanced spread between equities, bonds, cash and other investments vehicles or assets should be sought, based on the investor's risk profile, as well as short-, medium- and long-term needs (Mack, 2014). The availability of emerging market investments could mean that the investor who makes careful and informed choices of investments could enhance the return on the total investment portfolio as a result of a wider choice of investment options. The next section focuses on currency hedging as a reason for investing in emerging markets.

2.5.4. Currency hedging

According to Klein (1998), inflation has greatly changed investor attitudes towards investments. However, diversifying globally could increase inflation-beating returns. Higher potential earnings and capital gains with investments in foreign currencies that offset any decline in the values of the local currency (and therefore the value of domestic investments) are likely to improve the

risk-return ratio in any portfolio (Mack, 2014). The next section focuses on confidentiality as a reason for investing in emerging markets.

2.5.5. Confidentiality

Many offshore jurisdictions offer the complementary benefit of secrecy legislation by enacting laws establishing strict corporate and banking confidentiality (Qian, 2016). If this confidentiality is breached, there could be serious consequences. For example, a breach of banking confidentiality is regarded as divulging customer identities or disclosing a shareholder's profile (Mack, 2014). This secrecy does not mean that only unscrupulous investors should invest offshore. Offshore laws will allow identity disclosure in clear instances of drug trafficking, money laundering or other illegal activities (Hyman, 2006). The next section focuses on increased investment opportunities as a reason for investing in emerging markets.

2.5.6. Increased investment opportunities

The offshore investment arena provides increased opportunities, since investors can invest in various countries, products and industries (Hyman, 2006). The opportunities range from foreign currency fixed-period bank deposits, foreign government and corporate bonds, to shares on different stock markets and foreign venture capital (Mack, 2014). Investing in a range of opportunities will give a balanced exposure to different risks and returns (Rainbow, 2010). According to Morris (2007), an internationalised investment has less risk and higher returns over the long term. The next section focuses on a balanced portfolio as a reason for investing in emerging markets.

2.5.7. A balanced portfolio

A balanced portfolio is one that holds a variety of different kinds of investments, for example: some stocks, bonds, real estate and other investments assets (Morris, 2007). Offshore investments do not necessary always outperform a domestic investment portfolio in the short term. This is according to Solnik and McLeavey (2003), who warn that in the long term, an investment portfolio with adequate offshore risk exposure should always outperform a portfolio with pure domestic risk exposure. A factor that could contribute to an offshore portfolio

outperforming a domestic portfolio could be the depreciation of the local currency against other major currencies (Needham, 2007).

Therefore, a domestic investor could suffer a loss or realise low returns due to a single disaster, while in the case of an offshore investor, a disaster in Brazil may be offset by gains in the Russia (Rainbow, 2010). Moreover, investors benefit from the cycles of different asset classes and economies. Keeping all assets in one currency is hard to justify in a world where traditional barriers are being broken down (Swart, 2011). Investors who make informed choices when investing abroad could enhance the return of their total investment portfolio, while simultaneously reducing the overall risk (Morris, 2007). The right choice of currency, market segment, geographical region and asset class could lead to a balanced portfolio (Du Preez, 2005).

It can be deduced that investors invest in emerging markets for different or a combination of reasons. Irrespective of the financial situation, risk profile and the reasons for investing in emerging markets, investors need to be knowledgeable about the facts and underlying risk factors pertaining to emerging markets. No investment alternative is entirely without risk; therefore, investors should predetermine the risks and the potential return in order to ensure that the investment is aligned with their objectives. Investors attitude towards risk and return, as well as the degree of risk they are willing to accept should be a derivative of their investment objectives. This section focused on the reasons for investing in emerging markets. The next section focuses on risk and risk exposure in emerging markets.

2.6. Risk and risk exposure in emerging markets

This section focuses on the risk and risk exposure for investors in emerging markets. The section starts with the definitions of risk by various authors, followed by risk exposure and ends with a discussion of the mutual interest between developed and emerging markets.

2.6.1. Defining risk

According to Rausand (2011), risk is a condition in which there is a possibility of a contrary result from that which is expected. Hopkin (2013) mentions that risk is an event that will have a negative impact on an organisation and or result in a significant deviation from the expected outcomes. According to Pritchard (2014), a risk is the amount of harm that can be expected to

occur during a given time period, due to a specific event. Swart (2011) states that risk is a concept that denotes a potential negative impact on an asset or some characteristic of value that may arise from some present process or future event. According to Thakerse (2005), risk can be defined as the uncertainty that the outcome of an initiative might deviate from the anticipated result and if not properly managed, it could adversely influence the objectives. This is supported by Workman (2008), who says that risk is the uncertainty of an event that could have a negative impact on the achievement of objectives. In terms of risk relating to investments, Hands, Dawson and Cloete (2008), defined risk as the measurable possibility of losing capital or not gaining value during a capital investment. Similarly, Reilly, Brown and Leeds (2018) define risk as the uncertainty that an investment will earn its expected rate of return. It is the possibility that the actual outcome of a situation is going to differ from expectations.

For the purposes of this study and based on the above-mentioned views, risk related to investments can be defined as an adverse deviation from a desired outcome of an investment, resulting from a situation of uncertainty. For example, an investor hopes that their domestic currency does not depreciate against countries they intend to invest in. If the domestic currency depreciates, the investment loses value, and this will be the undesirable event, which is described as an adverse deviation from a desired outcome that is expected or hoped for (Godi, 2013).

To manage risk effectively, an investor should consider the degree of risk exposure of an investment under consideration (Hopkin, 2013). Whether investors are operating domestically or internationally, they are exposed to risks of adverse movements in their profits resulting from unexpected movements in exchange rates. Movement of exchange rates gives rise to foreign exchange exposure and foreign exchange risk. If an investor invests in foreign markets, the investor is exposed to foreign exchange risk. In this case, the exposure refers to the degree (sensitivity) to which a company is affected by exchange rate changes (Pritchard, 2014). According to Adrian, Etula and Shin (2015), exchange rate risk is the variability of the value of a firm due to uncertain changes in the rate of exchange, which is calculated by variance or standard deviation. In conclusion, investors face risk exposures that could present threats to their investments. The next section will focus on risk exposures for investors in emerging markets.

2.6.2. Risk exposure

This section focuses on risk exposure which needs to be mitigated when investing in emerging markets. According to Miller (2005), risk exposure is part of any investment undertaking, while Hampton (2009), indicates that risk exposure is a calculation that gives a numeric value to a risk, enabling different risks to be compared. Miller (2005) states that the calculation enables investors to compare different risk types, the degree of exposure and the possible loss, should a risk event occur. However, according to Adrian *et al.* (2015), there is no single investment that can meet all the needs of all investors. In addition, it is unlikely that any one investment can meet all the needs of a single investor. Investors that are willing to take major risks in order to gain maximum capital growth need to consider a number of risk factors, such as liquidity exposure (Hull, 2018). A good spread of investments in different asset classes is recommended to minimise liquidity exposure in case an investor needs money for emergencies or other investment opportunities (Cudmore, 2017). Therefore, investors should hold a well-diversified portfolio of investments, because the success of an investor's strategy could be determined by the diversification between the different asset classes of risk and risk exposure (Adrian *et al.,* 2015).

However, according to Hampton (2009), it becomes challenging to decide which risks are worth justifying when an investor has many of these to consider. The risk exposure should be derived from the investor's objectives, targets and risk appetite. For example, a conservative investor should consider low volatile investments, while an aggressive investor could consider investing in high volatile investments (Hull, 2018). In addition, Damodaran (2008) warns that potential emerging market investors need to consider risk exposure thoroughly as there are many risks involved when investing in emerging markets compared to developed markets. The difference between being blindsided by the realisation of risk exposure and making great returns rests in the proper consideration of risk exposure when making investment decisions (Gupta & Singh, 2016).

According to Miller (2005), the objective to optimise returns and still avoid risks hinges on the extent to which risk exposure and investment volatility are minimised. Volatility is a statistic measurement of the susceptibility of the market or a security to gain or lose value (Adam, Marcet & Nicolini, 2016). A highly volatile market could have huge price fluctuations over a short period of time. Consequently, investments that are very volatile are risky, while those with low volatility are relatively low on the risk barometer. For example, the performance of the rand has been largely unpredictable, fluctuating at an average of 6% per annum against the US dollar and increasing investors' exposure at an international level (Gwala, 2016). According to Stanlib (2014), most emerging market currencies have come under pressure, the rand was once again the worst performing emerging market currency. Since the end of 2010, the rand has weakened by more than 20% against the dollar (Stanlib, 2014). The weakness has occurred since the beginning of August 2011 (Thornton, 2012). The second worst performing currency has been the Turkish lira, which was down around 18%, with the entire decline occurring in the second half of the year (Stanlib, 2014). The extent of risk exposure indicates the severity of how an investment value can be decreased due to volatility of the currency.

In addition, Cudmore (2017) indicates that the Turkish lira has replaced the South African rand as the most volatile currency in the world, ending a two-month long reign at the top. This is due to Turkey having one of the worst external debt profiles in emerging markets, resulting in the corporate sector in the country chasing the weakening currency by buying dollars against Turkey (Cudmore, 2017). This has exacerbated the depreciation of the lira in the process (Cudmore, 2017). Therefore, political risk premium has become the real-world measure, as investors look to buy and sell currencies within days.

When investing in emerging markets, an investment volatility and degree of risk exposure should be considered (Adam *et al.,* 2016). Thereafter, an investment vehicle that aligns with the investor's objectives can be determined. While considering suitable investment vehicles, emerging market investors must comply with the rules, regulations, policies, and procedures of investing abroad (The Institute of Bankers in South Africa (IOB), 2006). Failure to comply with investment rules could result in cancellation of an investment or in losses. Many countries have regulations that seek to monitor and control the movement of incoming and outgoing capital. Some of the regulations are instituted to prevent a large outflow of capital from the country as a result of factors such as domestic political mismanagement and poor economic conditions. Therefore, emerging market investors should pursue investment decisions that align with the

regulations and policies of foreign countries and follow the right procedures (Gupta & Singh, 2016).

Having made the decision to diversify, investors should consider the portion of their portfolio they wish to invest in emerging markets, the investment vehicle available, and the associated costs and tax implications (Cudmore, 2017). In support of Salvatore (2015), Adam *et al.* (2016) warn that a risk exposure value calculation is a critical element of risk assessment. The main aim of calculating risk exposure is to compare various risks when there are multiple risks under consideration (Salvatore, 2015). Risk exposure value is the result of a calculation that gives a numeric value to a risk, enabling different risks to be compared (Kandel, 2014).

A limitation of this calculation is that it will give the same scores to high-probability/low-loss risks and low-probability/high-loss risks. As a solution to this issue, the best possible method is using a risk matrix for evaluating and identifying risks (Salvatore, 2015). A risk matrix may be employed when quantifying the investor's risk exposure, providing investors with an idea of possible loss should an unfavourable event occur (Allen, 2013). A risk matrix is a tool used during risk assessment to define the level of risk by considering the category of probability or likelihood against the category of consequence severity (Hopkin, 2017). Therefore, a risk matrix is a simple mechanism to increase visibility of risks and assist management in decision-making (Allen, 2013).

Statistically, the level of risk can be calculated as the product of the probability that harm occurs (that an accident happens), multiplied by the severity of that harm (the average amount of harm or more conservatively, the maximum credible amount of harm) (Allen, 2013). In practice, the risk matrix is a useful approach where neither the probability nor harm severity can be estimated with accuracy and precision. Although many standard risk matrices exist in different contexts, individual projects and organisations may need to create their own or tailor an existing risk matrix (Salvatore, 2015). According to Hopkin (2017), the harm severity can be categorised as:

- catastrophic – multiple losses;
- critical – one major loss;
- marginal – one severe loss or multiple minor losses; or
- negligible – one minor loss.

The probability of loss occurring might be categorised as certain, likely, possible, unlikely and rare (Allen, 2013). However, it must be considered that very low probabilities may not be very reliable. The resulting risk matrix is given in Table 2.3.

Table 2.3: The risk matrix

	Negligible	**Marginal**	**Critical**	**Catastrophic**
Extremely high	High	High	Extreme	Extreme
Highest	Moderate	High	High	Extreme
Higher	Low	Moderate	High	Extreme
High	Low	Low	Moderate	Extreme
Low	Low	Low	Moderate	High

Investors then would calculate what levels of risk they could take with different events (Allen, 2013). This would be done by weighing up the risk of an event occurring, against the cost to implement safety and the benefit gained from it. Investors may find this method useful when assessing areas of risk, for example when planning a new project to be carried out in a new investment avenue, such as emerging markets (Allen, 2013). The identification of appropriate risks may be best undertaken by involving those with a detailed understanding of the investor's operations and work and or detailed knowledge of the operating environment or the nature of particular investment or projects (Hopkin, 2017). A risk matrix is another common method for assessing risk, which can be used in conjunction with the SWOT (strengths, weaknesses, opportunities, and threats) and PESTLE (political, economic, social, technological, legal and environmental) analyses (Allen, 2013). The level of risk should be measured by both the likelihood of something occurring and the severity of the impact if it were to happen. The risk matrix can subsequently be used as a risk register for ongoing monitoring and reviewing of risk exposure throughout the life of an investment or project (Salvatore, 2015).

In conclusion, an investor should assess the risk exposure of all investments under consideration. A risk exposure has been defined as part of any investment undertaking that gives a numeric value to a risk, enabling different risks to be compared. Once the risk exposure has been quantified, an informed decision regarding which investment to pursue can be made. The next section focuses on BRICS countries, of which South Africa is a member.

2.7. BRICS

Then chief economist at Goldman Sachs, Jim O'Neill, wrote an article in 2001 arguing that the countries that formed BRIC (which South Africa joined in 2010) were the emerging superstars most likely to dominate the twenty-first century globalised economy (Okehi, 2014). Altogether, these countries cover 40% of the global population and more than 25% of global land (Bremmer, 2017). This study aimed to develop a risk analysis framework for investors in emerging markets, using South Africa as a gateway to BRICS countries. Therefore, this section is key, because it focuses on the determinants of emerging markets capital flow, an analysis of common challenges in the BRICS countries and the backgrounds of the BRICS countries.

2.7.1. Background

A review of bank failures prior to the global financial crisis of 2008 and the period after the crisis, reveals that ineffective management of the inherent risks in banks was one of the root causes of their failures (Sanusi, 2013). Many banks in both developed and emerging markets suffered huge losses stemming from inherent risks (Okehi, 2014). As a result of these losses, the Basel Committee on Bank Supervision (BCBS) formulated broad supervisory standards and guidelines, recommendations and best practices on issues of risk management in banking as captured in Basel I, II, and III from 2008 to 2013 (Bremmer, 2017).

According to Kearney (2013), research into the emerging markets of the world has increased over the past two decades for a number of reasons. Emerging markets comprise the majority of the people and land of the world and continue to grow faster than the developed world. According to Clarke (2017), emerging markets are increasingly recognised as a diverse set of business, cultural, economic, financial, institutional, legal, political and social environments within which to test, reassess and renew received wisdoms about how the business world works. This is done in order to understand prevailing theories and their supporting evidence, and to make new discoveries that will enhance human welfare in all environments, including the poorest countries in the world, the emerging world, the transition countries and the developed world. In addition, according to Kearney (2013), emerging market research is a fascinating multidisciplinary area that incorporates diverse disciplines across the humanities and finance.

The next sections will focus on the determinants of emerging markets capital flow and the analysis of common challenges in the BRICS countries, which forms the basis of risk mitigation techniques.

2.7.2. The determinants of emerging markets capital flow

According to Passari and Rey (2015), capital flow volatility is a major source of concern for the macroeconomic and financial stability in emerging markets. Over the decade (1996–2016), the emerging markets have liberalised their capital accounts and have become more integrated in international financial markets than before (Pagliari & Hannan, 2017). However, as the global financial crisis (GFC) has shown, reaping the benefits of capital account liberalisation while containing the associated risks, remains a key challenge for many countries for several reasons (Joffe, 2017). A capital account liberalization is a decision by a country's government to move from a closed capital account regime, where capital may not move freely in and out of the country, to an open capital account system in which capital can enter and leave at will (Joffe, 2017). Firstly, emerging markets tend to receive capital inflows that, even in net terms, are large relative to their domestic economies and overall absorptive capacity in terms of the size and depth of their financial systems (Passari & Rey, 2015).

Secondly, emerging markets are more vulnerable to shocks, partly because their economies are smaller and less diversified, and because they have less domestic economic and political stability. In addition, shocks of any kind (positive or negative, domestic or external) are aggravated and spread more easily in emerging markets than developed markets, due to structural and institutional characteristics (Pagliari & Hannan, 2017). In particular, large capital inflows, mostly intermediated through the banking system, tend to amplify the domestic financial and real business cycles more than in developed markets (Joffe, 2017).

Finally, the GFC has prompted new concerns that inflows to emerging markets are overly sensitive to some global (push) factors that are beyond the influence of domestic policies (Pagliari & Hannan, 2017). Given all this, financial integration poses serious challenges to economic and financial sector stability in emerging markets. To the extent that there exists a positive link between the stability of capital inflows and economic growth, maintaining a steady stream of capital inflows is a policy priority in most emerging markets (Passari & Rey, 2015). The link between capital inflows and economic growth is discussed below:

- Increase in domestic investment

Over the decade (1994–2014), private capital flows into emerging markets have been associated with about an equal increase in domestic investment, although this relationship has weakened over time as the extent of financial integration across borders has increased (Passari & Rey, 2015). The relationship is strongest where, as in Africa, countries are least integrated with international financial markets and capital flows in the form of FDI add to domestic saving and serve to identify and finance new investment opportunities (Joffe, 2017). The new investment opportunities translated into an increase in mergers and acquisitions which will be discussed next.

- Increase in mergers and acquisitions

Whereas mergers and acquisitions have increased relative to greenfield investments and as portfolio flows have risen, domestic investment and foreign inflows have become less tightly linked (Stapleton, 2017). Greenfield investment is an alternative to foreign portfolio investment, where an investor merely buys the stocks or bonds of an existing company (Stapleton, 2017). However, the association remains relatively high where the conditions are favourable for domestic investment (high education levels, political stability, and well-developed financial systems (Joffe, 2017). An increase in mergers and acquisitions has seen an increase in productivity growth and private capital inflows.

- Increase in productivity growth and private capital inflows

The relationship between productivity growth and private capital inflows appears to have strengthened over time (Joffe, 2017). The productivity benefits of capital inflows, through the transfer of technology and management techniques, and the stimulation of financial sector development are significant in countries where a developed physical infrastructure, a strong business environment, and open trade regimes have facilitated the absorption of those inflows, but not otherwise (Stapleton, 2017).

- Capital inflow volatility significantly dampens economic growth

The crisis-ridden years in the 1990s were associated with enormous shocks of output and consumption in some countries (Emerson, 2018). However, many countries appeared increasingly to manage volatility and in the aftermath of the crises, and growth rates have recovered quickly in many affected countries (Pagliari & Hannan, 2017). Adjustment to investment portfolios was promoted by greater exchange rate flexibility, more diversified production structures, and better risk management techniques (Stapleton, 2017).

According to Emerson (2018), capital flows lead to economic growth, and hence, a sound financial system remains one of the important determinants of capital flows and FDI in emerging markets. FDI has led the process of globalisation, which has in turn made the world a single global village (Broto, Díaz-Cassou & Erce, 2011). The globalisation process is now irreversible, caused primarily by trade and investment across economies resulting in strong worldwide market for goods, services and capital (Passari & Rey, 2015). FDI is one of the important outcomes of globalisation and it is increasingly considered as an important source of economic growth and development for emerging markets. The benefit of FDI can be in the form of knowledge and technological advancements, employment generation and enterprise development. However, there has been a decline of about 2%, to $1.75 trillion of global flows of FDI in 2016 (Pagliari & Hannan, 2017). Investment in emerging markets declined even more, by 14%, and flows to frontier and structurally weak economies remain volatile and low (Guterres, 2017). Although the United Nations Conference on Trade and Development (UNCTAD) predicted a modest recovery of FDI flows in 2017 and 2018, they are expected to remain well below their 2007 peak (Guterres, 2017).

The capital flow in emerging markets has fluctuated in the past number of years for various reasons (Lubek, 2016). The variables that cause the capital flow fluctuations are classified as push (external) and pull (domestic) variables, pertaining to the country receiving foreign investment (Xu & Meyer, 2013). Push variables, consequently, are external to the recipient country and take place in countries that are capital suppliers, for example, mostly industrial countries. Hence, these variables should be related to business cycles in developed countries. According to Passari and Rey (2015), the influence of push variables may be both positive and negative due to the presence of income and substitution effects. Growth rates, industrial production indices and interest rates in developed countries are good proxies for these types of variables (Guterres, 2017).

Pull variables, on the contrary, are those that take place in the host country. According to Ortel (2017), the variables are classified in six broad categories: market size, country conditions, openness variable, liquidity variable, government finance indicators and vulnerability indicators. These variables are important for the study, because they determine the amount of capital that is invested in each emerging market. These variables will be discussed in detail in the following sections.

2.7.2.1. Market size

According to Guterres (2017), market size variables are expected to affect capital inflows positively, since larger countries should receive more inflows than smaller countries. Good proxies for market size are host country GDP, absorption and private consumption. All these variables should have a positive sign on the regressions. Therefore, the market size should determine the willingness of investors to invest in that market. The bigger and stable the market is, the likelihood of bigger capital inflows (Guterres, 2017). In line with other studies, GDP per capita has been included in this group of variables, even if this in fact measures economic development rather than market size. Per capita GDP is, nevertheless, correlated with market size (Dimitrijevic & Mistele, 2016). The next section focuses on country conditions.

2.7.2.2. Country conditions

According to Ortel (2017), positive country conditions should generate higher inflows. Countries that have a stable macroeconomic environment characterised by high and unstable growth rates and low and stable inflation rates should receive more inflows than more volatile economies (Lubek, 2016). According to Ascher (2017), natural proxies used to determine the country conditions are GDP growth rates, industrial production indices, interest rates, inflation rates, domestic savings to GDP, and credit to GDP.

The country conditions variable has been emphasised by Franc, Rentocchini and Marzetti (2008) as a sign of financial depth. All the variables except inflation are expected to have a positive correlation with investment inflows. Other variables that can be envisaged here include average wages and rates of return on the domestic stock market. Investor survey of multinational corporations shows that political stability, security, and regulatory environment are leading factors driving decisions to invest in emerging markets (Ascher, 2017).

According to Gonzalez and Chu (2017), emerging markets accounted for a growing share of global FDI inflows (40%) and outflows (20%). Therefore, policies and actions by emerging market governments play a key role in ensuring that FDI creates better-paying jobs and increases competitiveness of the host economies. The next section focuses on openness variable.

2.7.2.3. Openness variables

The openness variable may be defined as the extent to which a country partakes in the global trade and allow foreign firms to do business in its domestic market (Essays, 2018). There are two types of openness, revealed openness and policy openness (Lubek, 2016). Revealed openness is measured in terms of the ratio of total foreign trade to GDP (Leeds, 2015). It is clearly defined and well measured. However, use of prices (domestic or international) to value the trade ratio has been a cause of disagreement among economists (Essays, 2018). Studies that focus on revealed openness always attempt to understand the linkage between trade openness and economic performance (Leeds, 2015). In other words, trade openness deals with finding out about the fact whether economies (and particularly emerging economies) that partake more in global trade, have a higher rate of economic growth than those who abstain from it (Dimitrijevic & Mistele, 2016).

The openness variable has several disadvantages, such as that it does not explain why some countries might trade more as the high trade openness of a country may be the result of a small domestic market, easy access to foreign markets and policy openness (Essays, 2018). Policy openness, as the name suggest, is measured in various ways such as the terms of incidence measures of trade barriers, the trade flow measures adjusted for structural characteristics such as size and factor endowments, as well as price distortions (Silajdzic & Mehic, 2017). However, policy openness is difficult to measure, and all these measures discussed above have their limitations and reliability issues.

According to Dimitrijevic and Mistele (2016), the openness variable considers the relationship of host economies with the rest of the world. Open economies attract more inflows than heavily protected economies (Silajdzic & Mehic, 2017). Therefore, the tariffs, the existence of trade

agreements and other types of agreements regulating the openness of an economy or an area, are good proxies for capital flow (Essays, 2018). The next section focuses on liquidity variable.

2.7.2.4. Liquidity variable

According to Peterhoff, Calvey, Goddard, Cleary and Alderighi (2016), liquidity can be broadly understood as the ability to facilitate large volumes of trade without causing excessive price movements, while still reflecting a steady and fair market price. According to Peterhoff *et al.* (2016), liquidity consists of the following aspects:

- Breadth: the cost of reversing a position over a short period. Breadth is usually identified (and measured) by the bid or ask spread (the tighter the spread, the better);
- Depth: a deep market has large numbers of pending orders on both sides of the bid or ask spread. This limits the influence of orders on prices;
- Resilience: the speed at which prices return to stability after a shock; and
- Immediacy: the speed at which trades can be conducted at a given cost.

According to Emerson (2018), market operators, investors, regulators, and others use various barometers to determine liquidity. These include bid or ask spreads, turnover, and turnover velocity (value traded relative to the overall market capitalisation). As a measurement of liquidity, proxies like exports, export growth and turnover measures (volume and value traded, and turnover velocity) are considered (Peterhoff *et al.*, 2016).

Based on the above, liquidity is clearly a key determinant of emerging markets capital inflow. As liquidity serves to deepen and strengthen financial markets, measures aimed at promoting liquidity will have a positive impact on overall financial market development. A strong liquidity variable can be regarded as a key determinant by investors in emerging markets. The next section focuses on government finance indicators.

2.7.2.5. Government finance indicators

According to Silajdzic and Mehic (2017), government finance is an important indicator that is expected to affect capital inflows. High fiscal deficits imply increasing government liabilities and more liabilities could lead to increased taxes and, in extreme cases, lead to non-payment of international debt (Peterhoff *et.al.* (2016)). Therefore, large fiscal deficits increase the country risk and restrain potential investment inflows. Different indicators, such as fiscal balance, government debt to GDP, government revenues and expenditure to GDP should be good proxies (Silajdzic & Mehic, 2017). The next section focuses of vulnerability indicators.

2.7.2.6. Vulnerability indicators

Dalhaus and Lam (2018), define vulnerabilities as a pre-existing condition that makes the occurrence of an economic or financial crisis or stress more likely when an adverse market shock occurs. Unlike shocks, vulnerabilities can be assessed to detect its impact (Lubek, 2016). Vulnerable countries make investment riskier, therefore, being susceptible to receiving fewer inflows. Investors are likely to invest in countries that are least vulnerable to shocks and currency fluctuations (Dalhaus & Lam, 2018). According to Emerson (2018), vulnerability indicators cover the government, the financial sector, and the household and corporate sectors. Therefore, when economies are under stress, problems in one sector often spread to other sectors. For example, concerns about the fiscal deficit of a country might lead to a run on the exchange rate, or undermine confidence in banks holding government debt, thereby triggering a banking crisis.

According to Emerson (2018), the following indicators are monitored closely by the international monitory fund (IMF);

- Indicators of external and domestic debt, including debt maturity profiles, repayment schedules, interest rate sensitivity and currency composition. The ratios of external debt to exports and to GDP are useful indicators of trends in debt and repayment capacity. Where public sector borrowing is significant, the ratio of debt to tax revenue is particularly important to gauge the repayment capacity of the country.

- Financial soundness indicators are used to assess the strengths and weaknesses of the financial sectors of countries. They cover the capital adequacy of financial institutions, the quality of assets and off-balance sheet positions, profitability and liquidity, and the pace and quality of credit growth. Financial soundness indicators are for instance used to assess the

sensitivity of financial systems to market risk, including changes in interest rates and exchange rates.

- Corporate sector indicators on the foreign exchange and interest rate exposure of companies are particularly important when assessing the potential impact of exchange rate and interest rate changes on corporate sector balance sheets. Indicators related to corporate leverage, profitability, cash inflow, and financial structure are also relevant.

The challenge for policymakers is to prepare their economies best to absorb the potential benefits of capital inflows while reducing the risks of sudden capital outflows (Dalhaus & Lam, 2018). This implies a multiplicity of measures that not only foster absorption of international capital inflows, but also generate long-term domestic benefits. The understanding of foreign investment inflows is important for policymakers, forecasters and researchers alike, and this is particularly the case for emerging markets (Silajdzic & Mehic, 2017). Capital inflows make up an important part of the balance of payments, and the large fluctuations in such inflows have, among emerging markets, ignited a number of balance of payment crises over the past two decades (2006-2016) (Joffe, 2017). Capital inflows not only constitute one of the main ingredients in the balance of payments, but also one of the most volatile. Understanding foreign investment inflows is, therefore, crucial in any balance of payments analysis (Emerson, 2018).

This section focused on what drives capital inflows into emerging markets for the benefits of the investors. The section covered the determinants of capital inflows and the six variables that determine the size of the capital inflow in emerging markets. The next section focuses on the analysis of common risks in the BRICS countries.

2.7.3. Challenges for investors in BRICS countries

This section focuses on challenges for investors in BRICS countries. It covers the common challenges in emerging markets, then focuses on the background of each BRICS country, as well as the economic outlook. The common challenges are important for this study, since the challenges need to be mitigated alongside the risks of emerging markets, which will be discussed in Chapter 3.

Emerging markets are facing serious challenges, which have undermined their once explosive growth and weakened their development prospects (Dimitrijevic & Mistele, 2016). Whether the emerging economies return to the path of convergence with the advanced economies, will largely depend on how the emerging economies approach an increasingly complex economic environment (Shmuel, 2015). The development path of emerging markets was never simple or smooth, but for most of the post-World War II period, until ten years ago, it was relatively clear-cut (Spence, 2017). Countries needed to open their economies at a sensible pace, leverage global technology and demand, specialise in tradable sectors, pursue a lot of investment (some 30% of GDP), and promote FDI, with appropriate provisions for knowledge transfer (Espallargas, 2017).

According to Spence (2017), emerging markets recognised the importance of allowing market mechanisms to work, guaranteeing property rights, and safeguarding macroeconomic and financial stability. Most importantly, emerging markets focused on generating employment, particularly in urban areas and modernising sectors, and broad inclusiveness (Ranchhod, 2019). As emerging markets pursued the inclusive agenda, they experienced stuttering starts and numerous crises, often associated with excessive debt, currency traps, and high inflation. According to Shmuel (2015), when emerging markets reached middle-income levels, countries confronted the policy and structural pitfalls that accompany the transition to high-income status. Nonetheless, in an increasingly open global environment, characterised by strong growth (and demand) in the advanced economies, the emerging markets managed to make huge and rapid progress.

In addition, Ranchhod (2019) warns that the rules of trade are changing, and each year brings new opportunities and challenges. Therefore, emerging markets should stay proactive when addressing these challenges, especially the challenges brought by the fundamental shift driven by digital capital-intensive technologies. While digital technologies have created new kinds of jobs in high-tech sectors, they have been reducing and disintermediating (removal of intermediaries) routine white- and blue-collar jobs (Shmuel, 2015). For example, in 2019, Standard Bank South Africa announced a plan to cut around 1 200 jobs and close 91 branches as part of efforts to digitise its retail and business bank (Ranchhod, 2019). The decision to cut jobs was widely resisted by the trade unions, even though the bank assured its stakeholders that the digital migration would generate new opportunities, especially in IT. Emerging markets have a number of challenges, for example, job cuts are sensitive in South Africa, where unemployment stands at 27% (Ranchhod, 2019).

According to Spence (2017), as these economies add items protecting themselves from volatility, countering unfavourable external conditions, and adapting to powerful technological trends to their core structural growth agendas, they will invariably encounter challenges. Such actions might produce a high variance in performance across countries and probably reduce the average pace of convergence. According to Shmuel (2015), exposure to emerging markets for the average retail investor often comes from exchange traded or mutual funds that are invested in a pool of emerging markets. However, the performance of broad market funds in 2016 suggests that investors must rethink their diversification approach. Overall, emerging markets did not perform well in the 2016 financial year. Unsurprisingly, investors pulled US$500 billion from emerging market equity funds (Joffe, 2017). Even though there was such a huge diversion of funds from emerging markets, a close look shows that most of the biggest returns in 2016 were found in emerging markets. One of the best-performing stock markets in the world in 2016 was Argentina, which gave investors an annual return of 33.3% (not accounting for currency swings). Other emerging stock markets that performed well include Hungary, Vietnam and Jamaica (Spence, 2017).

As investors consider the best emerging markets in which to invest in, making the right choices will likely depend on determining which countries can overcome the biggest challenges currently facing the emerging world. According to Shmuel (2015), the following are four challenges facing emerging markets.

- A more hawkish Fed

Emerging markets reacted with surprising calm when the US Federal Reserve raised interest rates in December 2016 for the first time in a decade (Lange, 2017). The test, however, will be how emerging market assets handle further rate hikes in the future. The projections of the Federal Reserve in 2017 indicate as many as four rate increases in the near future, which will tighten monetary conditions and potentially lead to an even stronger US dollar (Lange, 2017). The rate increases will have immense consequences for economies where a number of debt vehicles are held in US dollars, including countries such as Brazil and Russia. According to Rees (2017), emerging markets whose issuing countries have fragile balances of payments, such as the South African rand, may face further losses.

Since the 2008 financial crisis, the US central bank had maintained its key lending rate at close to zero (Rees, 2017). Having analysed the relevant macroeconomic indicators and taking into consideration the stock market rally following Trump's election, the FED board saw a window of opportunity to increase its interest lending rate (Rangasamy, 2017). With loans now more expensive than before, banks will be lending less, leading emerging currencies to depreciate further against the dollar. Consequently, assets and bonds in emerging markets could become less attractive to investors, as the amount of debt denominated in US dollars becomes a burden for these economies (Lange, 2017).

However, in 2017 interest rates were still relatively low, and not expected to pose an immediate threat to emerging countries. The benchmark stood at between 0.5% and 0.75%, which is low compared to the 2006 rate, which neared 6% (Rees, 2017). Being a global player, emerging markets should plan their long-term investments in line with projected interest rates movements from developed economies.

- US dollar denominated debt

According to Rangasamy (2017), emerging market corporate borrowing has exploded in recent years as loose monetary policies in the West led to increased borrowing. The IMF notes that the corporate debt of non-financial firms across major emerging markets exploded from US$4 trillion in 2004 to more than US$18 trillion in 2016 (Rees, 2017). A big portion of that debt is now held in US dollars and is set to begin maturing in the coming years, creating further risk as interest rates move higher. According to Espallargas (2017), about 40% of the almost $10 trillion stock of dollar-denominated debt held by non-financial entities outside the US, is held in emerging markets. The IMF has warned that emerging market governments need to prepare for a potential increase in corporate failures, especially as many of the firms that borrowed are resource firms and may now be struggling to service their expensive debts amid low commodity prices (Ranchhod, 2019).

- Low commodity prices

According to Labys (2019), the commodity price crash has created a divide in the emerging world. It has certainly been difficult for large oil exporters such as Nigeria, but countries that

depend on importing commodities, have had huge gains. Countries in East Asia, for example, have received a huge economic boost from the price collapse (Labys, 2019).

Market analysts anticipated that the turn of events in 2018 and 2019 would not alleviate the pressure that has bedevilled commodity producers and many emerging market economies (Ranchhod, 2019). The slow, mostly domestic-driven activity of the high-income countries, and notably the transition in China, dampens demand growth. This means that, even though some markets, such as Qatar, Nigeria and Chile that depend heavily on commodities, have sold off this year, they do not necessarily offer investors a bargain (Labys, 2019). The threat of ongoing commodity price weakness means that those countries that depend heavily on commodities, will likely continue to suffer a negative terms of trade shock, making commodity importers such as countries in East Asia more attractive than before (Rangasamy, 2017).

- Geopolitical instability

Emerging markets went into the year 2019 with a wave of ongoing conflicts around the world. This is according to Ranchhod (2019), who indicates that in the Middle East, ongoing Western intervention against ISIS militants continues to disrupt oil and gas production in the region. Tensions between Russia and Turkey, two important regional economies, continue to fester following the downing of a Russian fighter jet by the Turkey in November (Ranchhod, 2019). Analysts at Citigroup note that their research shows the market perception of geopolitical risk is at a 25-year high (Lemieux, 2018). Aside from tensions in the Middle East, there is the ongoing military escalation in the South China Sea, the growing number of Syrian refugees that could lead to unrest in Europe and the potential for further terrorist attacks around the world (Ranchhod, 2019).

Emerging market assets have tended to take the brunt of the blow whenever geopolitical risk flares up. Lemieux (2018) notes that when selloffs happen, certain emerging market countries tend to fare worse than others, because their stock markets are more dependent on international investment inflows. Das (2018) identifies the so-called fragile five as Mexico, Colombia, Indonesia, South Africa and Turkey as being at high risk of geopolitical declines in the event of an emerging market selloff, because they depend heavily on foreign money, which tends to be unpredictable.

- Decline in commodity prices

According to Rangasamy (2017), the world economy experienced rapid recovery in the first months of 2016 as commodity prices improved and capital markets strengthened after a very unstable end to 2015. However, events such as the Brexit referendum sparked global uncertainty and affected investor sentiment in global markets negatively (Das, 2018). According to Lemieux (2018), the populist surge in Europe and the US over the past year (2017) has encouraged protectionist economic policies on both continents. Protectionism is the economic policy of restricting imports from other countries through methods such as tariffs on imported goods, import quotas, and a variety of other government regulations (Lemieux, 2018). The British vote to leave the European Union (EU) and the election of Donald Trump in the US have shown that a sizable proportion of citizens in developed nations are ready to oppose free trade and economic globalisation (Das, 2018).

Despite expected volatility, many commodity prices grew considerably in the final months of 2016 (Lange, 2017). This increase came partly as a result of the OPEC deal to curb oil production, as well as Trump's election promises for infrastructure projects, which pushed up the prices of copper and other metals (Rees, 2017). This development has been welcomed by emerging markets, which are typically reliant on their mining and oil industries. If prices continue to rise, emerging countries will have more foreign exchange earnings and will be able to draw up larger annual budgets than before, a scenario, which would come as a relief after a two-year struggle to balance high growth rates and low commodity prices (Das, 2018).

In conclusion, the areas of challenges facing emerging economies should be continuously scrutinised to mitigate any potential negative setback. The potential challenges can be contained by ensuring consistent and strong balance sheets, domestic growth and supportive policies, which would buffer emerging markets against the challenges discussed previously, such as global economic slowdown, rising interest rates, trade protectionism and geopolitical tensions. The next section focuses on the investment performance of BRICS countries.

2.7.4. BRICS countries

This section gives a brief background and overview of the BRICS countries in order to unpack how these emerging countries are structured from an investment point of view. The overview is

limited to the background of each emerging country, the economic overview, the economic outlook, the economic growth and the economic data of the country in question. The overview seeks to give a potential investor a thorough understanding of how the emerging markets are structured, indications of the economic future of these countries, and should add value when considering the risks of a potential investment.

2.7.4.1. Brazil

- Brazil: background and economy overview

Brazil gained its independence in 1822 after more than 300 years under Portuguese rule, maintaining a monarchical system of government until the abolition of slavery in 1888 and the subsequent proclamation of a republic by the military in 1889 (Cia, 2018). Brazilian coffee exporters dominated the country politically until populist leader Getulio Vargas rose to power in 1930 (Rapoza, 2017). By far the largest and most populous country in South America, Brazil underwent more than a half century of populist and military government until 1985, when the military regime ceded power peacefully to civilian rulers (Cia, 2018).

Brazil continues to pursue industrial and agricultural growth and development of its interior (Das, 2018). Having successfully weathered a period of global financial difficulty in the late twentieth century, Brazil is considered as one of the strongest emerging markets in the world and a contributor to global growth (Rapoza, 2017). The awarding of the 2014 FIFA World Cup and 2016 Summer Olympic Games, the first ever to be held in South America, was seen as symbolic of the rise of the country (Gillespie, 2017). However, from about 2013 to 2016, Brazil was plagued by a sagging economy, high unemployment, and high inflation, only emerging from recession in 2017 (Cia, 2018).

According to Gillespie (2017), Brazil is the eighth largest economy in the world, but is recovering from a recession in 2015 and 2016 that ranks as the worst in the history of the country. Falling commodity prices reduced export revenues and investment, which weakened the Brazilian real (the Brazilian currency) and reduced tax revenues (Rapoza, 2017). The weaker real made existing public debt, which was largely denominated in foreign currency, more expensive. Lower tax revenues strained the government budget (Rapoza, 2017).

Economic reforms, proposed in 2016, aim to slow the growth of government spending and reduce barriers to foreign investment. Government spending growth helped to push public debt to 78% of GDP at the end of 2017, up from 50% in 2012 (Cia, 2018). Policies to strengthen the Brazilian workforce and industrial sector, such as local content requirements, may have boosted employment at the expense of investment. The Brazilian economy has also been affected by multiple corruption scandals involving private companies and government officials, hence former President Dilma Rousseff was impeached and convicted in August 2016 for moving funds among government budgets (Rapoza, 2017).

Sanctions against the firms involved some of the largest in Brazil, has limited their business opportunities, producing a ripple effect on associated businesses and contractors. In addition, investments in these companies have declined because of the scandals (Gillespie, 2017). Brazil is a member of the Common Market of the South (Mercosur), a trade bloc including Argentina, Paraguay, Uruguay, and Venezuela (Rapoza, 2017). After the Asian and Russian financial crises, Mercosur adopted a protectionist stance to guard against exposure to the volatility of foreign markets (Gillespie, 2017). According to Cia (2018), Brazil and its Mercosur partners have pledged to open the bloc to more trade and investment, but changes require approval of all five members, which makes policy adjustments too difficult to enact. The background and economic review should give an investor a clear picture of the emerging country in question. Therefore, providing an economic review which can be used to project the economic outlook.

- Brazil: economic outlook

Data for the fourth quarter suggests the recovery progressed well, after GDP grew at the fastest pace since Quarter 1 2014 (Gillespie, 2017). Economic activities increased and industrial production grew at the fastest pace in over two years in December 2014 (Rapoza, 2017). In addition, the unemployment rate edged down in Quarter 4, boding well for private consumption in the period. Data for 2018 also points to improving economic conditions, as consumer sentiment rose to a multi-year high in January (Cia, 2018). Meanwhile, political events are dominating the discourse and generating uncertainty in financial markets. On 24 January 2018, the IBOVESPA (the Brazilian benchmark stock index) surged to a record high, after an appeals court held up former President Luiz Inácio Lula da Silva’s corruption sentence (Cia, 2018). Heightened uncertainty in the run-up to the elections could generate volatility in the Brazilian exchange rate and in financial markets (Gillespie, 2017).

- Brazil: economic growth

According to Rapoza (2017), accommodative monetary policy and improved confidence should fuel high growth in the Brazilian economy. Keeping the recovery on track will require a reform-minded president. However, it is difficult to judge if the election will yield a market-friendly outcome. Table 2.4 shows the Brazilian economic data from 2012 to 2017 (Cia, 2018).

Table 2.4: Brazil: Economic data

	2012	2013	2014	2015	2016	2017
Population (million)	199	201	203	204	206	208
GDP per capita (USD)	12,364	12,278	12,106	8,792	8,731	9,896
GDP (USD bn)	2,464	2,468	2,455	1,798	1,799	2,055
Economic growth (GDP, annual variation in %)	1.9	3.0	0.5	-3.8	-3.6	1.0
Domestic demand (annual variation in %)	1.9	3.7	0.3	-6.4	-5.2	0.9
Consumption (annual variation in %)	3.5	3.5	2.3	-3.9	-4.2	1.0
Investment (annual variation in %)	0.8	5.8	-4.2	-13.9	-10.2	-1.8
Industrial production (annual variation in %)	-2.3	2.1	-3.0	-8.3	-6.5	2.5
Retail sales (annual variation in %)	8.4	4.3	2.2	-4.4	-6.3	2.1
Unemployment rate	7.4	7.1	6.8	8.5	11.5	12.7
Fiscal balance (% of GDP)	-2.3	-3.0	-6.0	-10.2	-9.0	-7.8
Public debt (% of GDP)	53.7	51.5	56.3	65.5	69.9	74.0
Money (annual variation in %)	9.1	10.9	9.9	6.3	3.8	4.8
Inflation rate (CPI, annual variation in %, eop)	5.8	5.9	6.4	10.7	6.3	2.9
Inflation rate (CPI, annual variation in %)	5.4	6.2	6.3	9.0	8.7	3.4
Inflation (PPI, annual variation in %)	9.1	5.1	2.2	11.3	7.7	-2.5
Policy interest rate (%)	7.25	10.00	11.75	14.25	13.75	7.00
Stock market (annual variation in %)	7.4	-15.5	-2.9	-13.3	38.9	26.9
Exchange rate (vs USD)	2.05	2.36	2.66	3.96	3.25	3.31
Exchange rate (vs USD, aop)	1.95	2.16	2.35	3.34	3.48	3.19
Current account (% of GDP)	-3.0	-3.0	-4.2	-3.3	-1.3	-0.5
Current account balance (USD bn)	-74.2	-74.8	-104.2	-59.4	-23.5	-9.8
Trade balance (USD billion)	19.4	2.3	-4.0	19.7	47.7	67.1
Exports (USD billion)	243	242	225	191	185	218
Imports (USD billion)	223	240	229	171	138	151
Exports (annual variation in %)	-5.3	-0.2	-7.0	-15.1	-3.1	17.6
Imports (annual variation in %)	-1.4	7.4	-4.4	-25.2	-19.8	9.6
International reserves (USD)	373	359	364	356	365	374
External debt (% of GDP)	13.3	12.7	14.4	18.6	18.0	15.1

Source: Adapted from Focus Economics (2018)

The economic data can be used as a yardstick to make investment decisions when planning to invest in the emerging market in question (Cia, 2018). Like any country, investment performances of countries fluctuate from year to year, thus strong capital inflows into emerging markets carried over the previous years can easily translate into a reversal in the coming years if investors' confidence has decreased over the recent months. The data can be used to compare how the specific emerging market has performed year on year. Therefore, taking into account the underlying activities that occurred during the period under review. The next section focuses on Russia as an emerging market.

2.7.4.2. Russia

- Russia: background and economy overview

Founded in the 12th century, the Principality of Muscovy was able to emerge from over 200 years of Mongol domination (during the thirteenth to fifteenth centuries) and to gradually conquer and absorb surrounding principalities (Cia, 2018). In the early seventeenth century, a new Romanov Dynasty continued this policy of expansion across Siberia to the Pacific Ocean. Under Peter (who ruled 1682–1725), hegemony was extended to the Baltic Sea and the country was renamed the Russian Empire. During the nineteenth century, more territorial acquisitions were made in Europe and Asia (Gillespie, 2017). Defeat in the Russo–Japanese War of 1904–1905 contributed to the Revolution of 1905, which resulted in the formation of a parliament and other reforms (Rapoza, 2017).

Repeated devastating defeats of the Russian army in World War I led to widespread rioting in the major cities of the Russian Empire and to the overthrow in 1917 of the imperial household (Cia, 2018). The communists under Vladimir Lenin seized power soon after and formed the Union of Soviet Socialist Republics (USSR) (Rapoza, 2017). The brutal rule of Joseph Vissarionovich Stalin (1928–1953) strengthened communist rule and Russian dominance of the Soviet Union at a cost of tens of millions of lives. After defeating Germany in World War II as part of an alliance with the US (1939–1945), the USSR expanded its territory and influence in Eastern Europe and emerged as a global power. The USSR was the principal adversary of the US during the Cold War (1947–1991) (Cia, 2018). The Soviet economy and society stagnated in the decades following Stalin's rule, until General Secretary Mikhail Gorbachev (in power 1985–1991) introduced glasnost (openness) and perestroika (restructuring) in an attempt to modernise

communism, but his initiatives inadvertently released forces that by December 1991 splintered the USSR into Russia and 14 other independent republics (Rapoza, 2017).

Following economic and political turmoil during President Boris Yeltsin's term (1991–1999), Russia shifted toward a centralised authoritarian state under the leadership of President Vladimir Putin (2000–2008, 2012–present) in which the regime seeks to legitimise its rule through managed elections, populist appeals, a foreign policy focused on enhancing the geopolitical influence of the country, and commodity-based economic growth (Rapoza, 2017). Russia faces a largely subdued rebel movement in Chechnya and some other surrounding regions, although violence still occurs throughout the North Caucasus. Russia has undergone significant changes since the collapse of the Soviet Union, moving from a centrally planned economy towards a more market-based system (Gillespie, 2017). Both economic growth and reform have slowed down in recent years. However, Russia remains a predominantly statist economy with a high concentration of wealth in officials' hands. Economic reforms in the 1990s privatised most industry, with notable exceptions in the energy, transportation, banking, and defence-related sectors (Gillespie, 2017). The protection of property rights is still weak, and the state continues to interfere in the free operation of the private sector (Cia, 2018).

According to Cia (2018), Russia is one of the leading producers of oil and natural gas of the world, and a top exporter of metals such as steel and primary aluminium. Russia is heavily dependent on the movement of world commodity prices as reliance on commodity exports makes it vulnerable to boom and bust cycles that follow the volatile swings in global prices (Gillespie, 2017). The economy, which had averaged 7% growth during the 1998–2008 period as oil prices rose rapidly, has seen diminishing growth rates since then, due to the exhaustion of the Russian commodity-based growth model (Cia, 2018).

A combination of falling oil prices, international sanctions, and structural limitations pushed Russia into a deep recession in 2015, with GDP falling by almost 2.8% (Gillespie, 2017). The downturn continued through 2016, with GDP contracting another 0.2%, but was reversed in 2017 as world demand picked up. Government support for import substitution has increased recently in an effort to diversify the economy away from extractive industries (Cia, 2018).

- Russia: economic outlook

Data suggests that the Russian economic recovery was broadly steady in 2018, although growth remained unlikely. This is according to Cia (2018) who warns that the manufacturing Purchasing Managers Index (PMI) fell to the lowest level since July 2017 in February, and the Ural oil price lost some recent gains. Overall, the economy has come a long way since the 2015–2016 recession, and on 23 February 2018, S&P Global Ratings upgraded Russia to investment grade status after three years (raising the rating from BBB- to BB+) with a stable outlook (Cia, 2018). The move sparked a rally in Russian assets while President Vladimir Putin has won the 18 March election, ushering in a continuation of current economic policy (Cia, 2018).

- Russia: economic growth

Economics analysts have cut the GDP forecasts for 2018, following a weaker than expected figures for 2017 (Cia, 2018). Limited oil production was expected to keep activity restrained in 2018, although the recovery is gaining modest steam from last year (2017), supported by low inflation, reduced interest rates and higher commodity prices. Focus Economics Consensus Forecast panellists (2018) projected GDP expanding by 1.8% in 2018. In 2019, growth was projected to be stable at 1.8%. Table 2.5 shows the Russian economic data from 2012 to 2017.

