

Exploring the Determinants of Capital flows in Emerging Markets: Evidence from South Africa

Jethro Godi (PhD)

godinj@unisa.ac.za

University of South Africa, Pretoria, South Africa

<https://doi.org/10.51137/wrp.ijarbm.2025.jgee.45785>

Abstract – Examining the determinants of capital flow in emerging markets stakeholders can gain insights into the drivers behind capital movements and better assess the opportunities and risks associated with cross-border investments. The purpose of this study is to examine the fundamental determinants of capital flow in emerging markets. This study utilised a quantitative research methodology, specifically employing a survey method and online questionnaires to gather data from asset managers in South Africa. Data analysis involved the utilisation of descriptive statistics. The findings indicated country conditions, vulnerability indicators, trade openness, government finance indicators, liquidity variables, and market size as the main determinants of capital flow in emerging markets like South Africa. This study enhanced the existing knowledge and offered fresh perspectives on the determinants of capital flow in emerging markets that motivate investors to contemplate investing in emerging markets. Hence, it is advisable for continued vigilance and analysis of these determinants will be essential for stakeholders to adapt to evolving market conditions and make informed decisions in an increasingly interconnected and dynamic global economy

Keywords – Market Size, Investors, Trade Openness, Emerging Markets, Financial Markets

Submitted: 2024-09-09. Revised: 2024-11-16. Accepted: 2024-11-22.

1 Introduction

Capital flows, the movement of financial resources across borders for investment or trade purposes, play a pivotal role in shaping global economic dynamics (Gelos et al., 2022). Understanding the determinants of capital flows is essential for policymakers, investors, and analysts seeking to navigate the complexities of international finance and anticipate market trends. These determinants are multifaceted and encompass a wide range of economic, financial, and institutional factors that influence the flow of funds between countries (Pagliari & Hannan, 2024). By examining these determinants, stakeholders can gain insights into the drivers behind capital movements and better assess the opportunities and risks associated with cross-border investments. The key determinants of capital flows, range from macroeconomic fundamentals to market sentiment, policy environments, and global economic conditions (Conner et al., 2023). Through a comprehensive understanding of these determinants, stakeholders can enhance their ability to interpret capital flow dynamics and formulate informed strategies to manage their exposure to international financial markets. There are some plausible, competing assertions about why speculative capital flow has recently soared in the emerging markets economies (EMEs) and developing countries. The confluence of the change in monetary policy in core EMEs and domestic and external financial conditions in EMEs and developing countries are primarily held accountable for this sharp rise (Gelos et al., 2022). However, these conclusions are based on studies which are often confined to a sample of EMEs or developing countries. Besides, the vast literature fueling this debate has produced no consensus as regards the impact of liquidity conditions and the changes in monetary policies on capital flow (Harris et al., 2023).

Capital flow has surged and ebbed in the post-Bretton Woods period, first in the developed and EMEs and more recently in the EMEs and developing countries. Researchers have documented that, while surges in capital inflows are generally stabilizing in advanced and some EMEs, surges in the EMEs and developing countries prior to the East Asian crisis era and post-Global financial crisis (GFC) have had a mixed impact (Pagliari & Hannan, 2024). Theoretical studies attribute surges in capital inflows to exogenous shocks and changes in domestic and external policies, vulnerabilities, and investment climate (Conner et al., 2023). However, studies conducted to substantiate these conjectures have produced almost no consensus.

Despite the dramatic rise in global liquidity in recent decades, there is an ongoing need to consider the determinants of capital flow, in large part due to the continuing uncertainty and instability in international financial markets. Yet, for many years, lack of data on investor behavior made it difficult to quantify the influence of different characteristics on the capital flow (Sikveland et al., 2022). In this paper, we take advantage of more parsimonious models from investment scholars. This study would provide insights into the future dynamics of the sector. Therefore, the objective of this study is to examine the determinants of capital flow in emerging markets. Structure of the rest of the article: Section 2 reviews literature. Section 3 discusses the study's approach

and research. Study results and discussions are in Section 4 and 5. Conclusions are in Section 5.

2 Literature Review

2.1 Neoclassical Theory

The standard neoclassical microeconomic theory is based on the theoretical construction of utility maximization. Since the marginalist revolution in the 1870s and the pioneering works of Leon Walras, Carl Menger, and William Stanley Jevons, a theory of price has been devised based on marginal utilities. Marshall's (1890/1920) *Principles of Economics* then provided a systematic account of the interplay between demand and supply on product and factor markets. Today, neoclassical microeconomic theory provides a standard axiomatization of the behavior of households and firms in markets (Hertel et al., 2022). The general theoretical framework that underlies this neoclassical theory of markets is the rationality hypothesis. The hypothesis of utility maximization plays the fundamental role in driving economic research, and it claims to offer a theoretical account covering all those cases where two or more individuals exchange goods under conditions of scarcity. Neoclassical microeconomic theory offers a global theoretical framework for both a partial analysis of a single market and a total analysis of all markets in an economy, using the utility maximization hypothesis and focusing on the properties of economic equilibrium (Lu et al., 2022).

By allowing for costs associated with the process of international capital movements, it is possible to reduce the force of these conditions, making it possible for a country to pursue a more independent monetary policy without there being an immediate response to change. It allows interest rates to be controlled, provided that the act is consistent with equilibration of the balance of payments over a longer period of time. An open-market operation in the context of floating exchange rates loses its effectiveness, given a strong enough dual cost associated with money movements (Casiraghi et al., 2022)

An important factor in determining capital inflow and outflow is the difference in interest rates between two countries. Interest parity suggests that all differences in return will be wiped out when exchange rates fluctuate if countries are open to capital flows. The neoclassical model of the balance of payments regards changes in returns on alternative assets as the basic force prompting changes in capital flows. (Liu et al., 2021). Migration of capital capitalizes yields, and capital flows restore equilibrium. It is controlled by changes in return only. It applies to international transactions as a whole, positing an inverse relationship between yield differentials and short-term capital movements (Erten et al., 2021). When interest rates are moving in such a way as to render a differential less favorable, movement of funds will occur to restore the balance, and increases in the return disparity will produce matching movements against the general flow of adjustment. (Liu & Lee, 2022)

2.2 Keynesian Theory

Before making predictions about capital flows or trying to derive relevant policy implications, it is important to determine what determines capital flows. There are a lot of theoretical and empirical papers about the determinants of capital flow. Various facts and economic models explain the reasons and consequences of capital movements. Some models show that capital flows can be predicted and some indicate that it is impossible. In the first set of models, predictions are based on one or several variables such as the real exchange rate, the output gap, stock prices, asset returns, and volatility (Pagliari & Hannan, 2024). In the second set of models, the only thing that can be said about capital flows with certainty is that the aforementioned variables capture perfectly no part of the variation. The first set of models is a starting point (Gelos et al., 2022). It provides guidance to policymakers while at the same time raising questions about which economic factor or factors might explain why these exchange rates? The second question is particularly important (Neves et al., 2020). Based on the global level of interest rates, one can forecast very little about capital flows. If capital flows are predictable, this finding is interesting in a theoretical sense and is consistent with the current theoretical models of capital flows. If capital flows are predictable, on the other hand, the implications of a finding are really interesting and more intricate (Paul & Jadhav, 2020).

The downside of free markets in the capitalist economic system has justified numerous interventions by the state to ensure the welfare of the people on the one hand and to maintain the position of the ruling authority on the other hand (Ehiedu, 2022). The state gets revenue to finance its activities of collecting taxes, duties, fees, etc. and spending money on the provision of public goods and security (Akamobi & Unachukwu, 2021). The source of state revenues are the public debt, the value added tax, the corporate tax, the personal income tax, excise, import duties, etc. collected by the state from the economic entities. There are three channels for non-governmental financing of government budget deficits (Durguti, 2020). The first channel is to print money which would increase the inflationary pressures on the economy. The second channel is tax collection and finally, the third channel is borrowing that can be domestic or external (al-Rubaie & Ahmed, 2023).