Table 2.5: Russia: Economic data

	2012	2013	2014	2015	2016	2017
Population (million)	143	144	144	144	144	144
GDP per capita (USD)	15,025	15,553	14,374	9,503	8,947	10,958
GDP (USD bn)	2,153	2,230	2,062	1,363	1,283	1,578
Economic growth (GDP, annual variation in %)	3.5	1.3	0.7	-2.8	-0.2	1.5
Consumption (annual variation in %)	7.4	4.4	2.0	-9.8	-4.5	3.4
Investment (annual variation in %)	6.0	0.9	-0.4	-9.9	-1.8	4.3
Industrial production (annual variation in %)	3.4	0.4	1.6	-0.8	1.3	1.0
Retail sales (annual variation in %)	6.5	3.9	2.7	-9.8	-4.6	3.1
Unemployment rate	5.5	5.5	5.2	5.6	5.5	5.2
Fiscal balance (% of GDP)	-0.1	-0.5	-0.4	-2.4	-3.5	-1.5

Public debt (% of GDP)	9.7	10.6	13.0	13.2	12.9	12.6
Money (annual variation in %)	12.5	14.9	1.5	11.3	9.2	10.5
Inflation rate (CPI, annual variation in %)	6.5	6.5	11.4	12.9	5.4	2.5
Inflation rate (CPI, annual variation in %)	5.1	6.8	7.8	15.5	7.1	3.7
Inflation (PPI, annual variation in %)	5.1	3.7	5.9	10.7	7.4	7.75
Policy interest rate (%)	5.50	5.50	17.00	11.00	10.00	-5.5
Stock market (annual variation in %)	5.2	2.0	-7.2	26.1	26.8	57.63
Exchange rate (vs USD)	30.48	32.73	56.26	72.88	60.27	58.33
Exchange rate (vs USD)	31.09	31.85	38.42	61.06	67.05	2.2
Current account (% of GDP)	3.3	1.5	2.8	5.0	2.0	35.2
Current account balance (USD bn)	71.3	33.4	57.5	68.8	25.5	115
Trade balance (USD billion)	192	181	189	148	90.3	353
Exports (USD billion)	527	522	497	341	282	238
Imports (USD billion)	336	341	308	193	192	25.2
Exports (annual variation in %)	2.3	-1.1	-4.8	-31.3	-17.4	24.2
Imports (annual variation in %)	5.4	1.6	-9.8	-37.3	-0.7	433
International reserves (USD)	538	510	385	368	378	32.9
External debt (% of GDP)	29.6	32.7	29.1	38.0	40.1	58.33

Source: Adapted from Focus Economics (2018)

2.7.4.3. India

- India: background and economy overview

According to Cia (2018), the Indus Valley civilisation, one of the oldest in the world, flourished during the third and second millennia B.C. and extended into North-Western India. Aryan tribes from the north-west infiltrated the Indian subcontinent about 1500 B.C., and their merger with the earlier Dravidian inhabitants created the classical Indian culture (Cia, 2018). The Maurya Empire of the fourth and third centuries BC reached its zenith under Ashoka, and united much of South Asia. The Golden Age ushered in by the Gupta dynasty (fourth to sixth centuries A.D.) saw a flowering of Indian science, art, and culture. Islam spread across the subcontinent over a period of 700 years (Rapoza, 2017). In the tenth and eleventh centuries, Turks and Afghans invaded India and established the Delhi Sultanate. In the early sixteenth century, the Emperor Babur established the Mughal Dynasty, which ruled India for more than three centuries (Rapoza,

2017). European explorers began establishing footholds in India during the sixteenth century (Cia, 2018).

By the nineteenth century, Great Britain had become the dominant political power on the subcontinent (Rapoza, 2017). The British Indian Army played a vital role in both World Wars. Years of nonviolent resistance to British rule, led by Mohandas Gandhi and Jawaharlal Nehru, eventually resulted in Indian independence, which was granted in 1947 (Cia, 2018). Large-scale communal violence took place before and after the subcontinent partition into two separate states (India and Pakistan). The two neighbouring nations have fought three wars since independence, the last of which was in 1971 and resulted in East Pakistan becoming the separate nation of Bangladesh (Rapoza, 2017). Indian nuclear weapons tests in 1998 emboldened Pakistan to conduct its own tests that same year. In November 2008, terrorists originating from Pakistan conducted a series of coordinated attacks in Mumbai, the Indian financial capital (Rapoza, 2017). Despite pressing problems such as significant overpopulation, environmental degradation, extensive poverty, and widespread corruption, economic growth following the launch of economic reforms in 1991 and a massive youthful population are driving the emergence of India as a regional and global power (Cia, 2018).

The diverse economy of India encompasses traditional village farming, modern agriculture, handicrafts, a wide range of modern industries, and a multitude of services (Gillespie, 2017). Slightly less than half of the workforce works in agriculture, but services are the major source of economic growth, accounting for nearly two-thirds of Indian output, but employing less than one-third of its labour force (Gillespie, 2017). India has capitalised on its large, educated, English-speaking population to become a major exporter of information technology services, business outsourcing services, and software workers. Nevertheless, per capita income remains below the world average (Rapoza, 2017).

India is developing into an open market economy, yet traces of its past autarkic policies remain. According to Cia (2018), economic liberalisation measures, including industrial deregulation, privatisation of state-owned enterprises, and reduced controls on foreign trade and investment, began in the early 1990s and served to accelerate the growth in the country, which averaged nearly 7% per year from 1997 to 2017. Indian economic growth slowed in 2011 because of a decline in investment caused by high interest rates, rising inflation, and investor pessimism about the government’s commitment to further economic reforms and about slow world growth

(Gillespie, 2017). Rising macroeconomic imbalances in India and improving economic conditions in Western countries led investors to shift capital away from India, prompting a sharp depreciation of the rupee during 2016 (Cia, 2018).

Growth rebounded in 2014 through to 2016, exceeding 7% each year, but slowed in 2017 (Cia, 2018). Investors' perceptions of India improved in early 2014, due to a reduction of the current account deficit and expectations of post-election economic reform, resulting in a surge of inbound capital flows and stabilisation of the rupee (Rapoza, 2017). Since the election, the government has passed an important goods and services tax bill and raised foreign direct investment caps in some sectors, but most economic reforms have focused on administrative and governance changes, largely because the ruling party remains a minority in the Indian upper house of Parliament, which must approve most bills (Rapoza, 2017). According to Cia (2018), despite a high growth rate compared to the rest of the world, Indian government-owned banks faced mounting bad debt in 2015 and 2016, resulting in low credit growth and restrained economic growth.

The outlook for the long-term growth in India is moderately positive due to a young population and corresponding low dependency ratio, healthy savings and investment rates, and increasing integration into the global economy (Rapoza, 2017). However, long-term challenges remain significant, including discrimination against women and girls, an inefficient power generation and distribution system, ineffective enforcement of intellectual property rights, decades long civil litigation dockets, inadequate transport and agricultural infrastructure, limited non-agricultural employment opportunities, high spending and poorly targeted subsidies, inadequate availability of quality basic and higher education, and accommodating rural to urban migration (Cia, 2018).

- India: economic outlook

The government unveiled on 1 February its 2018 budget, which envisages a fiscal deficit of 3.3% of GDP (Cia, 2018). The bill mainly benefits low-income earners and rural demographics ahead of a busy election cycle, but also slates higher infrastructure spending and lower corporate tax rates for medium-sized corporations (Rapoza, 2017). Meanwhile, the economy continued to make solid progress in the second half of the fiscal year when GDP growth was weighed down by lingering effects of demonetisation and the implementation of the goods and services tax (GST) (Rapoza, 2017). According to Cia (2018), industrial production growth

remained buoyant in December, while both the services and manufacturing sectors pointed to improving economic conditions in January. Auto sales also firmed up in the same period.

- India: economic growth

Economic growth was expected to strengthen in 2018, with high frequency indicators showing households were recovering from demonetisation and GST induced distortions (Cia, 2018). In addition, strong global sentiment, improving business sentiment and robust capital outlay in the 2018 budget was expected to lift investment growth during 2019 (Cia, 2018). The external sector was also expected to drag less on growth on softer import growth and a recovery in export-oriented sectors as GST-related problems fade. Market experts expected a growth of 7.3% in 2018 (Cia, 2018). Table 2.6 shows the Indian economic data from 2012 to 2017.

Table 2.6: India: Economic data

	2012	2013	2014	2015	2016	2017
Population (million)	1,243	1,259	1,276	1,292	1,309	1,317
GDP per capita (USD)	1,465	1,477	1,597	1,611	1,729	1,979
GDP (USD bn)	1,821	1,860	2,038	2,082	2,264	2,607
Economic growth (GDP, annual variation in %)	5.5	6.5	7.2	8.0	7.1	-
Consumption (annual variation in %)	5.3	7.4	6.8	6.1	8.7	-
Investment (annual variation in %)	4.8	1.8	4.1	6.6	2.4	-
Industrial production (annual variation in %)	1.1	-0.1	2.8	3.4	5.0	4.3
Public debt (% of GDP)	69.1	68.5	68.6	69.6	69.5	70.2
Money (annual variation in %)	7.5	12.3	10.7	11.5	6.3	21.9
Inflation rate (CPI, annual variation in %, eop)	10.5	8.2	5.3	4.8	3.9	4.3
Inflation rate (CPI, annual variation in %)	10.2	10.0	5.9	4.9	4.5	3.6
Inflation (PPI, annual variation in %)	7.4	6.0	2.0	-3.6	1.8	2.9
Policy interest rate (%)	7.50	8.00	7.50	6.75	6.25	6.00
Stock market (annual variation in %)	8.2	18.9	24.9	-9.4	16.9	11.3
Exchange rate (vs USD)	54.28	60.02	62.29	66.25	64.86	65.11
Exchange rate (vs USD, aop)	54.37	60.42	61.14	65.42	67.04	64.46
Current account (% of GDP)	-4.8	-1.8	-1.4	-1.1	-0.7	-1.9
Current account balance (USD bn)	-87.4	-32.8	-27.6	-22.1	-15.2	-48.7

Trade balance (USD billion)	-189.5	-136.6	-137.5	-117.8	-105.7	-157.0
Exports (USD billion)	300	314	311	262	275	303
Imports (USD billion)	490	451	448	380	380	460
Exports (annual variation in %)	-1.9	4.6	-1.2	-15.7	4.9	10.0
Imports (annual variation in %)	0.1	-8.0	-0.6	-15.3	0.2	19.7
International reserves (USD)	293	304	341	356	373	421
External debt (% of GDP)	22.5	24.0	23.3	23.3	–	–

Source: Adapted from Focus Economics (2018)

2.7.4.4. China

- China: background and economy overview

For centuries, China stood as a leading civilisation, outpacing the rest of the world in the arts and sciences, but in the nineteenth and early twentieth centuries, the country was beset by civil unrest, major famines, military defeats, and foreign occupation (Cia, 2018). After World War II, the Communist Party of China under Mao Zedong established an autocratic socialist system that, while ensuring Chinese sovereignty, imposed strict controls over everyday life and cost the lives of tens of millions of people (Rapoza, 2017). After 1978, Mao's successor Deng Xiaoping and other leaders focused on market-oriented economic development and by 2000, output had quadrupled (Rapoza, 2017). For much of the population, living standards have improved dramatically, but political controls remain tight. Since the early 1990s, China has increased its global outreach and participation in international organisations (Gillespie, 2017).

Since the late 1970s, China has moved from a closed, centrally planned system to a more market-oriented one that plays a major global role (Gillespie, 2017). China has implemented reforms in a gradualist fashion, resulting in efficiency gains that have contributed to a more than tenfold increase in GDP since 1978. Reforms began with the phasing out of collectivised agriculture, and expanded to include the gradual liberalisation of prices, fiscal decentralisation, increased autonomy for state enterprises, growth of the private sector, development of stock markets and a modern banking system, and opening to foreign trade and investment (Rapoza, 2017). China continues to pursue an industrial policy, state support of key sectors, and a restrictive investment regime. Measured on a purchasing power parity (PPP) basis that adjusts for price differences, China in 2016 stood as the largest economy in the world, surpassing the

US in 2014 for the first time in modern history (Cia, 2018). China became the global largest exporter in 2010 and the largest trading nation in 2013 (Rapoza, 2017). However, the per capita income in China is below the world average (Cia, 2018).

After keeping its currency tightly linked to the US dollar for years, in July 2005 China moved to an exchange rate system that had a basket of currencies (Cia, 2018). From mid-2005 to late 2008, the renminbi (the official currency of the People's Republic of China) grew by more than 20% against the US dollar, but the exchange rate remained virtually linked to the dollar from the beginning of the global financial crisis until June 2010, when Beijing announced it would allow a recommencement of gradual liberalisation (Rapoza, 2017). From 2013 until early 2015, the renminbi (RMB) appreciated by roughly 2% against the dollar. However, the exchange rate fell 13% from mid-2015 until end-2016 amid strong capital outflows in part stemming from the August 2015 official devaluation. In 2017, the RMB resumed appreciating against the dollar – roughly 7% from the end of 2016 to the end of 2017 (Cia, 2018). From 2013 to 2017, China had one of the fastest growing economies in the world, averaging slightly more than 7% real growth per year (Cia, 2018). In 2015, the People’s Bank of China announced it would continue to push for full convertibility of the RMB, after the currency was accepted as part of the special drawing rights basket of the IMF (Rapoza, 2017). However, since late 2015 the Chinese government has strengthened capital controls and oversight of overseas investments better to manage the exchange rate and maintain financial stability (Cia, 2018).

According to Kapur (2017), the Chinese government faces numerous economic challenges, which include:

- reducing its high domestic savings rate and correspondingly low domestic household consumption;
- managing its high corporate debt burden to maintain financial stability;
- controlling off-balance sheet local government debt used to finance infrastructure stimulus;
- facilitating higher-wage job opportunities for the aspiring middle class, including rural migrants and college graduates, while maintaining competitiveness;
- dampening speculative investment in the real estate sector without sharply slowing the economy;
- reducing industrial overcapacity; and
- raising productivity growth rates through the more efficient allocation of capital and state support for innovation than before.

More economic development has taken place in coastal provinces than in the interior, and by 2016, more than 169.3 million migrant workers and their dependents had relocated to urban areas to find work (Rapoza, 2017). One consequence of the Chinese population control policy, known as the one-child policy (which was relaxed in 2016 to permit all families to have two children), is that China is now one of the most rapidly aging countries in the world. Deterioration in the environment, notably air pollution, soil erosion, and the steady fall of the water table, especially in the north, is another long-term problem (Rapoza, 2017). China continues to lose land suitable for growing crops, because of erosion and urbanisation. The Chinese government is seeking to add energy production capacity from sources other than coal and oil, focusing on natural gas, nuclear and clean energy development (Cia, 2018). In 2016, China ratified the Paris Agreement, a multilateral agreement to combat climate change, and committed to peak its carbon dioxide emissions between 2025 and 2030 (Kapur, 2017).

The government's thirteenth Five-Year Plan, unveiled in March 2016, emphasises the need to increase innovation and boost domestic consumption to make the economy less dependent on government investment, exports, and heavy industry (Kapur, 2017). However, China has made more progress on subsidising innovation than rebalancing the economy. Beijing has committed to giving the market a more decisive role in allocating resources, but the Chinese government's policies continue to favour state-owned enterprises and emphasise stability (Kapur, 2017). Chinese leaders in 2010 pledged to double the GDP of China by 2020, and the thirteenth Five Year Plan includes annual economic growth targets of at least 6.5% through to 2020 to achieve that goal (Cia, 2018). In recent years, China has renewed its support for state-owned enterprises in sectors considered important to economic security, explicitly looking to foster globally competitive industries (Kapur, 2017). Chinese leaders also have undermined some market-oriented reforms by reaffirming the dominant role of the state in the economy, a stance that threatens to discourage private initiative and make the economy less efficient over time (Kapur, 2017). The slight acceleration in economic growth in 2017, the first such of its kind since 2010 gives Beijing more latitude to pursue its economic reforms, focusing on financial sector deleveraging and its supply-side structural reform agenda, first announced in late 2015 (Cia, 2018).

- China: economic outlook

According to Kapur (2017), available economic indicators suggest the economy continued to grow at the beginning of the year. Strong import growth in January 2018 indicates that domestic demand remains spirited, while healthy global demand boosts exports and activity in the manufacturing sector (Cia, 2018). Data for January and February 2018 was highly distorted by the Lunar New Year holidays. Because of China's healthy growth momentum and rising confidence about the state of the economy, the Yuan (the basic monetary unit of the People's Republic of China) has strengthened sharply in recent weeks (Cia, 2018). With the economy sailing smoothly, the country held the annual National People's Congress in early March 2018, in which the main policies and economic targets were consented to (Cia, 2018). In light of 2017's strong growth, the government was likely to leave the growth target unchanged from 2016's 6.5% (Cia, 2018).

- China: economic growth

Focus Economics (2018), warns that Chinese economic growth would be moderate, mostly due to slightly weaker domestic demand as authorities continue enforcing financial deleveraging via tighter financial regulations. The deceleration will only be gradual and managed by the government. Focus economics panellists forecast that the economy would grow by 6.5% in 2018 and by 6.3% in 2019 (Cia, 2018). Table 2.7 shows the Chinese economic data from 2012 to 2017.

Table 2.7: China: economic data

	2012	2013	2014	2015	2016	2017
Population (million)	1,354	1,361	1,368	1,375	1,383	1,390
GDP per capita (USD)	6,333	7,124	7,662	7,948	8,109	8,806
GDP (USD bn)	8,575	9,694	10,480	10,925	11,212	12,241
Economic growth (GDP, annual variation in %)	7.9	7.8	7.3	6.9	6.7	6.9
Consumption (annual variation in %)	9.1	7.3	7.7	7.5	7.3	–
Investment (annual variation in %)	20.6	19.6	15.7	10.0	8.1	–
Industrial production (annual variation in %)	10.0	9.7	8.3	6.1	6.0	6.6
Retail sales (annual variation in %)	14.3	13.1	12.0	10.7	10.4	10.3
Unemployment rate	4.1	4.1	4.1	4.1	4.0	3.9

Fiscal balance (% of GDP)	-1.6	-1.9	-1.8	-3.4	-3.8	-3.7
Public debt (% of GDP)	14.4	14.6	14.9	15.5	16.1	16.3
Money (annual variation in %)	13.8	13.6	12.2	13.3	11.3	8.1
Inflation rate (CPI, annual variation in %, eop)	2.5	2.5	1.5	1.6	2.1	1.8
Inflation rate (CPI, annual variation in %)	2.6	2.6	2.0	1.4	2.0	1.6
Inflation (PPI, annual variation in %)	-1.7	-1.9	-1.9	-5.2	-1.3	6.3
Policy interest rate (%)	6.00	6.00	5.60	4.35	4.35	4.35
Stock market (annual variation in %)	3.2	-6.7	52.9	9.4	-12.3	6.6
Exchange rate (vs USD)	6.23	6.05	6.21	6.49	6.95	6.51
Exchange rate (vs USD, aop)	6.31	6.15	6.16	6.28	6.64	6.76
Current account (% of GDP)	2.5	1.5	2.3	2.8	1.8	1.3
Current account balance (USD bn)	215	148	236	304	196	165
Trade balance (USD billion)	230	258	383	591	510	419
Exports (USD billion)	2,049	2,209	2,342	2,272	2,097	2,263
Imports (USD billion)	1,819	1,952	1,959	1,681	1,587	1,844
Exports (annual variation in %)	8.0	7.8	6.0	-3.0	-7.7	7.9
Imports (annual variation in %)	4.3	7.3	0.4	-14.2	-5.6	16.1
International reserves (USD)	3,312	3,821	3,843	3,330	3,011	3,236
External debt (% of GDP)	8.6	8.9	8.5	13.0	12.7	14.0

Source: Adapted from Focus Economics (2018)

2.7.4.5. South Africa

- South Africa: background and economy overview

According to the African Institute (AI) (2018), Dutch traders landed at the southern tip of modern-day South Africa in 1652 and established a stopover point on the spice route between the Netherlands and the Far East, founding the city of Cape Town. After the British seized the Cape of Good Hope area in 1806, many of the Dutch settlers (Afrikaners, called Boers (farmers) by the British) trekked north to start their own republics, Transvaal and Orange Free State (AI, 2018). The discovery of diamonds (1867) and gold (1886) prompted wealth creation and immigration, and intensified the suppression of the native inhabitants (Cia, 2018). The Afrikaners resisted British encroachments, but were defeated in the South African Anglo-Boer War (1899–1902). However, the British and the Afrikaners ruled together under the Union of South Africa beginning

in 1910. The country became a republic in 1961 after a whites-only referendum (AI, 2018). In 1948, the Afrikaner-dominated National Party (NP) was voted into power and instituted a policy of apartheid, the separate development of the races, which favoured the white minority at the expense of the black majority (AI, 2018). The African National Congress (ANC) led the opposition to apartheid and many top ANC leaders, such as Nelson Mandela, spent decades in South African prisons. Internal protests and uprising, along with boycotts by some Western nations and institutions, led to the regime's eventual willingness to negotiate a peaceful transition to democratic rule (AI, 2018).

The first multi-racial elections in 1994 following the end of apartheid ushered in majority rule under an ANC-led government. South Africa has since struggled to address apartheid-era imbalances in decent housing, education, and health care (AI, 2018). ANC infighting came to a head in 2008 when President Thabo Mbeki was recalled by Parliament and Deputy President Kgalema Motlanthe, succeeded him as interim president. Jacob Zuma became president after the ANC won general elections in 2009 and was re-elected in 2014 (AI, 2018). His government was beleaguered by numerous scandals, leading to gains by opposition parties at the municipal level in 2016.

- South Africa: economic overview

According to AI (2018), South Africa is a middle-income emerging market with an abundant supply of natural resources, well-developed financial, legal, communications, energy, and transport sectors, and a stock exchange that is the largest in Africa and among the top 20 in the world.

Economic growth has decelerated in recent years, slowing to an estimated 0.7% in 2017 (AI, 2018). Unemployment, poverty, and inequality are among the highest in the world and remain challenges. Official unemployment is roughly 27% of the workforce and runs significantly higher among black youth (AI, 2018). Even though the modern infrastructure in the country supports a relatively efficient distribution of goods to major urban centres throughout the region, unstable electricity supplies hinder growth. Eskom, the state-run power company, is in the process of building three new power stations and is installing new power demand management programmes to improve power grid reliability, but has been beset by accusations of mismanagement and corruption and faces an increasingly high debt burden (AI, 2018).

South African economic policy has focused on controlling inflation while empowering a broader economic base. However, the country faces structural constraints that also limit economic growth, such as skills shortages, declining global competitiveness, and frequent work stoppages due to strike action (AI, 2018). The government faces growing pressure from urban populations to improve basic service delivery to low-income areas, to increase job growth, and to provide university-level education at affordable prices. Political infighting in the ANC and the instability of the rand risk economic growth. International investors are concerned about the long-term economic stability of the country. In late 2016, most major international credit ratings agencies downgraded the South African international debt to junk bond status (AI, 2018).

- South Africa: economic outlook

According to AI (2018), Jacob Zuma's presidency ended abruptly when he resigned from his nearly decade-long position on 14 February 2018. His resignation capped a series of events that began after the deputy president, Cyril Ramaphosa, was elected leader of the ANC in December 2017. Ramaphosa was sworn in as president on 15 February 2018 and inherited an unstable economy, despite some encouraging signs. In Q4 2018, higher mining production propelled a modest recovery in manufacturing output in year-on-year terms (AI, 2018). The unemployment rate declined from the Q3 multi-year high, but remains high at 26.7%. Leading indicators such as the manufacturing Purchasing Managers Index (PMI) and the Sacci Business Confidence index improved in January 2018, but remain at low levels, highlighting the many challenges affecting the private sector (Cia, 2018). On 21 February 2019, the government budget speech unveiled its fiscal plan for the year. Rating agency Moody's has kept the South African credit ratings unchanged, but revised the outlook of the country to stable from negative (AI, 2018). A credit downgrade would have put severe pressure on the rand and likely determine if the South African emergent economic recovery observed since the second half of 2017, is still likely to happen.

- South Africa: economic growth

The economy was expected to recover moderately in 2018 and 2019 on the back of higher prices for commodities (Cia, 2018). Nevertheless, growth will remain constrained if structural imbalances in the economy are not addressed. Focus Economics panellists expect the economy

to grow by 1.5% in 2018 and 1.8% in 2019. Table 2.8 shows the South African economic data from 2012 to 2017.

Table 2.8: South Africa: economic data

	2012	2013	2014	2015	2016	2017
Population (million)	52.4	53.2	54.1	55.0	55.9	56.5
GDP per capita (USD)	7,599	6,704	6,621	6,065	5,299	6,281
GDP (USD bn)	398	357	358	334	296	355
Economic growth (GDP, annual variation in %)	2.2	2.5	1.7	1.3	0.3	1.3
Consumption (annual variation in %)	3.7	2.0	0.7	1.7	0.8	2.2
Investment (annual variation in %)	2.6	7.2	1.7	2.3	-3.9	0.4
Industrial production (annual variation in %)	2.2	1.3	0.1	0.0	0.7	-0.5
Unemployment rate	24.9	24.7	25.1	25.4	26.7	27.5
Fiscal balance (% of GDP)	-4.5	-4.1	-3.7	-3.6	-3.3	-3.5
Public debt (% of GDP)	41.0	44.1	47.0	49.3	51.7	53.0
Inflation rate (CPI, annual variation in %, eop)	5.7	5.4	5.3	5.3	6.8	4.7
Inflation rate (CPI, annual variation in %)	5.6	5.8	6.1	4.6	6.3	5.3
Policy interest rate (%)	5.00	5.00	5.75	6.25	7.00	6.75
Exchange rate (vs USD)	8.48	10.47	11.57	15.50	13.68	12.38
Exchange rate (vs USD, aop)	8.21	9.65	10.85	12.78	14.70	13.31
Current account (% of GDP)	-5.1	-5.9	-5.3	-4.4	-3.3	-2.5
Current account balance (USD bn)	-20.4	-21.0	-19.0	-14.7	-9.7	-8.7
Trade balance (USD billion)	-4.6	-7.0	-7.7	-4.2	1.7	6.0
Exports (USD billion)	99.9	93.6	94.1	85.5	76.8	90.5
Imports (USD billion)	105	101	102	89.6	75.2	84.5
Exports (annual variation in %)	-14.3	-6.3	0.6	-9.2	-10.1	18.7
Imports (annual variation in %)	-5.0	-3.8	1.3	-12.0	-16.1	12.5
International reserves (USD)	44.1	44.8	44.3	41.8	42.7	45.3
External debt (% of GDP)	35.6	38.3	40.5	37.2	48.2	48.8

Source: Adapted from Focus Economics (2018)

This section focused on the backgrounds and overview of BRICS countries which South Africa is a member of since 2010. The overview was limited to the background of the emerging country, the economic overview, the economic outlook, the economic growth and the economic data of the country in question. The section aimed at giving a potential investor a thorough understanding of how different emerging markets are structured and signs of how the economic future of these countries is likely to be in the next couple of years. The section indicates that the BRICS countries are volatile and some of the trends cannot be confirmed with certainty as movement in other countries especially developed markets have a direct impact on the emerging markets. For example, countries like Brazil and China, which benefit from the US consumer and corporate investment, should hope for a stronger US economy. According to the World Bank, a 1% increase in US GDP in any given year translates into an additional 0.6% growth rate for emerging markets. Table 2.9 below seeks to give an investor how the BRICS countries 2023 outlook is projected. The table compares the countries current (2019) economic ranking in the world and the 2023 projections (Cia, 2019).

Table 2.9: BRICS projections

Emerging Market (BRICS)	2019 World ranking per economy	2023 Projected world ranking per economy	2019 GDP (Nominal) (Billions of $)	2023 Projected GDP (Nominal) (Billions of $)
Brazil	9	9	1,929.71	2,351
Russia	12	12	1,649.21	1,818
India	5	5	2,957.72	4,330
China	2	2	14,172.20	19,581
South Africa	31	36	385.53	456.4

Source: Adapted from Focus Economics (2018)

This ranking is based on projections by the IMF outlook October 2018 for the years 2019 and 2023 (Cia, 2018). In 2019, the top ten countries in nominal terms would be US, China, Japan, Germany, India, France, United Kingdom, Italy, Brazil and Canada (Cia, 2018). In PPP terms, the top ten countries would be China, United States, India, Japan, Germany, Russia, Indonesia, Brazil, United Kingdom and France (Cia, 2018). Among the top ten, eight countries are common by both methods. The other two (Italy and Canada) are in the top ten on a nominal basis, while Russia and Indonesia are in the top ten on a PPP basis (Cia, 2018). The projections indicate a positive outlook for emerging markets, especially BRICS countries, as four out of the five are projected to be in the top ten between 2019 and 2023. The other positive aspect is that four

BRICS countries are expected to maintain their current ranking in 2023, with only South Africa expected to drop to 36 from 31 (Cia, 2018).

2.8. Conclusion

Chapter two of the study focused on emerging markets as a key component of the study. The chapter focused on defining and characterising emerging markets. The characteristics revealed the different types of emerging markets and the classification thereof based on the size of the GDP, the financial soundness and political stability. The key characteristics of emerging markets are summarised in the table below; each characteristic was tested in BRICS countries to determine its relevance and to confirm if all BRICS countries share similar characteristics as discussed by various authors. The summary and the relevance in each country is tabled below.

Table 2.10: The key characteristics of emerging markets

Characteristics of emerging markets	**Brazil**	**Russia**	**India**	**China**	**South Africa**
A lower-than-average per capita income	√	√	√	√	√
A well-developed system in place to allow FDI	√	√	√	√	√
Rapid growth	√	√	√	√	√
High volatility	√	√	√	√	√
The growth requires a lot of investment capital	√	√	√	√	√
Higher than average return for investors	√	√	√	√	√

The difference between a developed, emerging and frontier market were also incorporated in the chapter as well as the reasons why investors invest in emerging markets. This chapter also focused on risk and risk exposure in emerging markets and defined risk and risk exposure from an emerging market point of view. Risk was defined as an adverse deviation from a desired outcome, indicating a situation in which an uncertainty and an exposure to losses exist.

This chapter also covered activities taking place in BRICS countries including the determinants of emerging markets capital flow, as well as the analysis of common challenges in the BRICS countries. The last section dealt with the BRICS countries in detail, looking at the history of each country, the overview of different sectors, mainly the economic sector, and the trends in the past few years. The purpose of this chapter was to give an investor a thorough understanding of emerging markets. The next chapter will focus on risk management in emerging markets.

CHAPTER 3: RISK MANAGEMENT IN EMERGING MARKETS

3.1. Introduction

The previous chapter dealt with the characteristics of emerging markets, the difference between a developed, an emerging and a frontier market, the reasons investors invest in emerging markets, as well as the risk and risk exposures in emerging markets. This chapter focuses on risk management in emerging markets by looking at the definition of risk management by various authors, followed by a discussion of the rules of risk management. This is then followed by the breakdown of risk management processes and concludes with a discussion of risk types in emerging markets.

3.2. Risk management

According to Kendrick (2015), risk management is an increasingly important business driver and stakeholders have become much more concerned about risk. In addition, Hopkin (2017) states that risk may be a driver of strategic decisions but may be a cause of uncertainty in the organisation. Therefore, an enterprise-wide approach to risk management should enable an organisation to consider the potential effect of all types of risks on all processes, activities, stakeholders, products and services (Kendrick, 2015). Once the effect of all risk types has been considered, a comprehensive approach can be implemented which could result in an organisation benefiting from what is often referred to as the upside of risk (Hopkin, 2017).

The upside of risk is common across all types of organisations (Jourdan & Michaelson, 2009). Therefore, there is a need to understand the risks to be considered when seeking to achieve objectives and attain the desired level of reward. Organisations need to understand the overall level of risk rooted in their processes and activities (Jourdan & Michaelson, 2009). It is important for organisations to recognise and prioritise significant risks and identify the weakest critical controls. When setting out to improve risk management performance, the expected benefits of the risk management initiative should be established in advance (Vaughan & Vaughan 2013). The outputs from successful risk management include compliance, assurance and enhanced decision-making. These outputs will improve the efficiency of operations, the effectiveness of tactics (change projects) and the efficacy of the strategy of the organisation.

Events in the world such as terrorism, severe weather conditions, changes in political leadership and the 2008 global financial crisis have put risk into a higher profile (Jourdan & Michaelson, 2009). The core theme of this study was to develop a risk analysis framework for investors in emerging markets. Therefore, it was necessary to understand the meaning of risk management by looking at various definitions, the rules of risk management and the risk management processes to apply when investing in emerging markets. The next section focuses on the definitions of risk management.

3.2.1. Defining risk management

The definition of risk management is critical for investors, as they need to understand it, so that they can implement it for the success of their investments in emerging markets. Various sources offer the following definitions for risk management.

- Damodaran (2008) defines risk management as the employment of financial analysis and trading practices to reduce and or control exposure to various types of risk.
- Risk management is a systematic approach used to identify, evaluate and reduce or eliminate the possibility of an unfavourable deviation from the expected outcome (Kendrick, 2015).
- According to Harmony (2009), risk management is the identification and acceptance or offsetting of the risks threatening the profitability or existence of an organisation. Regarding foreign exchange, it involves consideration of market, sovereign, country, transfer, delivery, credit and counterparty risk.
- According to Jourdan and Michaelson (2009), risk management is defined as the identification, analysis and economic control of the risks that threaten the assets or earning capacity of an organisation.
- Valsamakis, Vivian and Du Toit (2010), see risk management as the art and science of managing risks and returns, and define it as a managerial function aimed at protecting the organisation, its people, assets and profits against the consequences (adverse) of pure risk, more particularly aimed at reducing the severity and variability of losses. Pure risk is defined as risk that only has the possibility of a loss.
- According to Vaughan and Vaughan (2013), risk management is a scientific approach to dealing with risks by anticipating possible accidental losses, and designing and implementing procedures that minimise the occurrence of loss or financial impact of the losses that occur.

- Hopkin (2017) defines risk management as activities undertaken to ensure the best possible results and or achieve the most predictable consequences.

Based on the above, it is clear that there are many views on the term risk management. However, for this study and from the aforementioned definitions, risk management can be regarded as the identification, assessment and prioritisation of risks. This is then followed by a harmonised and cost-effective use of resources to minimise, monitor and control the probability and or effect of unfortunate events or to maximise the realisation of opportunities. A logical next step is to deal with the rules for risk management relevant during an investment decision process.

3.2.2. Rules of risk management

In order to ensure an effective risk management process during investment decisions, it is necessary to identify the rules. Therefore, this section deals with these rules to ensure effective investment decisions.

The rules of risk management have increased the attention dedicated to formalising the principles and techniques in order to provide guidelines in the risk management decision-making process. According to Rausand (2011), the development of the risk management field has set the following rules of risk management for investors:

- investors should not risk more than what they can afford to lose;
- investors need to consider the odds (expected probability); and
- investors should not risk a lot for low returns.

Vaughan and Vaughan (2013) see the rules as common-sense principles applied to risk situations or during an investment decision process. These rules provide risk management decisions with a basic framework with which to work. However, these rules are sometimes misunderstood and often neglected. According to Disparte (2016), investors may suffer a loss due to engaging in emerging market investments without considering the rules of risk management. Therefore, proper planning and research can help investors understand and analyse the common and specific risks connected to emerging market investments. According to Lewis (2012), to avoid suffering loss and manage risks and expectations, investors can use, amongst other things, a policy statement to cultivate and realise their emerging market

aspirations by containing the risk exposures effectively. A policy statement is a guideline used by investors to define their investment objectives and risk appetite, and to outline the acceptable risks, objectives and constraints (Lewis, 2012). In addition, a policy statement could also serve as a tool to ensure that investors act within specified objectives and constraints (Lewis, 2012). Therefore, it is vital that an investor bases all investment decisions on a policy statement, as this would add value to making effective investment decisions.

It can, therefore, be concluded that the rules of risk management should be applied across all risks for the success of an investment. Risks differ in terms of nature and characteristics, and it is therefore important to consider risks separately. However, to make a sound investment decision, it is critical for an investor to identify all the risks related to a specific asset being considered as a potential investment (Thornton, 2012). Therefore, a structured risk management process should be adopted.

3.2.3. Risk management process

According to Young (2018), the risk management process can be defined as the systematic application of risk policies, procedures and practices by identifying, analysing, controlling, financing and monitoring risks. Therefore, it is important for investors to consider the risk management process in detail in order to manage risks. The risk management process will determine the steps to be followed when managing risks.

According to Rausand (2011), risk management represents a scientific approach to dealing with risks, implying that the process involves a logical sequence of six steps, namely determining objectives, identifying risks, evaluating the risks, considering alternatives and selecting the risk treatment device, implementing a decision, and evaluating and reviewing. According to Patton (2014), the risk management process can be divided into four steps: identify risk exposure, quantify exposure, evaluate alternative actions and manage risk. According to Valsamakis *et al.* (2010), a risk management process consists of the following four steps: risk identification, risk analysis and assessment, risk control and risk financing. According to Hopkin (2013), risk management consists of five components: risk agenda, risk assessment, risk response, risk communication, and risk governance. Although there are a number of steps or components for a risk management process, for the purposes of this study, the following common components can be identified:

- risk identification;
- risk analysis;
- risk control;
- risk financing; and
- risk monitoring.

These components are dealt with in more detail in order to determine a risk management process for investors in emerging markets.

3.2.3.1. Risk identification

According to Hopkin (2013), risk identification requires of the organisation to get a clear understanding of the reasons for risk management activities, along with the main features of these activities. Young (2018) says that risk identification refers to the need for an investor to define and understand the nature of the risks under consideration. It furthermore acknowledges that each investment initiative is a possible exposure to risk and that it has an impact on the overall risk profile of an investor. Risk identification is regarded as the first step in a risk management process (Patton, 2014). According to Valsamakis *et al*. (2010), identifying the risk and the sources of risk must be undertaken before any attention can be focused on the management thereof. Additionally, Rausand (2011) states that investors must be aware of the risks to which they are exposed before deciding how to mitigate such risks.

According to Patton (2014), it is difficult to generalise the risks for investors, because different conditions can generate divergent risks. Valsamakis *et al*. (2010) contend that risk identification consists of two related activities. Firstly, risks that affect the investor must be identified. Identification of risk is usually accompanied by both hazard identification and exposure identification. Hazards are activities or conditions that create or increase the likelihood of the loss (or gain) amount. An exposure to loss (or gain) would be the object, investment, individual or situation subject to loss (or gain).

The second activity is analysis. It is not enough to know that hazards, risk factors and exposures to loss or gain exist. An investor must understand the nature of these hazards, risk factors and exposures, how they come to exist, and how they interact to result in loss or gain (Valsamakis *et al*., 2010). Therefore, after the identification step, it is necessary to analyse the risk exposure.

3.2.3.2. Risk analysis

According to Valsamakis *et al.* (2010), risk analysis is the second most important step in the overall risk management process. Risk analysis, along with identifying possible sources of loss, represents the foundation for planning, organising and managing the risk to reduce the impact of possible losses (Patton, 2014). According to Rausand (2011), risk analysis entails quantifying the risk and determining its possible impact on an investor. Disparte (2016) refers to the process of risk analysis as the analysis of loss exposures, where attention is focused on how frequent and severe accidents are likely to be and how they may interfere with the business objectives of emerging market investments. According to Disparte (2016), risk analysis involves the following two aspects.

- The analysis entails determining loss frequency and loss severity, which will provide, among other things, the two significant measures of expected average loss and maximum possible loss. Since the risk, the frequency and severity of losses are all constantly changing, risk analysis becomes a continuous process.
- An analysis of an investor's financial strength, which entails assessing the risk-retention capacity of the business. The objective is to establish what the impact of an identified risk might be in relation to an investor's financial strength (Valsamakis *et al*., 2010).

According to Rausand (2011), risk analysis involves measuring the potential size of the loss and the probability that the loss is likely to occur, and then providing some ranking in order of priorities. Some risks will demand attention ahead of others, and in most instances, there will be a number of risk exposures that are equally demanding because of the severity of the possible loss (Patton, 2014). All exposures that involve a loss that would represent a financial catastrophe should be classified under the same category, and no distinction is made among risks in this class (Disparte, 2016). It does not matter whether bankruptcy results from a liability loss, a flood or an uninsured fire loss, if the net effect is the same. Therefore, rather than ranking exposures in some numerical order of importance, it is more appropriate to rank them according to general classifications such as critical, important and unimportant (Rausand, 2011). A criterion

that may be used to establish a priority ranking that focuses on the potential financial impact of the loss, is explained in Table 3.1.

Table 3.1: Ranking exposure in order of importance

Rank	**Degree of exposure**
Critical risks	Emerging markets exposure that could result in bankruptcy or closing down operations.
Important risks	Emerging markets exposures in which possible losses will not result in bankruptcy, but which will require the business to borrow in order to continue operating.
Unimportant risks	Emerging markets exposures in which possible losses can be covered by the existing assets or current income of the business without imposing undue financial strain.

Source: Adapted from Godi (2013)

Ranking exposure in order of importance will help investors to determine the amount of financial loss that might result from these exposures and assessing the ability to absorb such losses with the aim of making a profit.

Risk analysis was defined as a measurement of possible loss (Valsamakis *et al.,* 2010). The measurement of possible loss is an evaluation of the likelihood and extent (magnitude) of a risk (Damodaran, 2008). The evaluation of the magnitude of risk usually involves developing a set of risk factors that are observed and measured to detect the presence of risk. This activity entails the assessment and measurement of the identified risk exposures (Disparte, 2016).

In addition, Damodaran (2008) indicates that risk measurement also serves as a basis for risk control mechanisms. The measurement of risk is important for investors, as planning ahead before embracing the emerging markets arena will not only ensure that opportunities that exist are optimally utilised, but also that concomitant pitfalls will be avoided (Kaplan & Mikes, 2012). Whether an investor is simply choosing a jurisdiction for investment or setting up a company or trust, investing abroad is not without pitfalls. According to Rausand (2011), it is intuitively obvious that risk is greater in some situations than in others. It would seem that the most accepted meaning of a degree of risk is related to the likelihood of occurrence. Events with a

high likelihood of loss are considered to be riskier than those with low likelihood (Kaplan & Mikes, 2012).

According to Brigham and Houston (2018), the expectation is that the predicted number of losses will occur. In the case of aggregate exposures, the degree of risk is not the probability of a single occurrence or loss. It is the probability of some outcome different from that predicted or expected (Daniels & Van Hoose, 2014). In addition, Brigham and Houston (2018) indicate that the probability that a loss may occur and the potential severity of the loss if it does occur, contribute to the intensity of a potential investor's reaction to risk. It seems, therefore, that a measurement of risk should recognise the magnitude of the potential loss. Although it may be difficult to relate the size of the potential loss and the probability of that loss in the measurement of risk, the concept of expected value may be used to relate these two facets of a given risk situation (Brigham & Houston, 2018).

According to Godi (2013), the expected value of a loss in a given situation is the probability of that loss, multiplied by the amount of the potential loss. If the amount of risk is R10.00 and the probability of loss is 0.10, the expected value of the loss is 0.01, which translates to an expected value of R1.00. The calculation is summarised in Table 3.2 below.

Table 3.2: Calculation of expected value

Scenario 1	Scenario 2
In this case, the investor invests R10.00 in Brazil and the probability of loss is 10%	Here, the investor invests R1 000.00 in Russia and the probability of loss is 10%
Formula: Expected value *(EV)* = Probability of loss (p) x invested amount *(A).*	Formula: Expected value (*EV)* = Probability of loss *(p)* x invested amount *(A).*
EV = p x A: R10 x 10/100 = R1	*EV= p x A*: R1000 x 10/100 = R100
The investor could lose R1 in Brazil.	The investor could lose R100 in Russia.

Source: Adapted from Godi (2013)

The calculations confirm that there is more risk involved when a big amount is invested compared to a small amount, even though the loss probability is the same. After measuring the possible risk and loss, investors need to decide which investment to invest in, taking into account the expected returns. These could be followed by taking appropriate steps to mitigate the possible loss on the investments. Therefore, the practice of investing funds and managing

portfolios should focus primarily on the probability of loss, thus managing the risks than focusing on the returns (Brigham & Houston, 2018).

According to Kaplan and Mikes (2012), investors need to ensure that other financial obligations, such as bonds and insurance, are satisfied before taking on an investment. Investors must become aware of the long-term implications of this very important investment decision. In the case of individual investors, these include assessing the household financial situation, identifying needs and objectives over the short, medium and long term. Thereafter, an investment strategy can be put in place (Brigham & Houston, 2018). A lack of insurance coverage can ruin even the best-planned investment plan. It is important to have cash reserves to help meet these occasions. In addition to providing a safety cushion, cash reserves reduce the prospect of being forced to sell investments at inconvenient times to cover unexpected losses (Daniels & Van Hoose, 2014).

It can, therefore, be deduced that risk measurement helps investors quantify the probabilities of loss should unfavourable conditions occur. Furthermore, risk comprises of two measurable aspects that need to be controlled for the success of an investment: the impact or effect of the loss (intensity) and the probability or likelihood of the loss (frequency). This leads to the next component of a risk management process, namely risk control.

3.2.3.3. Risk control

After analysing the risks, the next step is to minimise the risk through the design and implementation of a risk management control programme (Ale, 2009). According to Hopkin (2013), such programmes would aim to achieve the following goals:

- reduction of the magnitude of the exposure;
- reduction of the frequency of the loss-producing events;
- dealing with loss-producing events; and
- recovery from loss-producing events.

According to Valsamakis *et al*. (2010), risk control programmes may be referred to as practical, in the sense that they are conducted at the sources of risk. According to Vaughan and Vaughan (2013), risk control involves applying techniques to reduce the probability of loss. The aim of risk control is to eliminate or minimise the potential effect of the identified risk exposures (Ale, 2009).

Risk is repulsive. Therefore, investors deal with risk through avoidance, reduction, retention and transfer (Valsamakis *et al*., 2010). In some cases, two of these approaches (transfer and retention) can be combined to create the fifth technique, called risk sharing (Salvatore, 2015).

In addition, Salvatore (2015) warns that this phase of the risk management process is primarily a predicament in decision-making, since it entails deciding which of the techniques available should be used in dealing with each risk. The extent to which an investor must make this decision, varies depending on different situations and circumstances (Hopkin, 2013). To determine which technique to use in dealing with a given risk, the investor or risk manager should consider the size of the potential loss, the probability of the loss and the resources that would be available to reduce the possible loss. The benefits and costs involved in each approach are evaluated and then, based on the best information available and under the guidance of the risk management policy, an informed decision can be made (Vaughan & Vaughan, 2013). The following are risk management techniques that can be applied when controlling the risk.

- Risk avoidance

According to Hopkin (2013), a risk may be avoided by not accepting or entering into hazardous events. This method has severe limitations because such a choice is not always possible for investors. If such a choice is available, it may require giving up some important advantages. According to Gillette (2016), risk is avoided when the investor refuses to accept it even for an instant, and thus prevents the exposure from occurring. This is accompanied by not engaging in action that gives rise to risk. If an investor cannot bear losing assets, then he or she should not invest. For example, if an investor wants to avoid the risks associated with owning property, then they should lease or rent it, instead of purchasing.

Avoiding risk is one way of dealing with risk itself, but this is considered to be a negative rather than a positive technique (Salvatore, 2015). This approach is consequently an unsatisfactory approach to dealing with many risks. If risk avoidance was used extensively, the business will have been deprived of many profit opportunities and would probably not be able to achieve its objectives (Gillette, 2016). The next section focuses on risk reduction as a risk management technique that can be applied when controlling the risk.

- Risk reduction

According to Wahlström (2015), risk can be reduced through loss prevention and control. Commonly used practices include diversification, insurance, hedging or forward contracting, maintaining cash reserves and maintaining flexibility in the emerging markets operation (Hopkin, 2013).

Certain techniques are designed to prevent the occurrence of the loss, whereas others, such as future contracts, are intended to control the severity of the loss should it happen (Wahlström, 2015). According to Hopkin (2013), loss prevention is the most desirable way of dealing with risk. If the possibility of loss could be completely eliminated, then risk would also be eliminated. However, loss prevention can also be viewed as an inadequate approach to dealing with risk, as no matter how hard investors may try, it is impossible to avoid all losses (Wahlström, 2015). In addition, in some cases, the loss prevention may cost more than the losses themselves. For example, insurance could be more expensive than the actual losses suffered. The next section focuses on risk retention as a risk management technique that can be applied when controlling the risk.

- Risk retention

According to Chapman (2013), risk retention is perhaps the most common method of dealing with risk. When positive action is not taken to avoid, reduce or transfer the risk, the possibility of loss involved in that risk is retained, since investors face a number of risks exposures. According to Vaughan and Vaughan (2013), risk retention may be conscious or unconscious. Conscious risk retention takes place when one perceives, but does not transfer or reduce risk. When the risk is not recognised, it is unconsciously retained. In this case, the investor unknowingly remains with the financial consequences of the possible loss. Additionally, Vaughan and Vaughan (2013) indicate that risk retention may also be voluntary or involuntary. Voluntary risk retention is the recognition that the risk exists, and an implicit agreement to shoulder the losses involved. The decision to retain risks voluntarily is usually made because there are no better alternatives.

Involuntary risk retention takes place when risks are unconsciously retained and also when the risk cannot be avoided, transferred or reduced (Chapman, 2013). According to Rausand (2011),

risk retention is a legitimate method of dealing with risk. Every investor should decide which risks to retain and which to avoid or transfer, on the basis of margin for contingencies or the ability to bear the loss.

According to Rausand (2011), a general rule is that risks that should be retained are those that lead to relatively small certain losses and high profits. Apostolik and Donohue (2015) warn that the decision to retain certain risks may need to be accomplished by a reserve fund. If the decision is made to include the accumulation of a fund, the administrative procedure must be inaugurated to implement the decision. If the decision is made to use loss prevention to deal with a particular risk, the proper loss prevention programme must be designed and implemented. The decision to transfer the risk through insurance must be followed by the selection of an insurer and negotiations with the insurance company. Risk transfer as a risk control decision technique is discussed in the next section.

- Risk transfer

According to Apostolik and Donohue (2015), risk may be transferred from one individual to another who is willing to bear the risk. When dealing with risks, hedging is an example of a transfer technique. According to Valsamakis *et al*. (2010), this is a method accomplished by buying and selling for future delivery, whereby dealers and processors protect themselves against a decline or increase in the market price between the time they buy a product and the time they sell it. According to Brigham and Houston (2018), hedging is the purchase or sale of one security for the purposes of offsetting risks taken in another.

According to Crouhy, Galai and Mark (2014), hedging consists of the simultaneous purchase or sale for immediate delivery and the purchase or sale for future delivery, such as the sale of futures in the wheat market at the same time that a purchase is made in the spot market. Risks are often transferred or shifted through contracts where an agreement is reached that one individual assumes another's possibility of loss (Apostolik & Donohue, 2015). For example, a tenant may agree under the terms of a lease to pay any judgements against the property owner, which arise out of the use of the premises. Contractual transfers of risk are quite common in the construction industry, but are also used between manufacturers and retailers with respect to the product liability exposure (Crouhy *et al.,* 2014). Insurance is another way of transferring risk. According to Brigham and Houston (2018), risk insurance as a risk control technique is when, for

example, an organisation pays a premium to a second party, who is then contracted to indemnify the first party up to a certain limit for the specified loss that may occur.

According to Apostolik and Donohue (2015), risk transfer is a strategy that involves the contractual shifting of a pure risk from one party to another. An example is the purchase of an insurance policy, by which a specified risk of loss is passed from the policyholder to the insurer. When done effectively, risk transfer allocates risk equitably, placing responsibility for risk on designated parties consistent with their ability to control and insure against that risk. Risk can also be transferred by sharing part of the risk with other investors. This is according to Askari, Iqbal, Krichene and Mirakhor (2012), who indicate that risk sharing is a special case of risk transfer. However, risk sharing is also a form of retention.

When sharing risks, the possibility of loss is transferred from an individual to a group. However, sharing is also a form of retention in which the risks transferred to the group are retained, along with the risks of the other members of the group (Askari *et al.*, 2012). Individuals and organisations share risk in a number of ways. One example is through the establishment of a corporation (Crouhy *et al.,* 2014). Under this form of business, the investments of a large number of persons are pooled. According to Rao (2015), a number of investors may pool their capital, each bearing only a portion of the risk that the corporation may fail.

Insurance is another method designed to deal with risk through sharing, as one of the basic characteristics of insurance is the sharing of risk by members of a group. These techniques need to be applied cautiously, as investors' needs and risk exposure differ. Some techniques will apply more favourably under certain conditions than others. For example, a wealthy investor might choose to retain a larger portion of risk, while a less wealthy investor might opt to transfer or share some of the exposures. In conclusion, Valsamakis *et al.* (2010) and the Office of Government Commerce (OGC) (2010) highlight the responses to emerging market risk and general responses to risks in Tables 3.3 and 3.4 respectively.

Table 3.3: Responses to emerging market risks

Response	**Impact on risk**
Avoiding investing in emerging	Emerging market risks can be avoided by refraining from investing in emerging markets. The risk of losing capital in a stock market can, for example, be avoided by not investing in stock exchanges. Avoiding a risk is, unfortunately, rarely possible in the business

markets	environment.
Emerging markets acceptance	Emerging market risks are inherent to businesses that have investments in foreign countries. Trying to avoid risk would mean disinvesting from a particular industry. If the risk-return properties are acceptable, the risk associated with that industry or type of business needs to be accepted.
Emerging markets mitigation	Once risk is accepted, it should be mitigated. Emerging markets mitigation is aimed at lessening the impact of emerging market risks. Risk control techniques are those that focus on avoiding, preventing, reducing or otherwise controlling risks and uncertainties.

Source: Adapted from Valsamakis *et al.* (2010)

Table 3.4: Responses to risk

Risk response	**Description/example**	**Suitable for risk types (these are suggestions and not exhaustive)**
Avoid	Avoiding risk by changing the investment in some way to bypass the risk.	Some political risks, e.g. adverse public opinion. Some technical, operational or infrastructure risks, e.g. maintenance problems. Legal and regulatory risks, e.g. regulatory controls or licensing requirements.
Transfer	Transferring some or all the risk to a third party, e.g. insurance.	Some strategic or commercial risks, e.g. theft or insolvency, can be insured against. Environmental risks, e.g. natural disasters, storms or flooding may also be insured against. See 'risk insurance'.
Reduce	Action is taken to reduce either the likelihood of the risk occurring or the impact that it will have.	The most frequently used response to risk. The risk may be technical, operational or relate to infrastructure, e.g. negligence, performance failure, scope 'creep', unclear expectations. The risk may relate to the organisation, management or human factors, e.g. personality clashes, poor leadership, and poor staff selection.
Accept	Accepting risk, perhaps because there is a low impact or likelihood. A contingency plan will be identified should it occur.	Some political, legal and regulatory, and economic or financial risks may need to be accepted with a contingency plan in place, e.g. war and disorder, or exchange rate fluctuation.
Contingency	A plan is put in place to respond if the risk is realised.	Economic, financial, market, political, legal and regulatory risks. Arguably, all risks can and should have a contingency plan in place.

Source: Adapted from OGC (2010)

According to Hopkin (2013), the responses to risk highlight the importance of effective risk management for a successful investment in emerging markets. In this section, attention has

been given to the application of techniques to reduce the probability of loss or to minimise the potential effect of the identified risk exposures. It was deduced that investors control risk through avoidance, reduction, retention and transfer. The next section focuses on risk financing as another component of a risk management process.

3.2.3.4. Risk financing

According to Young (2018) and Valsamakis *et al.* (2010), risk financing entails the financial provision for losses that may occur. Investors, therefore, select the most efficient method of financially providing for the consequences of risk. According to Cummins and Mahul (2009), risk financing refers to the provision of sufficient funds to meet loss situations as they occur. Funding can be provided by various internal and external financial resources, insurance and risk-based pricing (Valsamakis *et al.,* 2010). Risk financing activities provide the means to reimburse losses that occur and to fund other programmes to reduce uncertainty and risk, or to enhance positive outcomes (Young, 2018). According to Hopkin (2013), under normal circumstances, some losses will occur despite risk control efforts. Therefore, the financing of risks can include measures such as purchasing insurance coverage, establishing a captive insurance subsidiary, or using letters of credit.

According to Cummins and Mahul (2009), when selecting the most efficient method of financially providing for the consequences of risk, the following choices become evident:

- the retention of risk under a deliberate self-funding plan;
- the risk transfer cost to third parties, through techniques such as insurance; and
- the combination of risks (diversifying or hedging) to obtain the benefit of greater certainty in predicting the loss occurrences using the law of large numbers (Chandra, 2012). This method can be used by businesses, individual investors and insurers. It has its limitations, however, since the scope of combination or diversification may be limited.

According to Cummins and Mahul (2009), the analysis of the advantages and cost of alternative methods and the selection of the most efficient method or technique are not the easiest tasks due to many factors to consider. Askari *et al.* (2012) mention that prudent risk retention is underpinned by relatively complex quantitative analyses aimed at determining the probable quantum of losses, which are to be self-financed. Another consideration in terms of risk financing, is whether to transfer a given risk to an insurance company (third party) or retain it. If

retained, an investor should determine the limit beyond which the risk should be transferred to a third party. According to Crouhy *et al.* (2014), risk control and risk financing activities are not always mutually exclusive. For example, banks are actively involved in credit and interest rate risk management activities (such as interest rate swaps) that might reasonably be seen as both risk financing and risk control. Risk control is defined by Ale (2009) as the application of techniques to reduce the probability of loss. Therefore, insurance by a third party can be regarded as both risk control and risk financing, as it is a provision for losses that may occur. The next component of a risk management process is risk monitoring.

3.2.3.5. Risk monitoring

Risk monitoring can be regarded as a component of a risk management process and according to Hopkins (2013), involves ensuring the effectiveness of the risk management systems and techniques. In addition, and according to Young (2018), risk monitoring ensures that operations are within the defined risk policies and procedures, and that all other activities of the risk management process are effective. According to Rao (2015), ongoing monitoring is an important aspect of any risk management process to ensure that the techniques used to retain risks are relevant under the current conditions. This view is supported by Frenkel, Hommel and Rudolf (2013), who mention that monitoring is a continuous process that forms an integrated part of the management of risk and it is important for two reasons. Firstly, a risk management process does not take place in a vacuum: things change, new risks arise, and old risks disappear. Secondly, mistakes are sometimes made, and monitoring the risk management programme permits the investor to review decisions and discover mistakes proactively. According to Rao (2015), in order to ensure an appropriate and timely response, an organisation should have a mechanism in place to allow the organisation to monitor its risks and controls. According to Young (2018), monitoring should establish a programme for the following reasons.

- Monitor the qualitative assessments and quantitative measurements of risk exposures.
- Assess the quality and appropriateness of mitigating actions, including the extent to which risks can be transferred.
- Ensure that adequate internal controls, processes and systems are in place to identify and address problems on a proactive basis.
- Ensure the optimum risk management process.
- Ensure that the cost of risk does not exceed the reward.
- Ensure efficient reporting of risk management information.
- Ensure the efficiency of risk management systems.
- Ensure the efficiency of the risk management strategy.

The continuous monitoring of risk is essential in order to ensure the quality of the risk management process and to ensure that changing circumstances do not alter risk management priorities (Rao, 2015). In conclusion, risk monitoring ensures that the investment plan stays on track and continues until the investment reaches maturity. This section focused on the risk monitoring as an important and final step of the risk management processes.

3.2.3.6. Conclusion

This section focused on different facets of risk management. Firstly, various definitions of risk management were discussed. Risk management was defined as the identification, assessment and prioritisation of risks. These were followed by a section focusing on the rules of risk management. The rules mainly focused on the principles applied to risk situations or during an investment decision process. The key conclusion was that a structured risk management process should be adopted when considering investing in emerging markets.

Thirdly, the risk management process, which aims to minimise risks, was considered and four risk management processes from different authors were compared and discussed. The processes and number of risk management steps differed from author to author. However, all the risk management steps sought to achieve the same results, which are identifying possible risks, evaluating and assessing the extent of loss, and controlling the loss by employing different techniques. The risk management processes lead to a choice of strategy to mitigate the risk, while constantly monitoring the relevance of the techniques used to mitigate such risks. Few risks remain constant, which necessitates an ongoing review of the exposures to ensure that management actions remain relevant. The components of a typical risk management process for investors in emerging markets can be summarised as follows.

- Risk identification refers to the process of compiling all the possible risks the investor can be exposed to, which necessitates the need for an investor to define and understand the nature of the risks.
- Risk analysis entails quantifying the risk and determining its possible impact on an investor. Risk analysis is concerned with assessing the probability and impact of individual risks, taking into account any interdependencies.
- Risk control refers to the method by which investors evaluate potential losses and take action to reduce or eliminate such threats. Risk control is a technique that utilises findings from the risk analysis and implementing changes to reduce risk in these areas. The chapter identified risk avoidance, risk reduction, risk retention and risk transfer as the techniques applied to control risk.
- Risk financing includes providing funds to cover the financial effect of unexpected losses experienced by an investor. The forms of risk financing could include risk transfer, funded retention by way of reserves and risk pooling. Furthermore, the financing of risks can include

measures such as the purchase of insurance coverage, the establishment of a captive insurance subsidiary, or the use of letters of credit.

- Risk monitoring ensures that operations are within the defined risk policies and procedures, and that all other activities of the risk management process are effective. It was deduced that ongoing monitoring is an important aspect of any risk management process to ensure that the techniques used to retain risks are relevant under the current conditions.

These risk management components should be applied from the beginning of an investment and followed through till the investment matures. Once the risk management processes are in place, a next step to structure a risk analysis framework is to identify the risk types, which will be discussed next.

3.3. Risk types facing emerging market investors

Most investors are debating the differences between risk types. Although some regard this debate as semantic, it is necessary clearly to define and analyse each risk type and the potential effect it has on emerging market investments. The understanding should allow investors to identify the risk proactively and manage it, thus protecting their investments. According to Chapman (2013), as well as Saunders and Cornett (2018), the following can be regarded as the major risk types that need to be analysed when considering an investment in emerging markets.

- Exchange rate risk.
- Country risk.
- Market risk.
- Inflation risk.
- Interest rate risk.
- Liquidity risk.
- Financial risk.
- Credit risk.
- Legal risk.
- Technology risk.

Each of these risks will be discussed in more detail in the ensuing sections, which will also highlight the interface and applicability of the risks in emerging market investments.

3.3.1. Exchange rate risk

Exchange rate risk is the uncertainty of returns for an investor who acquires securities denominated in a foreign currency (Salvatore, 2015). 'Currency risk' is also sometimes used to refer to this concept. For the purposes of this study, the term 'exchange rate risk' is used. According to Madura (2017), exchange rate risk is a form of risk that arises from the change in price or value of one currency against another currency. Exchange rate risk is defined as the risk that exchange rate changes can affect the value of an investor's assets and liabilities denominated in foreign currency (Saunders & Cornett, 2018). Whenever investors or companies have assets or business operations across national borders, they face exchange rate risk. As economic conditions, such as import and export change, exchange rates can change substantially. A decline in a currency value is often referred to as depreciation, while an increase is referred to as appreciation (Madura, 2017). Godi (2013) indicates that when the spot rates of a foreign currency at two specific points in time are compared, the spot rate at the more recent date is denoted as *S* and the spot rate at the earlier date is denoted as *St-1*. The percentage change in the value of the foreign currency is computed as follows:

$$\text{Per cent } \Delta \text{ in foreign currency value} = \frac{S - St\text{-}1}{St\text{-}1}$$

A positive percentage change means that the foreign currency has appreciated, while a negative percentage change designates that it has depreciated. Currency appreciation could be advantageous when emerging market investors are buying foreign assets or investments. However, when emerging market investors expropriate returns, a strong domestic currency can be disadvantageous, meaning the returns will be significantly lower compared to an expropriation when the currency is weak. Currency depreciation will yield the opposite result. The next section focuses on the risk factors to be considered by potential emerging market investors, mainly looking at the relationship between exchange rates, inflation and interest rates.

3.3.1.1. Risk factors of exchange rate risk

The likelihood of incurring exchange rate risk is becoming greater for investors who buy and sell assets around the world, as opposed to those who invest in assets within their own countries (Madura, 2017). For example, if money must be converted from South African rand into a

different currency such as the US dollar to make a certain investment, changes in the value of the South African rand relative to the US dollar will affect the total loss or gain on the investment when the money is converted back to South African rand. This risk usually affects businesses with operations in many countries, but it can also affect individual investors who make international investments (Saunders & Cornett, 2018). For example, a South African investor who buys Japanese stock denominated in Japanese yen, must consider not only the uncertainty of the return in Japanese yen, but also any changes in the exchange value of the Japanese yen relative to the South African rand. The emerging markets investor must consider the additional uncertainty of the return on the Japanese stock when it is converted from Japanese yen to South African rand.

According to Bodie, Kane and Marcus (2018), the currency price is usually determined by demand and supply of a particular currency. Another example is when a US investor has stocks in Canada. The return that the investor will realise is affected by both the change in the price of the stocks and the change in the value of the Canadian dollar against the US dollar. If the investor realises a 15% return on Canadian stocks, but the Canadian dollar depreciates by 15% against the US dollar, this will result in no profit, as the 15% return will be reduced by the 15% depreciation of the Canadian dollar relative to the US dollar. Therefore, an investor should always take depreciation into account when making investments in emerging markets.

Investors should also be warned that competition for a fraction of global markets is increasing, particularly in emerging nations, hence the appreciation and depreciation of different currencies (Burnell, Rakner & Randall, 2014). According to Blanchard (2009), economies (and currencies) in emerging markets may be quite volatile due to political upheaval and risk factors such as the price of oil adding to the instability of the markets. The instability of emerging markets can cause the investors' balance sheets, cash flow and earnings to be unstable as well, thus influencing the reasons for doing business in emerging markets as inherently risky (Saunders & Cornett, 2018). For example, when profits are exchanged for the domestic currency, there is a risk that such profits could be reduced and in extreme cases, the investor may suffer a loss. Investors may sometimes struggle to compete with competitors from countries where currencies are weaker because the costs of acquiring currency are lower and could consequently offer lower prices to customers. Furthermore, international trade and money markets may also devalue the currency, decreasing its purchasing power abroad even further during times of low inflation (Bodie *et al.*, 2018). The risk exposure in foreign bond and stock funds is that the foreign

currency may appreciate relative to the currencies in which the securities are denominated, resulting in a currency loss (Burnell *et al*., 2014).

A more pragmatic approach for investors is to learn about the fundamentals of exchange rate risk in order to reduce its negative impact (Blanchard, 2009). Exchange rate is complex. Therefore, seeking professional advice could be one way of managing exchange rate risks. However, investors need to be knowledgeable enough to be able to act wisely on advice. Therefore, emerging market investors must continuously monitor exchange rates, because their cash flows are highly dependent on exchange rate movements (Adrian *et al.,* 2015). Therefore, investors need to understand which risk factors influence exchange rates so that the investors can anticipate how exchange rates may change in response to specific conditions. The main indicators of exchange rate risk are the relationships between interest, inflation and exchange rates (Brigham & Houston, 2018). These relationships are measured by using the following concepts.

- Purchasing power parity (PPP). According to Madura (2017), PPP is an economic technique used when attempting to determine the relative values of two currencies. It is useful because often the amount of goods a currency can purchase between two nations varies drastically based on the availability of goods and the demand for the goods. PPP solves this problem by taking some international measure and determining the cost for that measure in each of the two currencies, then comparing that amount (Adrian *et al*., 2015). The idea is that in a stable marketplace, the relationship between exchange rates of different countries should be in the same ratio as the price of a fixed basket of goods and services. This means that there is parity between the purchasing power of currencies and their exchange rates. According to Madura (2017), there are different ways of expressing this, but most commonly it is:

  Rate of change of exchange rate = difference in inflation rates

  According to Voinea (2013), the PPP theory uses the long-term equilibrium exchange rate of two currencies to equalise their purchasing power, which is based on the law of one price. The theory states that, in ideally efficient markets, identical goods should have only one price. The purchasing power rate equalises the purchasing power of different currencies in their home countries for a given basket of goods. Additionally, using a PPP basis is arguably more useful when comparing differences in living standards for the whole nation, because PPP considers the relative cost of living and the inflation rates of different countries, rather than just a nominal gross domestic product (GDP) comparison (Brigham & Houston, 2018).

- International Fisher effect (IFE). According to Madura (2017), an estimated change in the current exchange rate between any two currencies is directly proportional to the difference between the nominal interest rates of the two countries at a particular time. This theory is also known as the assumption of uncovered interest parity. According to Voinea (2013), the real interest rate in a particular economy is independent of monetary variables. With the assumption that real interest rates are calculated across countries, it can also be concluded that a country with a lower interest rate would also have a lower inflation rate. This will increase the real value of the currency of the country over time.

  According to the generalised Fisher effect, real interest rates should be the same across borders. However, the validity of the generalised Fisher effect largely depends on the integration of the capital market. That is, the capital in the market needs to be free to flow across borders. Usually, the capital markets of the developed countries are integrated by nature. It has been seen that, in underdeveloped countries, currency flow is restricted. This theory suggests that differences in interest rates between countries are expected to be offset by future changes in exchange rates. For example, if an investor earns a higher interest rate in another country, any gains are offset by an unfavourable exchange rate. The relationship is expressed as:

  The expected rate of change of the exchange rate = the interest rate differential

  The above relationship depends on careful monitoring when protecting an investor against exchange rate risk (Madura & Fox 2014). According to Eun and Resnick (2018), exchange rates are furthermore affected by politics, inflation, and the state of import and export markets, capital flow, consumer confidence, and many other economic and social factors Moreover, individual governments often act, sometimes controversially, to control the volatility of currencies. Madura and Fox (2014) indicate that exchange rates cannot be forecasted with perfect accuracy, but the business can at least measure its exposure to exchange rate fluctuations. If the business is highly exposed to exchange rate fluctuations, it can consider different techniques to reduce its exposure. Additionally, it is conventional to classify the exposure to exchange rate fluctuations into three types: economic, translation and transaction exposure.

  It can, therefore, be concluded that the risk exposure of exchange rate risk should be mitigated for a success of an emerging market investment as the fluctuations in exchange

rate will have an impact in the outcome of an investment. The next section focuses on the types of exposure.

3.3.1.2. Types of exposure

As investors and companies invest in foreign markets, many are exposed to the risk of fluctuating exchange rates (Voinea, 2013). Changes in exchange rates may affect the settlement of contracts, cash flows, and the business valuation (Eun & Resnick, 2018). Therefore, it is important for investors to know the foreign exchange rate exposure. The following are foreign exchange rate exposures that could affect an emerging market investment.

- Economic exposure. According to Madura and Fox (2014), economic exposure is defined as the risk that an investor's profits will be eroded by exchange rate changes because of increasing operating costs. Companies are very limited in the actions they can take to protect themselves in this situation (Voinea, 2013). According to Eun and Resnick (2018), economic exposure is defined as the extent to which the value of the business would be affected by unanticipated changes in exchange rates. Any anticipated changes in exchange rates would already have been discounted and reflected in the value of the business (Voinea, 2013). Investors should therefore be warned that changes in exchange rates can have a profound effect on the competitive position of the business in the world market and thus on its cash flows and market value (Eun & Resnick, 2018).

- Translation exposure. According to Madura and Fox (2014), translation exposure is the risk that exchange rate changes will diminish an investor's income, assets, equity or liabilities. According to Brigham and Houston (2018), translation exposure refers to the potential that the consolidated financial statements of the business can be affected by changes in exchange rates. Consolidation involves translation of the financial statements of subsidiaries from local currencies to the home currency. For example, an American multinational business that has subsidiaries in South Africa and the United Kingdom will produce financial statements in the local currencies. To consolidate the financial statement globally, the business must translate the financial statements of the subsidiaries from the local currencies into US dollar, the home currency (Brigham & Houston, 2018). The denomination is therefore significant, although some analysts believe that real assets (those that are physical and identifiable rather than financial) are hardly affected by currency movements (Eun & Resnick, 2018). To insulate against this risk, fund managers undertake currency hedging. Currency

hedging is a sophisticated technique which involves keeping a close watch on exchange rate changes and diversification of the investor's holdings in different currencies (Madura, 2017).

- Transaction exposure is the risk that exchange rates will change after a contract has been agreed, but before it is completed (or after borrowing/lending agreements have been established, but before repayments are made), and that major losses will occur as a result (Madura & Fox 2014). According to Eun and Resnick (2018), transaction exposure is defined as the sensitivity of realised domestic currency values of the contractual cash flows of the business denominated in foreign currencies to unexpected exchange rate changes. Since settlements of these contractual cash flows affect the domestic currency cash flows of the business, transaction exposure is sometimes regarded as a short-term economic exposure.

  Transaction exposure arises from fixed-price contracting in a world where exchange rates are changing randomly. According to Eun and Resnick (2018), companies working in international markets frequently face this problem, as it is not a common practice to demand advance payment from customers (and impossible to apply this in a borrowing/lending situation). Therefore, a technique called factoring is used to reduce the risk. This is according to Gundlach (2017), who indicates that factoring involves selling off an investor's foreign accounts receivable to a factoring house, which then takes on the responsibility for credit and collections. Factoring houses typically buy the accounts receivable at 90–95% of their value, although the discount may be greater. Emerging market investors often recoup their losses through product price adjustment (Gundlach, 2017). The next section focuses on risk exposure of exchange rates.

3.3.1.3. Risk exposure of exchange rates

According to Brigham and Houston (2018), each currency is valued in terms of other currencies, so that currencies can be exchanged to facilitate emerging market transactions. The values of most currencies fluctuate over time because of market and government forces (Gundlach, 2017). Exchange rates are thus affected by risks associated with a particular country (Madura & Fox 2014). The risk exposure of exchange rates may be political or military involvement, and restrictions may be imposed (Gundlach, 2017). There are also commercial factors, like a major foreign customer going bankrupt or defaulting. This is according to Brigham and Houston (2018), who warn that major customers in the domestic country can also default. However, local

customers are not operating under unfamiliar legal or regulatory systems. It is possible for companies to insure themselves against such risks, but this can be costly. Many South African companies trade with companies overseas or obtain foreign capital abroad. Therefore, such companies are not insulated from exchange rate risk, political instability, inflation, economic policy, interest rates, unemployment and the economic growth rate that can lead to changes in exchange rates (Gundlach, 2017).

It can therefore be deduced that risk factors in exchange rates can have a negative effect on investments if not well managed. Therefore, investors should ensure that there are risk mitigation techniques in place to manage exchange rates. The next section will focus on risk mitigation.

3.3.1.4. Exchange rate risk mitigation strategy

There are at least four ways, according to Gustke (2014), in which investors can minimise exchange rate risk. The method and the way in which the control measure is applied will depend on the investor's exchange rate expectations. Firstly, an investor can avoid unnecessary losses caused by an increase in exchange rates by paying for the transaction immediately at the rate of exchange ruling when the agreement is concluded.

Secondly, a futures transaction can be concluded. The rate of exchange, which will be used at the date of payment, is agreed at the beginning of the transaction. In this way, the 90 days' credit is still used and there is no uncertainty as to which rate of exchange will be used (Gustke, 2014). Thirdly, it is possible to borrow the relevant amount of South African rand at the time of the transaction and invest this in American interest-bearing stock with the same term as the transaction debt. By realising the investment at the redemption date, the correct amount will be available to settle the debt. The cost of this method will amount to the difference between the interest paid on the loan and interest received on the stock.

Fourthly, an investor can take out cover against exchange rate fluctuations with a certain financial institution at a fixed commission. Because financial institutions such as banks usually keep abreast of expected changes in the exchange rate, they offer a service whereby the investor can take out cover against changes in the exchange rate on payment of a commission. Apart from the element of remuneration, the commission usually makes provision for the

expected changes in exchange rates. The advantage for the investor is that it is relieved of the risk of unexpected exchange rate fluctuations.

If a South African investor is owed foreign currency, it is referred to as being in a long position, since it will profit if the exchange rate increases in favour of the foreign currency. However, if the investor owes foreign currency, it is in a short position, seeing that it will be at a disadvantage if the exchange rates increase in favour of the foreign currency. In both cases, there may be a converse risk if the exchange rates change in the opposite direction (Gustke, 2014). It is, therefore, important for investors to be aware of the nature and extent of the foreign debt or revenue of the company in which an investor is considering an investment (Gundlach, 2017). This applies particularly to companies, which obtain foreign capital abroad. An investor must ascertain whether sufficient provision has been made to ensure that unexpected fluctuations in the exchange rate do not adversely affect the financial position of the company (Saccomanni, 2008).

In conclusion, exchange rate risk can be regarded as an important risk to consider when investing in emerging markets. This section dealt with the effects of exchange rate risk, the types of foreign exchange exposure, as well as the risk mitigation techniques of containing foreign exchange rates movements. The next section focuses on country risk, which could be one of the most important risks to consider when investing abroad.

3.3.2. Country risk

This section introduces the various definitions of country risk, the risk factors that should be considered by emerging market investors, as well as the risk mitigation techniques for country risk and country instability. Various authors define country risk differently.

- Shapiro (2010) defines country risk as the general level of political and economic uncertainty in a country affecting the value of loans or investments in that country. From an investor's standpoint, country risk refers to the possibility that borrowers in a country will be unable to service or repay their debts to foreign lenders in a timely manner.
- Eiteman, Stonehill and Moffett (2004) define country risk as the risk that affects international investors at a corporate level, and which originates at a country level.
- Madura and Fox (2014) define country risk as the uncertainty of returns caused by the possibility of a major change in the political or economic environment in a country.

- Saunders and Cornett (2018) define country risk as the risk that repayment from foreign borrowers may be interrupted because of interference from foreign governments.

According to Mensi, Hammoudeh, Yoon and Nguyen (2016), the notion of country risk itself is very old and integrated into the assessment of risk and return in international operations. Usually, it was seen as inextricably linked to doing business abroad and seldom was a distinction made with currency risk (Madura & Fox, 2014). Instead, country and currency risk were seen as two sides of the same coin. However, the concept of country risk strongly evolved in the 1960s and 1970s. This especially was a response to the efforts of the international banking sector to define and measure its exposure to losses on cross-border lending (Shmuel, 2015).

According to Frenkel, Karmann and Scholtens (2004), the term 'country risk' has not gained a clear definition from academics. Instead, many different terms that have come into use are often seen as almost identical to country risk. For example, political risk, exchange rate risk, economic risk, sovereign risk, financial risk, cross-border risk, international business risk and transfer risk are all terms used to refer to the ability or willingness of an economy or country to honour its financial obligations (Madura & Fox, 2014). For the purposes of this study and deduced from the abovementioned literature review, country risk can be regarded as the adverse impact of the environment of a country on the value of an investor's international investments, operations and transactions.

Country risk varies from one country to the next, with some having extremely high risks that discourage foreign investment (Burnell *et al.*, 2014). For example, when a domestic corporation is unable or unwilling to repay a loan, an investor usually has recourse to the domestic bankruptcy courts and eventually may recoup at least a portion of its original investment when the assets of the defaulted firm are liquidated or restructured (Frenkel *et al.*, 2004). Most commonly, the government of the country in which the corporation is headquartered may prohibit or limit debt payments because of foreign currency shortages and adverse political reasons (Burnell *et al.*, 2014). In the event of such restrictions, rescheduling or outright prohibitions on the payment of debt obligations by sovereign governments, the investor has little, if any, recourse to the local bankruptcy courts or an international civil claims court (Saunders & Cornett, 2018). The major leverage available to an investor to ensure or increase repayment probabilities and amounts is its control over the future supply of loans or funds to the country concerned.

However, such leverage may be very weak in the face of a collapsing currency and government of a country (Saunders & Cornett, 2018).

When investors engage in international transactions and operations, they encounter additional risks compared to investing domestically (Salvatore, 2015). Different languages, currencies, jurisdictions, customs and habits can be translated into extra informational asymmetries and transaction costs that may have an effect upon the smooth operation of business (Madura & Fox, 2014). According to Saunders and Cornett (2018), an emerging markets-oriented investor that mismatches the size and maturities of its foreign assets and liabilities is exposed to country risks.

In conclusion, investors need to consider certain factors prior to investing in emerging markets, since changes in political and economic policies can be detrimental to investors' success. The next section focuses on the risk factors of country risk.

3.3.2.1. Risk factors of country risk

This section will deal with risk factors of country risk in order to assist emerging market investors plan their investments accordingly. According to Frenkel *et al.* (2004), politics is a major risk factor in determining the overall structure of financial markets and the regulatory framework, since countries have different rules that regulate investments in their countries. Therefore, investors in an emerging market where the country has an unstable political economic system should consider a country risk premium when determining a required rate of return to mitigate this risk of uncertainty. According to Chapman (2013), a country risk premium refers to an increment in interest rates that would have to be paid for loans and investment projects in a particular country. An investor can determine a country risk premium by benchmarking the interest rate of a standard security with another country that is more stable. However, for the securities to be comparable, the investor must ensure that it must have the same maturity and involve payments in the same currency. According to Chapman (2013), the reason why payment should be similar, is to ensure that interest rates reflect the differential rates of inflation in the two countries instead of solely the market perceived risk of non-payment.

The decision to invest in emerging markets is not one to be taken lightly, as an array of investments that may not be available in the onshore jurisdiction may be available in emerging

markets. Therefore, it is appropriate to discuss the risk factors of country risk pertaining to investments in foreign countries. Brink (2017) warns investors that the following risk factors of country risk may arise when investing in emerging markets:

- Jurisdictional risk factor. The choice of jurisdiction may affect the jurisdiction where the trust is to be set up as well as the jurisdiction chosen as the proper law of the trust. Furthermore, one should also take cognisance of the investment contract and the proper law that governs the investment contract. With regard to the law that governs property, a distinction should be made between movable and immovable property, for, regardless of the proper law chosen, the legislation of the jurisdiction where the assets are situated may override the proper law. Choosing a jurisdiction suitable for an emerging markets investor can be difficult, as there are many recognised jurisdictions to choose from (Brink, 2017). An investment decision must be made in conjunction with the decision on an appropriate structure and emerging markets investment vehicle (Mensi *et al*., 2016). Tax as a risk factor of country risk will be discussed in the next section.

- Tax risk factor. The tax risk factor can be attributable to the choice of jurisdiction or the choice of investment. Each type of investment carries its own tax consequences as onshore and offshore jurisdictions have their own tax codes. Prospective investors often make decisions considering offshore taxes in isolation and disregard the tax laws of their domestic jurisdiction. Investors need to make sure whether their domestic jurisdiction tax is on a worldwide basis or on a source basis, as this matter may affect the tax equation (Brink, 2017). It may sometimes be appropriate to invest in tax havens that do not deduct source-based taxes whereas at other times it may pay to invest in jurisdictions where taxes are deducted. It should be borne in mind that, once paid, relief can only be sought in terms of a double taxation agreement (DTA) or, failing this, unilateral relief may be sought in terms of domestic legislation (Brigham & Houston, 2018). Investment as a risk factor of country risk will be discussed in the next section.

- Currency risk factor. According to Bodie *et al*. (2018), careful consideration must be given to the currency in which the investment is denominated. A decision must be made whether to invest in strong currency (US dollar, euro, yen or a combination thereof) or to invest in a weak currency. For risk-averse investors, the focus of the investments should be on strong currencies and markets. Exposure to emerging markets should be carefully considered, as

there could be more instability of the currency. Trust as a risk factor will be discussed in the next section.

- Trust risk factor. Careful analysis is necessary to balance the benefits of trust structuring with the associated charges, before settling a trust. According to Blanchard (2009), the benefits of using a trust should not be limited to tax opportunities only, as the use of a trust purely for avoiding income and wealth taxes at the expense of commercial benefits, can be tantamount to economic suicide.

When risk factors of country risk are considered, investors can determine their willingness to invest in such a country based on their investment objectives. The above risk factors were discussed to give an investor the risk factors to consider when making an emerging market investment decision. The next section focuses on risk mitigation.

3.3.2.2. Country risk mitigation strategy

This section deals with mitigation of country risk in emerging markets. Investors, financial institutions and companies require authoritative and trusted assessment of country risk to pursue profitable business opportunities in difficult markets (Salvatore, 2015). In assessing the country risk, emerging market investors can use country risk service (CRS), which provides an in-depth and timely analysis of the risks of financial exposure in many countries.

According to Lessard (2011), the CRS is specifically designed to assist investors to set and review country credit lines or to manage financial exposures to foreign countries. The service provides an assessment of risks tailored to an investor's particular exposure to the sovereign and currency risk or to the banking sector and the broader private sector. Country risk service monitors emerging markets on a continuous basis at regular intervals (Salvatore, 2015). The service provides comprehensive tables of quarterly and annual data, including two-year forecasts for most annual series. Variables covered include external debt stocks and flows, external financing requirements, the balance of payments, foreign exchange reserves, public finances and credit. In addition, Lessard (2011) advises that CRS can assist investors in the following ways:

- by assessing sovereign, currency and banking sector risk in the emerging markets;
- by manipulating, displaying and analysing data in investors' financial and risk-rating models;

- by comparing risks across countries, using a standardised risk and forecasting methodology;
- by assessing business risk, taking into account macroeconomic variables in each report;
- by analysing credit risk posed by the political and economic situation in each country; and
- by limiting risk in markets with the help of timely warnings of likely rating downgrades.

According to Mensi *et al*. (2016), as with all risks, effective management of country risk requires an integration of assessments, policies and processes as well as internal and external information to ensure a proper execution of the investment strategy. Country risk should be analysed to monitor countries where investors have business interests (Salvatore, 2015). If the country risk level of a particular country begins to increase, the investor may consider divesting its business located there. According to Mensi *et al*. (2016), country risk analysis is not only limited to predicting major crises, but an investor may use the analysis to revise their investments or financing decisions in light of recent events that took place in the emerging country. According to Salvatore (2015), in any given period, the following unrelated international events may occur around the world:

- a terrorist attack, like the 11 September, 2001 terrorist attack on the United States, which heightened the awareness of country risk;
- a major labour strike in an industry;
- concern about the banking system of a country, which may cause a major outflow of funds;
- a political crisis due to a scandal within a country; and
- the imposition of trade restrictions on imports.

Any of these international events may affect the potential returns or the cost of financing projects and therefore affect the value of an investment. It can, therefore, be deduced that risk mitigation is not an easy task. However, investors can use the CRS to determine the countries that are relatively safe investment destinations. Furthermore, the service can help an investor make an informed and timely decision about international creditworthiness and financial risks of a country under consideration. CRS is specifically designed to assist investors to set and review country credit lines or to manage financial exposures to foreign countries. Therefore, an investor should consider whether its returns will be affected and whether there has been a change in policy to which it should respond. The next section focuses on market risk.

3.3.3. Market risk

This section introduces the various definitions of market risk, the risk factors that should be considered by emerging market investors, as well as the risk mitigation techniques for market risk. Various authors provide different definitions of market risk.

- According to Banks and Dunn (2003), market risk can either be systematic or unsystematic. Systematic risk refers to the risk inherent to the entire market or market segment and it affects the overall market, not just a particular stock or industry. Unsystematic risk is the risk that is unique to a specific company or industry (Banks & Dunn, 2003).
- Gustke (2014) defines market risk as the possibility that the price of an asset may decline or that the value of obligations (such as swap exposures, options or future contracts) may grow over a given period.
- According to Gitman, Smart and Joehnk (2016), market risk is the risk that investment returns will decline because of market factors independent of the given investment. Examples include political, economic and social events, as well as changes in investor tastes and preferences.
- Saunders and Cornett (2018) define market risk as the risk related to the uncertainty of an investor's earnings on its trading portfolio caused by changes, and particularly extreme changes, in market conditions such as the price of an asset, interest rates, market volatility and market liquidity.

For the purpose of this study and based on the literature, market risk can be defined as the exposure arising from adverse changes in the market value of a financial instrument. It is also clear that market risk depends on many factors, including the price of the reference asset, its volatility, prevailing interest rates and time. Therefore, a change in any of these afore-mentioned factors will cause a corresponding change in the risk and the value of the investment asset. For example, favourable changes could generate profits, while unfavourable changes could result in a loss.

Market risk is a broad term and can sometimes be confused with other risks. Banks and Dunn (2003) list some of the most common types of market risks.

- Directional risk. According to Buraschi, Trojani and Vedolin (2014), the risk of loss is due to an adverse move in the direction of the underlying assets. Changes in market direction occur because of supply and demand forces, meaning that bargains struck between buyers and sellers set the asset prices.

- Volatility risk. This is the risk of loss due to an adverse movement in prices. Volatility is a measure of turbulence or tranquillity in a particular market. A calm market has low volatility, whereas a turbulent market has high volatility (Buraschi *et al*., 2014).
- Time decay risk. This is the risk of loss due to the passage of time. This risk is found primarily in derivatives, which obtain some of their value from the time period in place. In general, the more time until the maturity of the contract, the greater its value and vice versa (Banks & Dunn, 2003).
- Curve risk. This is the risk of loss due to an adverse change in the maturity structure, such as interest rate, security price and volatility level (Leschhorn, 2014).
- Spread risk. This is the risk of loss due to adverse changes between two reference assets that may not have a common link, such as risk-free assets and a risky bond. The spread between the two assets fluctuates all the time based on supply and demand forces, market and liquidity conditions, as well as credit events (Banks & Dunn, 2003).
- Basis risk. Like spread risk, basis risk is the risk of loss due to adverse changes between two reference assets. In this case, the reference assets are related in some way, but are not perfectly similar. Some events might push the price of one up and the other down, causing a gain or loss (Leschhorn, 2014).
- Correlation risk. This is the risk of loss due to an adverse move in the correlations and price relationships between assets and markets. When considering the history of financial prices, it is clear that assets sometimes trade with or against one another. These price relationships, expressed in terms of correlation, are often used as the basis for hedging or investing (Banks & Dunn, 2003). Correlation risk is actually contained in assets and hedge relationships, and is a key component of the spread and basis risks described above. An investment manager might look at the historical price movement between two securities and determine that there is a high probability that the prices will converge, thus, buy one asset and sell the other. If the asset prices decouple, the historical correlation between the two diverges and the investment manager could suffer a loss (Leschhorn, 2014).

It can be deduced that market risk should be managed in its multifaceted form as there are other risks classified, embedded or incorporated under market risk. In addition, Waddell (2009) indicates that market risk is closely tied to interest rate risk. As interest rates increase, prices decline and vice versa. As a result, the value of an investment can decrease due to movements in market risk factors, which are identified by Waddell (2009) as follows:

- equity risk – the risk that stock prices will change;

- interest rate risk – the risk that interest rates will change;
- currency risk – the risk that foreign exchange rates will change;
- commodity risk – the risk that commodity prices (such as prices of grains and metals) will change; and
- equity index risk – the risk that stock or other index prices will change adversely.

Additionally, Gitman *et al*. (2016) warn investors that the impact of market factors on investment returns is not uniform. Both the degree and the direction of change differ among investment vehicles. Essentially, market risk is reflected in the price volatility of a security: the more volatile the price of a security, the greater it is perceived market risk (Buraschi *et al*., 2014). The next section focuses on the risk factors of market risk.

3.3.3.1. Risk factors of market risk

The previous section dealt with the background and definition of market risk. This section focuses on the risk factors of market risk. According to Voinea (2013), an entire class of assets and or liabilities carries market risk. This means that all risks have an element of market risk. The risk factor of market risk is embedded in all other risks. For example, a change in oil prices would affect exchange rate risk and could affect credit risk, and that could lead to country risk where certain countries might not be able to honour their financial obligations (Godi, 2013). Therefore, market risk may apply to a certain country or industry, or to the entire global economy (Voinea, 2013).

It is impossible to reduce market risk factors for the global economy, but one may mitigate other forms of market risk by buying different kinds of securities and or by buying in different industries (Salvatore, 2015). For example, all oil companies have the market risk that someday their market (oil drilling) could be dry and could lose their market. An investor may mitigate this risk by investing in both oil companies and or companies that offer an alternative to oil, e.g. electrical cars.

According to Salvatore (2015), it is important for investors to recognise the extent of market risk in the environment and how to respond to it. This naturally requires an understanding of the environment and its various risk factors. Figure 3.1 depicts market risk and its risk factors.

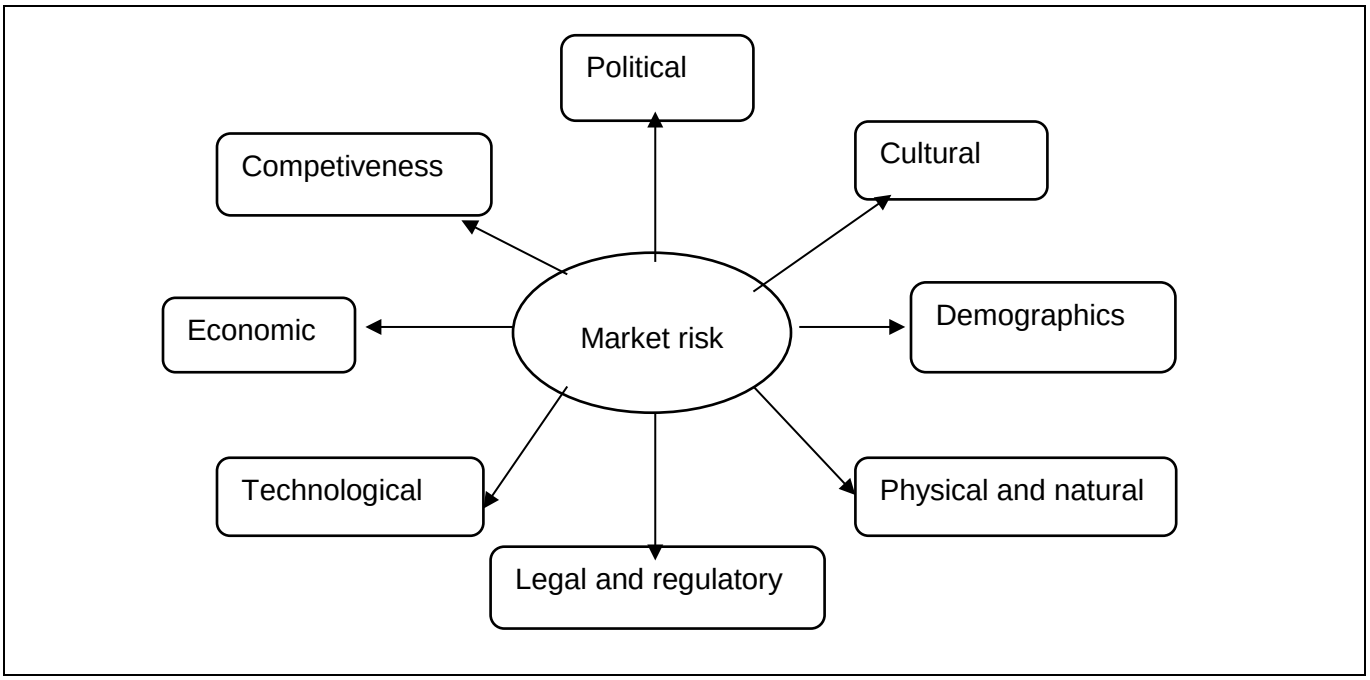

Figure 3.1: Market risk and its risk factors

Source: Adapted from Chapman (2013)

According to Chapman (2013), each risk factor has a direct effect on the outcome of an emerging market investment.

- Demographic trends affect the size of the market, its location and, to a degree, the kind of goods and services required.
- The legal and political characteristics of the environment affect investments, particularly with regard to the ability to participate in foreign markets and the ease with which foreign competitors are able to enter the domestic market.
- Changes in the economic environment affect markets by way of the pattern of economic growth and movements in interest and exchange rates.
- Innovation and technological advances introduce standards for competition and opportunities for the marketing of new products and services.
- Competition can both limit and erode market share.
- Legislation introduced to protect the environment can raise the unit cost of production, while at the same time creating new opportunities. It is necessary for any business to monitor the macro environment to ensure that an appropriate response is adopted at the micro level.

- An environmental analysis allows the business to respond to changes and to cope with market uncertainty.

These risk factors should be mitigated for a successful investment in emerging markets. Since market movement is the reason why investors make money from stocks, volatility is essential for returns, and the more unstable the investment the better the chances that it will experience a dramatic change in either direction (realising a profit or making a loss). Protection against market instability is crucial for investment success, which is covered in the next section.

3.3.3.2. Market risk mitigation strategy

The previous section focused on the risk factors of market risk. This section focuses on the risk mitigation of market risk factors. According to Gustke (2014), there are mitigation techniques, which can be used to protect an investment against market risk to a certain extent. Firstly, the historical price behaviour of a share requires careful study. Just as a historically stable pattern of growth will tend to maintain itself in future, a historically fluctuating market price will probably also fluctuate in future. Shares, which have a stable growth pattern, stable income and further growth potential, offer the best protection against market risk.

Secondly, with careful planning, an investor could avoid buying shares at relatively high prices during a general bull market, when the market risk is at its greatest. Technical analysis can be of great value when timing the market movements.

Thirdly, an investor could maintain a sufficiently long investment period to survive any decline as a result of the market risk and then turn the ensuing increase in the general market price to good account.

Fourthly, investment in the so-called rand-hedged shares and stocks offers a certain amount of protection since the income and dividends of these institutions are not subject to the economic and political instability of the local market. The assets and activities of these institutions usually fall outside the boundaries of South Africa, with the result that their performance depends on the political and economic climate of the countries within which they operate. Since an important holding interest of such companies is still established in South Africa, the profits are channelled

back here and paid out to investors. Rand-hedgers, however, are generally relatively expensive, according to Gustke (2014).

As with other classes of risk examined, market risk must be addressed as a primary risk and opportunity due to the magnitude of the risk factors and its impact on the outcome of an investment. Additionally, market risk has some overlap with several of the other classes of risk, such as technological, economic and social risk. The next section focuses on inflation risk.

3.3.4. Inflation risk

This section focuses on the background and definition of inflation risk, as well as risk factors of inflation risk. According to García and Werner (2010), when inflation occurs (the cost of goods and services increase), the value of a currency decreases because investors will not be able to purchase as much with the same amount of money as they previously could. For example, if one rand could buy three candy bars last year and today it can buy only two, the purchasing power of the rand has decreased. In periods of declining price levels (deflation), the purchasing power of a currency increases. There are various definitions of inflation risk by different authors.

- According to Gustke (2014), inflation risk refers to the general increase in prices, without necessarily an increase in productivity.
- Chapman (2013) defines inflation risk as a sustained general increase in prices that negatively affects the value of an investment.
- Appel (2008) defines inflation as the overall general upward price movement of goods and services in an economy, usually measured by the consumer price index (CPI) and the producer price index (PPI).
- According to Gitman *et al.* (2016), inflation risk is the possibility that changing price levels will adversely affect investment returns.

For the purposes of this study, inflation is defined as the sustained upward price movement, which negatively affects the value of an investment. There are two types of inflation: demand inflation and cost-push inflation (Gustke, 2014). Demand inflation means there is too much money in circulation and too few goods and services for the money to buy. Therefore, prices increase. Under cost-push inflation, input costs increase for various reasons, such as higher labour costs and weakening of the exchange rate (Gitman *et al*., 2016). Emerging market investors should take into account the following risk factors when considering inflation risk.

3.3.4.1. Risk factors of inflation risk

This section focuses on risk factors of inflation risk. According to Appel (2008), inflation is greatly feared by investors because it decreases the value of their investments. For example, R100.00 today is not the same as R100.00 ten years ago. It is therefore crucial for investors to include measures of expected inflation when calculating the expected return on investments.

Another example is that, if R1 000.00 is invested for a year with an expected return of 5%, an investor will be giving up R1 000.00 today for R1 050.00 in one year. If, over the course of that year, there had been an inflation rate of 6%, the purchasing power of R1 000.00 would have decreased by R60.00 and an investor would actually have lost value. This means the investor would have lost R10.00 (R1 050.00 - R1 060.00) in real terms. Any capital gains tax that investors pay may also increase the loss value. It is, therefore, important for investors to be aware of the effects of inflation on their investments (Appel, 2008). This could be done by always determining the real rate of return, which is the return after factoring in the effects of inflation. Inflation can erode the value of investments, such as stocks, cash and bonds. This is according to Roelf (2009), who believes that investments in real goods, such as property, are protected from inflation. This is because the value of goods is determined to a large extent by its intrinsic nature, as opposed to money, which is valued only for what investors can trade it for (Gitman *et al*., 2016).

According to Gustke (2014), when inflation is on the increase, the price of property or a car may simply increase at a similar rate, insulating it from price erosion. However, the same cannot be said for a 10-year bond. As a result, some investors seek protection from inflation and investment options, which protect them from inflation like treasury inflation-protected securities, commonly known as TIPS. These investments are like bonds, except that they are insulated from the effects of inflation (Gustke, 2014).