2.3 Emerging Markets

An emerging market is a market that is open enough to the global economy to facilitate international trade and provide foreign investors with access to its bond and stock markets (Leeds, 2015). Amadeo (2017) asserts that not all emerging markets possess equal potential as investment locations. Following the 2008 financial crisis, certain developing economies capitalised on the increasing prices of commodities to foster economic growth. Certain emerging countries choose not to allocate funds towards infrastructure development. Instead, they utilised the additional money for subsidisation purposes and the establishment of government employment opportunities (Abiad et al., 2012). Consequently, their economies saw rapid growth, leading to increased

consumption of imported commodities and subsequent inflationary pressures. Despite the increase in inflation, developing market equities have performed significantly better than US stocks since the 2008 financial crisis. Market analysts predict that this trend will continue if the value of the dollar continues to decline (Gundlach, 2017). Gundlach (2017) cautions that if investors begin to support emerging market currencies, it is probable that emerging markets will persist in surpassing the US in terms of performance. Consequently, this presents a favourable opportunity to invest in emerging markets. An appreciating US dollar in relation to foreign currencies is typically considered detrimental to developing markets. This is because it reduces the value of their commodities and increases the burden of their US dollar-denominated debt (Sanchez, 2017). The next section is dedicated to examining the distinctive attributes of emerging markets.

Cerutti, Claessens, and Puy (2015) identified five universally accepted attributes of emerging markets. Firstly, their per capita income is below the average. The primary defining feature is a low income, as it serves as a catalyst for the subsequent attribute of quick growth. The third trait, high volatility, is a direct result of rapid growth. High volatility arises due to three factors: natural disasters, foreign price shocks, and internal policy instability (Kuepper, 2016). An essential feature of an emerging market is its dependence on substantial investment capital for growth. Successful investments in emerging markets can result in quick growth, hence generating a high return on investment for investors.

2.4 Capital Flows in Emerging Markets.

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). 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).

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). 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.

2.4.1 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.

2.4.2 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.

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.

2.4.3 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.

2.4.4 Liquidity Variable

According to Peterhoff, et al. (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).

2.4.5 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 on vulnerability indicators.

2.4.6 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). 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 monetary 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).

3 Research Methodology

This study employed a definitive research design. Gaudet and Robert (2018) classify conclusive studies into two categories: descriptive and causal. Among these options, the research type being discussed is descriptive. Descriptive research is a form of conclusive research that primarily aims to provide a detailed account of something, typically its qualities or functions. Descriptive research encompasses both cross-sectional and longitudinal designs. This study employed a cross-sectional design, which involves gathering information from a specific sample of population elements just once. The researcher chose to employ quantitative research for this study because they aimed to attain objectivity by using a structured questionnaire to collect

information from the participants (Gaudet & Robert, 2018). The survey method was considered the best suitable for the present investigation. As stated by Leedy and Ormrod (2018), surveys are a method of gathering data on one or more groups of individuals, typically regarding their attributes, opinions, attitudes, or past experiences, and organising their responses into a tabulated style. South Africa was chosen as the study region due to its status as one of the countries with a growing economy, which attracts a large number of investors in the African continent. Given the objectives of this study, a questionnaire was selected as the most suitable instrument for data collection. After considering the pros and cons of other survey delivery techniques, a web-based questionnaire was chosen as the most effective instrument for gathering data.

The most appropriate sample approach for this investigation was purposeful non-probability sampling. The choice was made because the study requires data specifically from a designated target demographic. This group is limited to a restricted category of investors and/or asset managers who possess the capability to provide the required information. The asset managers were the most well-positioned respondents to offer the necessary information. The Financial Sector Conduct Authority (FSCA) (2019) reported that there were a total of forty-four licenced Collective Investment Schemes (CIS) operating in emerging markets. The asset managers overseeing these schemes were most qualified to provide insights on the risks they assessed for investors in emerging markets. Consequently, an invitation letter was dispatched to these asset managers, requesting their participation in the study. These asset managers are leading in investments and have a crucial position in the global investment arena. Hence, the desired sample size will encompass the entire group of 44 asset managers in South Africa who possess a licence from the FSCA to engage in trading activities inside emerging markets.