The above description explains why investors follow CPI and PPI reports closely (Gitman *et al*., 2016). In addition to being aware of the current rate of inflation, it is crucial for investors to be aware of expected inflation rate movements. Both the value of current investments and the attractiveness of future investments will change depending on the outlook of inflation (Gustke, 2014). The effect of inflation is that money has less purchasing power. If the general increase in prices (rate of inflation) is higher than the rate of return on an investment, the real return will be

negative (Chapman, 2013). Investors need to be mindful of the effects of inflation and guard against any movement that can be detrimental to their investment success. The next section focuses on risk mitigation of inflation risk.

3.3.4.2. Inflation risk mitigation strategy

The previous section focused on the risk factors of inflation risk. This section focuses on risk mitigation of inflation risk. According to Gustke (2014), investors will have to adapt the strategy for their entire portfolio as a hedge against the inflation risk. Firstly, it is unwise to invest all available capital in a single market. The diversification of investments into monetary assets, ordinary shares and real assets spreads the risk, since inflation does not affect all assets to the same extent (Appel, 2008).

Secondly, timing is extremely important, because the largest portion of the portfolio should continually be channelled to where the effects of inflation are the least felt (Chapman, 2013). Most non-monetary assets tend at least to increase in value with the inflation rate.

Thirdly, seeing that some countries are more successful in curbing the inflation rate than others, international diversification could be a solution for investors (Gitman *et al*., 2016). However, exchange control regulations can curb diversification as far as South Africans are concerned. According to Appel (2008), political instability in other parts of the world can also put a damper on such diversification.

Fourthly, the prudent choice of company shares in industries with considerable growth potential, which have good opportunities for expansion in their market, will usually yield real growth (Appel, 2008). Certain stock, such as participative preference shares, convertible preference shares and debentures, offer the investor the opportunity of sharing in the success of the investment if the expected growth in profit is realised (Chapman, 2013).

Finally, investments in rand-hedged shares and stocks also offer protection against the inflation risk, since the income and earnings are not subject to the fairly high South African inflation rate (Gustke, 2014).

It can be deduced that inflation is generally considered a problem for investors. Some economists, mainly monetarists, have claimed that inflation creates unemployment, lowers growth and increases cost of production and uncertainty (Gustke, 2014). This lowers the profitability of investments and makes businesses less likely to take risk associated with any investment project. Lower investments result in restricted long-term growth (Gitman *et al*., 2016). According to Chapman (2013), monetarists argue that inflation is caused by excessive increases in the money supply, while some believe that excess demand in the economy is the principal cause of inflation. Whatever the reasons for high inflation, investors need to be mindful of the effect of inflation and how best to position their emerging market investments to contain inflation risk. The next section focuses on interest rate risk.

3.3.5. Interest rate risk

This section focuses on interest rate risk in emerging markets. According to Whittaker (2009), the interest rate is the rate payable on borrowed money. This rate is applied to the principal of a loan and can be compounded in many ways (Drechsler, Savov & Schnabl, 2017). For example, interest rates can be compounded daily, weekly, monthly or annually. According to Sharpe (2013), interest rate risk is a general increase or decrease in market interest rates as a result of the monetary policy of the central bank. After the central bank has adapted its general lending rate, those in the banking sector alter their own prime and other lending rates accordingly (Whittaker, 2009). This has a ripple effect throughout the entire economy and influences all economic activities, because changes in interest rates affect cash, bonds and stocks. The next section focuses on risk factors of interest rate risk.

3.3.5.1. Risk factors of interest rate risk

This section focuses on the risk factors of interest rate risk. According to Bodie *et al*. (2018), changes in interest rates influence the value of investor's stocks, cash and shares. As a result, the risk of a particular investment could increase as interest rates increase. As risk increases, the cost of stock decreases and investors may lose money (Sharpe, 2013). However, the converse is actually beneficial. For example, if interest rates are reduced, stock prices are bound to increase. Investors could make money by selling stock at a higher price, since an increase in interest rates will increase the cost of capital (Chapman, 2013).

The role of interest rates in investing can sometimes be complicated and difficult to understand. In general, increasing interest rates are unfavourable for investors, because it is unfavourable for the profits of the companies in which they are investing (Bodie *et al*., 2018). Investors need to understand interest rates and the systems used to determine the risk factors of interest rates. This could help investors adjust their financial plan and investment portfolio to compensate for the increased rates if they anticipate a rise in the interest rate and vice versa. The following are risk factors in interest rate risk.

- Monetary policy of the government

According to Bodie *et al.* (2018), monetary policy refers to the manipulation of the money supply to affect the macro-economy and is the other main leg of the demand-side policy. Monetary policy works largely through its impact on interest rates. An increase in the money supply would lower short-term interest rates, ultimately encouraging investment and consumption demand (Chapman, 2013). Over longer periods, however, most economists believe a higher money supply leads only to higher price levels and does not have a permanent effect on economic activity (Drechsler *et al*., 2017).

Therefore, the monetary authorities face a difficult balancing act. Expansionary monetary policies will probably lower interest rates and thereby stimulate investment and some consumption demand in the short run, but these circumstances will ultimately only lead to higher prices (Drechsler *et al*., 2017). In order to combat inflation, the monetary authorities in a country usually tighten monetary policy, which entails various actions that could affect long-term interest rates in general. If the growth rate of the money supply exceeds the target set by monetary authorities, the demand for consumer credit may be restricted by increasing the bank rate, which will eventually influence the trend of interest rates in general (Sharpe, 2013).

- Fiscal policy developments in the country

According to Bodie *et al.* (2018), fiscal policy refers to the spending and tax actions of the government, and is part of demand-side management. Fiscal policy is probably the most direct way either to stimulate or to slow the economy. Decreases in government spending directly deflate the demand for goods and services. Similarly, increases in tax rates immediately siphon off income from consumers and result in rapid decreases in consumption.

When there is increased pressure on government to spend more, this may cause a deficit in the central government budget. A further deficit may arise when the government fiscal policy does not make sufficient provision for the budgeted expenditure. This will lead to an increase in the demand for local as well as international financing. The competition between the government and other local lenders pushes interest rates higher than which would normally prevail if the government had not been a participant in the capital market.

- Political attitude of investors

The perceptions of foreign investors regarding investment opportunities in South Africa are influenced, largely, by political development in the country. For example, when investment confidence in South Africa turns negative, both South African and foreign investors will start to disinvest and also become reluctant to make any further investments in the country. Any outflow of foreign capital causes a decline in the supply of funds and consequently also has a negative effect on the current account of the balance of payments. A further consequence is an increase in the demand for funds both here and abroad, which will eventually exert upward pressure on interest rates, resulting in a declining economy.

- Inflation

Efforts on the part of government to curb the rate of inflation are usually accompanied by an increase in interest rates. Higher interest rates, in turn, increase the cost of credit, and this could eventually limit the demand for goods and services in a country. Some of the main factors, which have an influence on the interest rate as well as other factors, do not function in isolation, but have implications for many other aspects of the economy of a country.

3.3.5.2. Interest rate risk mitigation strategy

Investors in bonds are particularly interested in the future level of interest rates in order to determine the effect interest rates might have on price movements (Sharpe, 2013). It is, therefore, of the utmost importance to be able to forecast interest rate movements as accurately as possible, since bond prices have a direct effect on capital gains and losses for investors. According to Gitman *et al*. (2016), the forecasting of the general level of interest rates and the

variables can be explained by looking at the most important economic factors, as set out in the sections below.

- Demand for and supply of funds

Market forces such as the demand for and the supply of funds determine interest rates. The total savings of a country represent the amount of funds available for investment. The amount of savings that enters the financial markets of a country originates from various sources.

- Personal savings. This represents the surplus income of all individuals after taxation. There are two kinds of personal savings, namely contractual savings and discretionary savings. Contractual savings consist of savings at financial institutions according to a contractual agreement between a depositor and a particular financial institution, such as a pension fund contribution. Discretionary savings, on the other hand, are voluntary savings without any previous contractual commitment (Drechsler *et al*., 2017).
- Net savings by private businesses. This consists of net profit after provision for depreciation, plus capital gains or losses, and not paid out as dividends. Parts of these funds are usually invested in debentures and ordinary shares issued by private companies, and eventually end up in the money and capital markets.
- Government savings. This is the surplus funds available after expenditure by all central and regional government departments, local authorities and government organisations. The demand for funds represents claims on the funds, which have been saved within an economy. This demand for funds originates in the private sector, government organisations and the central government itself. In circumstances where demand exceeds the supply of funds, this pressure causes an increase in the general level of interest rates.

The trend of market interest rates should be researched and analysed as accurately as possible. There are usually very clear signs and indicators when a change in the market interest rate is imminent. The knowledge gained in this way should be used to invest accordingly. If an increase in market interest rates is expected, the relatively conservative investor can possibly liquidate share investments to have cash available to invest in interest-bearing stock. The interest rate risk on fixed-interest-bearing stock can be reduced in the following ways:

- by concentrating on stock with a short remaining term;
- by retaining stock until maturity date, when a face value is paid out; and

- by distributing investment among stocks so that they are not all purchased at the same coupon rate.

The balance sheet and cash flow statements of companies, which have a high foreign capital component should be carefully analysed, bearing in mind the effect that an increase in interest rates can have on the cash flow of such companies. At the same time, an analysis should also be made of foreign capital in order to establish how it is divided into long-, medium- and short-term investments.

3.3.6. Financial risk

Investors need to understand what risk means to its business operations (Olson & Dash Wu, 2015). Essentially, this means knowing whether risks complement, enhance or harm business activities, or whether risks form a significant part of revenue generation. A typical bank, for instance, is in the business of taking risks and generating revenues based on extending risks. Risk activities should be consistent with the overall goals, so the philosophy of a bank should encourage initiatives related to the prudent management of risk exposures. Various authors define financial risk differently.

- According to Sharpe (2013), financial risk entails an exposure to uncertainty that could lead to a possible monetary loss. However, to be able to manage the risks, it is important to measure it.
- According to Van Horne and Wachowicz (2008), financial risk is the uncertainty introduced by the method by which the business finances its investments. If a business uses only common stock to finance investments, it incurs only business risk. If a business borrows money to finance investments, it must pay fixed financing charges in the form of interest to creditors prior to providing income to the common stockholders, so the uncertainty of returns to the equity investor increases. This increase in uncertainty because of fixed-cost financing is called financial risk or financial leverage, and this causes an increase in the risk premium of the stock. Depending on the nature of the investment, the type of investment risk will vary. High-risk investments have greater potential rewards, but also have greater potential consequences.
- Chapman (2013) defines financial risk as the exposure to adverse events that erode profitability and, in extreme circumstances, bring about business collapse.

- According to Madura (2017), financial risk is normally any risk associated with any form of financing. Risk is the probability of an unfavourable condition in the financial sector. It can also be seen as the probability of actual return being less than the expected return. There is uncertainty in every business. The level of uncertainty present is called risk.

According to Chapman (2013), financial risks also include the following:

- failure of financial systems, regulatory non-conformances or compliance issues;
- bad debt, adverse changes in exchange rates, overdependence on a single supplier;
- loss of key customers, loss of investments and poor hedging decisions; and
- poor investment decisions.

The sources of risk considered to be embraced within the term financial risk are considerable. Chapman (2013) considers these to include, but is not limited to:

- liquidity risk arising from a short-term inability to meet financial obligations, such as the business suppliers, the rent or staff remunerations;
- credit risk, stemming from the lack of payment of goods supplied to the business on credit;
- interest rate risk, which affects consumer's disposable income, resulting in trade deterioration;
- currency risk in terms of expected cash flow from overseas investments being adversely affected by fluctuations in exchange rates;
- funding risk for borrowers regarding to being unable to meet capital repayment requirements (and interest) and having to pay fixed charges on the company assets;
- foreign investment risk, such as restrictions on the right to repatriate funds, high levels of taxation on profits earned offshore, the temporary freezing of bank account balances and or the expropriation of assets;
- derivatives risk arising from speculation in the markets or hedging by buying forward with the aim of buying a commodity at a price lower than the prevailing price;
- systems risk, such as loss as a result of failure caused by the breakdown of business procedures, processes or systems and controls;
- outsourcing risk arising from a default of a counterparty that has gone into liquidation, failed to deliver goods by due date or breached contract conditions; and
- capital risk arising from a loss of an initial amount invested.

When considering an emerging market investment, the above-mentioned financial risks should be reduced to the minimum. According to Aggarwal (2005), financial risk management is the practice of creating economic value in a business by financial instruments to manage exposure to risk, particularly credit risk and market risk. Other risk types include foreign exchange, shape, volatility, sector, liquidity and inflation risks. Similar to general risk management, financial risk management requires identifying its sources, measuring it, and putting risk mitigation techniques in place.

In practice, financial markets are not likely to be perfect markets. This suggests that business managers are likely to have many opportunities to create value for shareholders using financial risk management. The challenge is to determine costly risks in relation to less costly risks for the investors to manage. A general rule of thumb, however, is that market risks that result in unique risks for the business have the potential for financial risk management. According to Chapman (2013), financial risk management presents investors with opportunities such as:

- improving financial planning and management, which is the focus of corporate governance;
- facilitating more robust investment decisions;
- informing hedging decisions;
- encouraging the development of constant monitoring of markets and the economy to make informed decisions; and
- encouraging the practice of due diligence when outsourcing and engaging with counterparties.

In conclusion, financial economics prescribes that investors should take on an investment that increases value. Finance theory also shows that fund managers cannot create value for investors by taking on investments that investors could do for themselves at the same cost. When applied to financial risk management, this implies that fund managers should not hedge risks that investors can hedge for themselves at the same cost. This notion is captured by the hedging irrelevance proposition. In a perfect market, the investment company cannot create value by hedging a risk when the price of bearing that risk within the business is the same as the price of bearing it outside of the business. Financial risk is one risk no business can afford to neglect. It is therefore critical for investors to develop a sound system of financial risk management.

This section focused on the management of financial risk by considering the various definitions of financial risk and the benefits of financial risk management. One of the sources of risk considered to be embraced within the term financial risk is credit risk, which is discussed next.

3.3.7. Credit risk

Movements of financial capital between countries are normally dependent on either credit or equity transfers. Credit is in turn dependent on the reputation or creditworthiness of an investor that takes responsibility for the funds. This section focuses on credit risk as an essential risk to consider when investing in an emerging market. Here are definitions of credit risk by various authors.

- Banks and Dunn (2003) define credit risk as a loss due to an inability or unwillingness by a counterparty to pay on its financial obligations, which usually leads to a default and losses for those extending credit.
- According to Bilardello and Ganguin (2005), credit risk is defined as a risk that a counterparty to a transaction will fail to perform according to the terms and conditions of the contract, thus causing the holder of the claim to suffer a loss.
- For Chapman (2013), credit risk is defined as the economic loss suffered due to the default of a borrower or counterparty. Banking institutions describe credit risk as the risk that customers default, in other words, they fail to comply with their obligations to service debt.
- According to Young (2018), credit risk is the risk that a counterparty to a financial transaction may fail to perform according to the terms and conditions of the contract.
- Wagner (2008) defines credit risk as a failure to make required debt payments on a timely basis or to comply with other conditions of an obligation or agreement. It may comprise, for example, the possibility that a bond issuer will default by failing to repay the principal amount and interest in the time agreed upon.
- According to Olson and Dash Wu (2015), credit risk is the risk that a counterparty may be unable to perform an obligation.

Actual credit losses depend on the collateral and netting agreements. In some (but not all) instances, collateral taken can be liquidated upon default to cover losses, while a netting agreement allows a portfolio of deals to be collapsed into a single amount payable or receivable. According to Banks and Dunn (2003), credit risk can appear in the form of:

- direct credit risk, which is the risk of a counterparty defaulting on the direct, unilateral extension of credit, such as a loan, security, receivable or deposit;
- trading credit risk, which is the risk of loss due to a counterparty defaulting on a bilateral obligation, like derivatives or repurchase agreement;
- contingent credit risk. which is the risk of loss due to a counterparty defaulting on a possible future extension of credit;
- correlated credit risk, which appears in certain financial transactions and increases the magnitude of potential loss;
- settlement risk is the loss due to a default after a payment of foreign exchange or delivery of securities has been made to a counterparty, but before an equivalent exchange has been received from the same counterparty; and
- sovereign risk is the risk of loss due to actions taken within the financial system of a country. This can occur through exchange controls and devaluation, for example a regulation preventing participants from converting and possibly withdrawing local funds or a large financial depreciation in the value of a local currency.

According to Rose and Hudgins (2013), an investor must consider three issues when assessing credit risk from a single counterparty.

- Default probability. This assesses the likelihood that the counterparty will default on its obligation either over the life of the obligation or over some specified horizon, such as a year. When calculated for a one-year horizon, this is called the expected default frequency.
- Credit exposure assesses the credit exposure in the event of a default, and the size of the outstanding obligation when the default occurs.
- Recovery rate, which means that, in the event of a default, a fraction of the exposure may be recovered through bankruptcy proceedings or some other form of settlement.

When the credit quality of an obligation is considered, this refers generally to the counterparty's ability to perform on that obligation. This encompasses both the default probability of the obligation and the anticipated recovery rate. Many forms of credit risk, especially those associated with larger institutional counterparties, are complicated or unique or they are of such a nature that it is worth assessing them in a less prescribed manner. The term credit analysis is used to describe any process for assessing the credit quality of a counterparty.

While the term credit risk can encompass credit scoring, it is more commonly used to refer to processes that entail human judgment. Emerging market investors should assess and review information about the counterparty. This might include the counterparty's balance sheet, income statement, recent trends in its industry, and the current economic environment. Credit risk provides another likely explanation of why the required rate of return is not always realised. Default bonds are defined as those that constitute failure to pay interest or where the interest is in arrears. From an investor's point of view, insolvency can be regarded as a serious issue where the repayment of the capital sum in total or in part is at stake. When the required rate of return is equal to the actual rate of return, this means that the issuer has met the obligations stipulated in the agreement.

Accordingly, investors will receive the required rate of return provided that all the obligations are met at the time of maturity. The extent of credit risk is determined by the difference between the yield on risk-free government stock and the yield on company debentures with a certain degree of risk. This difference indicates the additional return investors require on risky debentures to induce the investors to invest in such securities. According to Rose and Hudgins (2013), credit risk is determined by the extent of financial and business risk to which the issuer is exposed. In the case of company debentures, the extent of business risk is determined by the uncertainty surrounding the product prices, markets input prices and technological and management efficiency of the enterprise. These factors, in turn, are affected by the general level of business activities, business confidence, the monetary and fiscal policy of a country and many other related aspects.

In conclusion, Chapman (2013) argues that credit risk is the oldest and perhaps the most important of all risks in terms of the size of potential losses. Defaults by a small number of large customers can generate large losses, which can lead to insolvency. Therefore, emerging market investors need to mitigate credit risk at all cost. Credit risk can be mitigated by taking out credit risk insurance, which is available in many countries for local and offshore investors. When credit risk is well managed, investors will not be exposed to liquidity and legal risk, which are discussed in the next sections.

3.3.8. Liquidity risk

A liquid asset can be sold quickly and easily, with minimal loss of value, at any time within market hours (Banks & Dunn, 2003). The essential characteristic of a liquid market is that there are always ready and willing buyers and sellers. Various authors define liquidity risk differently.

- Mian and Santos (2018) define liquidity risk as the uncertainty introduced by the secondary market for an investment.
- Banks and Dunn (2003) define liquidity risk as the loss due to a mismatch between cash inflows and outflows and this may arise from an inability to sell a position (asset liquidity risk), fund a position (funding liquidity risk), or both.
- Bodie *et al*., (2018) define liquidity risk as the difficulty with which an asset can be sold and still fetch a fair price. It is the relationship between the time dimension (how long it will take to sell) and the price dimension (the discount from fair market price) of an investment asset.
- According to Rahman and Banna (2015), liquidity risk is an investment that has no immediate access to either the ability to buy or sell the investment, such as a stock or mutual fund, or the ability to access and withdraw funds, such as a savings account.
- According to Chapman (2013), liquidity risk is the risk that a business will be unable to obtain funds to meet its obligations as they fall due, either by increasing liabilities or by converting assets into money without loss of value.
- Gitman *et al*. (2016) define liquidity risk as the inability to convert an investment into cash quickly and with little or no loss in value. It is crucial for investors that some of the investments made be liquid enough to be disposed of easily should they run into cash-flow difficulties.

The advantages of liquid investments are twofold. Firstly, many banks prefer liquid assets, and so are more likely to extend a credit line should investors run into a cash flow crisis. Secondly, even if the bank does not like it, investors can always sell the assets themselves (Rahman & Banna, 2015). Highly illiquid and non-traded investments, such as private real estate, leveraged buyouts and venture capital, have historically been very hard to compare to traditional investments (Gitman *et al.,* 2016). This is particularly problematic when investors consider how to include these assets in a traditional portfolio of assets.

For the purposes of asset allocation, it is critical that illiquid asset classes be made comparable to liquid asset classes (Banks & Dunn, 2003). An estimation procedure may help to assess the true risks and diversification benefits presented by illiquid asset classes more accurately. Even though the approach involves some assumptions, it should provide a better picture of the

variations in illiquid returns. When an investor acquires an asset, they expect that the investment will mature or that it will be sellable to another investor (Rahman & Banna, 2015).

In either case, the investor expects to be able to convert the security into cash and use the proceeds for current consumption or other investments. The more difficult it is to make this conversion, the greater the liquidity risk (Gitman *et al*., 2016). According to Rose and Hudgins (2013), an investor must consider two questions when assessing the liquidity risk of an investment:

- how long will it take to convert the investment into cash?
- how certain is the price to be received?

Similarly, uncertainty faces an investor who wants to acquire an asset:

- how long will it take to acquire the asset?
- how uncertain is the price to be paid?

In conclusion, liquidity risk can be regarded as one of the key risks an investor should consider when investing in emerging markets. The process of buying and selling assets in emerging markets will determine the success of the investment. Liquidity management will not only ensure that risks are kept minimal, but also that opportunities presented are exploited. The next section focuses on legal risk.

3.3.9. Legal risk

According to Young (2018), legal risk is the risk arising from violation of or non-compliance with laws, rules, regulations, prescribed policies and ethical standards. This risk also arises when laws or rules governing certain products or activities of the customers of an organisation are unclear or untested (Young, 2018). According to Chapman (2013), legal risk is defined as failing to operate within the law, to be aware of legal obligations, to honour contractual commitments, to agree remedies for compensation with the offshore company in the event of default. Therefore, the investor needs to show evidence that an institution has operated within the law, or to recognise and effectively manage legal threats (Gitman *et al*., 2016). The next section focuses on risk factors of legal risk.

3.3.9.1. Risk factors of legal risk

The risk factors of legal risk for an investor may be considered to include, but are not limited to:

- breach of environmental legislation;
- inaccurate listing information in terms of misstatements, material omissions or misleading opinions;
- breach of copyright;
- loss of business as a result of senior management time being lost through a protracted legal dispute;
- prosecution for breach of the law;
- legal disputes with offshore trading partners arising from a lack of appreciation of the difference between trading laws;
- loss of reputation due to prosecution or a dispute with a customer, partner or supplier; and
- loss of legal disputes through poor record keeping.

Non-compliance can expose the organisation to fines, financial penalties, payment of damages, and the voiding of contracts (Young, 2018). It could also lead to a diminished reputation, reduced franchise value, limited business opportunities, restricted developments and an inability to enforce contracts (Chapman, 2013).

In conclusion, a well-managed legal risk can offer investors good returns, a good reputation and a competitive edge in emerging markets. Managing legal risk is an ongoing process as emerging market countries revise trading rules and regulations from time to time. Therefore, it is necessary to have risk mitigation techniques in place in case legal threats arise.

3.3.9.2. Legal risk mitigation strategy

Emerging market investors need to be well aware of the consequences of legal risk and should contain this risk as it could damage the reputation of the company and ultimately cease offshore operations, resulting in investors losing their investments (Gitman *et al*., 2016). Chapman (2013) argues that the development of risk mitigation will depend on a number of issues, such as:

- understanding the legal framework within which companies operate;
- having legal representatives review major contracts before completion;
- maintaining legal representation;
- ensuring annual reports and accounts are accurate;

- ensuring compliance with investor confidentiality requirements;
- ensuring compliance with copyright, trademark and patent law;
- reviewing current product law prior to the release of new products into existing and new markets;
- maintaining systems and processes which adhere to employment law;
- ensuring employees are aware of the law that they must adhere to in the fulfilment of their roles and duties and providing training and monitoring where required; and
- providing effective legal defence against challenges.

Investors' objectives may be compromised when legal risk is not minimised in an emerging market. According to Gitman *et al*. (2016), failure to manage legal risk can result in the cancellation of investment contracts, penalties, fines and termination of trading licenses, which will be detrimental to the investors' objectives in the international arena. However, when legal risk is managed, investors can realise great benefits, such as:

- it reduces the amount of management and external support time in legal disputes;
- it provides for greater offshore contractual, regulatory and statutory compliance;
- it reduces the offshore risk of reputational damage; and
- it promotes a more thorough review of contracts engaged in domestically and offshore.

In conclusion, legal risk should be considered before investing in emerging market countries by ensuring a good understanding of the emerging market legal frameworks. Investors need to ensure compliance with copyright, trademark and technological advancement of the emerging market country in relation to the domestic country. The next section focuses on technological risk.

3.3.10. Technological risk

Technological risk has become a major concern for emerging market investors in recent years (Saunders & Cornett, 2018). Since the 1980s, banks, insurance companies and emerging market investment companies have sought to improve operational efficiency with major investments in internal and external communications, computers and an expanded technological infrastructure (Gitman *et al*., 2016).

Technological risk arises when existing technology malfunctions or back-office support systems break down (Saunders & Cornett, 2018). According to Chapman (2013), technology risk refers to sources of risk that are considered to be embraced within the term technology. Technology risk includes the following:

- lack of investment in technology and the resultant erosion of the ability to compete;
- inadequate technology governance and, in particular, IT governance;
- inadequate management of outsourcing;
- lack of alignment of information technology (IT) to the business objectives;
- inadequate protection against viruses, hacking and loss of confidentiality of information; and
- inadequate flexibility of production to be able to produce small production runs in an economic way.

Poor technology can lead to emerging market investors having to withdraw offshore investments as a result of an inability to compete, leading to frustrations and losses (Gitman, *et al*. 2016). When investors envisage offshore investments, they need to ensure that they can afford the technology needed to trade with their offshore counterparts. There are technological risk factors that need to be considered by emerging market investors, which is discussed in the next section.

3.3.10.1. Risk factors of technological risk

Without up-to-date technology, investors may fail to notice opportunities emerging in an emerging market (Saunders & Cornett, 2018). Investors may also suffer losses due to late reaction on an anticipated loss that could have been prevented if up-to-date technology was in place. According to Wilkinson (2009), technology risk management affords an investor various benefits.

- It improves the quality of information for decision-making. Hence, business leaders who succeed will take advantage of a new way of doing business based on the increasing velocity of information and building advanced processes and products faster than the competition.
- It sets out the risks to investment in technology and promotes a proactive approach to managing technology projects.
- It maps the threats of existing business practices from emerging businesses to customer relationships.

- It draws attention to exposure to the loss of market share arising from a competitor's improvement in product design.
- It provides insights into the disadvantage of not aligning technology to strategy and offshore business operations.

In conclusion, emerging market investors need up-to-date technology to take advantage of opportunities and benefits while keeping technological threats to the minimum. For any emerging market investment to succeed, investors should have control measures in place should any threats arise. The next section focuses on the risk mitigation techniques that can be deployed to minimise technological threats.

3.3.10.2. Technological risk mitigation strategy

According to Wilkinson (2009), the development of a sound system of technology risk management will depend on attention being paid to several issues, including, but not limited to, the following:

- managing investment in technology to secure business objectives and optimise emerging market investment benefits;
- ensuring the right information reaches the right people at the right time through a combination of management information systems and channels;
- understanding the risks of outsourcing;
- monitoring competitors to avoid being outmanoeuvred by the introduction of new technologies that shift industrial boundaries;
- embracing new developments in e-commerce; and
- implementing information security.

A key aspect of technology risk management is that of not being outwitted by the opposition and as a minimum keeping in pace with the opposition's developments. The omnipresent technologies of today are information, communication and controls. These technologies can raise productivity, lower cost and drive growth. Therefore, changes in technology are both an opportunity and a threat in terms of market share and market development. In addition, the introduction of technology within a business can also open the door to a series of debilitating risks, which may seriously erode profitability and competitive advantage, or at worst lead to business failure.

Technological changes can present opportunities as well as threats to emerging market investments. Therefore, it is important for investors to conduct a thorough research of the technology used by their offshore counterparts to optimise the benefits, while keeping risks at bay. Failure to manage technological risk or any other risk discussed above could lead to the failure of an investment plan. The next section is a conclusion to Chapter 3.

3.4. Conclusion

Investors have several avenues through which they can invest internationally, but opportunities in international markets do not come without risk (Bodie *et al.,* 2018). This chapter covered the definition of risk management by various authors, and it was revealed that risk management is critical in successfully making investments in emerging markets. Risk management was discussed in more detail by focusing on the rules of risk management and the risk management processes. It can be concluded that risk management processes are perceived differently by different authors. However, the key common components that came out were risk identification, risk analysis, risk control, risk financing and risk monitoring. These components need to be followed in a proper manner to manage and minimise risks. For example, if a risk is not properly identified, then the evaluation will be misplaced, and the risk mitigation techniques will not minimise the risk. This could lead to financing and monitoring an insignificant risk, while the significant risk is ignored or overlooked.

The risk management processes section was followed by a detailed analysis of risk types considered to be a threat when investing in emerging markets. The analysis of risk types was subdivided into definitions by various authors, risk factors to be considered by emerging market investors as well as the risk mitigation to put in place to minimise the risks. It was also evident that some risks are embedded in other risks. For example, finance risk is considered to include liquidity risk, credit risk, currency and capital risk. The critical point for investors is to consider risks in relation to their investment objectives, as some emerging market investments will be free from certain risks while more exposed to others. A summary of risks, risk factors and a possible mitigating technique is presented in Table 3.5.

Table 3.5: Risks, risk factors and risk mitigation

RISK	**RISK FACTORS**	**RISK MITIGATION**
Exchange rate risk	Each currency is valued in terms of other currencies, so that currencies can be exchanged to facilitate emerging markets transactions.	Avoid unnecessary losses caused by an increase in exchange rates by paying for the transaction immediately at the rate of exchange ruling when the agreement is concluded, and futures transaction can be arranged.
Country risk	Different languages, currencies, jurisdictions, customs and habits can be translated into extra informational asymmetries and transaction costs that may impact upon the smooth operation of business.	Emerging market investors can use country risk service (CRS), which provides an in-depth and timely analysis of the risks of financial exposure in many countries.
Market risk	Changes in the economic environment affect markets by way of the pattern of economic growth and movements in interest and exchange rates.	Maintain a sufficiently long investment period to survive any decline as a result of the market risk and then turn the ensuing increase in the general market price to good account.
Inflation risk	Both the value of current investments and the attractiveness of future investments will change depending on the outlook of inflation.	The diversification of investments into monetary assets, ordinary shares and real assets spreads the risk, since inflation does not affect all assets to the same extent.
Interest rate risk	Interest rate movement has a ripple effect throughout the entire economy and influences all economic activities because changes in interest rates affect cash, bonds and stocks.	Concentrate on stocks with a short remaining term and retain stocks until maturity date, when a face value is paid out and distribute investment among stocks so that they are not all purchased at the same coupon rate.
Liquidity risk	A loss due to a mismatch between cash inflows and outflows and this may arise from an inability to sell a position (asset liquidity risk), fund a position (funding liquidity risk), or both.	Maintain a great relationship between the time dimension (how long it will take to sell) and the price dimension (the discount from fair market price) of an investment asset.

Financial risk	High-risk investments have greater potential rewards, but also have greater potential consequences.	Encourage the development of constant monitoring of markets and the economy to make informed decisions.
Credit risk	Loss due to an inability or unwillingness by a counterparty to pay on its financial obligations, which usually leads to a default and losses for those extending credit.	Collateral taken can be liquidated upon default to cover losses, while a netting agreement allows a portfolio of deals to be collapsed into a single payable or receivable amount.
Legal risk	Legal disputes with offshore trading partners arising from a lack of appreciation of the difference between the laws of the two countries.	Understanding the legal framework within which companies operate and have legal representatives review major contracts before completion.
Technology risk.	Without up-to-date technology, investors may fail to notice opportunities emerging in an offshore arena.	Managing investment in technology to secure business objectives, optimise emerging market investment benefits and implementing information security.

This chapter serves as a guideline for the next chapter, which aims to provide the details of the approach to the research methodology. The research methodology recommends the suitable method to collect data for an empirical analysis, which will be used to develop a risk analysis framework.

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

4.1. Introduction

According to the predetermined objectives of a study, a researcher has to plan the entire process of study in terms of a research plan and design suited to the study in order to accomplish the purpose of the study (Gaudet & Robert, 2018). A plan is typically any diagram or list of steps with timelines and resources, used to achieve an objective (Wildemuth, 2017). It is commonly understood as a temporal set of intended actions through which one expects to achieve a goal (Durdella, 2018). Furthermore, planning (also called forethought) is the process of thinking about and organising the activities required to achieve a desired goal. It is thought essential to the creation, maintenance and refinement of a plan, or integration of it with other plans (Wildemuth, 2017). It combines forecasting of developments with the preparation of scenarios of how to react to them and ensure finding the end results.

Chapter 2 and 3 dealt with a literature review of emerging markets focusing on the risk factors for investors in these markets. The objective of this study was to develop a risk analysis framework for investors in emerging markets. The aim of this chapter is to provide the research methodology that was used to gather and analyse the risk factors for investors in emerging markets. To achieve this objective, this chapter focuses on the underlying theory of the research design, research methods and statistical techniques that was used to analyse the data collected in order to derive at conclusions and recommendations for this study.

4.2. Research design

According to Gill and Johnson (2010), research design is a master plan that specifies the methods and procedures that are used for the collection and analysis of information that is required. It is a framework or blueprint that plans the action for the research project. In other words, a research design is a systematic plan to study a scientific problem. The design of a study defines the study type such as descriptive, correlational, semi-experimental, experimental, review, meta-analytic, and sub-types such as descriptive-longitudinal case study, research questions, hypotheses, independent and dependent variables (Gill & Johnson, 2010). According to Gupta (2012), the research design is the plan, structure and strategy of investigation conceived to obtain answers to research questions and control variance. A research design may

be considered as a general plan or blueprint used to guide the research process from formulation of the research questions and hypothesis to the reporting of the research findings (Kalaian, 2008).

Additionally, Kalaian (2008) indicates that any mode of research (descriptive, explorative, experimental, evaluative, diagnostic or prognostic) incorporates all the essential components of a research design. However, some substance is given to certain aspects of a research design, in a particular type of research compared to the other. According to Guthrie (2010), research approaches that are widely used are the quantitative and qualitative approaches. Therefore, a research design is a framework that has been constructed to seek answers to research questions. It is a detailed outline of how an investigation will take place. A research design typically includes; how data will be collected, what instruments will be employed, how these instruments will be used and the intended means for analysing the collected data.

4.2.1. Theoretical introduction to the design strategy

Research is the systematic problem analysis, model building and fact-finding for the purpose of important decision-making and control for the process of the study undertaken (Rajasekar, Philominathan & Chinnathambi, 2013). According to Gaudet and Robert (2018), research is an objective process as it attempts to provide accurate authentic information (it is sometimes defined as the application of scientific methods in the solution of problems). A broad definition of research is propounded by Wildemuth (2017), as any gathering of data, information and facts for the advancement of knowledge. Another definition of research is given by Creswell and Creswell (2018), who state that research is a process of steps used to collect and analyse information to increase an understanding of a topic or issue. It consists of three steps: (i) pose a question, (ii) collect data to answer the question, and (iii) present an answer to the question.

This section will briefly describe the purpose of the study and the need for research in this field. According to Creswell and Pot (2017), when deciding on the broad design, the following factors should be considered:

- understanding the research problem;
- identification of resources;
- deciding on the design procedure; and
- deciding on the data requirements.

The research problem and the resources needed for this study have been identified in Chapter 1. The research problem is to develop a risk analysis framework for investors in emerging markets. Before dealing with the research design, it is important to describe the basic steps in the research process. According to Leedy and Ormrod (2018), there are nine steps in the research process.

Step 1: The researcher asks a question that has no known resolution.
Step 2: The researcher converts the question into a clearly stated research problem.
Step 3: The researcher poses a provisional hypothesis or series of hypotheses.
Step 4: The researcher searches the literature for ideas regarding the problem and for strategies that may help to address it.
Step 5: The researcher collects data that potentially relate to the problem.
Step 6: The researcher arranges the data into a logical organisational structure.
Step 7: The researcher analyses and interprets the data to determine its meaning.
Step 8: Either the data appears to resolve the problem or not.
Step 9: Either the data supports the hypothesis or not.

The above steps were used as a guideline for this study and were also confirmed by Kumar (2014), as necessary for the proper execution of a research study. Therefore, the steps were adopted in the various chapters as follows: Steps 1, 2 and 3 were adopted in Chapter 1. Step 4, which focuses on the literature that shed light on the problem and ways to address it, was adopted in Chapters 2 and 3. Steps 5, 6 and 7 are addressed in this Chapter 4. Chapter 5, which is based on the results generated from the data collected, will address Step 8. Step 9 will be dealt with in Chapter 6, which focuses on the recommendations and conclusions of the study. The next section focuses on the purpose of the study and the need for research in this field.

4.2.2. Research design for this study

Figure 4.1 illustrates the types of research design of the present study, which is conclusive. According to Gaudet and Robert (2018), conclusive research has two types: descriptive and causal. Out of these, the study research type is descriptive as it is a type of conclusive research that has its major objective, the description of something (usually characteristics or functions). The figure below is important to include in the study to support the steps taken by the researcher.

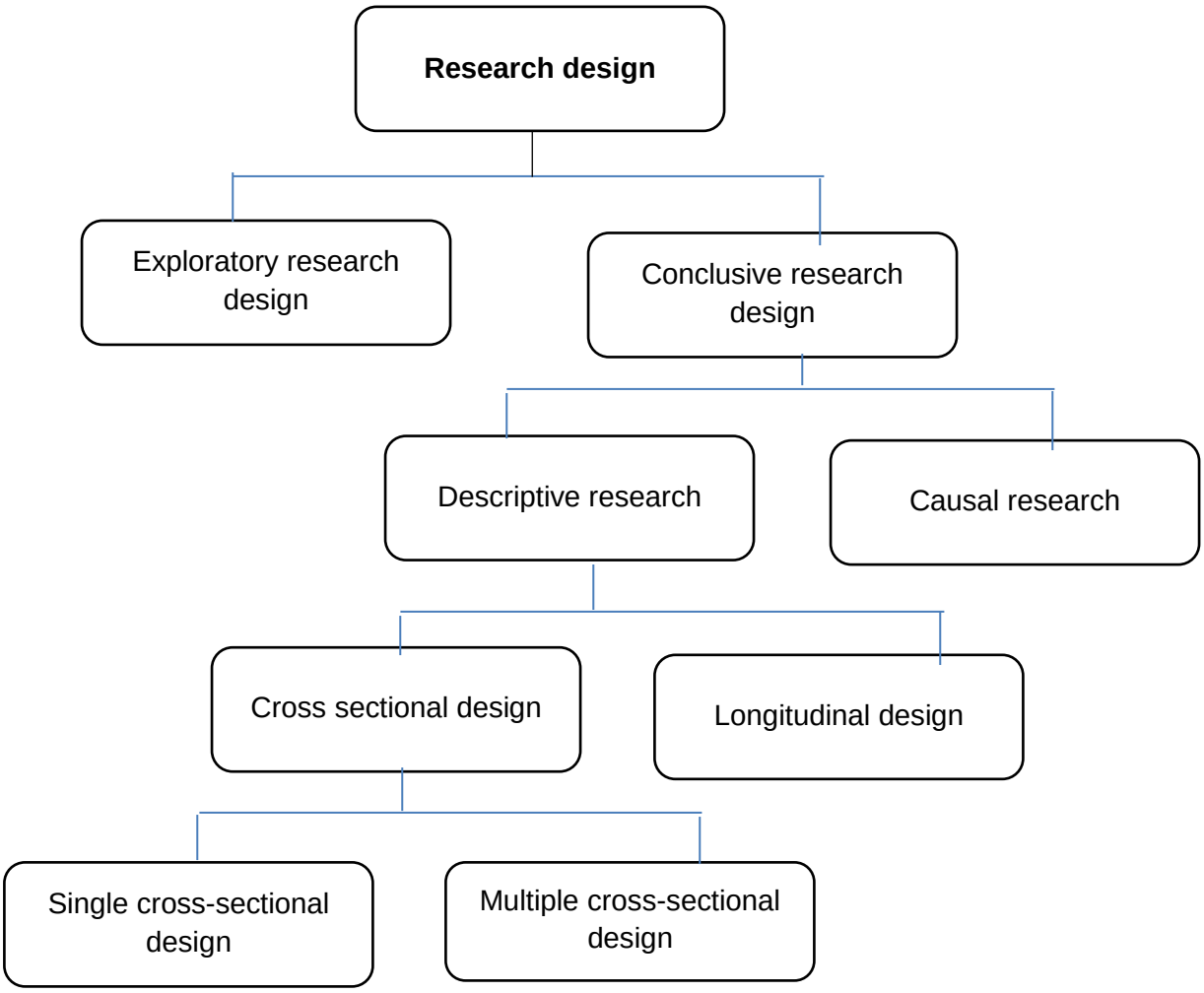

Figure 4.1. Types of research design

Source: Adapted from Best and Kahn (2013)

Descriptive research consists of cross-sectional and longitudinal design. This study was cross-sectional and can be stated as a type of research design involving the collection of information from any given sample of population elements only once. Cross-sectional research is further divided into single and multiple designs. This research had a single cross-sectional design, which implies a cross-sectional design in which one sample of respondents is drawn from the target population and the data is obtained from this sample. In short, the present study is conclusive, descriptive, and single cross-sectional research design in nature. The next section focuses on qualitative versus quantitative research.

4.2.3. Qualitative versus quantitative research

Social science research is normally divided into two broad categories: quantitative and qualitative research. However, in recent years, a new approach that combines both quantitative and qualitative methods, which is fondly called the mixed methodology, has emerged (Creswell, 2014). Quantitative and qualitative research aims to help researchers comprehend new ideas, improve their way of thinking and gather insights through the process of data analysis. Qualitative research highlights processes and meanings that are not experimentally examined or measured in terms of quantity, amount or frequency (Denzin & Lincoln, 2017). Therefore, qualitative research employs non-mathematical analytical procedures that result in the findings derived from data gathered by observations and interviews, as well as conversation, books, articles and recordings (Burney & Saleem, 2008). By contrast, quantitative research can be defined as the methods that primarily seek to express information numerically, in terms of quantities or measurements (Babbie, 2016). In general, statistical analysis of experimental, survey, and archival data is considered quantitative (Creswell, 2014). According to Walliman (2016), qualitative methods are inductive, holistic and natural. This leads to the investigation of the relationships that exist in nature, with the purpose of coming up with significant meanings.

While the aim of qualitative research is to understand and interpret social phenomena in their real-life context, the aim of quantitative research is to determine common patterns in an examined population and to develop explanations of cause and effect relationships (Neuman, 2011). In addition, quantitative research is a form of conclusive research that involves sampling. It also involves a structured or unstructured data collection procedure (Kalaian, 2008). According to Grix (2010), quantitative research is categorised into three main phases: finding variables for concepts, operationalising them in the research study, and quantifying them. Therefore, quantitative research is utilised to answer questions about relationships among measured variables with the aim or purpose of predicting, explaining and controlling the real situation of the study (Leedy & Ormrod, 2018). A quantitative study often concludes with either rejection or confirmation of the hypotheses of the model being tested. The strengths and weaknesses of the two approaches are summarised in Table 4.1.

Table 4.1: Strengths and weaknesses of quantitative and qualitative methods

	Quantitative	**Qualitative**
Strengths	Higher level of accuracy Provides factual information Results are more significant and focused both to information gathered and target audience Margin of error can be calculated Generalisations possible Data is in the form of numbers from precise measurement	Can be cheaper than quantitative if on a small scale Can be simpler to undertake Offers useful overview Helpful as prelude to quantitative research
Weaknesses	Slower than qualitative Not so simple to undertake Often require computer analysis facilities Low response rates Some risk of bias Procedures are standard, replication is assumed	Subjective findings, calling for a higher level of interpretive skills as data is in the form of text Research procedures are particular, and replication is difficult Small sample size reducing statistical accuracy level Greater chance of bias from respondents and through interpretation Difficult to generalise from limited number of cases

Source: Adapted from Ghauri and Gronhaug (2011)

From Table 4.1 above, it can be deduced that both approaches have advantages for certain purposes, while both also have drawbacks. In fact, the current trend is to see them as complementary, because, as Leedy and Ormrod (2018) state, the use of multiple methods can make valuable contributions to the same research problem. Quantitative research was considered as the best research approach for this study, because the researcher was trying to achieve objectivity through the use of a structured questionnaire that was used to collect information from the participants.

According to Creswell (2014), quantitative research falls into either the experimental or the non-experimental category. Ader, Mellenbergh and Hand (2008) say that of all research methods, experimental research is considered to be the most accurate and powerful method of enquiry. The researcher manipulates treatment in order to establish the cause and effect of the phenomenon under investigation. By contrast, in a non-experimental study, no attempt is made to change the behaviour or conditions of the subjects of research, with the researcher

measuring existing phenomena as they are found (Sekaran & Bougie, 2016). Major forms of non-experimental research include survey research, correlation studies, and causal comparative studies. A survey research is undertaken to measure the characteristics of different groups, or their attitude towards, or perceptions of, a certain phenomenon. By contrast, correlation research is used to determine, as well as to examine the strengths and direction of the relationship between two or more variables in relation to the same group of people (Cooper & Schindler, 2008). Causal comparative research attempts to investigate the cause of, or the consequences of differences between certain groups.

Bearing such an approach in mind, the survey method was deemed to be the most appropriate for the current study. A survey is a form of research where the researcher interacts with the respondents to obtain facts, opinions and attitudes (Walliman, 2016). As explained earlier, a survey research is usually quantitative, which necessitates standardisation of information used in defining or describing variables and their relationships in a study. According to Leedy and Ormrod (2018), surveys are either descriptive or relational. Whereas descriptive surveys are intended to describe the prevailing situation, relational surveys are designed to examine relationships among two or more variables in an exploratory or confirmatory empirical way. The current study sought to analyse risks for investors in emerging markets, with the objective of developing a risk analysis framework for emerging market investors.

4.2.4. Quantitative research design

According to Yin (2017), quantitative research is a variable-oriented approach, which is theory-centred. In this approach, generality is given precedence over complexity because the researcher is interested in testing propositions derived from general theories. Kalaian (2008) states that quantitative research is a deductive theory-based research process that focuses primarily on testing theories and research hypotheses. This type of research investigates differences and relationships using numeric data and statistical methods to reach specific conclusions about the phenomena. According to Guthrie (2010), quantitative research primarily focuses on the measurement of objective variables that affect individuals or groups. This study adopted a quantitate research where statistical methods were used to draw conclusions about the analysis of risk factors for investors in emerging markets.

4.2.5. Qualitative research design

According to Trochim, Donnelly and Arora (2016), qualitative research refers to meanings, concepts, definitions, characteristics, metaphors, symbols and descriptions of things. According to Leedy and Ormrod (2018), qualitative research methods focus on phenomena that occur in the real world and involve studying those phenomena in all their complexities. Qualitative researchers rarely try to simplify what they observe. Instead, they recognise that the issue they are studying has many dimensions and layers, and so they try to portray the issue in its multifaceted form. According to Kalaian (2008), qualitative research is inductive and context-specific research that focuses on observing and describing a specific phenomenon, behaviour, opinions and events. The events exist through data collected by observations, documents, physical artefacts, interviews and focus groups to generate hypotheses and theories.

The aim of this study was to analyse risks for investors in emerging markets, with an objective of developing a risk analysis framework for emerging market investors. Since the study is based on deductive theory-based research, a quantitative approach was chosen as the appropriate tool for this study. When considering the associated tools for conducting the study, research has shown that a survey can be a useful tool when collecting data describing a specific phenomenon. A survey is one of the four main research design techniques that are used to collect data, and therefore this will be discussed in the next section.

4.3. Research design techniques

Once the research design conditions and the research approach (qualitative or quantitative) discussed above, have been satisfied, it is important to consider the design techniques that may be used to collect data. According to Trochim *et al*. (2016), researchers can use different design techniques. However, the chosen design should be appropriate for the research aims and objectives. The study aimed to collect primary data, thus a survey (most commonly used to generate primary data) was chosen as the most appropriate for the study.

4.3.1. Surveys

According to Leedy and Ormrod (2018), surveys involve acquiring information about one or more groups of people, perhaps about their characteristics, opinions, attitudes or previous experiences and tabulating their answers. Surveys are classified as a research technique where information is collected from a sample of people by means of interviews (verbally) or questionnaires (non-verbally). A survey research is a systematic research method for collecting data from a representative sample of individuals using instruments composed of closed-ended and or open-ended questions, observations and interviews (Kalaian, 2008).

4.3.1.1. Interviews

According to Zikmund, Babin, Carr and Griffin (2012), interviews have certain advantages and disadvantages when used as research technique.

- Advantages
  - the opportunity to provide feedback in the clarification of instruments of certain questions between the interviewer and the respondent;
  - more detail can be obtained than from lengthy questionnaires;
  - the completeness of the survey may be increased by ensuring responses to all questions; and
  - the percentage of people completing the questionnaire is increased by the presence of an interviewer.

- Disadvantages
  - respondents may not want to supply confidential information due to the fact that they are not anonymous;
  - the interviewer's demographic characteristics may have an influence on the respondents' answers;
  - interviewer's bias may be created through different interview techniques; and
  - personal interviews are more expensive and time-consuming than questionnaires.

The advantages and disadvantages discussed above were taken into consideration to determine whether interviews would be the best techniques to collect data for this study. Therefore, based on the sensitivity, confidentiality, the nature of the study, the advantages and disadvantages discussed above, as well as the profile of the respondents, interviews were not used to collect data for this study.

4.3.1.2. Questionnaires

Many situations exist where it is not essential to make use of an interview, but rather to gather data by making use of a questionnaire. According to Trochim *et al.* (2016), a questionnaire is defined as a list of well-structured questions that was chosen after careful and considerable testing and which aims at getting reliable responses from the chosen sample. According to Yin (2017), a questionnaire is a prepared set of written questions, used for statistical compilation or comparison of the information gathered. The aim of a questionnaire is to determine what a selected group of participants do, feel and think. Zikmund *et al.* (2012) list the advantages and disadvantages of using questionnaires as follows.

- The use of questionnaires make data gathering geographically easy because mail questionnaires reach respondents at the same time over a widely distributed area, and it is cost-effective.
- Using mail to send questionnaires to the sample population is not free, but is low in cost compared to personal and telephone interviews.
- Questionnaires are convenient for the respondents who can complete the questionnaires in their own time with enough time to think about their responses.
- In the absence of an interviewer, the respondent may be more likely to supply sensitive information. However, this can also be a disadvantage for the researcher as he or she has no control over the responses provided by respondents and there is no opportunity to clarify or ask questions.
- Mail questionnaires consist of mostly well-structured questions that are standardised, clear-cut and straight-forward.
- The response rate may be low because the survey may be boring, unclear or complex, and may therefore be disregarded by most respondents.
- Individuals, who have an interest in the subject matter, will have a higher response rate than those with less interest or experience. To increase the responses to mail surveys, researchers can make use of prepaid return envelops, designing attractive questionnaires and using easy-to-understand language.

A questionnaire is one of the most widely used research designs across disciplines (Guthrie, 2010). A questionnaire collects a large amount of survey data from a representative sample of individuals, sampled from the targeted population and using a variety of delivery methods such as face-to-face, telephone, mail, and electronic (web-based and email) interviews and questionnaires. Each of these data collection methods has its own advantages and disadvantages in terms of cost, duration, and response rate. Some of the most popular methods along with their associated advantages and disadvantages are elaborated on in Table 4.2 below.

Table 4.2: Advantages and disadvantages of survey methods

Methods	**Advantages**	**Disadvantages**
Postal	• Low cost per response. Survey participants can choose to remain anonymous. It is not labour intensive. Interviewer's absence may lead to a more candid response.	• Mail is subject to postal delays, which can be substantial when posting to remote areas, or unpredictable events, such as natural disasters, could cause delays. Interviewer's absence may lead to a lack of control over how the questionnaire is answered.
Telephone	• Interviews can be conducted swiftly. Rapport can be established with respondents. Higher response rate compared to postal and electronic questionnaires.	• More prone to social desirability biases than other modes, so telephone interviews are generally not suitable for sensitive topics. The interviewer cannot see or respond to non-verbal signs.
Electronic	• Low cost. Questionnaires can be conducted swiftly, without postal delays. Survey participants can choose to remain anonymous. It is not labour intensive. Questions can be more detailed, as opposed to the limits of paper or telephones. Help or instructions can be dynamically displayed with the question as needed, and automatic sequencing means the computer can determine the next question, rather than relying on respondents to follow instructions or skip questions correctly.	• Not all the sample may be able to access the electronic format, and therefore results may not be representative of the target population.
Personally administered	• Questions can be more detailed, as opposed to the limits of paper or telephones. Rapport with respondents is generally higher than other modes. Typically, higher response rate than other modes.	• Can be extremely expensive and time-consuming to train and maintain an interview panel. Each interview also has a marginal cost associated with collecting the data. Interviewer can introduce bias by leading the interview.

Source: Adapted from Fowler (2013)

From Table 4.2 above, the electronic method appears to have the most advantages and also the most manageable disadvantages, in comparison to the other methods. When examining the postal method of conducting the survey, given the geographical distribution of the sample group along with the time to administer the survey through mail, this method was not considered as the best option. The telephonic method of conducting the survey was considered, but due to the seniority of the participants involved in the study, the telephonic survey was deemed to be more intrusive and time-consuming compared to the electronic method, which has the advantage of being completed by the respondents in their own time and across several sessions. The personally administered method was not considered due to the geographic dispersion of the participants involved.

When examining which tool to use for the survey, Guthrie (2010) identifies a questionnaire as the main instrument for collecting data for a survey research. Additionally, Guthrie (2010) describes a questionnaire as a set of standardised questions, often called items, which follow a fixed scheme in order to collect individual data about one or more specific topics. A questionnaire was consequently chosen as the most appropriate tool to collect data, based on the objectives of this study.

4.3.2. Secondary data versus primary data

This section focuses on determining which data would be most suitable for the study, based on the objectives on the research. Secondary and primary data were considered for the study.

4.3.2.1. Secondary data

Secondary data (also known as historical data) is data that was previously collected and analysed for another research project. This data is usually found inside the company or in the library (Zikmund *et al.,* 2012). Secondary data includes data found in books, articles and documents such as published statistics, annual reports and accounts of companies (Kumar, 2014). According to Zikmund *et al.* (2012), as well as Kumar (2014), there are certain advantages and disadvantages to using secondary data for research.

- Advantages
    - secondary data builds the research on past research outputs which increase the body of business knowledge in the market;

- secondary data can be obtained at a lower cost and faster than primary data; and
- the use of secondary data is of greater value than primary data when doing exploratory research.

- Disadvantages
  - secondary data can be outdated and does not always meet the needs of the researcher because it was collected for another purpose; and
  - secondary data that is available can be inadequate because of outdated information, variation in the definition of the terms used, different units of measurement and a lack of information to verify the accuracy of the data.

The purpose of most studies is to utilise information for future purposes. Therefore, for secondary data to be helpful, it must be timely and accurate (Zikmund *et al*., 2012). The aim of this study was to obtain primary data from the respondents (which will be discussed next). Therefore, secondary data was not used in the study.

4.3.2.2. Primary data

According to Golden (2017), data collection plays a crucial role in statistical analysis. In research, there are different methods used to gather information, all of which fall into two categories: primary data, and secondary data. As the name suggests, primary data is collected for the first time by the researcher, while secondary data is the data already collected or produced by others (Ignatow & Mihalcea, 2017). There are many differences between primary and secondary data, but the most important difference is that primary data is factual and original, whereas secondary data is just the analysis and interpretation of other primary data. While primary data is collected with the aim to source solutions to current problems, secondary data was collected for other purposes (Golden, 2017).

According to Flick (2017), primary data is data originated for the first time by the researcher through direct efforts and experience, specifically for the purpose of addressing a research problem. It is also known as the first hand or raw data. The data can be collected through various methods such as surveys, observations, physical testing, mailed questionnaires, personal interviews, telephonic interviews, focus groups and case studies (Ignatow & Mihalcea, 2017).

After considering the different research designs and techniques described above, it was concluded that primary data was the most relevant research design technique. A survey, in particular a questionnaire survey, was the most appropriate method to gather primary data for this study, based on the following reasons.

- secondary data was not suitable as a research design technique due to the absence of a secondary database pertaining to the analysis of risk factors for investors in emerging markets;
- it was also inappropriate to use an observation technique or an experiment due to the nature of the data that was required;
- telephone interviews have a high cost, and the time the respondents have to answer the questions is limited;
- a web-based questionnaire is the most efficient way of reaching emerging market investors and asset managers, allowing for immediate delivery of the questionnaire and fast response; and
- respondents can be more open and relaxed by completing the questionnaires in their own time.

It was therefore deduced that primary data will be best suited for the study as a real-time data will be collected whereas secondary data is one which relates to the past. The next section focuses on the data gathering method for this study.

4.3.3. Data gathering method for this study

Based on the advantages and disadvantages of the various survey delivery methods, a web-based questionnaire was selected as the best tool to conduct the primary research. The benefits of using a web-based survey are briefly discussed in Table 4.3 below.

Table 4.3: Benefits of using a web-based survey

Benefit(s)	**Description of benefit(s)**
Flexible instrument	Provides a flexible survey instrument that can include text, images, sounds and video, as well as dynamic filtering by the respondents.
Sampling	Can access large and geographically broad samples.
Human resources	Requires few resources, for example no photocopying, folding or coding

	verification.
Time resources	Improved survey available all the time and has a short delivery time.
Material resources	Requires little material, for example paper and stamps.
Reduced cost	Few human and material resources required.
Analysis	Direct transmission of data, including coding and analysis. More complete replies to open-ended questions. Potential for customer feedback.

Source: Adapted from Harris (2014)

Callegaro, Manfreda and Vehovar (2015) also recognise increased sample-size availability, time efficiencies and other benefits such as reduced cost. Additionally, it was found that web-based surveys lead to an improvement in data capture and analysis, because there is no need to enter the data manually. With manual data entry, there are always risks of input errors (Maxwell, 2013). Significant timesaving through response speed due to high availability and fast delivery are also identified.

In this study, the most important advantages of a web-based survey, compared to other methods, were:

- it is the most efficient method of sending and receiving data, as a web-based questionnaire has –
  - response validation to ensure a minimum number of questions are answered as well as validation to ensure correct entry of data;
  - automated skip logic, based on respondents' input; and
  - speed of completion;
- it can be completed anywhere, any time of day; and
- it can also be completed across several sessions, which reduces the single amount of time the respondent needs to commit.

The web-based software that was used to collect data in this study, is called the LimeSurvey. According to Maxwell (2013), LimeSurvey is a user-friendly open source online survey application designed to develop and publish surveys and collect responses, without doing any coding. LimeSurvey has no limit on the number of surveys a user can create, nor is there a limit on how many participants can respond. Aside from technical and practical constraints, there is also no limit on the number of questions each survey may have. LimeSurvey also offers several advanced features:

- it provides basic statistical and graphical analysis of survey results;

- surveys can be either publicly accessible or strictly controlled through the user, since access is granted only to selected participants); and
- participants can be anonymous.

A LimeSurvey has a variety of applications, as it allows users to create and host high-quality surveys, which is ideal for general data gathering purposes. It can be used in many different areas for collecting data from participants. In this study, a LimeSurvey was used to gather data from participants. The data was then exported to the SPSS for analysis. SPSS will be discussed in the ensuing sections. According to Callegaro *et al.* (2015), the main disadvantage of using electronic surveys cited in the academic literature has been associated with lower response rates and higher drop-out rates than traditional surveys. According to Harris (2014), the lower response rate has been attributed to increased surveying and spam, the threat of viruses and the possibility that the novelty aspect of completing surveys online has passed.

To manage this risk, all identified asset managers were contacted telephonically to invite them to participate in the survey, followed by a formal invitation letter. The invitation letter gave details about the purpose of the study, processes and timelines in the study. To entice participation in the questionnaire, each participant would receive a copy of the results once the study has been completed, if they so wish. A LimeSurvey has been identified as the tool to construct and disseminate the questionnaire. Thus, a web-based survey tool was the tool for disseminating the questionnaire, as well as gathering and analysing the responses. This type of survey was chosen for its ease of use and the full list of features in designing and analysing questionnaire responses. Being a web-based tool, LimeSurvey allows the respondents to complete the questionnaire online in their own time and space without having to download any specific software. The next section focuses on data requirements for this study.

4.4. Data requirements

Research design involves a great deal of careful planning (Callegaro *et al.,* 2015). First, as part of the research proposal, a decision must be made on exactly which group of people or objects needs to be studied to get the information that is required (Harris, 2014). Then, the study usually focuses on a sample taken from the entire group. Sampling is one of the foundations of research methods and design, because research design nearly always involves recognition of samples (Guthrie, 2010). The aim in any sample is that its participants should be broadly representative

of the population from which they are drawn (Yin, 2017). This section forms a key part of this study as it focuses on the sample design, sample population, as well as the sample size.

4.4.1. Sample design

According to May (2011), sampling design is a process of sampling that involves any procedure using a small number of items or parts of the population to reach conclusions regarding the whole population. A sample is a subset, or some part, of a large population. The purpose of sampling is to enable the researchers to estimate some unknown characteristics of the population. The process of sampling is briefly stated in the Figure 4.2 below.

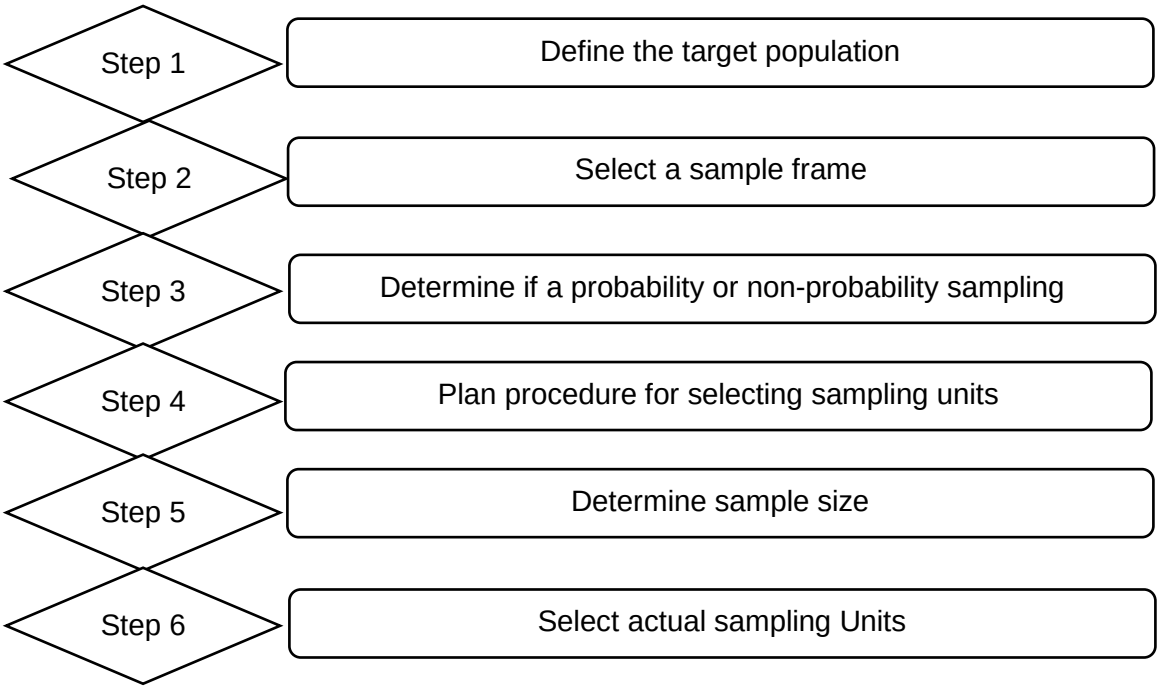

Figure 4.2. The sampling processes

Source: Adapted from May (2011)

A sample could consist of a tiny fraction of the whole target population, provided it is selected carefully and methodologically. It can provide remarkable and accurate estimates of the parameters of the whole population (Guthrie, 2010). Estimates of population parameters made

from small samples will never be completely accurate, and occasionally they may turn out to be inaccurate. However, researchers rarely need total accuracy (May, 2011). According to Yin (2017), an accurate estimate derived from a small sample can be achieved much more quickly and cheaply than a completely accurate figure based on contacting a total population.
This section focused on how to draw a sample of appropriate size, which will reflect the views of the target population accurately. According to Dan (2017), Fowler (2013), as well as May (2011), there are two types of sampling designs: probability and non-probability sampling.

4.4.1.1. Probability sampling

According to May (2011), probability sampling enables the researcher to express the mathematical probability of sample characteristics being reproduced in the target population. An important principle is that each person in the population of interest has an equal chance of being part of the sample. According to Sekaran and Bougie (2016), probability sampling can be unrestricted or restricted in nature.

- Unrestricted sampling

Unrestricted sampling is commonly known as simple random sampling and involves every element that has a known and equal chance of being selected in the sample. According to Sekaran and Bougie (2016), unrestricted sampling provides the least biased results and offers the best generalisation of results.

- Restricted sampling

Restricted or complex probability sampling offers a viable alternative to unrestricted designs and improves the efficiency, in that more information can be obtained than with the random sampling designs. According to Fowler (2013), May (2011), and Rea and Parker (2014), there are five common complex probability designs.

  - Systematic sampling involves the drawing of every *n*-th element out of the population starting with a randomly chosen element between 1 and *n.*
  - Stratified random sampling involves dividing the population into two or more relevant and significant groups based on certain attributes, determining the representation of

each of these groups in the sample, and then selecting elements of these groups randomly for inclusion in the sample.

- Cluster sampling means groups of elements that would provide heterogeneity among members within each group are chosen, which is similar to a stratified sample except for the fact that the criteria for the representation of a group differ.
- Area sampling involves geographical clusters.
- Double sampling involves gathering further information when needed from a subset of the group from which the information was gathered.

Probability sampling requires the existence of some sort of sampling frame and, importantly, the size of *n* must be known. This is not always the case or perhaps no sampling frame is available. In these cases, the researcher must use a non-probability sample, which will be discussed next.

4.4.1.2. Non-probability sampling

Non-probability sampling designs do not attach any probability to elements being chosen. For this reason, the findings from this form of sampling cannot confidently be generalised to the population. According to Sekaran and Bougie (2016), non-probability sampling is classified into two broad categories, namely convenience and purposive sampling.

- Convenience sampling

Convenience sampling concerns the collection of information from members of the population that are conveniently available. This type of sampling is most often used during the exploratory phase of the research and is seen as one of the best ways to get basic information quickly and efficiently.

- Purposive sampling

This sampling method involves getting information from a specified target group. The group is usually confined to specific types of people who will be able to supply the information needed. The two major types of purposive sampling are:

- judgment sampling, which involves choosing respondents who are most advantageously placed to provide the information needed; and
- quota sampling, which ensures that certain groups are adequately represented in the study.

The above section focused on a brief overview of the most important sampling techniques used in practice. With this background knowledge, a researcher should be able to design meaningful sample schemes for different types of research surveys. However, no sampling procedure can be implemented routinely without a careful study of the background and objectives of the investigation concerned (Rea & Parker, 2014).

Probability sampling was not appropriate for this study, because an important principle with regard to this technique is that each person in the population of interest has an equal chance of being part of the sample. The investment industry is very broad, and this study only focused on investors who invest in emerging markets. Therefore, a purposive non-probability sampling technique was chosen as the most relevant to this study. This decision was based on the fact that the data needed for the study is from a specified target group. This group is confined to a specific type of investors and or asset managers who would be able to supply the information needed. The respondents who were most advantageously placed to provide the information needed, were asset managers. The next section focuses on the sample population and size.

4.4.2. Sample population and size

According to Zikmund *et al.* (2012) and Kumar (2014), a sample population can be described as a complete group of specific population elements that is relevant to the research project. According to Rea and Parker (2014), a sample is any subset of the population, while a population is defined as the total group of persons or universal collection of items to which the study relates. A suitable sampling method can only be selected once the researcher has acquired a complete description of the population from which the sample is to be drawn.

One of the problems in sampling is determining the size of the sample. Sometimes thousands of people are sampled to get the data that is required, for example for political telephone surveys. On other occasions, a sample might be as small as one. Sample size depends on many factors, including the purpose of the study, the size of the universe and the research techniques used

(Guthrie, 2010). According to Fowler (2013), the main purpose of empirical research is to obtain information regarding the characteristics of a target population.

According to the Financial Sector Conduct Authority (FSCA) (2019), there were forty-four Collective Investment Schemes (CIS) licensed to trade in emerging markets. The asset managers managing these schemes were best suited to share insights on which risks they analysed for investors in emerging markets. Therefore, an invitation letter to participate in the survey was sent to these asset managers. The study was quantitative in nature and focused on one target group: the asset managers licenced to trade in emerging markets. These asset managers have been at the forefront of investments and play a key role in the global investment arena. Thus, the target sample size will consist of all 44 asset managers in South Africa licensed by the FCSA to trade in emerging markets. The next section focuses on the design of the survey questionnaire of this study.

4.5. Design of the survey questionnaire

According to Punch (2009), a questionnaire is a research instrument consisting of a series of questions (or other types of prompts) for the purpose of gathering information from respondents. Questionnaires have advantages over some other types of surveys in that they are less costly, do not require as much effort from the questioner as verbal or telephone surveys, and often have standardised answers that make it simple to compile data. However, such standardised answers may frustrate users. Questionnaires are also sharply limited by the fact that respondents must be able to read the questions and respond to them.

Usually, a questionnaire consists of several questions that the respondent has to answer in a set format. A distinction is made between open-ended and closed-ended questions. According to Harris (2014), an open-ended question asks the respondent to formulate their own answer, whereas a closed-ended question has the respondent pick an answer from a given number of options. The response options for a closed-ended question should be exhaustive and mutually exclusive. Harris (2014) distinguishes four types of response scales for closed-ended questions.

- dichotomous, where the respondent has two options;
- nominal-polytomous, where the respondent has more than two unordered options;
- ordinal-polytomous, where the respondent has more than two ordered options; and
- bounded-continuous, where the respondent is presented with a continuous scale.

Once the draft questionnaire is done, it is important to conduct a pre-test. According to Rea and Parker (2014), pre-testing is far more than sending questionnaires to a sample of respondents and then counting how many come back. Pre-testing a questionnaire is important as it tends to:

- examine the reliability, validity, accuracy, integrity and ambiguity of the questionnaire;
- identify any omission of important factors; and
- examine any need to integrate or remove certain factors from the questionnaire.

The type of population, the nature of the research question and the resources available will determine the type of questionnaire to be used. For the purposes of this study, a web-based LimeSurvey questionnaire was used to disseminate and collect data. According to Guthrie (2010), and Leedy and Ormrod (2018), the following are guidelines for developing a survey questionnaire:

- keep it short, and use simple, clear, unambiguous language;
- check for unwanted assumptions implicit in your questions;
- ask questions in ways that do not give clues about preferred or more desirable responses;
- check for consistency;
- determine in advance how to code the responses;
- keep the respondent's task simple;
- provide clear instructions;
- give a rationale for any items whose purpose may be unclear;
- make the questionnaire attractive and professional looking;
- conduct a pilot test; and
- scrutinise the product just before the final stage to ensure that it meets the needs.

These guidelines were considered when formulating questions for the survey questionnaire to improve the response rate. The next section focuses on the ethical considerations in research, the structure of the questionnaire, the choice of measuring scale and pre-testing the questionnaire.

4.5.1. Ethical considerations in research

According to Rea and Parker (2014), ethics within society pertain to commonly accepted standards of right or wrong behaviour. Ethics provide guidelines for decision-making and determine the socially responsive actions of an organisation. Ethics can be defined as the body of moral principles or values governing, or distinctive of a particular organisation (Cohen, Manion & Morrison, 2017). When conducting research, researchers have general ethical obligations to participants who provide data in their research studies.

These obligations include that participants should be comfortable, not be deceived, be willing and informed, and that data should be held in confidence (Rea & Parker, 2014). Therefore, it is important that, when conducting research, researchers should minimise problems associated with research projects and make it as convenient as possible for respondents to participate. It is also important that researchers adopt a high standard of professionalism.

Ethics and professionalism go hand in hand. As discussed in previous sections, all respondents were contacted telephonically to inform them of the study and to ask for permission to invite them to take part in the study. Participants should be willing and informed about the research being conducted. However, when researchers approach respondents, it may take longer to inform them about the study than actually completing the questionnaire. Participants could, therefore, only be informed about:

- who is doing the research;
- what the research is about; and
- how long it will take.

The above was included in the invitation letter and, furthermore, participants were informed about the confidentiality clause and the reasons for undertaking a study of this nature. In conclusion, a high standard of professionalism was maintained. Therefore, the data collected from participants was dealt with in a strictly confidential manner and the results thereof cannot be linked to any participant. In addition, an ethical clearance letter from the University of South Africa to provide permission to conduct this study is attached as Annexure C

4.5.2. Structure of the questionnaire

The questionnaire comprises of two main parts: the cover letter (with the introduction and instructions), and the body. The questionnaire has a section that seeks to thank the respondents for their valuable input into the study. The cover letter introduces the research and motivates the

respondents to cooperate with the survey objectives. It also explains the aim of the research and guarantees the anonymity or at least the confidentiality of the respondents. The main body of the questionnaire consisted of all the questions divided into three sections that the respondents had to answer. Leedy and Ormrod (2018), note that during the development of the questionnaire, the following guidelines should be adhered to:

- use simple, conventional language to avoid complexity;
- avoid leading and loaded questions;
- avoid ambiguity by being as specific as possible;
- do not make any assumptions; and
- avoid burdensome questions that may impose on the respondent's memory.

According to Brace (2018), the following types of questions should be avoided when developing a questionnaire:

- double-barrelled questions, forcing respondents to make two decisions in one;
- double negative questions;
- hypothetical questions, which are too difficult for respondents since they require more scrutiny;
- biased questions, which incorporate the researcher's feelings or attitudes towards a topic; and
- questions with long lists, as such questions may tire respondents or respondents may lose track of questions.

According Zikmund *et al.* (2012), there are two main types of questions used in questionnaires:

- open-ended response questions, which give the respondents the freedom to answer the question in their own words; and
- fixed-alternative questions (closed questions), which provide the respondents with a specific or limited alternative in answering the question, only ask the respondents to choose the one alternative closest to their own point of view.

The web-based questionnaire consisted of closed-ended questions, where the respondents only had to select an option. Closed-ended questions were used for the following reasons:

- these questions are usually self-explanatory, and the presence of an interviewer is not required;

- the questions may be answered faster, and the respondent's time is not wasted;
- such questions require fewer instructions; and
- closed-ended questions focus the attention of the respondent on a specific issue.

The above guidelines were considered when the questionnaire was developed. The draft questionnaire design consisted of three sections. Section A covered the demographics, section B focused on risk factors in emerging markets, and section C focused on risk exposures when making an investment decision in emerging markets.

4.5.3. Choice of measuring scale

Answers to survey questions are typically a choice of position, either within some category or along some continuous spectrum. A measuring scale is merely a representation of the categories or continuum along which respondents will arrange themselves (Baumgarten, 2012). When scales are used, reports describe the distribution of respondents along the scale or in the categories. The position of various individuals or groups can then be compared with one another. Scales can be coded with numbers. Numeric codes that represent answers to questions are used because they are easier to manipulate than words. Using a numeric database also saves time and helps to ensure accuracy, reliability and validity. Scales can be arranged so they capture answers to many questions quickly and in very little space. Scales are both efficient and practical (Guthrie, 2010).

Researchers may use many measuring scales. Some may be used to measure a broad range of topics and objects while others are only recommended for very specific tasks (Yin, 2017). According to Knight (2006), the Likert scale is a special type of the more general class of summated rating scales constructed from multiple ordered-category rating items. Additionally, Knight (2006) indicates that the Likert scale has the following distinguishing characteristics:

- each item uses a set of symmetrically balanced bipolar response categories indicating varying levels of agreement or disagreement with a specific stimulus statement expressing an attitude;
- the response category points of each item are individually labelled; and
- the descriptive text of these labels is chosen so that gradations between each pair of consecutive points seem similar.

Based on the above discussion, the Likert scale was chosen as the most appropriate scale for this study. Likert response sets may include four or more points. In this study, two four-point category scales were selected as indicated in Tables 4.4 and 4.5 below.

Table 4.4: Likert-type scale 1

Scale value	Scale name	Scale description
1	Irrelevant	Indicates that the statement is irrelevant when considering an emerging market investment decision according to the respondents' views and experiences.
2	Unimportant	Indicates that the statement is not important when considering an emerging market investment decision according to the respondents' views and experiences.
3	Important	Indicates that the statement is important when considering an emerging market investment decision according to the respondents' views and experiences.
4	Very important	Indicates that the statement is very important when considering an emerging market investment decision according to the respondents' views and experiences.

Table 4.5: Likert-type scale 2

Scale value	Scale name	Scale description
1	Strongly disagree	Indicates that the respondents strongly disagree with the statement when considering an emerging market investment decision according to their views and experiences.
2	Disagree	Indicates that the respondents disagree with the statement when considering an emerging market investment decision according to their views and experiences.
3	Agree	Indicates that the respondents agree with the statement when considering an emerging market investment decision according to their views and experiences.
4	Strongly agree	Indicates that the respondents strongly agree with the statement when considering an emerging market investment decision according to their views and experiences.

The questions in the questionnaire used in this study were formulated based on the risk factors and risk exposures in emerging markets identified in the literature study in Chapters 2 and 3. Prior to distribution among the target population, a pre-test or pilot study was conducted to establish validity and reliability of the questionnaire.

4.5.4. Pre-testing the questionnaire

The purpose of the questionnaire (Annexure A) was to gather data for empirical analysis based on the literature review. A draft questionnaire was pre-tested for validity, reliability, objectivity

and generalisation in cooperation with a statistician, asset managers and senior researchers from University of South Africa who are experts in the field of finance, investments and risk management. The pre-test sought to test the following questions.

- did each question get the information it was intended to get?
- were all the words understood?
- were the questions interpreted the same by all the respondents?
- did all closed-ended questions have an answer that applied to each respondent?
- did the questionnaire create a positive impression that warranted a response?
- were the questions answered correctly and in a way that could be understood by the researcher?

The validity, reliability, objectivity and generalisation as components of pre-testing a questionnaire will be discussed in the next section.

4.5.4.1. Validity

According to Baumgarten (2012), a measurement of any kind is valid to the degree it measures all that it is supposed to measure. According to Heffner (2014), any measuring instrument is considered valid when it measures what it purports to measure. For example, an intelligence test, constructed for measuring intelligence, should measure intelligence only and nothing else. According to Punch (2009), validity is primarily a measurement term, which has to do with the relevance of a measuring instrument for a particular purpose. As in the case of reliability, there are a good number of procedures for establishing the validity test, for example validating the present data against a simultaneous criterion or a future criterion or theory. In this study, content validity was tested. Content validity is based on the extent to which a measurement reflects the specific intended domain of content (Howell *et al.,* 2005). Content validity was the most appropriate validity type for this study as the proposed questionnaire measured the attitudes and opinions of emerging market investors towards a set of predefined emerging market risks.

This test agrees with the statement by Reynolds and Suzuki (2014), that an instrument can be considered valid in content if it has drawn representative questions from a universal pool and if experts have subjected it to a thorough reviewing process of the items. The experts have confirmed that the questionnaire for this study is valid from a content perspective and that it is in line with academic research principles. A total of forty-four questionnaires were distributed to

asset managers in South Africa, of which thirty-three were returned, which represents a 75% response rate. All the questionnaires returned were suitable for analysis. The next section focuses on reliability.

4.5.4.2. Reliability

According to Baumgarten (2012), reliability refers to consistency throughout a series of measurements. For example, if a respondent gives a response to a particular item, each respondent is expected to give the same response whenever they are asked subsequently. If respondents keep on changing their responses to the same item when asked repeatedly, then the researcher would have difficulty in considering which one of these responses is the genuine response of each respondent (Baumgarten, 2012). Therefore, the researcher should structure the items in such a way that the respondent will give one genuine response at any given time.

A reliability test was conducted using Cronbach's alpha to ascertain whether the questionnaire was reliable. Alpha was developed by Lee Cronbach in 1951, to provide a measure of the internal consistency of a test or scale (Schmitt, 1996). Alpha is expressed as a number between 0 and 1. Internal consistency describes the extent to which all the items in a test measure the same concept or construct, and hence the connection to the inter-relatedness of the items within the test. According to Tavakol, Mohagheghi and Dennick (2008), internal consistency should be determined before a test can be employed for research purposes to ensure reliability. In addition, reliability estimates show the amount of measurement error in a test. The interpretation of reliability is the correlation of the test with itself. Squaring this correlation and subtracting from 1.00 produces the index of measurement error. For example, if a test has a reliability of 0.80, there is 0.36 error variance (random error) in the scores ($0.80 \times 0.80 = 0.64$; $1.00 / 0.64 = 0.36$). As the estimate of reliability increases, the fraction of a test score that is attributable to error will decrease.

If the items in a test are correlated to each other, the value of alpha is increased. However, a high coefficient alpha does not always mean a high degree of internal consistency. This is because the length of the test also affects alpha. If the test length is too short, the value of alpha is reduced. Therefore, to increase alpha, more related items testing the same concept should be added to the test. It is also important to note that alpha is a property of the scores on a test from

a specific sample. Therefore, investigators should not rely on published alpha estimates and should measure alpha each time the test is administered (Cohen & Swerdlik, 2017).

According to Tavakol *et al*. (2008), the improper use of alpha can lead to situations in which either a test or scale is wrongly discarded, or the test is criticised for not generating trustworthy results. To avoid this situation an understanding of the associated concepts of internal consistency, homogeneity or unidimensional may help to improve the use of alpha. Internal consistency is concerned with the interrelatedness of a sample of test items, whereas homogeneity refers to the unidimensional. A measure is said to be unidimensional if its items measure a single latent trait or construct. Internal consistency is necessary, but not a sufficient condition for measuring homogeneity or the unidimensional in a sample of test items.

Fundamentally, the concept of reliability assumes that the unidimensional exists in a sample of test items and, if this assumption is violated, it causes a major underestimation of reliability. It has been well documented that a multidimensional test does not necessarily have a lower alpha than a unidimensional test. Therefore, a more rigorous view of alpha is that it cannot simply be interpreted as an index for the internal consistency of a test.

Alpha, therefore, does not simply measure the unidimensional set of items, but can be used to confirm whether or not a sample of items is actually unidimensional (Lawson, 2006). On the other hand, if a test has more than one concept or construct, it may not make sense to report alpha for the test as a whole as the large number of questions will inevitably inflate the value of alpha. In principle therefore, alpha should be calculated for each of the concepts rather than for the entire test or scale. The implication for a summative examination containing heterogeneous, case-based questions is that alpha should be calculated for each case. In this study, the alpha test on reliability was conducted in sections B and C of the questionnaire. Section A was not tested, as it focused on the demographics of the respondents.

4.5.4.3. Validity and reliability test: Cronbach's alpha

Cronbach's alpha is a measure used to assess the reliability, or internal consistency, of a set of scale or test items. The reliability of any given measurement refers to the extent to which it is a consistent measure of a concept, and Cronbach's alpha is one way of measuring the strength of that consistency. Cronbach's alpha is computed by correlating the score for each scale item with

the total score for each observation and then comparing that to the variance for all individual item scores

Alpha is a commonly employed index of test reliability. Alpha is affected by the test length and dimensionality. Alpha, as an index of reliability, should follow the assumptions of the essentially tau-equivalent approach (Cohen & Swerdlik, 2017). A low alpha suggests that these assumptions have not been met. According to Baumgarten (2012), alpha does not simply measure test homogeneity or unidimensional as test reliability is a function of test length. A longer test increases the reliability of a test regardless of whether the test is homogenous or not. A high value of alpha (> 0.90) may suggest redundancies and show that the test length should be shortened (Cohen & Swerdlik, 2017). Risk factors and risk exposures were the two sections of the questionnaire that were tested for validity using the Cronbach's alpha.

- Risk factors

The first part (section A) of the questionnaire focused on risk factors, while section B focused on risk exposures. Both sections were subjected to a reliability test. The test was done in order to estimate the internal consistency and the reliability. Therefore, the coefficients were computed for each of the risk factors identified in emerging markets. The Cronbach's alpha coefficients for section A are reported in Table 4.6.

Table 4.6: Descriptive statistics and internal consistency reliabilities

Average inter-item covariance:	0.034456
Number of items in the scale:	46
Scale reliability coefficient:	0.761

Item	Obs	Sign	item-test correlation	item-rest correlation	average interitem correlation	alpha
q01	33	+	0.3667	0.3015	0.0687	0.7684
q02	33	+	0.4559	0.3956	0.0674	0.7649
q03	33	+	0.1633	0.0916	0.0715	0.7761
q04	33	+	0.4899	0.4318	0.067	0.7636
q05	33	+	0.1237	0.0515	0.0721	0.7775
q06	33	+	0.5183	0.4622	0.0666	0.7624

q07	33	+	0.3237	0.2566	0.0693	0.7701
q08	33	+	0.3618	0.2963	0.0687	0.7686
q09	33	+	0.2465	0.1767	0.0704	0.773
q10	33	+	0.5352	0.4804	0.0663	0.7617
q11	33	+	0.5377	0.483	0.0663	0.7616
q12	33	+	0.3445	0.2782	0.069	0.7693
q13	33	+	0.5227	0.4669	0.0665	0.7622
q14	33	+	0.3711	0.3061	0.0686	0.7683
q15	33	+	0.1318	0.0597	0.0719	0.7772
q16	33	+	0.4731	0.4139	0.0672	0.7642
q17	33	+	0.2842	0.2156	0.0698	0.7716
q18	33	+	0.0953	0.0228	0.0725	0.7785
q19	33	+	0.4206	0.3582	0.0679	0.7663
q20	33	+	0.372	0.3071	0.0686	0.7682
q21	33	+	0.3912	0.3272	0.0683	0.7675
q22	33	+	0.4689	0.4095	0.0673	0.7644
q23	33	+	0.3179	0.2506	0.0694	0.7703
q24	33	+	0.1261	0.0539	0.072	0.7774
q25	33	-	0.1274	0.0552	0.072	0.7774
q26	33	+	0.4225	0.3602	0.0679	0.7662
q27	33	-	0.1085	0.0362	0.0723	0.7781
q28	33	+	0.2628	0.1935	0.0701	0.7724
q29	33	+	0.3071	0.2393	0.0695	0.7707
q30	33	+	0.1886	0.1174	0.0712	0.7751
q31	33	+	0.1443	0.0723	0.0718	0.7768
q32	33	+	0.4257	0.3636	0.0679	0.7661
q33	33	+	0.4969	0.4394	0.0669	0.7633
q34	33	+	0.4255	0.3634	0.0679	0.7661
q35	33	+	0.2509	0.1812	0.0703	0.7728
q36	33	+	0.1374	0.0654	0.0719	0.777
q37	33	+	0.127	0.0548	0.072	0.7774
q38	33	+	0.2181	0.1475	0.0707	0.7741
q39	33	+	0.2766	0.2077	0.0699	0.7719
q40	33	+	0.1617	0.09	0.0715	0.7761
q41	33	+	0.516	0.4597	0.0666	0.7625
q42	33	-	0.2251	0.1547	0.0706	0.7738
q43	33	-	0.0895	0.017	0.0725	0.7787
q44	33	-	0.221	0.1505	0.0707	0.774
q45	33	+	0.0932	0.0208	0.0725	0.7786
q46	33	+	0.1197	0.0475	0.0721	0.7777
Test scale					0.0696	0.7749

- Risk exposures

Risk exposures in emerging markets were also subjected to validity and reliability teats. The Cronbach's alpha coefficients for section B are reported in Table 4.7.

Table 4.7: Descriptive statistics and internal consistency reliabilities

Average inter-item covariance:	0.04044
Number of items in the scale:	33
Scale reliability coefficient:	0.7054

Item	Obs	Sign	item-test correlation	item-rest correlation	average interitem correlation	alpha
q47	33	+	0.1687	0.0818	0.0957	0.772
q48	33	+	0.5257	0.4577	0.0875	0.7542
q49	33	+	0.08	-0.0078	0.0977	0.7761
q50-1	33	+	0.1527	0.0656	0.0961	0.7728
q50-2	33	+	0.3491	0.2686	0.0916	0.7633
q50-3	33	-	0.5668	0.5026	0.0866	0.752
q51-1	33	+	0.3126	0.2303	0.0924	0.7651
q51-2	33	-	0.1139	0.0263	0.097	0.7746
q51-3	33	+	0.1142	0.0266	0.097	0.7745
q51-4	33	-	0.3109	0.2285	0.0924	0.7652
q52	33	+	0.4445	0.37	0.0894	0.7585
q53	33	-	0.2031	0.117	0.0949	0.7704
q54	33	+	0.7431	0.6997	0.0825	0.7421
q55	33	+	0.274	0.1901	0.0933	0.767
q56	33	+	0.7217	0.6753	0.083	0.7434
q57	33	+	0.5078	0.4383	0.0879	0.7552
q58	33	+	0.4897	0.4187	0.0883	0.7561
q59	33	+	0.6435	0.5875	0.0848	0.7478
q60	33	+	0.3318	0.2504	0.092	0.7642
q61	33	+	0.4418	0.3671	0.0894	0.7586
q62	33	-	0.325	0.2433	0.0921	0.7645
q63	33	+	0.3399	0.2589	0.0918	0.7638
q64	33	+	0.2745	0.1906	0.0933	0.767

q65	33	+	0.7253	0.6794	0.0829	0.7431
q66	33	+	0.3544	0.2742	0.0914	0.7631
q67	33	+	0.1441	0.0569	0.0963	0.7732
q68	33	+	0.1451	0.0578	0.0962	0.7731
q69-1	33	-	0.2407	0.1556	0.094	0.7686
q69-2	33	+	0.4457	0.3713	0.0893	0.7584
q69-3	33	-	0.2002	0.114	0.095	0.7705
q70	33	-	0.2157	0.1299	0.0946	0.7698
q71	33	-	0.2375	0.1524	0.0941	0.7688
q72	33	+	0.2483	0.1635	0.0939	0.7683
Test scale					0.0916	0.769

The scales have alpha coefficients between 0.769 and 0.7749, which suggests high reliability, since the acceptable score is 0.6. This is according to De Souza and Dick (2009), who warn that all coefficient alpha values of 0.6 are considered acceptable in statistical analysis.

As shown in Tables 4.7 and 4.8, there is a strong indication that that the Cronbach's alphas that were recorded in this study were of an acceptable range because the alphas of all the variables were above 0.6. Based on the results of the pre-test of the questionnaire, it can be regarded as valid and reliable. Objectivity will be discussed next.

4.5.4.4. Objectivity

The objectivity of the findings pertains to the methods of the collection of data and scoring of the responses (Howell *et al.,* 2005). The objectivity of the procedure (either the collection of data or scoring of the responses or both) may be judged by the degree of agreement between the final scores assigned to different individuals by more than one independent observer. The more subjective the observation, recording and evaluation of the responses, the less the different observers agree.

Researchers who use closed-ended questionnaires (questionnaires in which each item is supplied with certain alternatives, thus forcing the respondent to choose one among them) are said to be collecting data with the help of objective tools, because all the scores can apply a scoring key and agree perfectly on the result (Cohen *et al*., 2017). By contrast, the open-ended questionnaires (questionnaires in which the respondents are allowed to give free responses to

each of the items) allow room for great disagreement among the scores. However, in certain instances, questionnaires consisting of both types of items are used purposefully. In such instances, free response items and observations can be made fairly objective by giving careful instructions and guidelines to the observer or scorer (Punch, 2009).

Therefore, any research design should permit the use of measuring instruments, which are fairly objective and in which every observer or judge seeing a performance arrives at precisely the same report. This ensures the objectivity of the collected data, which will be used for the analysis, inferences and generalisations. In this study, a closed-ended questionnaire has been designed based on the conclusions from the literature review. The next section focuses on generalisation.

4.5.4.5. Generalisation

Once it is ensured that the measuring instruments used in a research investigation yield objective, reliable and valid data, the next challenge in a well-planned research design is to answer the generalisability of the findings of the present study (Cohen *et al*., 2017). This covers how the data collected from a sample can be utilised best for drawing certain generalisations applicable to a larger group (population) from which the sample was drawn. In other words, it reflects the degree of authority and confidence with which a researcher can say that the same findings were obtained even though the data was not collected from the total population from which the sample was selected (Kumar, 2014).

A research design thus helps a researcher in an attempt to generalise the findings, provided due care is taken in defining the population, selecting the sample and using the appropriate statistical analysis while planning the research design (Creswell & Creswell, 2018).

A LimeSurvey was used to collect data and the data was exported to SPSS for statistical analysis. Therefore, the findings can be generalised without being contaminated by the errors of measurement or any other interfering factors. The next section focuses on the statistical analysis of the findings.

4.6. Statistical analysis of findings

According to Kumar (2014), statistical techniques are tools applied by the researcher in the measurement, comparison and control of any uncertainties. According to Zikmund *et al.* (2012), Antonius (2003) and Heffner (2014), there are two types of statistical techniques:

- inferential statistics, which conduct the inference around the population or sample; and
- descriptive statistics that describe the characteristics for the population or sample.

As the questionnaire comprised of a Likert scale and the respondents were not a random sample, but rather a purposive sample, a descriptive analysis was chosen as the most appropriate technique to interpret the data for this study. According to Miles and Huberman (2013), data description is a typical first step in any data analysis project. In addition to being an important self-standing activity, when a descriptive focus characterises the analysis objectives, descriptive analysis provides a useful initial examination of the data, even when the ultimate concern of the investigator is inferential in nature. For the purpose of this study, descriptive analysis was used to:

- provide preliminary insights as to the nature of the responses obtained, as reflected in the distribution of values;
- help detect errors in the coding process (Likert scale), where coding refers to the process of assigning a code or symbol, preferably a number, to each possible answer to a particular question (Saldana, 2015);
- provide a means for presenting the data in an understandable manner, using tables and graphs;
- provide summary measures of typical or average responses as well as the extent of variation in responses for a given variable; and
- provide an early opportunity for checking whether the distributional assumptions of subsequent statistical tests are likely to be satisfied.

By contrast to the analytical survey, a descriptive survey is primarily concerned with addressing the particular characteristics of a specific population of subjects, either at a fixed point in time or at varying times for comparative purposes (Creswell & Creswell, 2018). As such, they do not share the emphasis in analytical designs upon control, but they do share a concern to secure a representative sample of the relevant population. This is to ensure that any subsequent assessments of the attributes of the population are accurate and the findings are generalisable, meaning that they have population validity. However, this does not mean that descriptive surveys are theoretical and that prior reviews of the literature are not as important as in the case

of an analytical survey. Rather, prior consideration of the relevant theory and literature may be vital in determining the kind of questions needed to be asked. In this study, SPSS was used to analyse the data imported from the LimeSurvey.

According to Schwartz, Wilson and Goff (2014), SPSS was released in its first version in 1968. SPSS is among the most widely used programs for statistical analysis in social science. It is used by market researchers, health researchers, survey companies, government, education researchers, marketing organisations and others (Yin, 2017). In addition to statistical analysis, data management (case selection, file reshaping, creating derived data) and data documentation (a metadata dictionary is stored in the data file) are features of the base software (Morgan, Leech, Gloeckner & Barrett, 2011). Other statistics included in the base software are:

- descriptive statistics: cross-tabulation, frequencies, descriptive ratio statistics;
- bivariate statistics: means, t-test, ANOVA, correlation (bivariate, partial, distances), nonparametric tests;
- prediction for numerical outcomes: linear regression; and
- prediction for identifying groups: factor analysis, cluster analysis (two-step, K-means, hierarchical), and discriminant statistics.

Based on the above features of SPSS and considering that the survey is descriptive in nature, SPSS was chosen as the most appropriate tool to analyse the data collected. The other reason for using SPSS was that it is compatible with other research tools such as the LimeSurvey, which was used to collect data. LimeSurvey was used to define the variables and collect data, while SPSS was used for statistical analysis of the data collected. The data collected was exported from LimeSurvey to SPSS for statistical analysis. Data was exported and stored in SPSS for a statistical run to be performed, which produced a statistical analysis summary, based on the frequency of responses on each question.

The categorical data was summarised by reporting the percentage of respondents falling into each category. The percentages were used to depict graphs and or charts. The graphs will summarise the results from the questionnaire where findings were drawn to serve as a platform for relevant conclusions and to formulate recommendations.

4.7. Chapter summary

The chapter focused on the theoretical introduction to the design strategy and a review of the research design for the primary research aspect of the study. The design was examined from both the qualitative and quantitative perspectives. Through academic research, a survey methodology was identified as one of the most widely used non-experimental research designs. As several survey methodologies were considered, an analysis was conducted to review the advantages and disadvantages of each of the specific methods, with the electronic survey methods being selected as the most appropriate for this study.

The use of a questionnaire was identified as the most appropriate data gathering method for this study. The questionnaire was then developed to determine whether the emerging market risks identified in the literature were critical when making an emerging market investment decision. The questionnaire was pre-tested by means of a pilot study, which confirmed the validity of the questionnaire from a content perspective. A reliability test was conducted using Cronbach's alpha.

After the questionnaire had gone through validity and reliability testing, the target population within the South African asset management industry was selected to participate in the study and a web-based questionnaire was distributed using the LimeSurvey platform. The collected data was transferred to the SPSS statistical model for descriptive analysis.

A quantitative approach was chosen as the most appropriate to carry out this research, as it was a deductive theory-based research process that focused primarily on testing theories. The research investigated differences and relationships using numeric data and statistical methods to reach specific conclusions about emerging market risk factors. Once data was collected, the descriptive analysis of data was conducted.

Chapter 5 focuses on the analysis and interpretation of the research results following the methodology outlined in this chapter.

CHAPTER 5: ANALYSIS AND INTERPRETATION OF THE RESULTS

5.1. Introduction

Chapter 4 focused on the research design, statistical methodology and the development of the questionnaire used in the study. This chapter presents the findings of the survey conducted with South African asset managers licensed to trade in emerging markets. The aim of this research was to develop a risk analysis framework for investors in emerging markets. The study focused on uncovering risks and risk factors that could be detrimental to an investment in an emerging market, with special focus on South Africa as a member of the BRICS countries. According to the Financial Sector Conduct Authority (2019) there were forty-four asset managers licenced to trade in emerging markets in South Africa. Due to company policies, terms and conditions as well as trade secrets and discomforts from other BRICS countries (Brazil, Russia, India, China and South Africa), the study was limited to South African assets managers licensed to trade in emerging markets. Due to the commonality of the risks faced by the BRICS countries, the South African asset management industry can be regarded as an adequate representative for the purposes of this study. Furthermore, the literature confirmed that the risk factors for investors in one emerging market are similar to another.

All forty-four asset managers were first invited to participate in the survey and later a web-based questionnaire was sent to them for completion. Thirty-three completed and submitted the survey by the due date. Subsequently, the responses to the questionnaires were analysed in terms of the objectives of this study.

The analysis will commence with the presentation of non-parametric demographic estimations of the sample. This is followed by the presentation of the results, a discussion of the findings from the survey and concludes with a summary of the results.

5.2. Analysis of the results of the survey

The specific objectives of the survey were fivefold: firstly, to analyse the risk factors for investors in emerging markets; secondly, to evaluate the significance and the effect of risks in emerging markets; thirdly, to assess the various opportunities presented to investors in emerging markets; fourthly; to investigate the current risk analysis methods applied during an emerging market investment process; and lastly, to develop a risk analysis framework for investors in emerging markets. The following section discusses the characteristics of the sample of the asset managers.

5.2.1. Characteristics of the sample

A total of forty-four questionnaires were distributed to asset managers in South Africa, of which thirty-three were returned, which represents a 75% response rate. All the questionnaires returned were suitable for analysis. The demographic information of the thirty-three participants is shown in Table 5.1.

Table 5.1: Demographic profile of the frequency distribution of the sample

Years of experience as an asset manager	**Frequency**	**Percentage**
Less than 5 years	23	70
6 – 10 years	6	18
11–15 years	1	3
16–20 years	2	6
More than 20 years	1	3
Duration at current company?		
Less than 3 years	**17**	**52**
4 – 7 years	6	18
8 – 11 years	8	24
More than 12 years	2	6
Highest qualification?		
National senior certificate	0	0
Bachelor's degree	11	33
Post graduate studies	21	64
Other	1	3

5.2.2. Level of experience of respondents

The practical experience of the respondents in asset management is graphically depicted in Figure 5.1. The respondents' level of asset management experience ranged from just less than five years (70%) to more than twenty years (3%). The 6–10-years category comprised of 18% of the respondents, 11–15 years amounted to 3% and 16–20 years constituted 6%, as shown in Table 5.1. A summary of these experiences is given in Figure 5.1.