The study also took into account the significance of validity and reliability. The validity, reliability, objectivity, and generality of a draft questionnaire were assessed by a pre-test. This pre-test was conducted in collaboration with a statistician, asset managers, and senior scholars from the University of South Africa who possess expertise in the field of finance, investments, and risk management. This study examined the content validity. Content validity is determined by the degree to which a measurement accurately represents the specific intended content domain (Howell et al., 2005). The study utilised content validity as the most suitable type of validity, given that the questionnaire designed for the study aimed to assess the attitudes and opinions of emerging market investors on a specific set of identified emerging market risks. The experts have verified that the questionnaire for this study is valid in terms of its content and adheres to academic research criteria. A reliability test was conducted using Cronbach's alpha to determine the questionnaire's dependability.

Forty-four questionnaires were issued to asset managers in South Africa, and thirty-three of them were returned, resulting in a response rate of 75%. All of the surveys that were received were appropriate for analysis. Data analysis involved the utilisation of descriptive statistics. The SPSS software is utilised for the analysis of data that is imported from a LimeSurvey.

4 Results

4.1 Reliability and Validity

A reliability test was conducted to assess the internal consistency and reliability of the questionnaire. Hence, the coefficients were calculated for each of the underlying factors discovered in emerging markets. The Cronbach's alpha coefficients are presented in Table 1.

Table 1: Descriptive statistics and internal consistency reliabilities

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

Source: Own compilation

Table 1 shows that the scales have an alpha coefficient of 0.761, indicating a high level of dependability. This is considered acceptable as the minimum acceptable score is 0.6. De Souza and Dick (2009) caution that any coefficient alpha values below 0.6 are not deemed acceptable in statistical analysis.

4.2 Descriptive Statistics

The aim of this study was to ascertain the fundamental factors that motivate investors to contemplate investing in emerging markets. In order to accomplish this goal, the questionnaire included numerous reasons that were identified in the literature, and respondents were asked to rank them accordingly.

Objective 1: To examine the determinants of capital flows in emerging markets.

Figure 1 graphically depicts the ratings of the determinants of capital flows in emerging markets from the respondents.

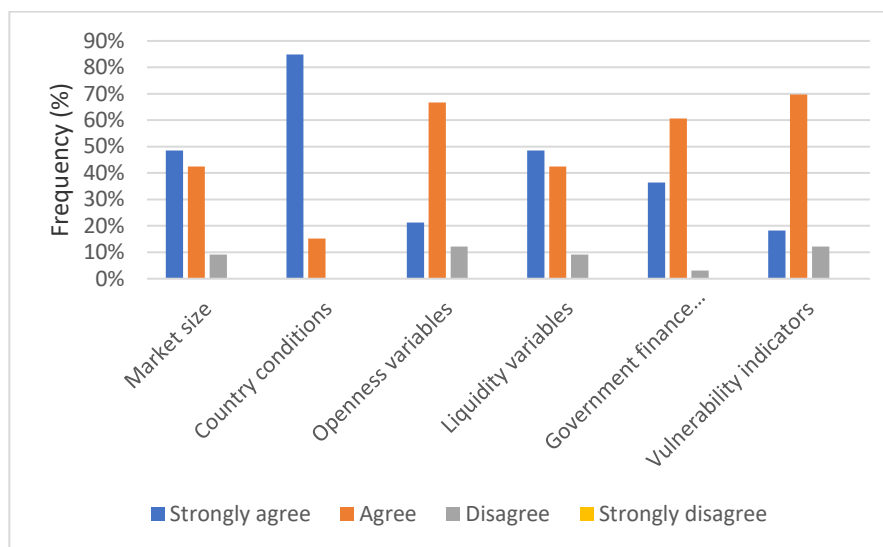


Figure 1: Determinants of emerging markets capital flows

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.