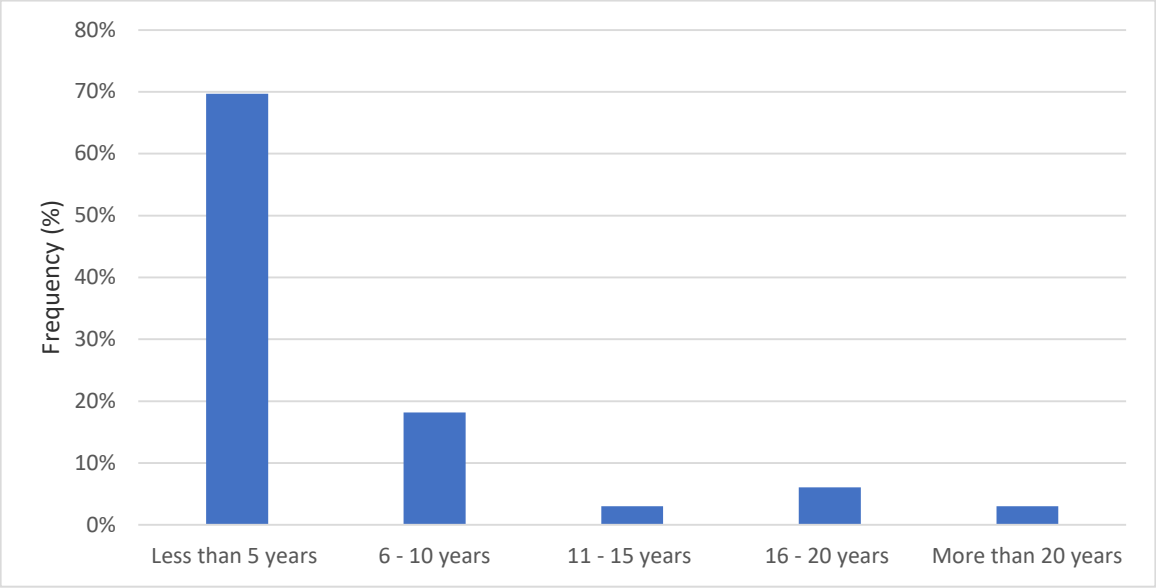

Figure 5.1: Duration as asset managers

It can be inferred that the questionnaire was completed by mostly inexperienced asset managers who were new in this position. Hence, the findings can be regarded as a true reflection that emerging markets is a new avenue to a number of investors who have in the past channelled their investments to developed markets. The next question deals with the duration of the respondents employed by their current employer.

5.2.3. Duration at current company

Of the respondents, 6% had been with their current employer for more than 12 years, 24% has been with their current employer for between 8–11 years, 18% has been with their current

employer for between 4–7 years and 52% has been with their current employer for less than three years. This information is graphically illustrated in Figure 5.2.

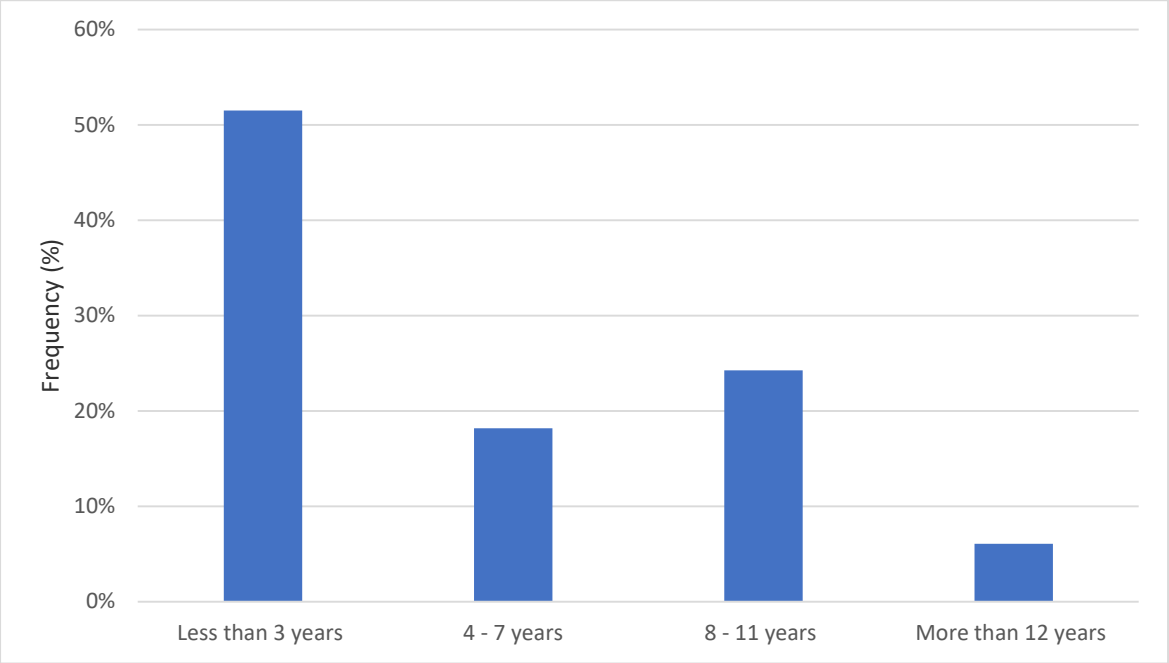

Figure 5.2: Duration at current company

The duration at a current employer is in line with the level of experience that the respondents have as asset managers, with 52% having been with the current employer for less than three years. Therefore, the majority of the respondents are inexperienced and have been with their current employer for less than 3 years. The conclusion is that South Africa can be regarded as a new player in the emerging market arena. The next question concerns the education levels of the respondents.

5.2.4. Education level

The question regarding the respondents' education levels aimed at deducing an understanding of whether the respondents' educational levels played a role in aiding the right decisions when investing in emerging markets is reflected in Figure 5.3. Of the respondents, 64% had a post graduate qualification, 33% had a bachelor's degree and 3% had other qualifications such as a higher certificate as indicated.

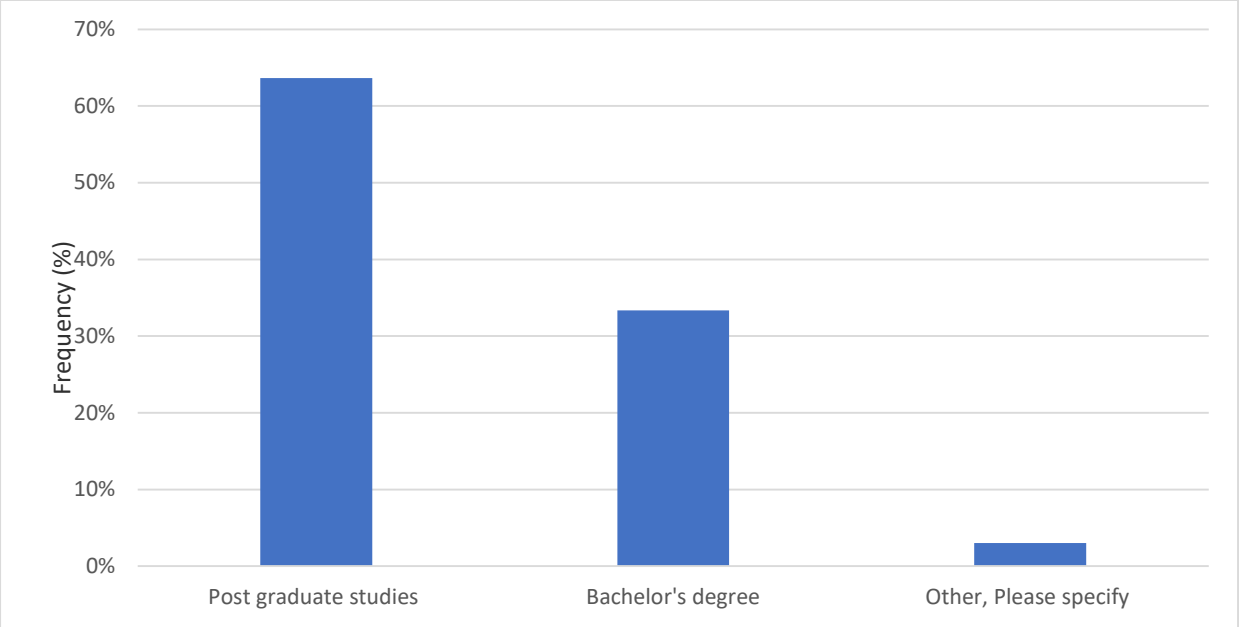

Figure 5.3. Education level

It seems that education standards in emerging markets are improving significantly on the back of economic growth and priority given to education and training. According to an article by Euromonitor International (2019), education helps to boost labour productivity, employment and competitiveness, with positive knock-on effects on income, consumption, middle-class expansion and economic growth. However, it seems that businesses will experience rising labour costs, while unequal access to education and a lack of education quality are the challenges for filling the skills gap in emerging markets.

It can be deduced that most of the respondents had an acceptable level of education to help them make decisions when considering an investment in emerging markets. Therefore, for the purposes of this study, it can be concluded that most respondents (>60%) were suitably qualified academically to provide an informed response to the questions. The next section focuses on risks in emerging markets.

5.3. Risks in emerging markets

The first objective of this study was to analyse the risk factors for investors in emerging markets. This section focused on rating the risks and risk factors identified in the literature review as important to consider when making an investment decision regarding emerging markets. Ten

risk types were included in the questionnaire and the applicable ratings are graphically depicted in Figure 5.4. The responses are elaborated on in the ensuing sections.

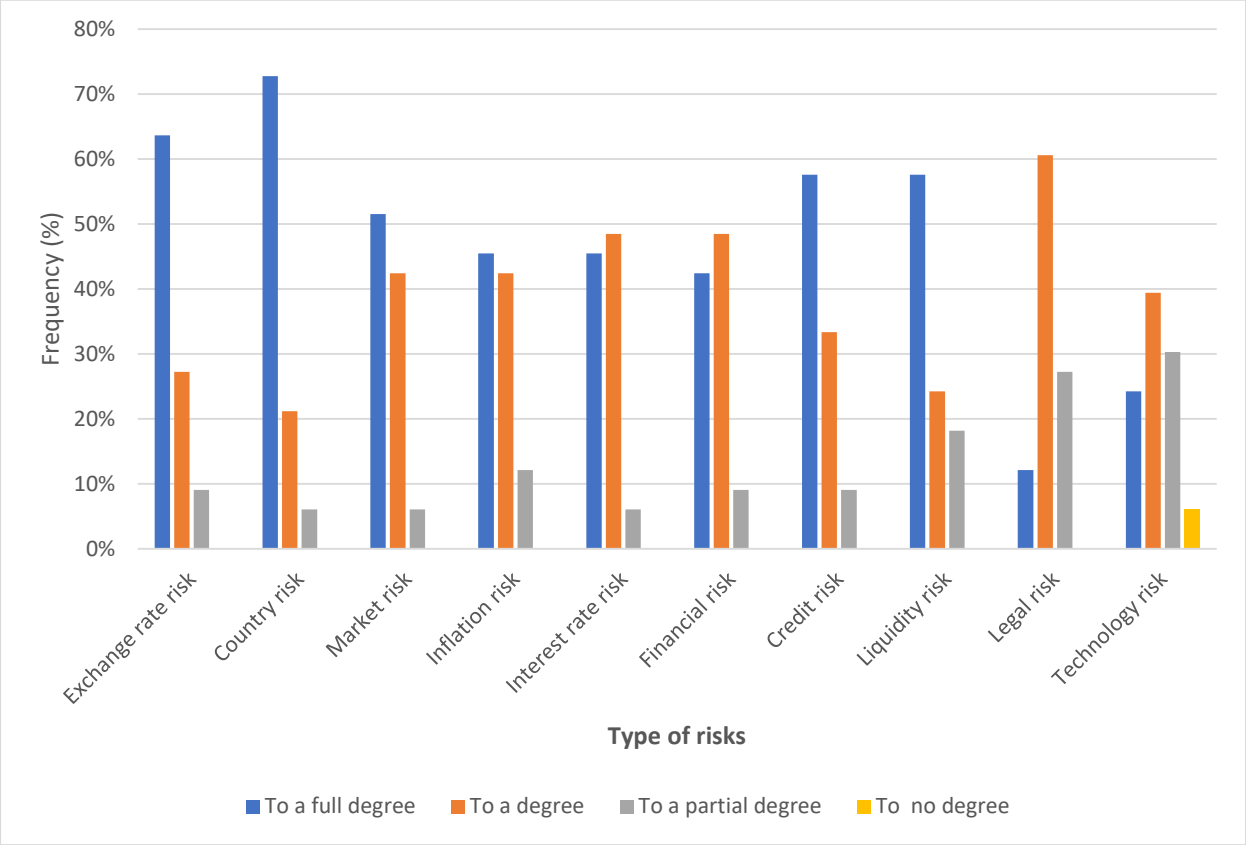

Figure 5.4: Risks in emerging markets

5.3.1. Exchange rate risk

The aim of the question was to confirm whether exchange rate risk was a key risk to consider when investing in an emerging market. Figure 5.4 shows that the majority of the respondents (64%, n = 21) agreed to a full degree that exchange rate was important to consider in an emerging market, 27% (n = 9) agreed to a degree, while 9% (n = 3) agreed to a partial degree that exchange rate risk was important to consider in an emerging market.

Therefore, all respondents agreed that exchange rate risk should be considered when investing in emerging markets. This is an indication that most asset managers take exchange rate risk very seriously when investing in emerging markets. Some authors (Warner & Pierce, 2016) warn that the value of an investment could be significantly decreased when the risk that exists when a

financial transaction is denominated in a currency other than the domestic currency, is not well managed. The respondents' ratings of country risk will be discussed next.

5.3.2. Country risk

When rating the importance of considering country risk in an emerging market, the majority of the respondents (73%) agreed to a full degree, 21% agreed to a degree, while 6% agreed to a partial degree that country risk was important to consider in an emerging market.

All respondents agreed that country risk is important to consider, with many respondents considering it key in emerging markets. If country risk is not mitigated, it will increase the uncertainty associated with investing in a particular country, and more specifically the degree to which that uncertainty could lead to losses for investors. The uncertainty can result from several factors including political, economic, exchange rate, or technological influences. Market risk will be discussed next.

5.3.3. Market risk

This question aimed at determining the importance of considering market risk in an emerging market. Figure 5.4 graphically depicts that over half of the respondents (52%, n = 17) agreed to a full degree, 42% agreed to a degree, while 6% agreed to a partial degree that market risk is important to consider in emerging markets.

Market risk is the possibility of an investor experiencing losses due to factors that affect the overall performance of the financial markets in which they are involved. All the respondents agreed that such a risk is important to consider in emerging markets. The respondents' ratings of inflation risk will be discussed next.

5.3.4. Inflation risk

The respondents' ratings in Figure 5.4 are consistent with the general view that inflation risk should be managed in any investment as it increases the chance that the cash flows from an investment will not be worth as much in the future because of changes in purchasing power due

to inflation. Of the respondents, 46% agreed to a full degree that inflation risk is important to consider in emerging markets, 42% agreed to a degree, while 12% agreed to a partial degree.

Inflation comes in the form of higher prices for goods and services. Inflation risk is also referred to as purchasing power risk, meaning that investors' returns will not buy as much as it is intended to in the future. The importance of inflation rate cannot be overlooked as it can render an investment worthless if not mitigated. Interest rate risk will be discussed next.

5.3.5. Interest rate risk

Of the respondents, 46% agreed to a full degree that interest rate risk is important to consider when investing in emerging markets, 48% agreed to a degree, while 6% agreed to a partial degree.

All respondents agreed that interest rate risk is important to consider with an almost equal split between a full degree and a degree. The importance of considering interest rate risk is consistent with a warning by Bodie *et al*. (2018), who state that changes in interest rates influence the value of investors' stocks, cash and shares. As a result, the risk of a particular investment could increase as interest rates increase. As risk increases, the cost of stocks decrease, and investors may suffer a loss. The next discussion is on financial risk.

5.3.6. Financial risk

Of the respondents, 42% agreed to a full degree that financial risk is important to consider when investing in emerging markets, 49% agreed to a degree, while 9% agreed to a partial degree.

All respondents agreed that financial risk is important to consider and therefore, it can be inferred that the exposure to adverse events that erode profitability and, in extreme circumstances, bring about business collapse, should be managed when investing in emerging markets. This is in line with the sentiments of Olson and Dash Wu (2015) who state that investors need to understand what risk means to their business operations. This means having a clear understanding of whether risks complement, enhance or harm business activities, or whether risks form a significant part of revenue generation. Credit risk will be discussed next.

5.3.7. Credit risk

This question aimed at determining the importance of considering credit risk when investing in emerging markets. Of the respondents, 58% agreed to a full degree that credit risk is important to consider when investing in emerging markets, 33% agreed to a degree, while 9% agreed to a partial degree.

The respondents attest to Chapman's (2013) argument that credit risk is the oldest and perhaps the most important of all risks in terms of the size of potential losses. Defaults by a small number of large customers can generate large losses, which can lead to insolvency. Therefore, emerging market investors need to mitigate credit risk. Credit risk can be mitigated by taking out credit risk insurance, which is available in many countries for local and foreign investors. When credit risk is well managed, emerging market investors will not be exposed to liquidity and legal risk, which will be discussed next.

5.3.8. Liquidity risk

The literature has listed two advantages of liquid investments: firstly, many banks prefer liquid assets, and so are more likely to extend a credit line should investors experience a cash flow crisis; and secondly, even if the bank does not agree, investors can always sell the assets themselves. This question sought to test the importance of considering liquidity when investing in emerging markets. Of the respondents, 58% (n = 19) agreed to a full degree that liquidity risk was important to consider when investing in emerging markets, 24% (n = 8) agreed to a degree, while 18% (n = 6) agreed to a partial degree.

Liquidity risk can be regarded as one of the key risks an investor should consider when investing in emerging markets. Managing liquidity will not only ensure that risks are kept to a minimum, but also that opportunities are exploited. The next discussion focuses on legal risk.

5.3.9. Legal risk

When rating legal risk in an emerging market, 12% of the respondents agreed to a full degree that legal risk should be considered, 61% agreed to a degree, while 27% agreed to a partial degree.

Based on the respondents' ratings of legal risk in Figure 5.4 above, it can be concluded that investors' objectives may be compromised when legal risk is not minimised in a foreign country. According to Young (2018), failure to manage legal risk can result in the cancellation of investment contracts, penalties, fines and the termination of trading licenses in extreme cases, which will be detrimental to the investors' objectives in the international arena. The final risk that was analysed is technology risk.

5.3.10. Technology risk

When rating technology risk in an emerging market, 24% (n = 8) of the respondents agreed to a full degree, 40% (n = 13) agreed to a degree, 30% (n = 10) agreed to a partial degree, while 6% (n = 2) disagreed that technology risk was important to consider in emerging markets.

Technological risk arises when existing technology malfunctions or back-office support systems break down. Investors in an emerging market need to guard against technology failures, which could disrupt their investments, such as information security incidents or service outage. According to Chapman (2013), poor technology can lead to emerging market investments having to withdraw their investments as a result of an inability to compete, leading to frustrations and losses. When investors envisage investments, they need to ensure that they can afford the technology needed to trade with their foreign counterparts. Therefore, the respondents' ratings of technology risk attest that the technological factors need to be considered before investing in emerging markets with the majority (94%) of the respondents agreeing that technology risk is a key risk to consider when planning to invest in emerging markets.

5.3.11. Concluding remark

This section focused on confirming the risks to be considered when planning to invest in emerging markets. The majority of the respondents confirmed these risks as being the risks to be considered when planning to invest in an emerging market to a full degree or to a degree. Based on the average ratings of the respondents, the following can be regarded as the top five most important risks to consider when planning to invest in an emerging market.

Table 5.2: Top five risks in emerging markets

Risks in emerging markets	**Average response (%)**
Country risk	73%
Exchange rate risk	64%
Market risk	52%
Inflation risk	46%
Technology risk	40%

Table 5.2 indicates the primary risk types that should be considered and managed by an investor. Therefore, it should form part of the risk analysis framework. The next section focuses on the risk factors in emerging markets.

5.4. Risk factors in emerging markets

The analysis and mitigation of risk factors relevant to emerging markets will determine the success of such investments. Therefore, this section deals with the rating of the identified risk factors considered to be important when planning to invest in emerging markets. The risk factors that were included in the questionnaire and the applicable responses are discussed in the ensuing sections. Table 5.3 gives a brief description of the applicable risk factors identified in the literature review.

Table 5.3: Risk factors relevant to investors in emerging markets

Risk factors relevant to investing in emerging markets	**Definition or description**
Currency	A system of money or medium of exchange in general use in a country
Economic stability	An absence of excessive fluctuations in the macro economy
Cost	The monetary value that has been spent by an investor in order to acquire investments
Liquidity	A feature of the market whereby an investor can quickly purchase or sell an asset without causing a drastic change in the price of the asset
Inflation	A general increase in prices and fall in the purchasing value of money
Risks	Risk is the potential for uncontrolled loss of something of value

Taxation	A compulsory financial charge or some other type of levy imposed upon a taxpayer (an individual or legal entity) by a governmental organisation in order to fund various public expenditures

The respondents' ratings of the risk factors to consider when planning to invest in emerging markets are graphically displayed in Figure 5.5.

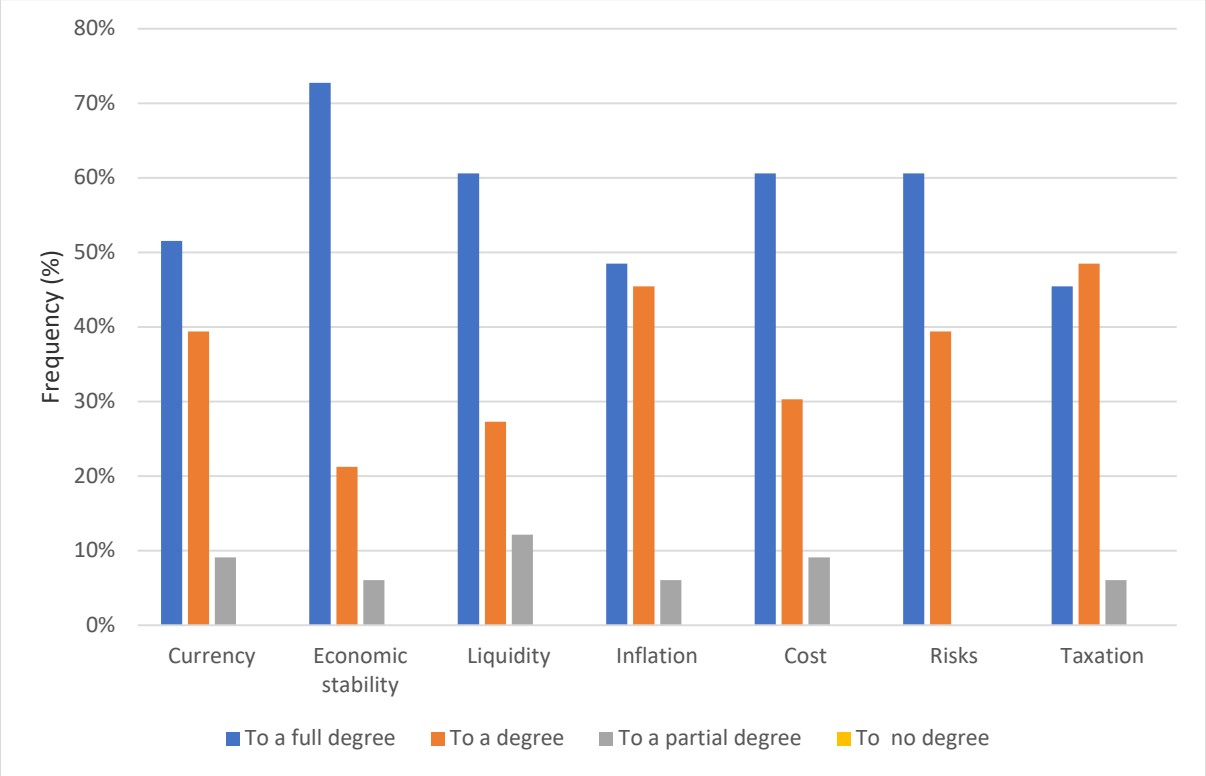

Figure 5.5: Risk factors to be considered for investments in emerging markets

5.4.1. Currency

When rating currency as a risk factor in emerging markets, 52% of the respondents agreed to a full degree, 39% agreed to a degree, while 9% agreed to a partial degree that currency was a key risk factor to consider when investing in emerging markets.

All respondents agreed that currency is a key risk factor to consider when investing in emerging markets. This is consistent with the literature, which raises the importance of one currency in relation to other currencies. When buying the currency of other countries or investing in other currencies, this triggers currency exchange risk. Currency exchange risk is the risk that an asset or investment denominated in a foreign currency will lose value as a result of unfavourable

exchange rate fluctuations (Amadeo, 2017). Therefore, it can be concluded that currency is a risk factor to be considered when investing in emerging markets. The next risk factor to be discussed is economic stability.

5.4.2. Economic stability

The aim of the section was to investigate whether economic stability can be regarded as a key risk factor to consider when investing in an emerging market. Figure 5.5 indicates that most of the respondents (73%) agreed to a full degree that economic stability was important to consider in an emerging market. Of the respondents, 27% agreed to a degree, while 6% agreed to a partial degree that economic stability was important to consider in an emerging market.

The deduction therefore is that economic stability could enable other macroeconomic objectives to be achieved, such as stable prices and sustainable growth. It could also create the right environment for job creation and a balance of payments. It is observed that the respondents' ratings attest to the IFM stance that promoting economic stability is partly a matter of avoiding economic and financial crises, large swings in economic activity, high inflation, and excessive volatility in foreign exchange and financial markets (Ranchhod, 2019). Therefore, it can be deduced that economic stability is a key factor to consider when investing in emerging markets. The respondents' ratings of liquidity will be discussed next.

5.4.3. Liquidity

Emerging markets are generally less liquid than those found in developed markets (Peterhoff *et al.*, 2016). As discussed in 2.7.2.4, investors who try to sell stocks in an illiquid market could face substantial risks that their orders will not be filled at the current price, and the transactions will only go through at an unfavourable level. When rating liquidity as a risk factor in emerging markets, 61% of the respondents agreed to a full degree, 27% agreed to a degree, while 12% agreed to a partial degree, as graphically depicted in Figure 5.5 above.

The literature emphasised that liquidity is a concept that many investors fail to consider or understand and as a result their financial plans could fail in such critical times when they need cash for emergency purposes (Emerson, 2018). However, it could be mentioned that liquidity, or a lack thereof, could cause more financial problems than almost any other aspect of finance. It can be construed that investors can either lose money, which they needed in the short term

because of improper investments, or they may have insufficient funds upon retirement because of years of investing in short term investments for a long-term goal. In conclusion, liquidity is a risk factor that should be considered when investing in emerging markets. Inflation as a risk factor will be discussed next.

5.4.4. Inflation

High inflation rates tend to cause uncertainty and confusion, leading to lower investment returns (Gustke, 2014). As discussed in 3.2.4, higher inflation leads to lower international competitiveness, leading to fewer exports and deterioration in the current account balance of payments. When rating the importance of considering inflation as a risk factor in emerging markets, 49% of the respondents agreed to a full degree, 45% agreed to a degree, while 6% agreed to a partial degree.

Inflation is regarded as adverse because it leads to higher prices and economic challenges. Based on the responses received, it can be deduced that the respondents agree with the SARB and many other central banks in most countries, which are strongly opposed to inflation, and uses monetary policy to combat inflation. It can, therefore, be concluded that inflation is a key factor to consider when investing in emerging markets. The investment cost as a risk factor will be discussed next.

5.4.5. Investment cost

According to Louw (2016), until recently, many local investors were not informed of what fees they were paying. Investment and insurance companies have been accused of using statements such as that annuities and or endowments are bad investments as an excuse for poor returns. Many of the respondents seem to agree with this statement, with 61% agreeing to a full degree that cost is a risk factor that could influence the outcome of an investment when investing in emerging markets. Of the respondents, 31% agreed to a degree, while 9% agreed to a partial degree. Therefore, it can be concluded that the investment cost as a risk factor should be clearly defined and considered before making an investment decision. Therefore, it is recommended that this risk factor should be included in a risk analysis framework for offshore investments. The next factor is risk, which will be dealt with in the ensuing section.

5.4.6. Risks

Risk was defined as the potential for uncontrolled loss of something of value in 3.1.3.2. Values (such as physical health, social status, emotional well-being, or financial wealth) can be gained or lost when taking risk resulting from a given action or inaction, foreseen or unforeseen (planned or not planned). Risk was further described as the intentional interaction with uncertainty. Uncertainty is the unpredictable and uncontrollable outcome, and risk is the aspect of taking action despite the uncertainty.

When rating the importance of considering risk as a factor to make a decision to invest in emerging markets, 61% and 39% of the respondents agreed to a full degree and a degree, respectively. Therefore, all respondents agreed that risk was a key factor to consider when a decision is made to invest in emerging markets. Every business or investor faces the risk of unexpected, harmful events Therefore, it can be concluded that a risk analysis framework could prepare investors for the unexpected by minimising the potential effects of risk exposures. In addition, a risk analysis framework could assist with establishing procedures to avoid potential threats and minimise their impact. The next risk factor to be discussed is taxation.

5.4.7. Taxation

In 3.2.1.1 taxation was defined as an act of imposing tax or levies, usually by a government. The term taxation applies to all types of involuntary levies, from income to capital gains to estate taxes. Tax systems have varied considerably across jurisdictions and time. In most modern systems, taxation occurs on both physical assets, such as property, and specific events, such as a sales transaction. The formulation of tax policies is one of the most critical and contentious issues in modern politics (Beere, 2013). The continuous modernisation of emerging market systems and tax structures make it critical for investors to understand the tax direction a country is heading towards to guard against higher taxes that could reduce investments returns.

Of the respondents, 45% agreed to a full degree that taxation is a risk factor when considering investing in emerging markets, 49% agreed to a degree, while 6% agreed to a partial degree. Based on the response, it can be confirmed that tax is an important factor to include in a risk analysis framework for investors in emerging markets.

5.4.8. Concluding remark

This section aimed at confirming the importance of the risk factors that were identified as critical to consider when investing in emerging markets. Most of the respondents confirmed the importance of the risk factors that should be considered when making investment decisions in emerging markets. As such, it can be accepted that these risk factors should be included in a risk analysis framework for investment decisions in emerging markets. Based on the average ratings of the respondents, Table 5.4 illustrates the top five most important risk factors to consider when investing in an emerging market and therefore imperative to be addressed during investment decisions.

Table 5.4: Top five risk factors in emerging markets

Risk factors in emerging markets	**Average response (%)**
Economic stability	73%
Risks	61%
Liquidity	61%
Currency	52%
Inflation	49%

Table 5.4 indicates the primary risk factors in emerging markets that should be considered and managed by an investor. Therefore, it should form part of the risk analysis framework. The next section focuses on the reasons for investing in emerging markets.

5.5. Reasons for investing in emerging markets

This section focuses on the fourth objective of the study, namely, to confirm the underlying reasons for investors to consider investing in emerging markets. Figure 5.6 graphically depicts the ratings of the reasons for investing in emerging markets from the respondents. The literature has identified the main reasons for investing in emerging markets, which were included in the questionnaire and the applicable responses are discussed in the ensuing sections.

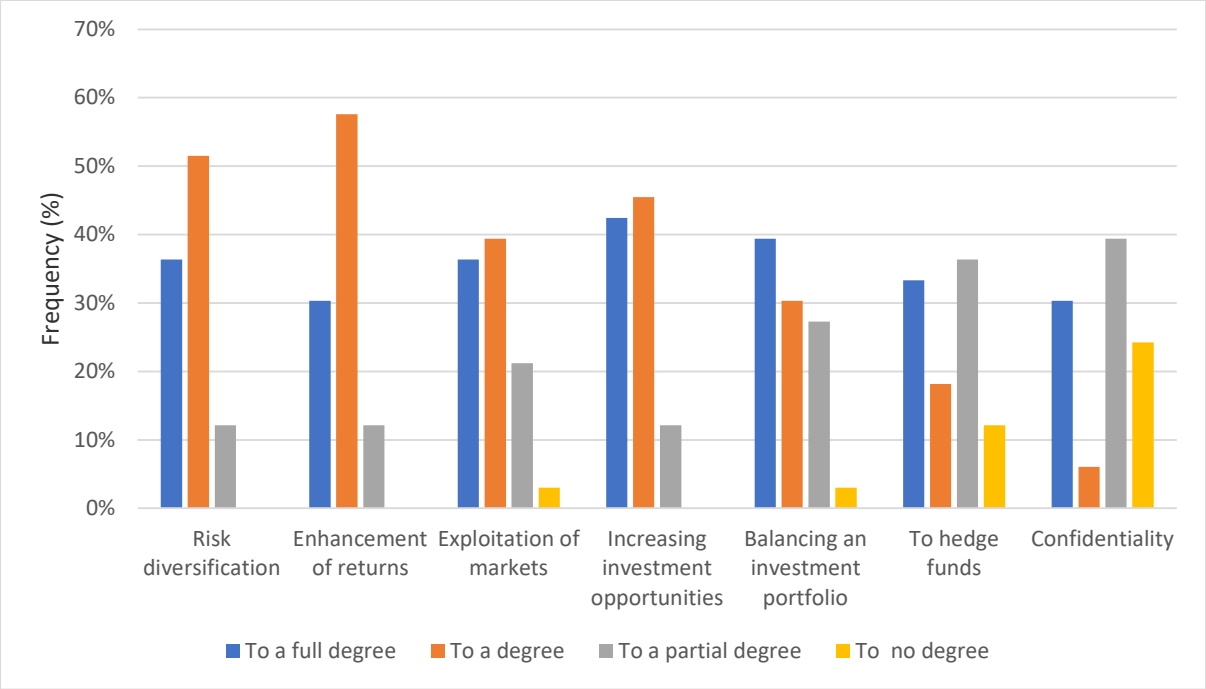

Figure 5.6: Reasons for investing in emerging markets

5.5.1. Risk diversification

Risk diversification is described as a process of spreading risk over numerous areas to ensure that the potential negative effects of exposure to any one variable are limited (Clarke, 2017). Diversification is a risk management strategy that mixes a wide variety of investments within a portfolio. A diversified portfolio contains a mix of distinct asset types and investment vehicles in an attempt at limiting exposure to any single asset or risk (Clarke, 2017).

Risk diversification as a reason for investing in emerging markets was rated as follows: 52% of the respondents agreed to a full degree that risk diversification was one of the main reasons for investing in emerging markets. Another 36% agreed to a degree, while 12% agreed to a partial degree, as indicated in Figure 5.5 above.

Therefore, it can be deduced that investors must apply a technique that reduces risk by allocating investments among various financial instruments, industries and other categories. In conclusion, risk diversification aims to maximise returns by investing in different portfolios that would react differently to the same event. Therefore, it can be concluded that risk diversification

is one of the reasons for investing in emerging markets. The next discussion focuses on the enhancement of returns as a reason for investing in emerging markets.

5.5.2. Enhancement of returns

Asset managers' main concern is to employ strategies to gain exposure to specific types of opportunities to help enhance the performances of their portfolios (Clarke, 2017). When rating enhancement of returns as a reason for investing in emerging markets, 58% of the respondents agreed to a full degree, 30% agreed to a degree, while 12% agreed to a partial degree.

Based on the response, it can be concluded that the broad objective of asset management is to maximise investment returns. These were further alluded to by the respondents' ratings, with all agreeing that enhancement of returns was one of the main reasons for investing in emerging markets. Therefore, asset managers should reduce expenditures where possible, find the most consistent and the highest sources of revenue, and mitigate liability and risk. Exploitation of markets as a reason for investing in emerging markets will be discussed next.

5.5.3. Exploitation of markets

Market exploitation was described as the search for and pursuit of new knowledge and skills outside the investor's current product market (Bodie *et al.,* 2018). When rating exploitation of markets as a reason for investing in emerging markets, 40% of the respondents agreed to a full degree, 36% agreed to a degree, 21% agreed to a partial degree, and 3% to no degree.

The respondents had different views regarding the exploitation of markets as one of the reasons for investing in emerging markets. This confirms the literature, which indicates that not all investors want the same investment returns and one investment strategy or destination would not be acceptable for all investors. Therefore, investors should focus on what is the most beneficial for them in terms of their investment objectives. Therefore, it can be concluded that exploitation of markets is one of the reasons for investing in emerging markets. Increasing investment opportunities as a reason for investing in emerging markets are discussed next.

5.5.4. Increasing investment opportunities

Despite the aftermath of the global recession still being felt in many countries across the globe, BRICS countries have seen considerable growth in its developing sectors, leading to an increase in investment opportunities (Bodie *et al.,* 2018). When rating increasing investment opportunities as a reason for investing offshore, 46% of the respondents agreed to a full degree, 42% to a degree and 12% to a partial degree.

All respondents agreed that increasing investment opportunities is one of the main reasons for investing in emerging markets. According to Teso, Wong and Gokoluk (2019), emerging market assets will outperform their developed peers, with Asia having the best prospects. This is according to Bloomberg's 2019 survey of 57 global investors, strategists and traders on their outlook for 2020. Total wealth in emerging market stocks and bonds in December 2019 exceeds $25-trillion, which is bigger than the economies of the US and Germany combined. Therefore, it seems that emerging markets continue to offer better investment opportunities than developed markets. Therefore, it can be concluded that increasing investment opportunities is one of the reasons for investing in emerging markets. The next reason for investing in emerging markets could be balancing an investment portfolio.

5.5.5. Balancing an investment portfolio

Balancing an investment portfolio as a reason for investing in emerging markets, was rated by the respondents as follows: 30% agreed to a full degree, 40% to a degree, 27% to a partial degree and 3% to no degree, as indicated in Figure 5.6 above.

A balanced investment strategy can be seen as a way of combining investments in a portfolio that aims to balance the risks and returns. Typically, balanced portfolios can be spread between stocks and bonds (Aven, 2015). The majority of the respondents agreed that balancing an investment portfolio is a reason for investing in emerging markets. In conclusion, it seems logical that emerging markets should form part of any investment portfolio as there is a definite need for an exposure to emerging markets in any investment portfolio. Hedging funds as a reason for investing in emerging markets are discussed in the next section.

5.5.6. To hedge funds

A hedge fund is described as an investment fund that pools capital from accredited investors or institutional investors and invests in a variety of assets, often with complicated portfolio-construction and risk management techniques (Saunders & Cornett, 2018). Hedging funds as a reason for investing in emerging markets, was rated as follows by the respondents: 18% agreed to a full degree, 33% to a degree, 37% to a partial degree and 12% to no degree.

According to Suleman (2014), the use of hedge funds in personal financial portfolios has grown dramatically since the start of the twenty-first century. It can be seen as a contract of a professional fund manager, who can often be known as the general partner, and the investors, sometimes known as the limited partners, who contribute their money as a group to the fund.

The purpose of a hedge fund is to maximise investor returns and to eliminate risk, and is generally considered to be more aggressive, risky and exclusive than mutual funds. Therefore, hedge funds are not recommended to all investors, especially to those who are not aggressive. In conclusion, to hedge funds can be considered as a risk factor to consider when investing in emerging markets. Confidentiality will be discussed next.

5.5.7. Confidentiality

Confidentiality is described as a non-disclosure of contracts normally used in negotiations taking place prior to making distribution, licence, technological transfer, franchise, manufacturing, joint ventures, mergers and acquisitions agreements (Gitman *et al*., 2016). According to Chapman (2013), confidentiality is an agreement, which might entail a prior exchange of confidential information.

When rating confidentiality as a reason for investing in emerging markets, only 6% of the respondents agreed to a full degree, 30% to a degree, 40% to a partial degree and 24% to no degree, as indicated in Figure 5.6. Based on the response, it can be derived that confidentiality is not necessary a key reason for investing in emerging markets

5.5.8. Concluding remark

This section focused on the reasons for investing in emerging markets. All the reasons discussed in the literature were tested to confirm whether they can be regarded as reasons for investing in emerging markets. The main deduction was that investors invest in emerging markets for various reasons or a combination of reasons. In conclusion, any investor or potential investor should be guided by their own investment objectives as there is no single investment that could cater for all investors' needs and no single investor can use all the investment vehicles to reach their objectives. According to the response, the reasons for investing in emerging markets can be priorities based on the average response as indicated in Table 5.5

Table 5.5: Reasons for investing in emerging markets

Reasons for investing in emerging markets	**Average response (%)**
1. Enhance returns	58%
2. Diversify risks	52%
3. Exploit emerging markets	40%
4. Increase opportunities	46%
5. To balance an investment portfolio	30%
6. To hedge funds	18%
7. Confidentiality	6%

Based on the response, it is apparent that the first four reasons for investing in emerging markets are important and should be part of a risk analysis framework. These four have with above average responses. The next section focuses on the key considerations before deciding to invest in emerging markets.

5.6. Key considerations before making investment decisions

This section aims to address objective five, which was to investigate whether there is any risk analysis framework applied during an emerging market investment process. During the literature review, a specific risk analysis framework for potential risks could not be identified. However, investors are encouraged by Ranchhod (2019) to conduct a risk analysis exercise before making any investment decisions. Therefore, a number of key considerations by investors in emerging markets were identified in 2.6 and included in the questionnaire. The result of the responses

regarding the key considerations is reflected in Figure 5.7. The applicable responses are discussed in the ensuing section.

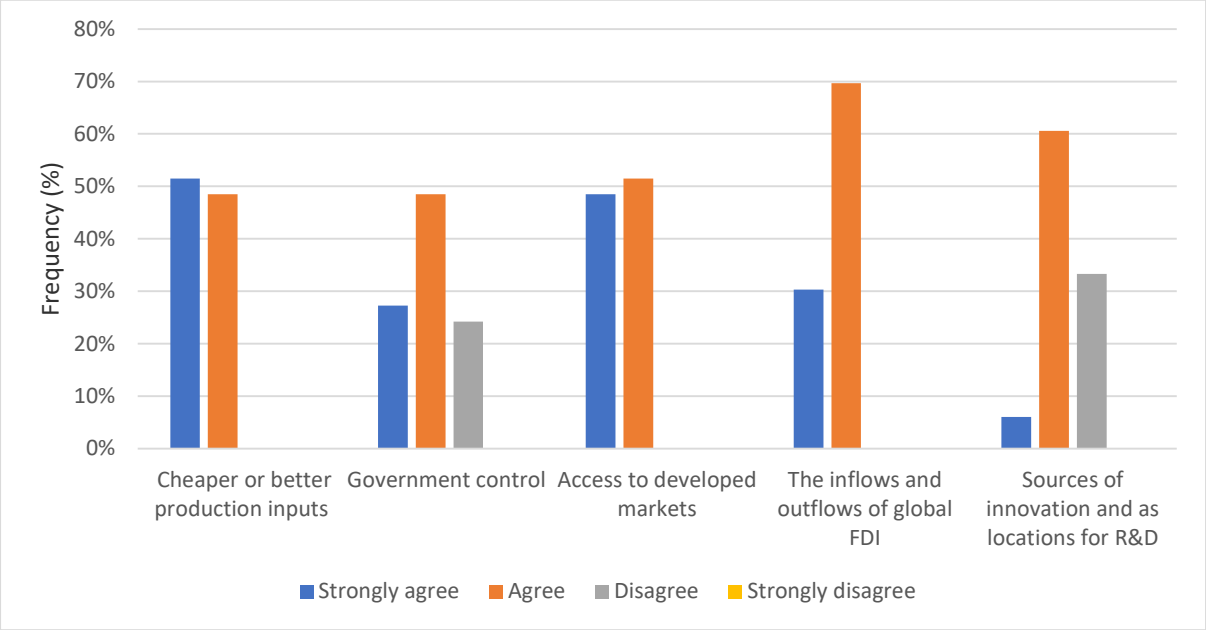

Figure 5.7: Key considerations before investment in emerging markets

5.6.1. Cheaper or better production inputs

According to the response, 52% of the respondents strongly agreed, while 48% agreed that emerging markets were increasingly important for MNCs as growing markets, sources of cheaper or better production inputs and as a source of competition in the shape of a new MNC.

In conclusion, emerging markets has drawn the interest of the MNC as emerging markets offer better returns and investment opportunities. As emerging market multinational corporations (EMNCs) tend to expand their global presence, it seems of the utmost importance to explore the salient attributes of such an unfolding phenomenon. One of the key findings is that top EMNCs are displaying a rapid internationalisation process. Moreover, natural resources-related sectors, in particular energy, have been proven to dominate the non-financial industry structure of EMNCs. Therefore, cheaper or better production inputs are key considerations before investment in emerging markets. The next section will focus government control.

5.6.2. Government control

Emerging markets tend to be controlled by their governments and are less predictable and riskier than developed markets (Ciravegna *et al*., 2014). Governments in emerging markets have, over the decades, tried many different policy agendas to, for example stimulate development, accelerate growth, and alleviate poverty.

Of the respondents, 27% strongly agreed, 49% agreed and 24% disagreed that emerging markets tend to be controlled by their governments and are less predictable and riskier than developed markets. It can be deduced that government control is a key consideration before investing in emerging markets. The next section focuses on access to developed markets.

5.6.3. Access to developed markets

The purpose of this section is to determine whether access to developed markets is a key consideration before investment in emerging markets. The literature argues that emerging markets and developed markets both need each other as covered in 2.3.1. When rating whether emerging markets need investments from and access to developed markets, 48% and 52% of the respondents strongly agreed and agreed, respectively.

Ciravegna *et al.* (2014) warn that emerging and developed markets have similar objectives when exploring market-seeking investments. They both want to increase sales in each other's territories and to do this they must customise products and services to suit these markets, establish or buy distribution and sale networks, and raise the profiles of the brands. In many cases, they may also need to set up manufacturing, assembly, service, or support activities in each other's markets to avoid import duties and or to support the needs of their customers. Thus, all the respondents agreed that emerging markets need investments from and access to developed markets. Therefore, it can be concluded that access to developed markets is a key consideration before investing in emerging markets.

5.6.4. Movement of foreign direct investments

The inflows and outflows of global FDI show that there is a growing integration between emerging and developed countries. Of the respondents, 30% strongly agreed, while 70% agreed

that the inflows and outflows of global FDI show that there was a growing integration between emerging and developed countries.

It can be deduced that when exploring input-seeking investments, emerging and developed market-based firms may have similar strategies, but they tend to be looking for different kinds of inputs. In conclusion, emerging and developed markets need each other because their home regions could provide each with a different set of resources. It can, therefore, be concluded that movement of FDIs is a key consideration before investment in emerging markets. The next section will focus on sources of innovation and locations for research and development.

5.6.5. Sources of innovation and locations for research and development

BRICS countries are emerging from the global recession with high expectations for growth, presenting global companies with new markets, ongoing access to lower costs, and unprecedented opportunities to broaden their research and development efforts in the coming years (Distler, 2016). Emerging markets are growing in importance as sources of innovation and as locations for R&D investment by MNCs. Of the respondents, 33% strongly agreed, 61% agreed and 6% disagreed that emerging markets were growing in importance as sources of innovation and as locations for R&D investment by MNCs.

In conclusion, the respondents' ratings are in sync with the third annual McKinsey survey on R&D, which warned that one-third of executives around the world were not doing any R&D work in emerging markets. Of the two-thirds of respondents whose companies pursue such efforts, the largest group says their R&D is focused on either global product platforms or local innovation in emerging markets, as opposed to R&D for developed markets only.

5.6.6. Concluding remark

This section focused on key considerations before investing in emerging markets. All the key considerations discussed in the literature were tested to confirm whether they need to be considered before investing in emerging markets. According to the response, the key considerations before investing in emerging markets can be prioritised based on the average response as indicated in Table 5.6 below.

Table 5.6: Key considerations before investment in emerging markets

Key considerations before investment in emerging markets	Average response (%)
6. The movement of FDIs	70%
7. Sources of innovation and locations for research and development	61%
8. Access to developed markets	52%
9. Government control	49%
10. Cheaper or better production inputs	48%

Based on the average response ratings, it is apparent that the key considerations before investing in emerging markets should form part of the risk analysis framework. The next section focuses on the determinants of capital flows in emerging markets.

5.7. Determinants of capital flows in emerging markets

The previous section focused on key considerations before investing in an emerging market. Once this has been considered and the investment strategies are put in place, the capital should then flow into the chosen emerging markets for investment purposes (Emerson, 2018).

This section also adds to the fifth objective, namely to investigate whether there is any risk analysis framework applied during an emerging market investment process. For capital to flow into other countries, the investors should ensure that there is a risk analysis framework in place to ensure that the right channels are in place and the capital is invested where intended as discussed in 2.7.2. The determinants of capital flows, which serve as the basis for the development of a risk analysis framework, are graphically depicted in Figure 5.8 below.

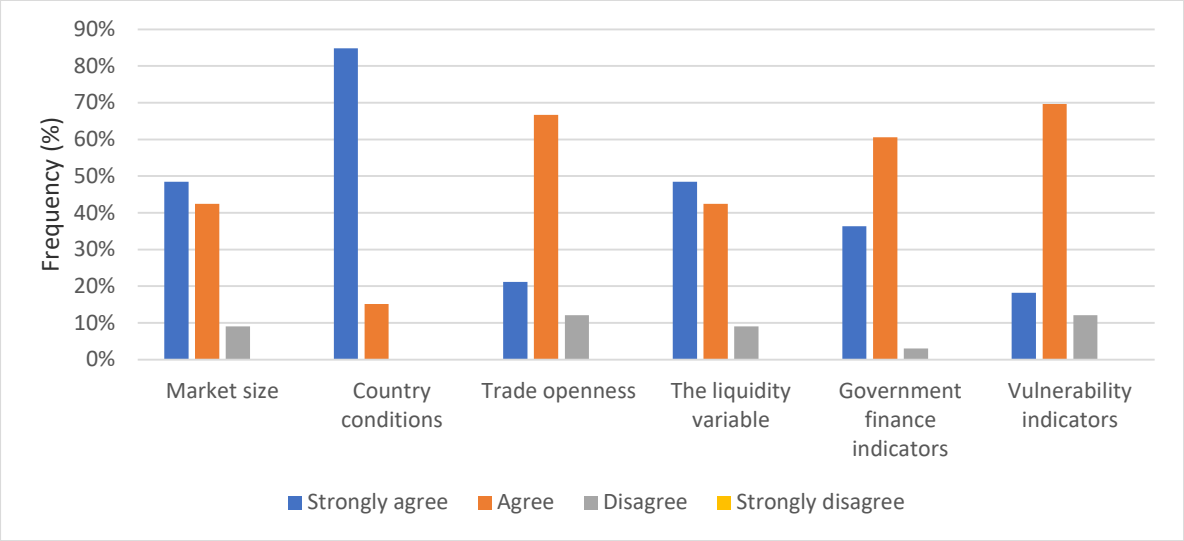

Figure 5.8: Determinants of emerging markets capital flows

The respondents were asked to rate their level of agreement on the determinants of capital flows in emerging markets as listed in the questionnaire. The applicable responses are discussed in the ensuing sections.