- 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. 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. The next discussion is on country conditions as a determinant of capital flows in emerging markets.
- Country conditions:** According to the literature review 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 literature, 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. The next determinant is the trade openness of capital flows in emerging markets.

- **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.
- **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.

- **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.
- **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 Discussion of Results

This study investigated the determinants of capital flow in emerging markets, especially South Africa. The results indicated the following as the determinants, market size, country conditions, trade openness, liquidity variables, government finance indicators, and vulnerability indicators. Respondents agreed with all these factors as the main determinants of capital flow in emerging markets. Thus, these factors must be understood to ensure smooth

investment in emerging markets. Market size is important in investing in emerging markets. The current study results support the previous results (Guterres, 2017; Franc, Rentocchini & Marzetti, 2008; Silajdzic & Mehic, 2017; Peterhoff et al., 2016; Dalhaus & Lam, 2018) For example Guterres (2017) found that 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. Franc, Rentocchini and Marzetti (2008) revealed that the country conditions variable has been emphasised as a sign of financial depth. Silajdzic and Mehic, (2017) found that open economies attract more inflows than heavily protected economies. 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. Peterhoff et al., (2016) found that liquidity and government finance indicators are clearly 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 potential investors in emerging markets. The next section focuses on government finance indicators. Dalhaus and Lam (2018) found that 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. Therefore, it is apparent that investing in emerging markets requires a delicate understanding and analysis of these determinants.

6 Conclusion

The objective of this study was to examine the determinants of capital flow in emerging markets with a particular focus on South Africa. The results showed that country conditions, vulnerability indicators, trade openness, government finance indicators, liquidity variables, and market size are the main determinants of capital flow in emerging markets like South Africa. The theoretical implications of this study are that it contributes to the theoretical understanding of the determinants of capital flow in emerging markets by using the Neoclassical and Keynesian theories. 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 potential investors in emerging markets. The determinants of capital flows constitute a complex interplay of economic, financial, and institutional factors that shape the movement of funds across borders. From interest rates and economic growth to political stability, exchange rates, and market sentiment, a multitude of variables influence investor decisions and capital allocation decisions. Moreover, the impact of these determinants is often intertwined with global economic conditions, policy environments, and market dynamics, adding further layers

of complexity to the analysis of capital flow dynamics. By recognizing the significance of these determinants and their implications for cross-border investments, stakeholders can enhance their ability to navigate the intricacies of international finance and mitigate risks while capitalizing on opportunities. Going forward, continued vigilance and analysis of these determinants will be essential for stakeholders to adapt to evolving market conditions and make informed decisions in an increasingly interconnected and dynamic global economy.

7 Authors

Jethro Godi, a senior lecturer from the University of South Africa, holds a PhD degree in Management studies. His area of expertise is in small business finance, risk management, financial management, and investment management.

8 References

- Abiad, A., Bluedorn, J., Guajardo, J. & Topalova, P. (2012). The Rising Resilience of Emerging Market and Developing Economies. IMF Working Paper: Thomas Helbling.
- Ascher, W. (2017). Understanding the Policymaking Process in Developing Countries. New York: Cambridge University Press.
- Akamobi, O. G., & Unachukwu, I. B. (2021). Macroeconomic effects of budget deficit in Nigeria. *European Journal of Economic and Financial Research*, 4(4): 128-153
- al-Rubaie, Q. L. A. & Ahmed, A. S. (2023). Measuring and analyzing the repercussions of public debt in financing the general budget deficit for the Iraqi economy after 2003 using the (Eviews) program. *Materials Today: Proceedings*, 80(3): 3144-3154
- Amadeo, K. (2017). The Difference Between Developed, Emerging and Frontier Markets, [Online] Available: <https://www.nasdaq.com/articles/what-difference-between-developed-emerging-and-frontier-market-2012-05-11> [Accessed: March 2024].
- Broto, C., Díaz-Cassou, J. & Erce, A. (2011). Measuring and explaining the volatility of capital flows to emerging countries. *Journal of Banking and Finance*. 35 (8),:1941-1953
- Casiraghi, M., Habermeier, K., & Harjes, T. (2022). Choice of Exchange Rate Arrangement. Monetary and Capital Markets Department Technical Assistance Handbook, 9. imf.org
- Cerutti, E., Claessens, S. & Puy, D. (2015). Push Factors and Capital Flows to Emerging Markets: Why Knowing Your Lender Matters More Than Fundamentals. IMF Working Papers, Giovanni Dell'Ariccia.

Conner, J. O., Crawford, E., & Galioto, M. (2023). The mental health effects of student activism: Persisting despite psychological costs. *Journal of Adolescent Research*, 38(1), 80-109.

Dalhaus, T. & Lam A. (2018). Assessing Vulnerabilities in Emerging-Market Economies. Bank

of Canada Staff Discussion Paper 2018-13.

De Souza, Z., & Dick, G.W. (2009). Disclosure of information by children in social networking – Not just a case of “you show me yours and I will show you mine”. *International Journal of Information*, 29: 255-261

Dimitrijevic, M. & Mistele, T. (2016). *Frontier Investor: How to Prosper in the Next Emerging*

Markets. Columbia: Business School Publishing.

Durguti, E. A. (2020). How does the budget deficit affect inflation rate—Evidence from Western Balkans countries. *International Journal of Finance & Banking Studies*, 9(1): 01-10

Ehiedu, V. C. (2022). Deficit financing and sustainable growth (sg) in a small open economy. *International Journal of Academic Accounting, Finance & Management Research*, 7: 1-96

Emerson, J. (2018). *The Purpose of Capital: Elements of Impact, Financial Flows, and Natural Being*. San Francisco, CA: Blended Value Group Press.

Erten, B., Korinek, A., & Ocampo, J. A. (2021). Capital controls: Theory and evidence. *Journal of Economic Literature*. nber.org

Essays, UK. (2018). The benefits of trade openness to developing countries. [Online]

Available. <https://www.ukessays.com/essays/economics/the-benefits-of-trade-openness-to-developing-countries-economics-essay.php?vref=1>. Accessed: 07/01/2019.

Financial Sector Conduct Authority (2019). List of regulated entities and persons. [Online]

Available.https://www.fsca.co.za/MagicsScripts/mgrqispi.dll?APPNAME=Web&PRGNAME=Search_Mancos. [Accessed: April 2024].

Franc, C., Rentocchini F. & Marzetti GV. (2008). Why do firms invest abroad? An analysis of the motives underlying Foreign Direct Investments. JEL Classification: F210; F230; L230; L240.

Gaudet, S., & Robert, D. (2018). *A Journey Through Qualitative Research: From Design to*

Reporting. 1st Ed. London: Sage.

Gelos, G., Gornicka, L., Koepke, R., Sahay, R., & Sgherri, S. (2022). Capital flows at risk: Taming the ebbs and flows. *Journal of International Economics*, 134, 103555. imf.org

Gonzalez, A. & Chu, TH. (2017). Trade and Competitiveness Senior Director, and IFC Chief

Economist in the Foreword to the Global Investment Competitiveness Report 2017/2018.

Gundlach, J. (2017). Emerging markets will likely continue to outperform the U.S; Active

managers will also likely outperform along with Ems. USA: Double Line Capital.

Guterres, A. (2017). World investment report; investment and the digital economy. United Nations, Geneva: United Nations Publication.

Harris, R. S., Jenkinson, T., Kaplan, S. N., & Stucke, R. (2023). Has persistence persisted in private equity? Evidence from buyout and venture capital funds. *Journal of Corporate Finance*, 81, 102361.