5.7.1. Market size

Understanding market size helps to distinguish between two categories: the addressable market, which is the total revenue opportunity for products or services; and the available market, which is the portion of the addressable market for which investors can realistically compete as discussed in 2.7.2. When rating market size as a determinant of capital flow in emerging markets, 42% of the respondents agreed, 9% disagreed and 49% strongly disagreed that market size was a determinant of capital flow in emerging markets.

Besides developing an exceptional product or hiring the right talent, doing market research can be regarded as one of the most critical steps for any investment. Therefore, it can be concluded that research of market size is key. Without knowing the market size, investors may be conducting business in a market that is not aligned to their investments' objectives, which could make it impossible to generate the intended returns. The next discussion is on country conditions as a determinant of capital flows in emerging markets.

5.7.2. Country conditions

According to the literature review (2.7.2), many investors place a portion of their portfolios in foreign securities. This decision involves an analysis of various mutual funds, exchange-traded funds (ETFs), or stock and bond offerings. The decision to invest overseas should begin with determining the riskiness of the investment climate in the country under consideration (Ascher, 2017). As discussed in 2.7.2.2, country conditions (risk) refers to the economic, political and business risks that are unique to a specific country, and that might result in unexpected investment losses. When rating country conditions as a determinant of capital flow in emerging markets, 15% and 85% of the respondents agreed and strongly agreed, respectively.

As all respondents agreed that country conditions were one of the key determinants of capital flow into emerging markets, it can be deduced that one of the important steps in deciding on an investment is to examine the economic and financial fundamentals of a country. Although, it seems that various analysts prefer different measures, most experts turn to the gross domestic product (GDP), and inflation and consumer price index (CPI) readings of a country when considering an investment in emerging markets. Investors will also want to evaluate the structure of the financial markets, the availability of attractive investment alternatives, and the recent performance of local stock and bond markets of a country. Therefore, it can be concluded that the condition of a country can be regarded as a key determinant of capital flows in emerging markets. As such, it should form an integral part of a risk analysis framework for investing in emerging markets. A next determinant is the trade openness of capital flows in emerging markets.

5.7.3. Trade openness

Trade openness is defined as the extent of which a country partakes in the global trade and allows foreign firms to do business in its domestic market (Essays, 2018). Openness may affect stock market development. For example, higher trade openness is associated with higher informational efficiency of emerging stock markets. When rating the openness variable as a determinant of capital flow in emerging markets, 67% of the respondents agreed, 21% strongly agreed, while 12% disagreed that the openness variable can be regarded as a determinant of capital flow in emerging markets.

The literature on trade and growth indicates that trade openness has favourable effects on growth and income levels, but for the most part, it does not indicate whether these effects are attributable to the extent of the market, or to other channels. Most of the respondents consider openness as a determinant of capital flows in emerging markets. Therefore, it can be concluded that trade openness is a key determinant of capital flows in emerging markets and should be determined before investing in emerging markets. The next discussion relates to the liquidity variable as a possible determinant.

5.7.4. The liquidity variable

Liquidity is not just the ability to buy or sell an asset or security in a timely manner, but rather it is the ability to buy or sell an asset or a security in a timely manner without affecting the asset price (Emerson, 2018). In effect, liquidity can be the ease of converting one's investment into cash. According to Peterhoff *et al*. (2016), while nearly everyone in the investing public has an understanding of liquidity, few actually endeavour to assign a value to it. According to the response, 49% of the respondents strongly agreed, 42% agreed, while 9% disagreed that the liquidity variable was a determinant of capital flow in emerging markets.

Fundamentally, assuming return profiles are equal, an investment that has daily liquidity is preferential to an investment that requires months or even years to redeem (Peterhoff *et al.*, 2016). Therefore, it can be concluded that an illiquid holding must achieve a greater rate of return over time compared to its liquid counterpart. Therefore, liquidity must be quantified to understand and compare investments accurately across asset classes to make the right investment decision. As such, the liquidity variable can be regarded as an important determinant of capital flow in emerging markets and should form an integral part of a risk analysis framework. The next section deals with government finance indicators.

5.7.5. Government finance indicators

Government finance indicators help investors and analysts assess investment opportunities or entire economies (Silajdzic & Mehic, 2017). Governments provide key indicators such as gross domestic products (GDPs) and consumer price indices (CPIs), which can help investors predict changes in the economy of a country and strategically adjust their portfolios. When rating

government financial indicators as a determinant of capital flow in emerging markets, 36% of the respondents strongly agreed, 61% agreed, while 3% disagreed.

It is apparent that emerging market investors should familiarise themselves with government financial indicators of the emerging market in which they want to invest. This information can be retrieved from government financial indicators and should, therefore, be considered as an important determinant of capital flow in emerging markets and included in a risk analysis framework for investors in emerging markets. Vulnerability indicators will be discussed next.

5.7.6. Vulnerability indicators

Dalhaus and Lam (2018) define vulnerabilities as pre-existing conditions that make the occurrence of an economic or financial crisis or stress more likely when there is an adverse shock. A vulnerability indicator allows decision-makers to anticipate and respond to future crises and market fluctuations. Identifying appropriate indicators to measure uncertain future events is highly challenging (Joffe, 2017). When rating a vulnerability indicator as a determinant of capital flow in emerging markets, 70% of the respondents agreed, 18% strongly agreed, while 12% disagreed that it should be a determinant of capital flow in emerging markets. Therefore, it can be concluded that a vulnerability indicator should be considered as a determinant of capital flow in emerging markets and therefore should be included in a risk analysis framework.

5.7.7. Concluding remark

This section dealt with the identified determinants of capital flows into emerging markets that were identified during the literature review. Each determinant was rated by the respondents to attest if they can be regarded as a determinant of capital flow in emerging markets. It was found that the understanding of the determinants of capital flows is important for investors, because capital flows not only constitute one of the main components of the balance of payments, but also one of the most volatile. Understanding capital flows is, therefore, crucial in any balance of payments analysis and the determinants should form an integral part of a risk analysis framework for investors in emerging markets. According to the response the order of priority of these determinants is indicated in Table 5.7 below.

Table 5.7: Determinants of emerging markets capital flows

Determinants of emerging markets capital flows	Average response (%)
1. Country conditions	85%
2. Vulnerability indicators	70%
3. Trade openness	67%
4. Government finance indicators	61%
5. Liquidity variables	42%
6. Market size	42%

The next section focuses on common challenges in BRICS countries.

5.8. Common challenges in the BRICS countries

The previous section dealt with the determinants of capital flows into emerging markets. Once capital has flowed into an emerging market, investors are not guaranteed a positive outcome (Spence, 2017). The literature review indicated five challenges that investors could face, indicated in Figure 5.9. This section focused on these challenges in terms of the BRICS countries addressing the second objective that aims to determine the extent of risk exposures for investors in these emerging markets.

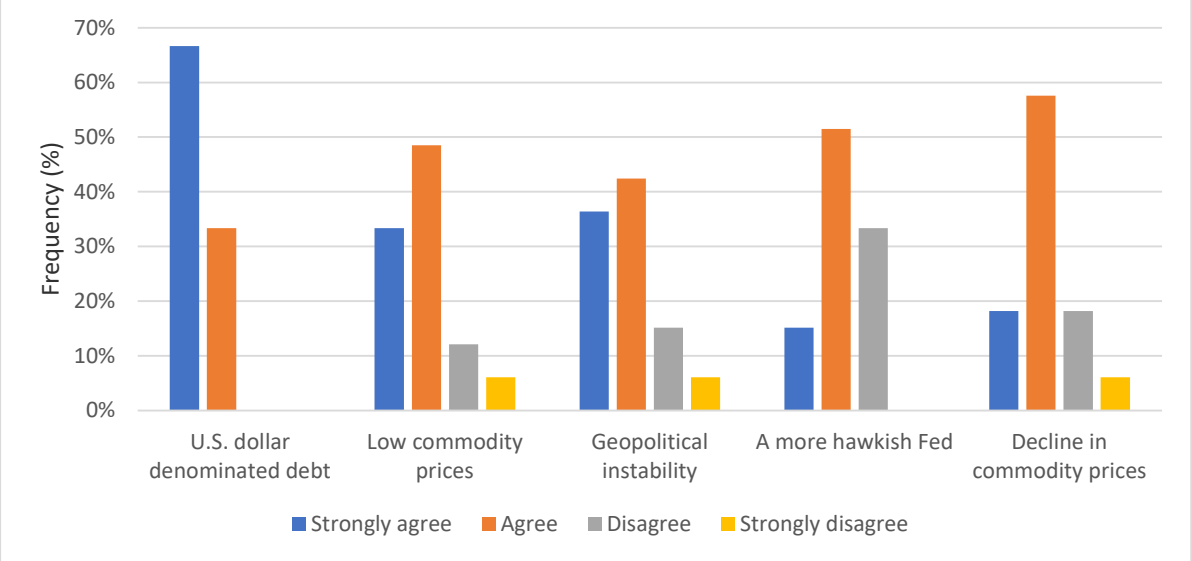

Figure 5.9: Common challenges in the BRICS countries

The common challenges in the BRICS countries that were included in the questionnaire and the applicable responses are discussed in the ensuing section.

5.8.1. US dollar denominated debt

US dollar-denominated debt is a dollar bond that trades outside of the United States, along with the principal amount, any coupon payments from the bond are paid in US funds (Rangasamy, 2017). A dollar bond may also refer to a municipal bond which has its price quoted in dollars, rather than on its yield to maturity (Labys, 2019).

When rating the US dollar denominated debt as a challenge in the BRICS countries, sixty-seven per cent of the respondents strongly agreed while thirty-three per cent agreed that the US dollar denominated debts was one of the challenges in the BRICS countries as indicated in Figure 5.9.

It can be deduced that a surge in the dollar makes dollar-denominated debt across the emerging markets costly to service. When financial conditions in the emerging markets worsen, some economies will find it difficult to pay off or refinance their debt because dollar investors are going to be leery and would want to be compensated for large risks. It can, therefore, be concluded that an US dollar-denominated debt is a challenge in emerging markets and should be managed effectively. As such, it is imperative that this challenge be assessed as part of a risk analysis framework by investors in emerging markets. The next challenge is low commodity prices, which will be discussed next.

5.8.2. Low commodity prices

Section 2.7.3 of the literature review indicated that a positive growth of many emerging markets during the past decade was highly dependent on booming commodity markets and strong capital inflows, often related to commodities. With commodity prices falling and market expectations looking negative in the foreseeable future, macroeconomic policies have been put to a serious test. When rating low commodity prices as a challenge in the BRICS countries, thirty-three per cent of the respondents strongly agreed, forty-nine per cent agreed, twelve per cent disagreed and only six per cent strongly disagreed. Therefore, it can be deduced that low commodity prices is a challenge in BRICS countries.

Commodity markets can be volatile, and the pricing can be unpredictable, even for the most experienced traders. However, the price movements are a function of supply and demand. When the market shows a lower supply, prices tend to rise. Conversely: higher supplies generally result in lower prices. It can be concluded that commodity prices are a challenge when investing in emerging markets. Therefore, investors need to understand how and why commodities prices fluctuate, which determines a success in trading instruments. Therefore, it seems necessary to include this challenge of low commodity prices as part of a risk analysis framework for investors in emerging markets to ensure that they do not suffer great losses.

5.8.3. Geopolitical instability

Section 2.7.3. dealt with geopolitical instability as a challenge, yet it is also an opportunity to grow. For example, by performing comprehensive research in the operating countries and including geostrategic risks into a strategic-planning process not only mitigate the hazard of an asset bubble but doing so may put companies in a position to take advantage of abundant resources (Labys, 2019). Additionally, section 2.7.3 indicated that geopolitical risks can cause sudden yet fatal harm to company's' core business. From a micro perspective, unstable interstate environments prevent FDI and increase the likelihood of capital flight. This could lead to high entry barriers for companies. High volatility usually affects traditional industries such as oil and gas and may lead to irreversible consequences.

When rating geopolitical instability as a common challenge in the BRICS countries, thirty-six per cent of the respondents strongly agreed, forty-three per cent agreed, fifteen per cent disagreed and only six per cent strongly disagreed. It can be deduced that geopolitics has become extremely important and crucial to all kinds of business.

According to the response, it can be confirmed that geopolitical instability can be considered a common challenge in emerging markets, as such investors need to manage it effectively and this can be done by including it as part of a risk analysis framework for investors in emerging markets. A more hawkish Fed will be discussed next.

5.8.4. A more hawkish Fed

When rating a more hawkish fed as a common challenge in the BRICS countries, fifteen per cent (15%) of the respondents strongly agreed, fifty-two per cent (52%) agreed while thirty-three per cent (33%) disagreed. In conclusion, a more hawkish Fed is a common challenge in emerging markets and needs to form part of the risk analysis framework. The next challenge to be discussed is a decline in commodity prices.

5.8.5. Decline in commodity prices

Commodities are typically seen as leading indicators for global growth as they are used for everything from homebuilding to powering cities as discussed in section 2.7.3. A decline in commodity prices can signal slower economic growth moving forward. Commodity prices have been unstable due to several factors, including higher rates, a stronger dollar, weakness in emerging markets and increasing friction in global trade relations. A decline in commodity would also mean two opposite things to many investors, depending on whether one is buying or selling (Lemieux, 2018).

When rating the decline in commodity prices as a common challenge in BRICS countries, eighteen per cent strongly agreed, fifty-eight per cent agreed, eighteen per cent disagreed and only six strongly disagreed. Based on the response, it seems that a decline in commodity prices can be regarded as a common challenge in emerging markets.

5.8.6. Concluding remark

This section focused on confirming common challenges that investors in emerging markets are likely to face, which could be detrimental to their investments if not well mitigated. Five common challenges identified during the literature review were rated by respondents to confirm its applicability. This was confirmed by the respondents and the order of priority based on the average response is shown in the Table 5.8 below.

Table 5.8: Common challenges in the BRICS countries

Common challenges in the BRICS countries	Average response (%)
Decline in commodity prices	58%
A more hawkish Fed	52%
Low commodity prices	49%
Geopolitical instability	43%
US dollar denominated debt	33%

In accordance with the response, it can be concluded that the challenges should be included in a risk analyses framework for investors in emerging markets, in order to be aware and assess these challenges proactively. In addition, it seems that there's a link between these challenges, which could mean that they must not be assessed in a silo'd approach. For example, a more aggressive federal reserve could lead to a decline in commodity prices which in turn could lead to geopolitical instability and both these challenges should be assessed. The next section focused on whether emerging market investors considered emerging markets as a good investment destination despite all the risks, risk exposures, and challenges.

5.9. Emerging markets as good investment destination

The previous sections dealt with the risks, risk factors and challenges of investing in these markets. According to the literature review (Section 3.1.2), it is apparent that investors should decide if an investment in an emerging market will be a sound investment. Therefore, the respondents were requested to indicate if they consider investing in emerging markets as a sound investment at the time of the survey. Figure 5.10 illustrates their response

Ninety-four per cent of the respondents considered emerging markets as a good investment destination.

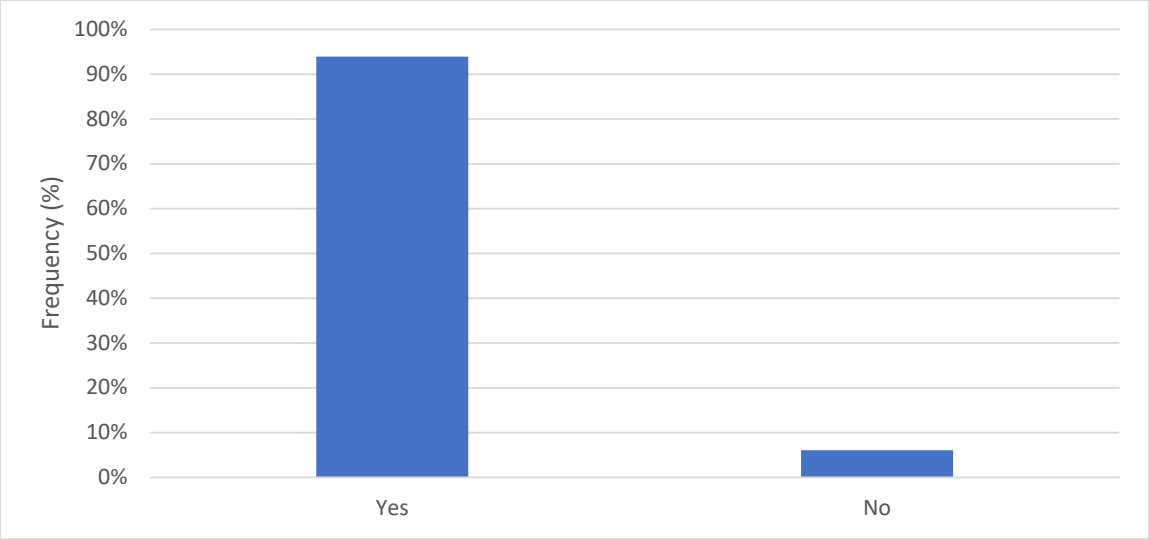

Figure 5.10: Emerging markets as good investment destination

It can be concluded that emerging markets are considered to be a good investment destination. However, these seemingly sound investments do not come without risk exposures and it is imperative to mitigate it accordingly.

5.10. Risk exposures

Over the past two decades, it seems that an increasing global economic integration has been a noticeable trend. The world economy has seen growing internationalisation with rising volumes of international trade and foreign investment flows, particularly FDI (Elliott, 2018). However, the impact of globalisation has been uneven (Gupta & Singh, 2016). Some countries, regions and sectors have been integrated into the world economy, with growing magnitudes of inward and outward FDI flows and other cross-border transactions. Others have been left relatively untouched and less exposed. Miller (2005) regarded risk exposure as part of any investment undertaking, while Manktelow (2014) indicated that risk exposure is a calculation that gives a numeric value to a risk, enabling different risks to be compared.

This section focuses on the objective of this study to develop a framework to analyse risk factors for investors in emerging markets. In order to develop a risk framework, it is necessary to firstly understand the current risk mitigation strategies that are in place, and secondly, to assess their effectiveness. The first section focuses on the main indicators of exchange rate risk, which was

indicated as one of the key risks to consider when investing in emerging markets. Three main indicators of exchange rate risk are graphically presented in Figure 5.11.

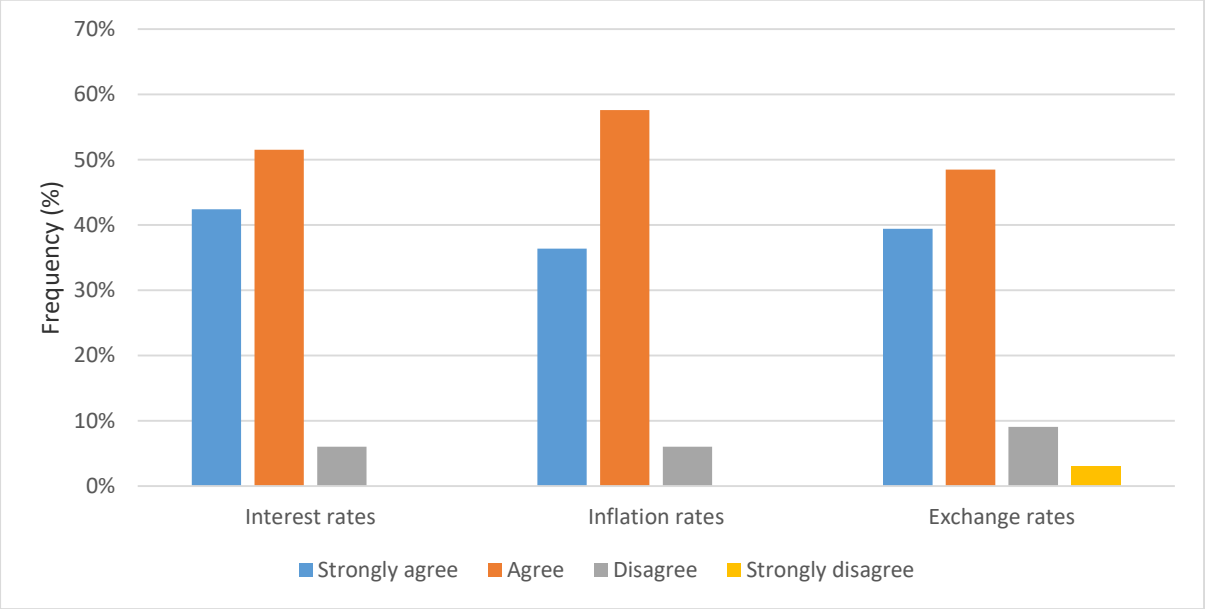

Figure 5.11: The main indicators of exchange rate risk

5.10.1. Main indicators of exchange rate risks

This question focused on the main indicators of exchange rate risks in emerging markets. Respondents were asked to what degree they agree that the three main indicators included in the questionnaire are the main indicators of exchange rate risks. The applicable responses are discussed in the ensuing section.

5.10.1.1. Relationship between emerging markets' interest rates

The relationship between emerging markets' interest rates need to be measured and quantified using the purchasing power parity (PPP). When rating the relationship between emerging markets' interest rates, forty-two per cent (42%) of the respondents strongly agreed, fifty-two per cent (52%) agreed while six per cent (6%) disagreed that the relationship between emerging markets interest rates is a key indicator of exchange rate risk.

PPP is an economic technique used when attempting to determine the relative values of two currencies. It is useful because often the amount of goods a currency can purchase between

two nations varies drastically based on availability of goods and the demand for the goods. In conclusion, the relationship between emerging markets' interest rates need to be managed for a success of an investment as a main indicator of exchange rate risk. Therefore, it can be concluded that interest rates form an important part of a risk analysis process and subsequent framework.

5.10.1.2. Relationship between emerging markets' inflation rates

When rating the relationship between emerging markets' inflation rates, thirty-six per cent of the respondents strongly agreed, fifty-eight per cent agreed while six per cent disagreed that the relationship between emerging markets' inflation rates is a main indicator of exchange rate risk.

PPP can assist an investor to solve this inflation rates problem between emerging markets by taking some international measure and determining the cost for that measure in each of the two currencies. The aim is that in a stable marketplace, the relationship between exchange rates of different countries should be in the same ratio as the price of a fixed basket of goods and services. It can, therefore, be concluded that the relationship between emerging markets' inflation rates need to be managed as a main indicator of exchange rate risk and should form part of a risk analysis framework for investors in emerging markets.

5.10.2. Concluding remark

It can be deduced that currency flow is restricted in emerging markets. This theory suggests that differences in interest rates between countries are expected to be offset by future changes in exchange rates. For example, if an investor earns a higher interest rate in another country, any gains are offset by an unfavourable exchange rate. In conclusion, the relationship between emerging markets' exchange rates can be confirmed as a main indicator of exchange rate risk, therefore, needs to be managed. It was also confirmed that the relationship between emerging markets' inflation rates need to be managed as a main indicator of exchange rate risk. In terms of the relationship between emerging markets' exchange rates, it was deduced that it forms an important part of a risk analysis process and subsequent risk analysis framework. The next section focuses on factors that could arise as country risk when investing in emerging markets.

5.11. Risk factors arising as country risk

An investment decision is dependent on an array of investments that may not be available in the home jurisdiction and may be available in other emerging markets (Silajdzic & Mehic, 2017). This section deals with risk factors arising as country risk when investing in emerging markets. The factors arising as country risk are graphically presented in Figure 5.12 below.

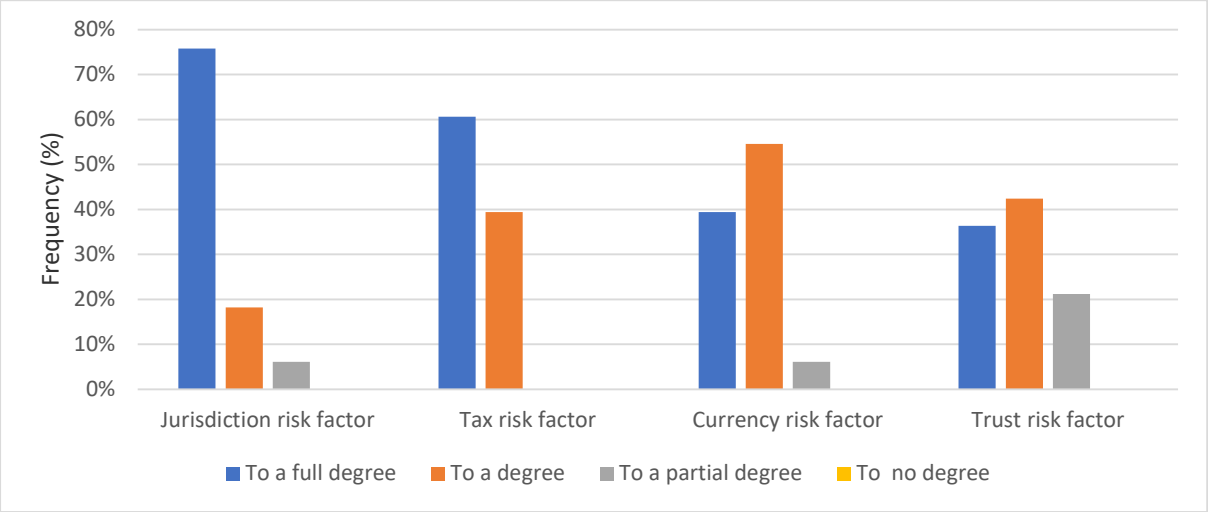

Figure 5.13: Country risk factors when investing in emerging markets

Respondents were requested to indicate to what degree they agree that the issues listed in the questionnaire could be linked to country risk in emerging markets. The applicable responses are discussed in the ensuing sections.

5.11.1. Jurisdiction risk factor

The jurisdiction risk factor refers to the laws that govern investments in that emerging country (Kaplan & Mikes, 2012). Section 3.2.1.1 indicated that the choice of jurisdiction may affect the country where the trust is set up as well as the laws that will govern the trust. Furthermore, there should also be taken cognisance of the investment contract and the proper law that governs the investment contract.

When rating the jurisdiction risk factor, seventy-six per cent of the respondents agreed to a full degree, eighteen per cent agreed to a degree while only six per cent agreed to a partial degree.

Therefore, it can be concluded that the jurisdiction risk factor could arise as country risk when investing in emerging markets and should be included in the risk analysis framework. The tax risk factor will be discussed next.

5.11.2. Tax risk factor

Each type of investment carries its own tax consequences as local and foreign jurisdiction has their own tax codes (Brink, 2017). Prospective investors often make decisions considering foreign taxes in isolation and disregard the tax laws of their domestic jurisdiction. As discussed in section 3.2.1.1 foreign investors need to ascertain if their domestic jurisdiction tax is on a worldwide basis or on a source basis, as this matter may affect the tax equation. It may sometimes be appropriate to invest in tax havens that do not deduct source-based taxes whereas at other times it may be worthwhile to invest in jurisdictions where taxes are deducted (Brink, 2017). It should be considered that, once paid, relief can only be sought in terms of a double taxation agreement (DTA) or, failing this, unilateral relief may be sought in terms of domestic legislation (Brigham & Houston, 2014).

When rating the tax risk factor, sixty-one per cent and thirty-nine per cent of the respondents agreed to a full degree and degree, respectively. Therefore, it can be deduced that the tax risk factor could arise as country risk when investing in emerging markets and should be included in the risk analysis framework. The currency risk factor will be discussed next.

5.11.3. Currency risk factor

The currency risk factor deals with the balance between strong currencies, markets and exposure to emerging markets that should be carefully considered as discussed in section 3.2.1.1. Consideration should be given to the currency in which the investment is denominated. A decision must be made whether to invest in a strong currency (US dollar, Euro, Yen or a combination thereof) or to invest in a weak currency. Furthermore, section 3.2.1.1 warned that for risk-averse investors, the focus of the investments should be on strong currencies and markets. Exposure to emerging markets should be carefully considered, as there could be more instability in the markets that could yield negative returns (Bodie *et al*., 2018).

When rating the currency risk factor, thirty-nine per cent of the respondents agreed to a full degree. Fifty-five per cent to a degree, while six per cent to a partial degree. It can be concluded that the currency risk factor could arise as country risk when investing in emerging markets and should form part of the risk analysis framework. The next section focuses on the trust risk factor.

5.11.4. Trust risk factor

According to Blanchard (2009), before setting up a trust, a careful analysis is necessary to balance the benefits of trust structuring with the associated charges. Section 3.2.1.1 indicated that the benefits of using a trust should not be limited to tax opportunities only, because the use of a trust purely for avoiding income and wealth taxes at the expense of commercial benefits could be tantamount to economic failure.

When rating the trust risk factor, thirty-six per cent of the respondents agreed to a full degree, forty-two per cent to a degree, while twenty-one per cent to a partial degree. Therefore, the trust risk factor could arise as country risk when investing in emerging markets and should form part of the risk analysis framework.

5.11.5. Concluding remark

This section focused on risk factors that could arise as country risk when investing in emerging markets. Respondents were asked to what degree they agree that these risk factors could arise as country risk in emerging markets. The respondents indicated that these risk factors could arise as country risk in emerging markets and should form part of the risk analysis framework. The next section focuses on mitigation of country risk.

5.12. Mitigation of country risk

The previous section focused on risk factors that could arise as country risk when investing in emerging markets. This section aims to add to the fourth objective of the study, namely, to investigate the current risk analysis methods that could be applied during an emerging market investment process. This question focused on actions and assessment that could lead to a development of control measures that could reduce country risk when investing in emerging markets. Respondents were asked to what degree they agree that the control measures listed in

the questionnaire (and graphically depicted in Figure 5.14) could reduce country risk in emerging markets. The applicable responses are discussed in the ensuing section.

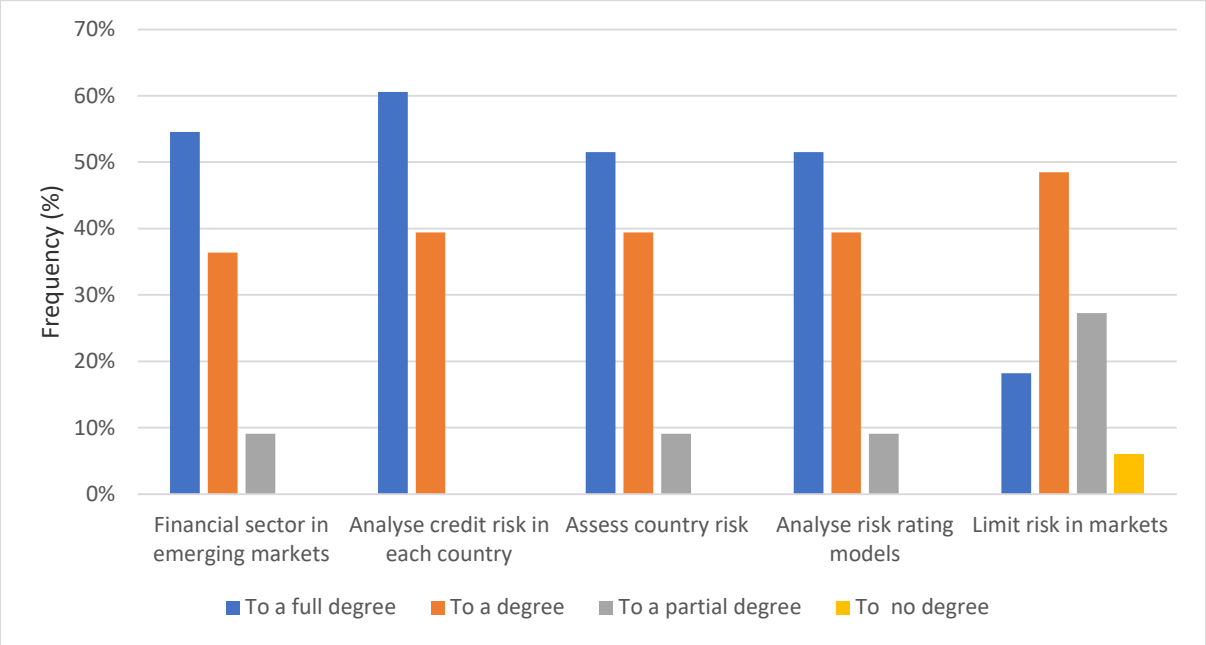

Figure 5.14: Mitigation of country risk

5.12.1. Financial sector in emerging markets

The assessment of sovereign, currency and banking sector risk that could reduce country risk in emerging markets was rated as follows; fifty-five per cent of the respondents agreed to a full degree, thirty-six per cent to a degree, while nine per cent to a partial degree.

Based on the response, it can be deduced that investors, financial institutions and companies require authoritative and trusted assessment of credit risk to pursue profitable business opportunities in difficult markets as attested by the respondents' ratings. The assessment of sovereign, currency and banking sector could assist in formulating control measures to reduce country risk when investing in emerging markets. Therefore, the assessment of the financial sector in emerging markets should form part of the risk analysis framework. The next section focuses of analysing credit risk in each country.

5.12.2. Analyse credit risk in each country

Section 3.2.1.2 indicated that when assessing the credit risk, emerging market investors can use country risk service (CRS), which provides an in-depth and timely analysis of the risks of financial exposure in many countries. The services can help an investor make an informed and timely decision about international creditworthiness and financial risks of a country under consideration.

According to the response, sixty-one per cent and thirty-nine per cent of the respondents agreed to a full degree and to a degree respectively, that analysing credit risk posed by the political and economic situation in each country could lead to identifying the risk and relevant control measures to reduce country risk in emerging markets. Therefore, analysing credit risk posed by political and economic situations in each country to reduce country risk when investing in emerging markets should form part of the risk analysis framework. The next section focuses of the assessment of country risk in each country.

5.12.3. Assess country risk

Country risk should be analysed to monitor countries where investors have business interests. If the country risk level of a particular country begins to increase, the investor may consider divesting its business located there as discussed in section 3.2.1.2. When rating the assessment of business risk, with macroeconomic variables in each emerging country that could reduce country risk in emerging markets, fifty-two per cent of the respondents agreed to a full degree, thirty-nine per cent to a degree, while nine per cent to a partial degree.

In conclusion, assessing business risk, with macroeconomic variables in each emerging country could lead to a formulation of a control measure to reduce country risk when investing in emerging markets. Therefore, it should form part of the risk analysis framework. The next section focuses on analysing risk rating models.

5.12.4. Analyse risk rating models

Section 3.2.1.2 discussed that country risk analysis is not only limited to predicting major crises, but an investor may use this analysis to revise their investments or financing decisions in light of recent events that took place in the emerging country. When rating analysing data in investors own financial and risk rating models that could reduce country risk in emerging markets, fifty-two

per cent (52%) of the respondents agreed to a full degree, thirty-nine per cent (39%) to a degree, while nine per cent (9%) to a partial degree. Therefore, analysing data could be used to reduce country risk when investing in emerging markets and should form part of the risk analysis framework. The next section focuses on limitation of risks in markets.

5.12.5. Limit risk in markets

According to the literature (Section 3.2.1.2), the primary objective of managing country risk is to protect investors' investments and sustain investment returns. Because events in high-risk countries can occur with little warning, investors should regularly analyse the portfolio of countries in which they operate. Investors can apply Country Risk Service monitors on both emerging and highly indebted markets on a continuous basis, producing two-year and five-year forecasts for the economic variables that are most important for risk assessments.

The limitation of risk in markets was rated as follows; eighteen per cent of the respondents agreed to a full degree. Forty-nine per cent to a degree, twenty-seven per cent to a partial degree, while six per cent to no degree. The limitation of risk in markets with the help of timely warnings of likely rating downgrades could reduce country risk in emerging markets and should form part of the risk analysis framework.

5.12.6. Concluding remark

This section focused on the risk exposures in emerging markets. The first part focused on the main indicators of exchange rate risk. Three indicators of exchange rate risk were rated by respondents and the relationship between the emerging markets' exchange rates, the interest rate risk and inflation rate risk were confirmed as the main indicators of exchange rate risk. Therefore, should form part of the risk analysis framework. This was followed by a discussion on risk factors that could arise as country risks when investing in emerging markets. Four risk factors were rated accordingly and should be managed to mitigate country risk. Actions that could lead to control measures to reduce country risk when investing in emerging markets were also considered in this section. Therefore, investors need to consider all the main indicators of exchange rate, the risk factors that could arise as country risk and the possible actions that could develop control measures to reduce country risk. The next section will focus on a risk management processes, as a component of a risk analysis framework.

5.13. Risk management processes

As discussed in 3.1, risk management is an increasingly important business driver and stakeholders have become much more concerned about risk. Risk may be a driver of strategic decisions, it may be a cause of uncertainty in the organisation, or it may simply be embedded in the activities of the organisation (Hopkin, 2017). An enterprise-wide approach to risk management enables an organisation to consider the potential impact of all types of risks on all processes, activities, stakeholders, products and services. Implementing a comprehensive approach will result in an organisation benefiting from what is often referred to as the upside of risk (Vaughan & Vaughan, 2013).

This section focuses on the importance of risk management processes or steps that should be followed when investing in emerging markets. The five risk management steps that were discussed in the literature (3.1.3) are graphically presented in Figure 5.15. Respondents were asked to what degree they agree that the risk management steps should be followed to mitigate risks as part of a risk management process. The applicable responses are discussed in the ensuing section.

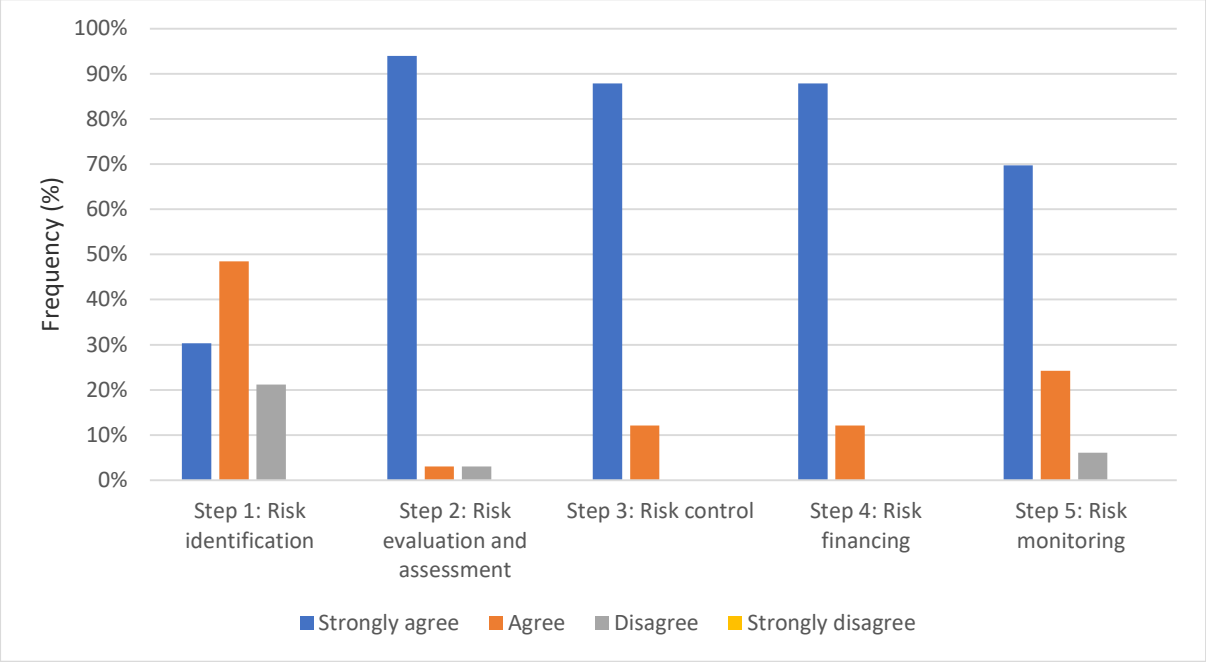

Figure 5.15: The importance of the risk management processes when investing in emerging markets

5.13.1. Step 1: Risk identification

In 3.1.3.1 risk identification was described as the need for an investor to define and understand the nature of the risks to which he or she is exposed. This entails identifying the inherent risk exposures that a potential investor could face when investing in emerging markets (Vaughan & Vaughan 2013). When rating risk identification as the first step in the risk management process, 30% of the respondents agreed to a full degree, 49% to a degree, while 21% to a partial degree that it should be the first step of a risk management process.

Most respondents agreed that risk identification is the first step in a risk management process that aims to identify the inherent risks that an investor in emerging markets could face. Therefore, it can be deduced that risk identification is the first step of the risk management process and should be included as a component of a risk management process and a risk analysis framework. The second component of a risk management process is risk evaluation and assessment.

5.13.2. Step 2: Risk evaluation and assessment

According to Disparte (2016), risk evaluation and assessment was described as quantifying the risk and determining its possible impact on an investment. Risk evaluation and assessment as the second step and component of a risk management process was rated as follows: 94% of the respondents strongly agreed, 3% agreed, while the remaining 3% disagreed.

The majority of the respondents agreed that risk evaluation and assessment is the second step of the risk management process. Risk evaluation can therefore be accepted as the second step of the risk management process and should be an integral part of a risk management process and a risk analysis framework for investments.

5.13.3. Step 3: Risk control

Risk control is the application of techniques to reduce the probability of loss (Hopkin, 2017). In 3.1.3.3, it was indicated that after analysing the risks, the next step is to minimise the risk through design and implementation of a risk management control programme. Risk control aims to eliminate or minimise the potential effect of the identified risk exposures (Salvatore, 2015). According to the response, 88% and 12% of the respondents strongly agreed and agreed

respectively, that risk control is the third step of the risk management processes as indicated in Figure 5.15. Based on this response, it can be confirmed that risk control can be regarded as a third step and a component of a risk management process and risk analysis framework for investments in emerging markets. Risk financing as a fourth step in the risk management process will be discussed next.

5.13.4. Step 4: Risk financing

Risk financing activities provide the means of reimbursing losses that occur and for funding other programmes to reduce uncertainty and risk or to enhance positive outcomes as discussed in 3.1.3.3. According to Hopkin (2013), under normal circumstances, some losses will occur despite risk control efforts. Therefore, the financing of risks can include measures such as the purchase of insurance coverage, the establishment of a captive insurance subsidiary, or the use of letters of credit. The responses indicate that 88% and 12% strongly agreed and agreed respectively, that risk financing is the fourth step of the risk management process. Therefore, it can be concluded that risk financing should be a step and component of a risk management process and risk analysis framework for investments in emerging markets. The last step is risk monitoring, which will be discussed next.

5.13.5. Step 5: Risk monitoring

Risk monitoring deals with the effectiveness of the systems and techniques ensuring that the operations are within the defined risk policies and procedures, and that all other activities of the risk management process are effective (Rao, 2015). Risk monitoring is an important aspect of any risk management process to ensure that the techniques used to retain risks are relevant under the current conditions as discussed in 3.1.3.3.

When rating risk monitoring as the fifth step in the risk management process, 70% of the respondents strongly agreed, 24% agreed, while 6% disagreed. Based on the respondents' ratings, it can be concluded that risk monitoring is the fifth step of the risk management process and should be an integral component of a risk analysis framework for investing in emerging markets.

5.13.6. Concluding remark

This section aimed to confirm the steps and components of a risk management process, which should be part of a risk analysis framework for investments in emerging markets. In addition, it can be concluded that the risk management steps are key in the embedding of a risk analysis framework, as it could lead to a choice of strategy to mitigate risks while constantly monitoring the relevance of the methods used to mitigate such risks. In conclusion, the following steps and components of a risk management process should be part of a risk analysis framework for investments in emerging markets.

Step 1: Risk identification – refers to the process of compiling all the possible risks the investor can be exposed to, which necessitates the need for an investor to define and understand the nature of the risks.

Step 2: Risk evaluation and assessment – entails quantifying the risk and determining the possible effect on investment decisions.

Step 3: Risk control – aims to eliminate or minimise the potential effect of the identified risk exposures.

Step 4: Risk financing – includes providing funds to cover the financial effects of unexpected losses that an investor could experience.

Step 5: Risk monitoring – entails the process that ensures that the techniques used to retain risks are relevant under the current conditions.

It is apparent that a formalised risk management process be included in a risk analysis framework for investments in emerging markets. In order to ensure that investors make appropriate investment decisions, it is also necessary to elaborate on the concept of emergency funds to serve as another means of protecting an investor in emerging markets.

5.14. Emergency funds when investing in emerging markets

According to the literature review, an emergency fund was described as a financial safety net for future mishaps and or unexpected expenses (Cummins & Mahul, 2009). This section aims to address the second objective by adding a precaution to investors not to focus all their funds into emerging markets without making provisions for unexpected expenses that could arise.

Financial planners recommend that emergency funds should typically have three to six months' worth of expenses in the form of highly liquid assets. Investors can use tax refunds and other windfalls to build up their fund. The response indicated that 91% and 9% of the respondents strongly agreed and agreed, respectively, that it was important to have an emergency fund when investing in emerging markets, as indicated in Figure 5.16 below.

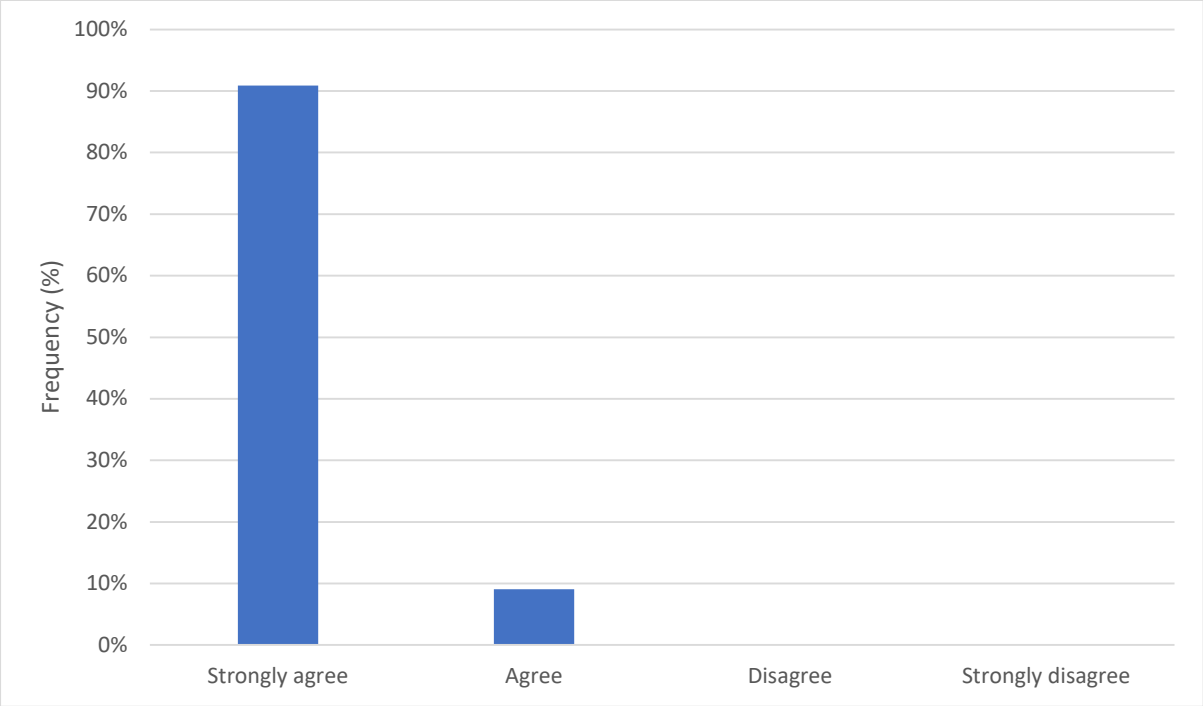

Figure 5.16: The importance of the provision for an emergency fund when investing in emerging markets

As such, it can be concluded that an investor should create an emergency fund that will cover any unexpected expenses, should they occur. Failure to do so, could lead to withdrawing investments to deal with current challenges and or expenses. In addition, it seems apparent that the provisioning of an emergency fund should be considered during the risk management process. Before making an investment decision in emerging markets, investors' attitudes towards an emerging market investment in terms of the investment objectives should be clear.

5.15. Attitudes towards emerging market investments

This section aimed at addressing an investor's attitude towards emerging markets and to ensure that an investment decision will add value to investment decisions in emerging markets. When rating the respondents' attitude towards emerging market investments, 43% considered

emerging markets to be high risk, 27% considered emerging markets to be a great platform to yield higher returns, 18% considered emerging markets to be good investments, 9% considered emerging markets to be too complicated to administer; and 3% had other attitudes.