Hertel, K., Humanicki, M., Kitala, M., Kleszcz, T., Kuziemska-Pawlak, K., Mućk, J., ... & Stefański, M. (2022). The impact on the Polish economy of the Structural Open Market Operations programme conducted by NBP (No. 343). Narodowy Bank Polski. nbp.pl

Howell, J., Miller, P., Park, HH., Sattler, D., Schack, T., Sperry, E., Widhalm, S. and Palmquist, M. (2005). Reliability and validity. [Online] Available. <http://writing.colostate.edu/guides/research/relval/> [Accessed: January 2024].

Joffe, H. (2017). Capital inflows into SA stagnant Capital inflows to emerging markets at their weakest since 2008, the latest figures from the Institute for International Finance show. Business day 05 January 2017 - 05:55.

Kuepper, J. (2016). The Impact of Globalization on Economic Growth. California: The balance.

Leedy, P.D., & Ormrod, J.E. (2018). Practical Research: Planning and Design. 12th Ed. England: Pearson.

Leeds, R. (2015). Private Equity Investing in Emerging Markets: Opportunities for Value Creation (Global Financial Markets). USA: Palgrave Macmillan.

Liu, T. Y. & Lee, C. C. (2022). Exchange rate fluctuations and interest rate policy. *International Journal of Finance & Economics*, 27(3): 3531-3549

Liu, Z., Wang, P., & Xu, Z. (2021). Interest rate liberalization and capital misallocations. *American Economic Journal: Macroeconomics*

Lu, D., Xia, T., & Zhou, H. (2022). Foreign exchange intervention and monetary policy rules under a managed floating regime: evidence from China. *Applied Economics*, 54(28): 3226-3245.

Lubek, S. (2016). A beginner's guide to investing in emerging markets. London, United Kingdom: Financial Advisor at BSG Financial Solutions.

Lucke, N. and Eichler, S. 2016. Foreign direct investment: the role of institutional and cultural

Determinants. *Journal of Applied Economics* 48(11):1-22.

Neves, M. E., Serrasqueiro, Z., Dias, A., & Hermano, C. (2020). Capital structure decisions in a period of economic intervention: Empirical evidence of Portuguese companies with panel data. *International Journal of Accounting & Information Management*, 28(3): 465-495

Ortel, S. (2017). What's the Difference between Emerging and Frontier Markets? Posted In:

Drivers of Value, Economics.

Pagliari, M. S. & Hannan, S. A. (2024). The volatility of capital flows in emerging markets: Measures and determinants. *Journal of International Money and Finance*. imf.org

Pagliari, MS. & Hannan, SA. (2017). The Volatility of Capital Flows in Emerging Markets:

Measures and Determinants. Working Paper No. 17/41.

Passari, E. & Rey, H. (2015). Financial flows and the international monetary system. *The Economic Journal*, 125 (May), 675–698. Doi: 10.1111/econj.12268 © 2015 Royal Economic Society.

Paul, J. & Jadhav, P. (2020). Institutional determinants of foreign direct investment inflows: evidence from emerging markets. *International Journal of Emerging Markets*.

Peterhoff, D., Calvey, P., Goddard, Q., Cleary, S., & Alderighi, S. (2016). Enhancing liquidity in emerging market exchanges. USA: Oliver Wyman and World Federation of Exchanges.

Sanchez, G. (2017). Why the emerging markets rally may just be emerging? USA: Chantico Global.

Sikveland, M., Xie, J., & Zhang, D. (2022). Determinants of capital structure in the hospitality industry: Impact of clustering and seasonality on debt and liquidity. *International Journal of Hospitality Management*, 102, 103172.

Silajdzic, S. & Mehic, E. (2017). Trade Openness and Economic Growth: Empirical Evidence from Transition Economies. Italy: Management international conference.

Xu, D. & Meyer, K.E. (2013). Linking Theory and Context: 'Strategy Research in Emerging

Economies, *Journal of Management Studies*. John Wiley and Sons Ltd and Society for the Advancement of Management Studies.