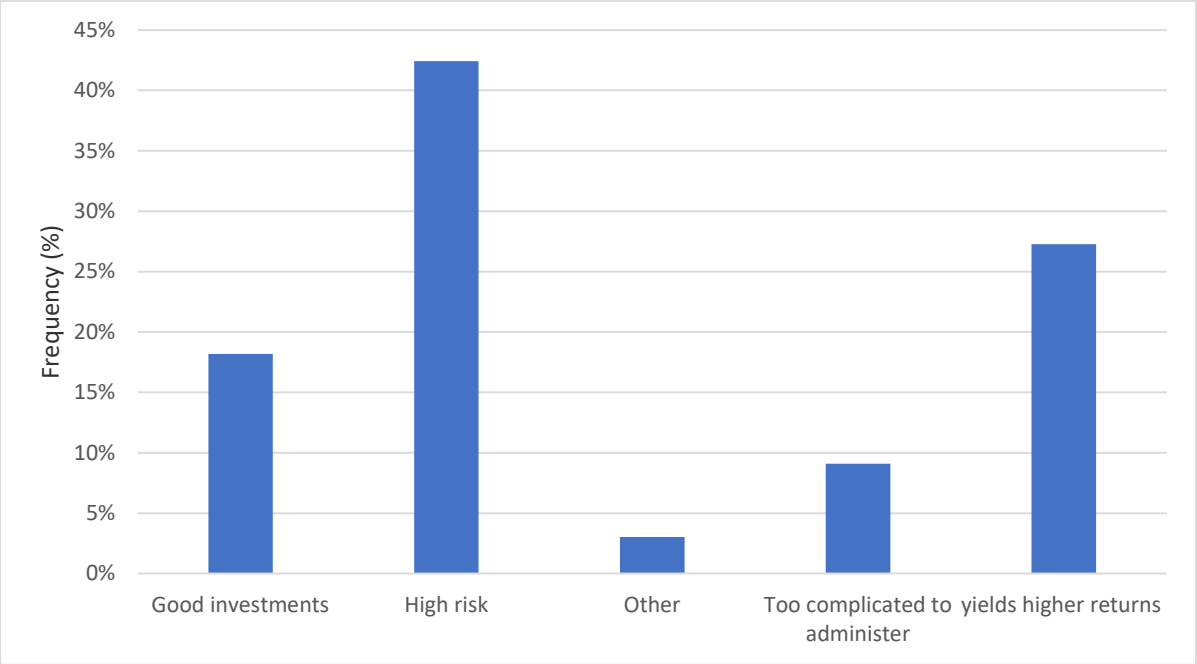

Figure 5.17: Attitudes towards emerging market investments

The respondents' diverse views attest to the sentiments in the literature that a risky asset for one investor could be the opposite for another investor. When rating the investors' attitudes towards emerging market investments, 18% rated emerging markets as good investments, 43% as high risk, 9% as too complicated to administer, 27% as having the potential to earn higher returns than elsewhere and 3% as "other". Thus, not all investors would react to a situation in the same manner. This further supports the view that a risk analysis framework, which could be used to streamline the risk analysis processes, is necessary to provide a structured approach when investing in emerging markets.

5.16. Summary of the results

The chapter discussed and analysed the results from the empirical research. The descriptive statistics relating to each question of the questionnaire were presented. The objectives of the study were fivefold: the first objective was to confirm the risk factors for investors in emerging markets. Based on the average ratings of the respondents, the following were confirmed as the top five most important risks to consider when investing in an emerging market.

- Country risk (73%)
- Exchange rate risk (64%)
- Market risk (52%)
- Inflation risk (46%)
- Technology risk (40%).

This was followed by a section that aimed to assess and confirm the importance of the risk factors that were identified as critical to consider when investing in emerging markets. Based on the average ratings of the respondents, the following can be regarded as the most important risk factors to consider when investing in an emerging market.

- Economic stability (73%)
- Risks (61%)
- Liquidity (61%)
- Currency (52%)
- Inflation (49%).

The next section dealt with the reasons for investing in emerging markets. All the reasons discussed in the literature were tested to confirm whether they can be regarded as valid for investing in emerging markets. The main deduction was that investors invest in emerging markets for various reasons or a combination of reasons. Furthermore, investors should be guided by their own investment objectives as there is no single investment that could cater for all investors' needs and no single investor can use all the investment vehicles to reach their objectives.

The next section dealt with key points to consider when making an investment in emerging markets, with the intention to address objective five, which aimed to investigate whether there was any risk analysis framework applied during an emerging market investment process. During

the literature review, a specific risk analysis framework for potential risks could not be identified. However, investors were encouraged to conduct a risk analysis exercise before making any investments. As such, a number of key points to consider by investors in emerging markets were identified and rated accordingly. In conclusion, any key point or underlying factor that seems to affect the investment should be incorporated in a risk analysis framework.

The determinants of capital flows in emerging markets were dealt with, aiming to add to the fifth objective, which was to investigate whether there is any risk analysis framework applied during an emerging market investment process. For capital to flow into other countries, the investors or asset managers should ensure that there is a risk analysis framework in place to ensure that the right channels are available, and the capital is invested where intended. Based on the average ratings of the respondents, the following can be regarded as the determinants of capital flows in emerging markets:

- Country conditions (85%);
- Vulnerability indicators (70%);
- Trade openness (67%);
- Government financial indicators (61%);
- Liquidity variables (42%);
- Market size (42%).

The next section focused on assessing common challenges that investors are likely to face in emerging markets, and which could be detrimental to their investments if not well mitigated. This section dealt with the common challenges in the BRICS countries, which addressed the second objective that aimed at reviewing the extent of risk exposures for investors in emerging markets. Five common challenges in emerging markets were rated by respondents to ascertain whether they were the common challenges faced by investors in emerging markets. The respondents' ratings confirmed that the common challenges as discussed in the literature, are still relevant and need to be properly managed and or mitigated for a successful investment in an emerging market. Based on the average ratings of the respondents, the following can be regarded as the common challenges in emerging markets:

- Decline in commodity prices (58%);
- A more hawkish Fed (52%);
- Low commodity prices (49%);
- Geopolitical instability (43%);
- US dollar-denominated debt (33%).

A section on risk exposure followed, which focused on the main objective of the study, namely to develop a risk analysis framework for investors in emerging markets. In order to develop a risk analysis framework, it is necessary firstly to understand the current risk mitigation strategies that are applied, and secondly, to assess their effectiveness. Therefore, the first part focused on the main indicators of exchange rate risk, which was indicated as one of the key risks to consider when investing in emerging markets. Three main indicators of exchange rate risk were rated by respondents and the relationship between exchange rates, interest rate risk and inflation rate risk of emerging markets was confirmed to be the main indicators of exchange rate risk, and therefore, should form part of the risk analysis framework.

The second part of the risk exposure section focused on risk factors that could arise as a country risk when investing in emerging markets. This section aimed to add to the fourth objective of the study, namely to investigate the current risk analysis methods applied during an emerging market investment process. Actions that could lead to control measures to reduce country risk when investing in emerging markets were also considered in this section. When developing a risk analysis framework, investors need to take into account all the main indicators of exchange rates, the risk factors that could arise as country risks and the possible control measures to reduce country risks. Therefore, these should form part of the risk analysis framework.

The next section focused on a risk management process to be part of a risk analysis framework for investment in emerging markets. Five risk management steps were rated by the respondents to be included in a risk analysis framework for investing in emerging markets, which could lead to a choice of a strategy to mitigate risks while constantly monitoring the relevance of the methods used to mitigate such risks.

It seems apparent that a risk analysis framework for investing in emerging markets should incorporate components such as the risks, risk factors, common challenges, risk factors that could lead to country risk and a risk management process. Based on the conclusions of this study, the next section aims to develop a risk analysis framework for investors in emerging markets.

5.17. The development of a risk analysis framework

An effective risk management framework seeks to protect the capital base and earnings of an organisation without hindering growth (Gupta & Singh, 2016).

Aligned with this view, the objective of a risk analysis framework is to serve as a guide to a structured approach to analyse risks that a potential investor might face when considering investing in an emerging market. Therefore, the primary components of the framework are factors to consider before investing in emerging markets: risk management process, risk types, and risk factors. Based on the literature review and the results of the empirical research, these components can form a risk analysis framework and is graphically illustrated in Figure 5.23.

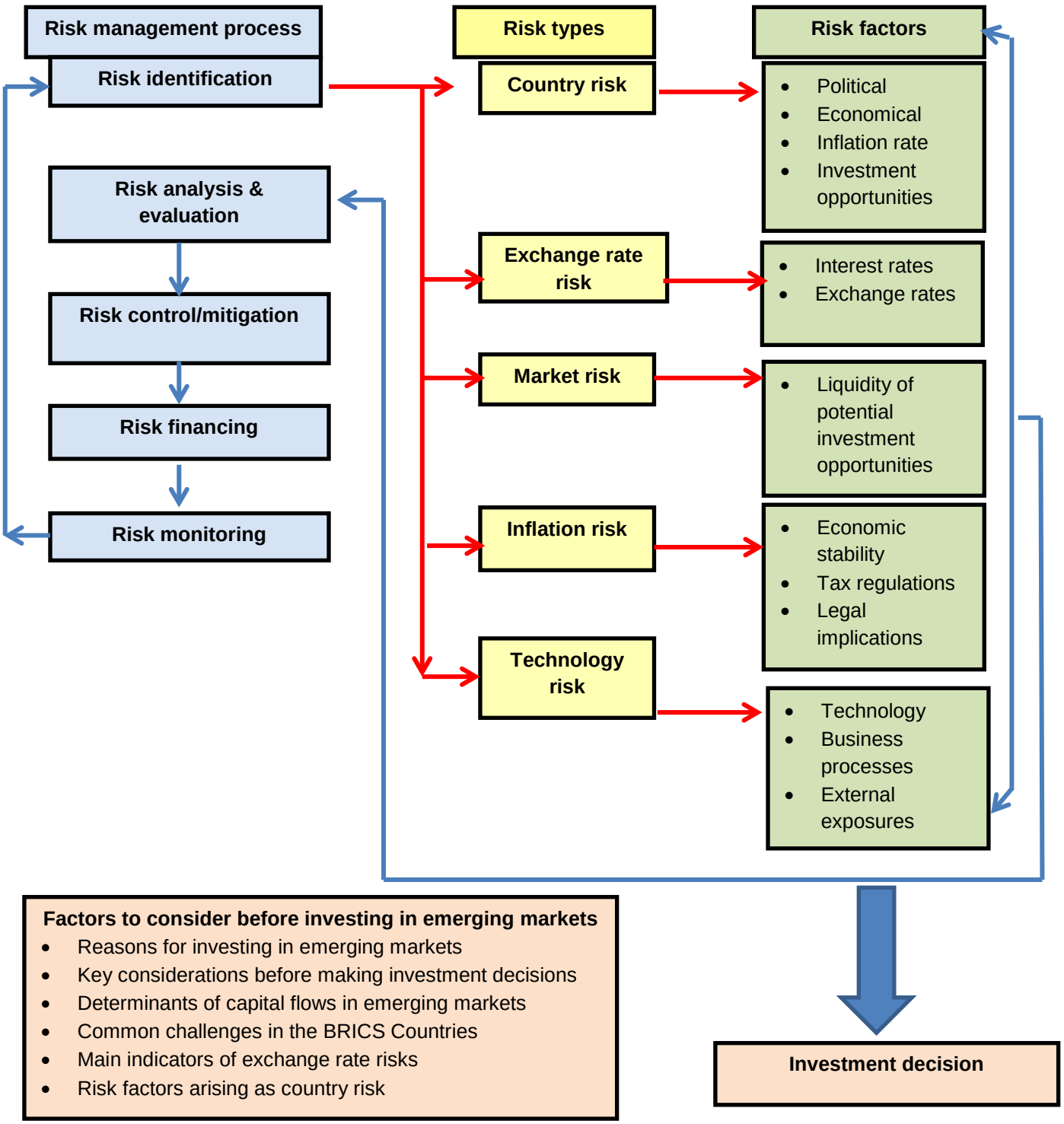

Figure 5.23: The risk analysis framework for investors in emerging markets

The risk analysis framework consists of the following components: factors to consider before investing in emerging markets, the risk management process, risk types, risk factors, and the investment decision. The factors to consider before investing in emerging markets are: the reasons for investing in emerging markets, the determinants of capital flows in emerging markets, the common challenges in the BRICS countries, the main indicators of exchange rate risks, and the risk factors arising as country risks.

The risk management process aims to identify the risk types that could affect the investment decision. The primary risk types are: country risk, exchange rate risk, market risk, inflation risk, and technology risk. Each risk type should then be assessed in terms of the related risk factors. Once the risk factors are assessed, the next step is to formulate risk mitigation and control measures. Following the formulating of the control measures, the next step is to determine funding required to address the key risks identified, either by means of risk transfers or by capital allocations. Finally, the process requires a continuous monitoring of the risks to ensure that the identified risks are managed effectively by means of the control measures and within the approved policies and procedures. The monitoring process can also lead to the identification of any additional risks, which must be managed.

5.17.1. Factors to consider before investing in emerging markets

The factors to consider before investing in emerging markets focus on the readiness of an investor before investing in emerging markets. The following are considered as factors to consider before investing in emerging markets.

- Reasons for investing in emerging markets

According to the response, the reasons for investing in emerging markets should form part of the factors that serve as a guideline before investing in emerging markets. All the reasons discussed in the literature were tested to confirm if they can be regarded as reasons for investing in emerging markets. The main deduction was that investors invest in emerging markets for various reasons or a combination of reasons. Therefore, any investor or potential investor should be guided by their own investment objectives as there is no single investment that could cater for all investors' needs and no single investor can use all the investment vehicles to reach their objectives.

- Key considerations before making investment decisions

Based on the response, the key considerations before investment in emerging markets should form part of the factors to consider. All the key considerations discussed in the literature were tested to confirm whether they should be considered before investing in emerging markets.

- Determinants of capital flows in emerging markets

The determinants of capital flows into emerging markets were confirmed as a key component of a risk analysis framework and should form part of the factors to consider before investing in emerging markets. Each determinant was rated by the respondents to attest whether these can be regarded as the determinants of capital flow in emerging markets. It was found that the understanding of the determinants of capital flows is important for investors, because capital flows not only constitute one of the main components of the balance of payments, but also one of the most volatile. Understanding capital flows is, therefore, crucial in any balance of payments analysis and the determinants should form an integral part of a risk analysis framework for investors in emerging markets.

- Common challenges in the BRICS countries

According to the responses, investors should include common challenges that investors in emerging markets are likely to face among the factors to consider before investing in emerging markets. The common challenges could be detrimental to their investments, if not well mitigated.

The factors to consider before investing in emerging markets seek to check on the readiness of an investor before investing in emerging markets by identifying the risks and risk factors. Before an investor takes up an investment, an emergency fund should be put in place to avoid cancelling or withdrawing funds from an investment portfolio to cater for any unforeseen events happening. An investment decision whether to invest in emerging markets can be made once the factors to consider before investing in emerging markets, the risk management processes, the risk types and the risk factors have been considered.

5.17.2. The risk management process

The risk management processes involve five key steps, which aim to identify possible risks, evaluating and assessing the extent of the potential risk exposures, and then controlling risks by employing different techniques. The risk management processes lead to a choice of strategies to mitigate the risk while constantly monitoring the relevance of the techniques used to mitigate such risks.

5.17.3. Risk types

Most investors are debating the differences between risk types in emerging markets. Although some regard this debate as semantic, it is necessary to define and analyse each risk type clearly and the potential effect it has on emerging market investments. This understanding will allow investors to identify the risk proactively and manage it, thus protecting their investments.

5.17.4. Risk factors

Emerging markets can be quite volatile due to political upheaval, and risk factors such as the price of oil, interest rates, inflation rates, exchange rates and technology add to the instability of the economies. The investors' balance sheets, cash flow and earnings can be dramatic, and thus influence the reasons for doing business internationally as inherently risky. Thus, investors need to understand which risk factors influence exchange rates, inflation rates and interest rates so that they can anticipate how exchange rates, inflation rates and interest rates may change in response to specific conditions. Additionally, without up-to-date technology, investors may fail to notice opportunities emerging in an emerging market. Investors may also suffer losses due to late reaction to an anticipated loss that could have been prevented if up-to-date technology were in place.

5.17.5. The investment decision

Once all the other components of a risk analysis framework have been considered, a risk-based investment decision can be made. The chapter summary will be discussed in the last section.

5.18. Chapter summary

This chapter presented the findings of the survey conducted with South African asset managers licensed to trade in emerging markets. The aim of this research was to develop a risk analysis framework for investors in emerging markets. The study focused on uncovering risks and risk factors that could be detrimental to an investment in an emerging market, with a special focus on South Africa as a member of the BRICS countries. The chapter discussed and analysed the results from the empirical research. Thirty-three out of forty-four (75%) respondents participated in the study.

The risks of investing in emerging markets were evaluated and the following were regarded as the main three risks to mitigate when investing in emerging markets: (1) country risk, (2) exchange rate risk, and (3) market risk.

The chapter also assessed the risk factors as well as the common challenges of investing in emerging markets. The main three risk factors to consider when investing in emerging markets were: (1) economic stability, (2) risks, and (3) liquidity. The three common challenges of investing in emerging markets were summarised as: (1) a decline in commodity prices, (2) a more hawkish Fed, and (3) low commodity prices.

Reasons for investing in emerging markets were also incorporated in this chapter with respondents having diverse views on what makes them invest in emerging markets. The three most important reasons for investing in emerging markets were: (1) enhance returns (2) diversify risks and (3) exploit emerging markets. Once the decision to invest in emerging markets has been made, there are key points to consider, which were also covered in this chapter. The key points to consider when investing in emerging markets were: (1) the movement of FDIs, (2) sources of innovation and locations for research, and (3) access to developed markets.

Determinants of capital flows in emerging markets were also incorporated in this chapter, which led to the question about the importance of the provision of an emergency fund when investing in emerging markets. The main determinants of capital flows in emerging markets were: (1) country conditions, (2) vulnerability indicators, and (3) trade openness.

The primary components of the framework were summarised as factors to consider before investing in emerging markets, the risk management process, risk types, risk factors and risk-based decision. Based on the literature review and the results of the empirical research, these components were used to form the components of a risk analysis framework for investors in emerging markets. The next chapter presents a summary and synthesis of the results, the contribution of this study to the body of knowledge and recommendations for future studies.

CHAPTER 6: SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

6.1. Introduction

It is a generally recognised fact that emerging markets are the cornerstone of the global GDP (Richter, 2014). More than half of the GDP growth in the world since 2009 has come from emerging markets, with China and India accounting for more than 40% of that growth, as discussed in 2.3. This trend is expected to continue, with emerging markets likely to grow at 4–5% over the next five years, compared to only 1.5–2% for developed markets. Therefore, it can be deduced that investors would prefer to invest in emerging markets in order to generate higher returns than they could get in developed markets. However, a challenge is that emerging markets are volatile, risky and often unpredictable.

One of the most enduring challenges investors face, is which risks to prioritise and which risks are insignificant to their investment objectives. Investors have historically been more aggressive in allocating capital in their local markets, because they naturally understand those markets better. Likewise, investors are at a disadvantage when investing in markets abroad and require a greater understanding of the complexity of engagement in foreign markets. As the rise of emerging markets continues, managing risks in these markets has become even more critical.

This study, therefore, aimed to develop a risk analysis framework for investors in emerging markets. Furthermore, the study sought to determine the risks, risk factors and challenges for investors in emerging markets. This chapter, firstly, recaps the objectives of the study. Secondly, the chapter presents a summary of the findings of the study, which then forms the basis for recommendations.

6.2. Research problem and objectives

In Chapter 1, it was indicated that not all emerging markets are equally good investments, due to risk exposures attached to the investments. Therefore, this study was motivated by the high-risk nature of emerging markets and the lack of a risk analysis framework that could be used to analyse and mitigate risks posed to investors who want to invest in an emerging market. It is for this reason that the aim of the study was to develop a risk analysis framework for investors

in emerging markets in order to serve as a guideline to identify and manage risks proactively. In support of this aim, the following primary and secondary objectives were defined.

- Primary objective: To develop a risk analysis framework for investors in emerging markets.
- Secondary objective 1: To investigate and research the relevant literature on risks and investments, emphasising the risk analysing methods used in an emerging market.
- Secondary objective 2: To determine the significance of potential risks for investors in emerging markets.
- Secondary objective 3: To identify and analyse the potential risk factors for investors in emerging markets, using South Africa as a gateway to BRICS countries.
- Secondary objective 4: To confirm empirically the components of a risk analysis framework for investing in emerging markets. This framework is developed by using the literature review as a platform.

According to the literature review, investors have several avenues through which they can invest in emerging markets, but opportunities in emerging markets do not come without risks. It was, therefore, concluded that risks and risk factors are the main detriments of a successful investment in emerging markets. To ensure a successful investment in an emerging market, it is important that investors proactively identify potential risks and formulate appropriate control measures should such a risk event occur. Therefore, it is essential to use a risk management process to identify the risks. The research also found that it is imperative to manage the risk exposures by means of a structured approach, which can be established by means of a risk analysis framework. For the purposes of this study, a risk analysis framework was defined as an approach for prioritising and sharing information about the risks and risk exposures posed to investors.

Although the literature review could not establish the existence of such a risk analysis framework for investors in emerging markets, various components were identified which could be used to develop such a framework. These components are discussed in the ensuing sections.

6.3. Key findings of the study

In support of achieving the objectives of this study, a questionnaire was compiled consisting of three sections, namely: the demographics of the respondents, risk factors, and risk exposures. The rationale for this questionnaire was to solicit independent views from the respondents based on their opinions and experiences regarding investments in emerging markets in order to confirm the applicability of the components of an appropriate risk analysis framework. The respondents were identified as the group of asset managers registered with the FSCA. A response rate of 75% was achieved and the data were subjected to a statistical descriptive analysis to confirm the components of a risk analysis framework for investments in emerging markets. In addition, the responses confirmed factors, which could serve as a guideline for investors before making any investment decision.

The key findings of the survey are dealt with in the ensuing sections in terms of the secondary objectives of the study to achieve the primary objective, namely, to develop a risk analysis framework for potential investments in emerging markets.

- To investigate and research the relevant literature on risks and investments, emphasising the risk analysing methods used in an emerging market

As stated in Chapter 5, one of the objectives of the research survey was to shed some light on the common challenges and experiences associated with emerging markets as perceived by investors. The majority of the respondents attested to the common challenges as significant for a successful investment in emerging markets. Some of the more important challenges that can be highlighted are a decline in commodity prices, a more hawkish Fed and low commodity prices. Most of the respondents also indicated that their investments were positive in the last financial year (2019) with 70% of the respondents indicating that they were not victims of fraud in an emerging market. This is positive news for emerging market investors. However, a lack of a risk analysis framework could lead to an oversight of potential scams and fraudulent activities that could lead to potential losses when investing in emerging markets.

Another key finding was that the common challenges could have a negative effect on the investments. Therefore, there is a need to manage these challenges when investing in an emerging market. Emerging markets play an increasingly important role in the global economy, given their high economic growth prospects and their improving physical and legal

infrastructures. For some investors, emerging markets offer an attractive opportunity, but they also involve multifaceted risks. Thus, these risks require investors to have a thorough understanding of the risk factors in different markets. In conclusion, investors should, therefore, use a risk analysis framework to mitigate risks, risk factors and common challenges in emerging markets.

- To analyse risks for investors in emerging markets

The aim of this objective was to determine the risks that were identified in the literature review, as important to consider when investing in emerging markets. Ten risk types were identified and confirmed by the respondents as important risks to consider as part of a risk analysis framework for investment in emerging markets. It was further discovered that significance of the risk will depend on the nature of the investment, the term of the investment, as well as the industry towards which the investment is channelled. For example, a ten-year investment in property development in Russia might not be too concerned with the current fluctuations in exchange rates, but may be more concerned with the technological advancement of Russia. Based on the respondents' ratings, the top five risks to consider in emerging markets, in order of priority, are:

- Country risk;
- Exchange rate risk;
- Market risk;
- Inflation risk;
- Technology risk.

A detailed review of each risk type indicated that each can be linked to specific risk factors.

- To analyse risk factors for investors in emerging markets

The study revealed that the perceived profitability of an investment is based on the underlying risk factors in the emerging market in question. It can, therefore, be inferred that investors stand a chance of suffering immeasurable losses, possibly due to the investors being unfamiliar with the risk factors associated with emerging markets. This finding is in line with that of Disparte (2016), who mentions that the evaluation of the magnitude of risk usually involves developing a set of risk factors that are observed and measured to detect the presence of risk.

Some of these risk factors can be linked to more than one risk type, but it is apparent that each risk factor should be analysed in detail to enable a potential investor to make a risk-based decision when investing in emerging markets. Therefore, it can be concluded that when analysing a risk factor, it could serve as a guideline for investors and to ensure that it is analysed in order to ensure adequate risk mitigation and that control measures would be put in place. Therefore, it is important that the analysis and evaluation of risk factors should be an integral part of a risk analysis framework for investments in emerging markets.

Based on the average ratings by the respondents, the following can be regarded as the five most important risk factors to consider when investing in an emerging market.

- Economic stability;
- Liquidity;
- Currency;
- Inflation;
- Taxation.

The significance and the effect of risks and risk factors in emerging markets can never be overestimated. According to Rausand (2011), risk analysis involves measuring the potential size of the loss and the probability that the loss is likely to occur, and then providing some ranking in order of priorities. Certain risks and risk factors will demand attention prior to others, and in most instances, there will be a number of risk exposures that are equally demanding because of the severity of the possible loss. Therefore, a key finding in this regard, is that any exposure that involves a potential loss could represent financial exposure and should form part of the risk analysis framework.

The study further revealed that the extent of risk exposure was prominent in emerging markets, due to its volatile nature. It can, therefore, be concluded that risk exposure is the measure of potential future loss resulting from a specific activity or event. An analysis of the risk exposure for an investor often rank risks according to their probability of occurring, multiplied by the potential loss, if they do. Therefore, it would benefit investors to rank risks and risk factors in order of priority when considering an investment in emerging markets.

- To determine various opportunities presented to investors in emerging markets

The key finding was that investors have different reasons or a combination of reasons why they explore various opportunities in emerging markets. The main reasons for investing in emerging markets that were identified in the literature were:

- Enhance returns;
- Diversify risks;
- Exploit emerging markets.

According to the response, it seems that there are various reasons why investors want to invest in emerging markets. An important conclusion was that investors should be guided by their own investment objectives as there is no single investment that could cater for all investors' needs and no single investor can use all the available investment vehicles to reach their objectives.

- To develop a risk analysis framework for investing in emerging markets

The study could not find a customised risk analysis framework for investing in emerging markets. Therefore, the primary objective of this study was to develop a risk analysis framework, which could serve as a guideline for investors when they want to invest in emerging markets. Based on the literature review, five components of a suitable risk analysis framework were identified, namely: factors to consider before investing in emerging markets, a risk management process, risk types, risk factors, and a risk-based decision. Based on the empirical results, it can be concluded that risks and risk factors are the main determinants of the performance and returns of an emerging market investment. Therefore, the risk management process, as a component of a risk framework, aims to identify and evaluate the risk types and risk factors applicable for investments in emerging markets. The responses confirmed that risk identification and risk evaluation can be regarded as the first two steps of a risk management process. Steps 3 and 4 are risk control and risk financing. Step 5 is risk monitoring.

6.3.1. Factors to consider before investing in emerging markets

Based on the responses, factors to consider before investing in emerging markets should consider the following as a guideline.

- Reasons for investing in emerging markets

The reasons for investing in emerging markets should form part of the factors that serve as guidelines before investing in emerging markets. All the reasons discussed in the literature were tested to confirm whether they can be regarded as reasons for investing in emerging markets. The main deduction was that investors invest in emerging markets for various reasons or a combination of reasons. Therefore, any investor or potential investor should be guided by their own investment objectives as there is no single investment that could cater for all investors' needs and no single investor can use all the investment vehicles to reach their objectives.

- Key considerations before making investment decisions

The responses in Chapter 5 confirmed that key considerations before investing in emerging markets should form part of the factors to consider before investing in emerging markets. All the key considerations discussed in the literature were tested to confirm whether they need to be considered before investing in emerging markets. The three key considerations were concluded as the movement of FDIs, sources of innovation and locations for research, and access to developed markets.

- Determinants of capital flows in emerging markets

Chapter 5 confirmed the determinants of capital flows into emerging markets as a key component of a risk analysis framework and should form part of the factors to consider before investing in emerging markets. The determinants were rated by the respondents to attest whether they could be regarded as determinants of capital flow in emerging markets. It was deduced that the understanding of the determinants of capital flows is important for investors, because capital flow not only constitute one of the main components of the balance of payments, but is also one of the most volatile. Understanding capital flows is, therefore, crucial in any balance of payments analysis and the determinants should form an integral part of a risk analysis framework for investors in emerging markets.

- Common challenges in the BRICS countries

Investors should include common challenges that investors in emerging markets are likely to face amongst the factors to consider before investing in emerging markets. The common challenges were confirmed to be detrimental to investments if not well mitigated.

The factors to consider before investing in emerging markets seek to check on the readiness of an investor before investing in emerging markets by identifying the risks, risk factors, risk exposures, the financial roadmap and the investment mix that the investor is planning to put in place. Before an investor takes up an investment, an emergency fund should be put in place to avoid cancelling or withdrawing funds from an investment portfolio to cater for any unforeseen events taking place. An investment decision whether to invest in emerging markets can be made once the factors to consider before investing in emerging markets, have been outlined, as well as the risk management processes, the risk types and risk factors.

6.3.2. Develop a risk management process

According to the literature, an investor should develop and put in place a risk management process. The process should involve five key steps, which need to be considered for an effective risk analysis framework. The risk management process will assist the investor to identify risks, evaluate the severity of each risk and put measures in place to control the risk exposure. The risk management processes will also ensure that risks, and risk exposures are constantly monitored to determine their significance in line with the investment goals.

6.3.3. Determine and rank risk types in order of importance

Once the risk management process has been established and put in place, the investor should identify and analyse all the risk types to which he or she is exposed in an emerging market. The risk types should also be ranked in order of importance, as not all risks have the same effect on an investment performance. The literature indicated that certain risks are more severe in certain markets and investment portfolios than in others. Therefore, it is recommended that investors should apply a risk analysis framework in each investment portfolio to rank risks in order of importance and to mitigate risk exposures within the investment portfolio. The ranking of risk types in order of importance will afford the investors an opportunity to identify and mitigate risks proactively, thus protecting their investments.

6.3.4. Determine and rank risk factors in order of importance

Once the risk types are identified and ranked in order of importance, the underlying risk factors should also be determined and ranked in order of importance. According to the literature, the challenge faced by investors is that they could suffer immeasurable losses, if they are unfamiliar with the risk factors associated with investing in emerging markets. Emerging markets can be quite volatile and unstable. Therefore, investors need to understand which risk factors influence the instability of the particular economic sectors, in order to plan accordingly and put measures in place to contain such risk factors.

6.3.5. Make investment decision

The components of the risk analysis framework are to make a risk-based decision to invest in an emerging market, after considering all the other elements covered in the risk framework. According to the responses, making a risk-based decision should form part of the risk analysis framework. Therefore, it seems imperative that an investor should make an investment decision once the factors were considered, before investing in emerging markets. The risk management processes, the risk types and risk factors should also be identified before making an investment decision. The next section deals with the final recommendations of this study.

6.4. Limitations of the study

This study focused on the development of a risk analysis framework for investors in emerging markets from a South African perspective, as a gateway to BRICS countries. Furthermore, all data was gathered at a specific time, thus the variables, responses and findings may be limited to that point in time.

6.5. Recommendation for further research

This study investigated the risk factors for investors in emerging markets to consider, in order to develop a risk analysis framework for investors, to serve as a guideline to aid sound investment decisions. Although this study focused on the components of such a framework and its applicability for investment considerations in emerging markets, it can be expanded to include potential investments in developed countries.

6.6. Recommendations

Based on the literature and the findings of the empirical analysis, this section elaborates on the development of a risk analysis framework for investors in emerging markets. It is recommended that the risk analysis framework be used by investors as a guideline to ensure a structured approach when making risk-based investments. Figure 6.1 below depicts the developed risk analysis framework for investors in emerging markets.

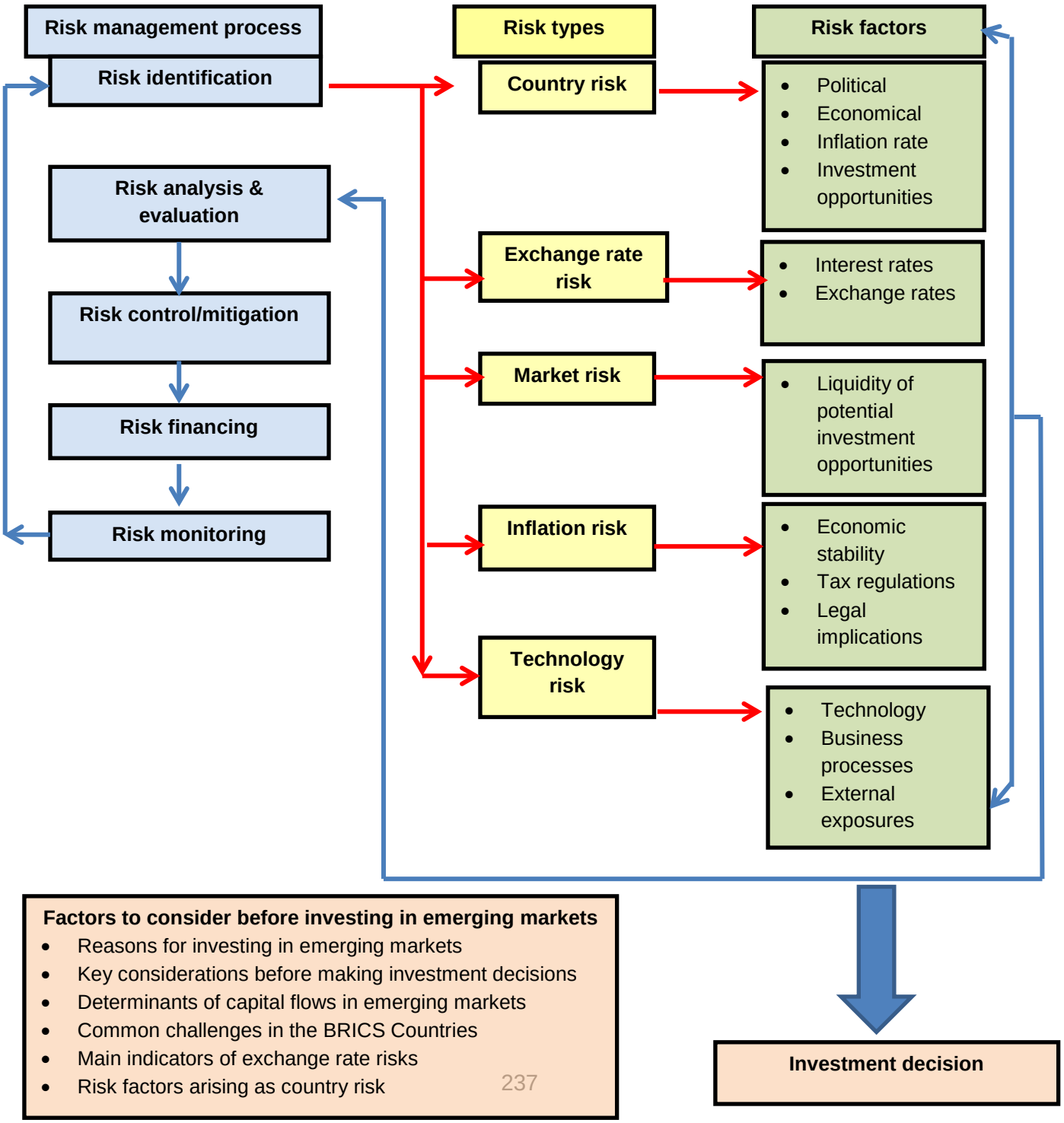

Figure 6.1: Risk analysis framework for investors in emerging markets

6.7. Contribution of the study

The empirical results of the study provide new insights into a risk analysis framework for investors in emerging markets. From the analysis, evidence emerged that investors have the potential to enhance their portfolios in a sustainable way, should they apply a risk analysis framework. Although previous studies focused on analysing emerging markets, there seems to be no or a limited risk analysis framework in place for investors. As such, this study contributes to the existing body of literature by developing a risk analysis framework for investors. The risk analysis framework can be used as a guideline to aid sound investment decisions based on a risk-based approach. Therefore, the study will serve as a source of reference for subsequent research in the area of risk analysis in emerging markets.

6.8. Final conclusion

Contrary to the general view that emerging markets are volatile and risky, many investors have channelled their investments to emerging markets. The results of the study indicate that investors consider emerging markets as a strategically profitable economic avenue. However, several obstacles are influencing the involvement of investors in emerging markets. These could include inherent emerging market characteristics such as high volatility, asymmetric information and inability to do appropriate research and development. Investors who are looking to grow their portfolios in emerging markets, should take the time necessary to understand the investment environment, culture, and evolving regulations of the particular emerging market.

According to the study, corruption, political instability, economic crises, logistic issues, or bureaucracy are some of the risks in emerging countries that can disrupt investment objectives. When dealing with these risks, many investors tend to assume that the risk management practices applied in one emerging market, will work in another market. Even though emerging markets are often grouped together as a homogenous entity, such as the BRICS bloc, the magnitude of the risks and operating conditions in each country could be different. However, the developed risk analysis framework consists of generic components and can be used as a general guideline by investors to follow a risk management process to identify the applicable risks and subsequent risk factors, which could serve as a platform for making sound investment decisions.

It can therefore be concluded that a properly applied risk analysis framework can have a positive impact on an emerging market investment. The impact of positive investment outcomes will further contribute to the economic growth of the emerging market in question. Thus, a risk analysis framework has the potential to be one of the main contributing factors of economic growth in an emerging country.

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ANNEXURE A: ASSET MANAGEMENT COMPANIES

FSP No._____

Name of respondent: _____ Date: _____

Address: _____

Telephone: (____) _____- _____ email address: _____

Analysis of risk factors for investors in emerging markets: BRICS perspective

Dear respondent

Thank you for your willingness to participate in this survey. The purpose of the survey is to analyse risks for investors in emerging markets. The survey should not take more than 30 minutes to complete. This is an anonymous and confidential survey. You cannot be identified and the answers you provide will be used for academic research purposes only.

Please answer all the questions as accurately as possible. Indicate your choice by ticking the appropriately selected block.

SECTION A: DEMOGRAPHIC INFORMATION

1. How long have you operated as an asset manager?

Less than 5 years	1	
6 - 10 years	2	
11-15 years	3	
16-20 years	4	
More than 20 years	5	

2. How long have you been with your current company?

Less than 3 years	1	
4 - 7 years	2	
8 - 11 years	3	
More than 12 years	4	

3. What is your highest qualification?

National senior certificate	1	
Bachelor's degree	2	
Post graduate studies	3	
Other, please specify:	4	

SECTION B: RISK FACTORS

The following risks have been identified as the main risks to consider when investing in emerging markets.

Please rate the importance of these risks when investing in emerging markets. Please make a cross (x) next to your answer using the scale on the right.

4. To what degree do you rate the following risks as important to consider when making an investment decision in emerging markets?

Emerging market risks	To a full degree	To a degree	To a partial degree	To no degree
1. Exchange rate risk	1	2	3	4
2. Country risk	1	2	3	4
3. Market risk	1	2	3	4
4. Inflation risk	1	2	3	4
5. Interest rate risk	1	2	3	4
6. Financial risk	1	2	3	4
7. Credit risk	1	2	3	4
8. Liquidity risk	1	2	3	4
9. Legal risk	1	2	3	4
10. Technology risk	1	2	3	4
11. Other: Please list other risks not included above and rate them accordingly:				
11.1.	1	2	3	4
11.2.	1	2	3	4
11.3.	1	2	3	4

5. To what degree should the following factors be considered as important when investing in emerging markets?

Emerging markets risk factors	To a full degree	To a degree	To a partial degree	To no degree
1. Currency	1	2	3	4
2. Economic stability	1	2	3	4
3. Liquidity	1	2	3	4
4. Inflation	1	2	3	4
5. Cost	1	2	3	4
6. Risks	1	2	3	4
7. Taxation	1	2	3	4
8. Other: Please list other factors and rate them accordingly:	1	2	3	4
8.1.	1	2	3	4
8.2.	1	2	3	4
8.3.	1	2	3	4

6. To what degree are the following considered as reasons for investing in emerging markets?

Reasons for investing in emerging markets	To a full degree	To a degree	To a partial degree	To no degree
1. Diversify risks	1	2	3	4
2. Enhance returns	1	2	3	4
3. Exploit emerging markets	1	2	3	4
4. Increase opportunities	1	2	3	4
5. To balance an investment portfolio	1	2	3	4
6. To hedge funds	1	2	3	4
7. Confidentiality	1	2	3	4
8. Other: please list reasons and rate them accordingly	1	2	3	4
8.1.	1	2	3	4
8.2.	1	2	3	4
8.3.	1	2	3	4

7. To what extent do you agree that the following are key points to consider when considering an investment in emerging markets:

Key points to consider when investing in emerging markets	Strongly agree	Agree	Disagree	Strongly disagree
Emerging economies are increasingly important for Multinational Corporation (MNC) as growing markets; as sources of cheaper or better production inputs and as a source of competition in the shape of new MNC.	1	2	3	4
Emerging markets tend to be controlled more strongly by their government and less predictable and riskier than developed markets.	1	2	3	4
Emerging markets need investment from and access to developed markets.	1	2	3	4
The inflows and outflows of global FDI show that there is a growing integration between emerging and developed countries.	1	2	3	4
Emerging markets are growing in importance as sources of innovation and as locations for R&D investment by MNC.	1	2	3	4

8. To what extent do you agree that emerging markets capital flows are determined by the following

The emerging markets capital flows	Strongly agree	Agree	Disagree	Strongly disagree
Market size	1	2	3	4
Country conditions	1	2	3	4
Openness variables	1	2	3	4
Liquidity variables	1	2	3	4
Government finance indicators	1	2	3	4
Vulnerability indicators	1	2	3	4

9. To what extent do you agree that the following are common challenges in the BRICS countries

The emerging markets capital flows	Strongly agree	Agree	Disagree	Strongly disagree
US dollar denominated debt	1	2	3	4
Low commodity prices	1	2	3	4
Geopolitical instability	1	2	3	4
A more hawkish Fed	1	2	3	4
Decline in commodity prices	1	2	3	4

10. In terms of investment activities and interaction, please rank the BRICS countries that you had more interactions with in the last 24 months.

BRICS countries interaction	Rank (1- 5)
Brazil	
Russia	
India	
China	
South Africa	

11. Do you consider emerging market as a good investment destination?

Yes	1	
No	2	

SECTION C: RISK EXPOSURES

12. To what degree do you agree that the main indicators of exchange rate risks are:

Indicators of exchange rate risk in emerging markets	Strongly agree	Agree	Disagree	Strongly disagree
The relationships between emerging countries interest rates	1	2	3	4
The relationships between emerging countries inflation rates	1	2	3	4
The relationships between emerging countries exchange rates	1	2	3	4

Are there other indicators of exchange rate risk that you would like to indicate that were not highlighted above? (If yes, please specify)

_____

_____

13. The following are risk exposures to measure when considering exchange rate risk in emerging markets. Please rank in order of importance the following measures of exposure (1= Highest importance and 3 = lowest importance)

Types of exchange risk exposure in emerging markets	Rank (1- 3)
Economic exposure - is the risk that the investor's profits will be eroded by exchange rate changes because of rising operating costs.	
Translation exposure - is the risk that exchange rate changes will diminish an investor's income, assets, equity or liabilities.	
Transaction exposure - is the risk that exchange rates will change after a contract is agreed, but before it is completed (or after borrowing/lending agreements are established but before repayments have been made), and that major losses will occur as a result	

Are there any other exposures to measure when considering exchange rate risk not included above? (if yes, please specify)

_____

_____

14. Listed below are four ways that emerging markets investors can minimise exchange rate risk. Please rank in order of importance the following ways of minimising exchange rate risk (1 = Highest importance and 4 = lowest importance)

Exchange rate risk control measures	Rank (1- 4)
Losses caused by an increase in exchange rates can avoided by paying for the transaction immediately at the rate of exchange ruling when the agreement is concluded.	
Futures transaction can be concluded.	
An investor can borrow the relevant amount in domestic currency at the time of the transaction and invest it in another emerging market with the same term as the transaction debt.	
An investor can take out cover against exchange rate fluctuations with a certain financial institution.	

15. To what degree could these factors arise as country risk when investing in emerging markets?

Risk factors arising as country risk	To a full degree	To a degree	To a partial degree	To no degree
Jurisdiction risk factor - the laws that govern investments in that emerging country.	1	2	3	4
Tax risk factor - each type of investment carries its own tax consequences as local and foreign jurisdiction has their own tax codes.	1	2	3	4
Currency risk factor – balance between strong currencies, markets and exposure to emerging markets should be carefully considered.	1	2	3	4
Trust risk factor - Before setting a trust, a careful analysis is necessary to balance the benefits of trust structuring with the associated charges	1	2	3	4

16. To what degree can the following reduce country risk?

Factors controlling country risk in emerging markets	To a full degree	To a degree	To a partial degree	To no degree
Assess sovereign, currency and banking sector risk in many markets.	1	2	3	4
Analyse credit risk posed by political and economic situation in each country.	1	2	3	4
Compare risks across emerging countries, using standardised risk and forecasting methodology.	1	2	3	4
Assess business risk, with macroeconomic variables in each emerging country.	1	2	3	4
Manipulate, display and analyse data in investors own financial and risk rating models.	1	2	3	4
Limit risk in markets with the help of timely warnings of likely rating downgrades.	1	2	3	4

17. Please indicate the importance of the following risk management processes (steps) when investing in emerging markets.

Risk Management Processes	Strongly agree	Agree	Disagree	Strongly disagree
Step 1: Risk identification - the need for an investor to define and understand the nature of the risks exposed to.	1	2	3	4
Step 2: Risk evaluation and assessment - quantifying the risk and determining its possible impact on an investment.	1	2	3	4
Step 3: Risk control - the application of techniques to reduce the probability of loss.	1	2	3	4
Step 4: Risk financing - the financial provision for losses that may occur.	1	2	3	4
Step 5: Risk monitoring - the effectiveness of the systems and techniques ensuring that the operations are within the defined risk policies and procedures, and that all other activities of the risk management process are effective.	1	2	3	4

18. To what degree of importance is the provision for an emergency fund when investing emerging markets

Not important at all	1	
Not very important	2	
Somewhat important	3	
Very important	4	
Extremely important	5	

19. What is your attitude towards emerging markets investment?

(Please choose the right options)

Good investments	1	
High risk	2	
Yield higher returns	3	
Too complicated to administer	4	

20. In terms of portfolios managed in emerging markets on behalf on your clientele, please rank the top investors (1= Client with high worth portfolio and 3 = Client with least worth portfolio)

Portfolio managed on behalf of investors	Rank (1- 3)
Private / individual investors	
Private businesses	
Government agencies	

21. What was your company's emerging market result in the previous financial year?

Positive	1	
Negative	2	

22. If positive, what was the rate of return of your emerging market investments?

Less than 5%	1	
6 – 10%	2	
11 – 15 %	3	
More than 16%	4	

23. Has your company been a victim of a fraud (scam) in an emerging market?

Yes	1	
No	2	

24. If yes, describe the fraud and how did your company deal with it?

(Please explain briefly)

_____

_____

25. What is your level of understanding emerging risks and exposure?

Very good	1	
Good	2	
Fair	3	
Poor	4	

Thank you for taking part in this survey.

If you would like to receive a report on the findings, please e-mail the researcher, as it is on request. godinj@unisa.ac.za

ANNEXURE B: INFORMED CONSENT LETTER FOR ASSET MANAGERS

5-112 AJH Van der Walt
Muckleunek Campus
Pretoria, 0001
01 September 2018

Contact person: _____
Contact number: _____
E-mail address: _____
Company: _____

Dear Sir/ Madam

I, Ntwanano Jethro Godi, am doing research with Prof Jackie Young in the Department of Finance, Risk Management and Banking towards a PhD degree at the University of South Africa. We are inviting you to participate in a study entitled: “Analysis of risk factors for investors in emerging markets: BRICS perspective.”

The aim of the study is to analyse risks for investors in emerging markets with special focus on BRICS countries. In addition, the study aims to develop a risk framework that could be used a guideline when considering investments in emerging markets. The study will entail a survey of asset managers who are licensed to trade in emerging markets by the Financial Services Board of South Africa. A questionnaire will be sent out to selected asset managers who are involved one way or another with an emerging market and the analysis of the risks involved.

Being in this study is voluntary and you are under no obligation to consent to participation. You are free to withdraw (opt-out) at any time or stage during the completion of the questionnaire without giving a reason. The survey should not take more than 30 minutes to complete. All data obtained from you will be kept confidential and will only be reported in an aggregate format (by reporting only combined results and never reporting individual ones). All questionnaires will be concealed, and no one other than the primary investigator and promoter will have access to them.

There are no direct benefits to participants in this study. However, we hope that the information obtained from this study may be used to simplify the analysis of risks in emerging markets. The results from this study will be presented in a thesis and possibly articles at a later stage. At no time, however, will your organisation’s name be used, or any identifying information revealed. If you wish to receive a copy of the results from this study, you may contact one of the researchers at the contact details given below.

Electronic copies of your answers will be stored by the researcher for a period of five years on a password protected computer. Future use of the stored data will be subject to further Research

Ethics Review and approval if applicable. After the 5-year period all information will be permanently deleted.

If you require any information about this study or would like to speak to one of the researchers, please call Ntwanano Jethro Godi at 082 460 3735 or e-mail godinj@unisa.ac.za or Professor Jackie Young on 012 429 3010 or e-mail youngj@unisa.ac.za at the University of South Africa.

If you have any other questions regarding your rights as a participant in this research, you may also contact the College Research Ethics Review Committee of the University of South Africa via email at uysm@unisa.ac.za.

Thank you for taking the time to read this information sheet and for choosing to participate in this study. Please note that by completing the questionnaire you agree that you understand the information shared with you and that you voluntarily participate.

Yours Sincerely,
Ntwanano Jethro Godi (PhD student)

ANNEXURE C: RESEARCH ETHICS CLEARANCE CERTIFICATE

UNISA university of south africa

UNISA DEPARTMENT OF FINANCE, RISK MANAGEMENT AND BANKING ETHICS REVIEW COMMITTEE

Date: 30 JULY 2019

Dear Mr NJ Godi

ERC Ref #2019/CEMS/FRMB/007
Name : Mr NJ Godi
Student #: 32902697
Staff #: 90163419

Decision: Ethics Approval from 01 August 2019 to 31 July 2024

Researcher(s): Name Mr NJ Godi

E-mail address godinj@unisa.ac.za, telephone 012 429 8895

Supervisor (s): Name Prof J Young
E-mail address youngj@unisa.ac.za, telephone 012 429 3010

Working title of research:

Analysis of risk factors for investors in emerging markets: BRICS perspective

Qualification: PHD

Thank you for the application for research ethics clearance by the Unisa DFRB Ethics Review Committee for the above mentioned research. Ethics approval is granted for the period 01 August 2019 to 31 July 2024

*The Low **risk application** was **reviewed** by the DFRB Ethics Review Committee on 30 July 2019 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment*

University of South Africa
Preller Street, Muckleneuk Ridge, City of Tshwane
PO Box 392 UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the DFRB Committee.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
7. No fieldwork activities may continue after the expiry date (2024). Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number 2019/CEMS/FRMB/007 *should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.*

Yours sincerely,

Signature

Chair of DFRB ERC : Prof K Tsaurai

E-mail: tsaurk@unisa.ac.za

Tel: (012) 429-2140

Signature

Executive Dean: Prof T Mogale

E-mail:mogalemt@unisa.ac.za

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