

An Assessment of the Impact of Exchange Rate Fluctuations on the Performance of The Real Estate Sector in Zimbabwe

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Abstract: The investigation sought to assess the connection between the exchange rate fluctuations and property sector performance in Harare. Zimbabwe's real estate sector is undergoing a dip in terms of sales and vacancy levels. The real estate sector in Harare has been growing at a very slow rate in recent years resulting in thousands of jobs and the viability of the whole economy being threatened. A pragmatist approach and descriptive research design was applied in the investigation. A stratified random sample of 171 respondents was used in the administration of survey questionnaires were used. Primary data was collected by using survey questionnaires while secondary data was obtained from past researches, journals, reports from the Real Estate Institute of Zimbabwe (REIZ) and other exiting literature. Data was analysed using the Statistical Package for Social Sciences (SPSS) version 20. The major findings of the study were that from the research overwhelmingly confirm to the hypothesis that exchange rate fluctuations had a negative impact on real estate sector performance in Zimbabwe and from the correlation tests done in the study, it was concluded that there was a strong negative correlation between exchange rate fluctuations and real estate sector performance. This implied that a stable exchange was key to the growth in real estate sector and was an imperative deliverable by the monetary authorities.

Keywords: Real estate sector, performance, exchange rate. Purchasing power parity and interest rate parity.

1. Background to the Study

According to Knight Frank Real Estate report (2019), the real estate sector in Zimbabwe has been growing at a very slow rate in recent years. It has generally attracted a few individual and institutional investors. The recent decline in demand for residential and commercial premises due to liquidity challenges in the central business district is responsible for the real estate sector slump. Real estate business activities primarily deal with the ownership and transfer of physical properties (Davies, 2015). The real estate sector entities in Zimbabwe are represented by the Real Estate Institute of Zimbabwe (REIZ), established in 1945, which acts as a member driven organization to promote the players' common interests. Almost all the real estate companies in Harare provide common real estate services, which are designed to satisfy the needs of the customers. Some of the essential real estate services provided by these companies include property sales, property valuation, property management and auctioning, and property development among other services. Globally, the real estate sector is one of the most profitable ventures for several economies and one of the indices for measuring economic growth of any society. According to World Bank (2018), the value of global real estate sector eclipsed \$243 trillion in 2017. Around the world, real estate investment is given rigorous attention due to its critical role and contribution to the economy and social development of nations. For instance, inference from past studies by Hunger and Stripia (2016) suggest that real estate business contributes to job creation, housing provision and income redistribution as well as poverty alleviation.

Studies done in the United States by Hooper et al (2014) and Ratha (2015) in the New York business district to assess the link between the the exchange rate movements and property sector sales were conclusive on the positive relationship between the two. Exchange rate gains for the dollar resulted in moderate growth in real estate sector sales especially for residential flats. Shania and Mahlabo (2018) found that inflation across many African countries, accounts for more than half of the total variations in real estate prices, averring that in the short run, the size of the effect is larger. In quarterly analysis, they attributed over 90% variance in real estate prices to inflation than any other macroeconomic factor. Their study involved samples from African economies across all tiers from low income countries such as Rwanda and Benin, middle income economies such as Egypt, Angola and Ghana to upper middle income countries such as Botswana, Algeria and South Africa. Bonnie (2018) found that fluctuation in employment in South Africa results in change of income levels which affect house price changes through its effect on demand.

Zimbabwe's Real Estate undertakes all the property development that shapes the country, yet its contribution to the country's GDP has fallen below \$400 million in 2018 as compared to an average of \$743 million between 2009 and 2015, according to Bart Real Estate Report (2018). It is a sector that mirrors the viability and sustainability of an economy and its investment levels. Masimbe (2018) concluded that various macroeconomic factors are negatively affecting the viability of the real estate sector locally. These include high interest rates on borrowing, high exchange rates between the local RTGS Dollar and US Dollar, taxation levels, government policy on economic growth and growth in money supply which pushes up inflation rates. Furthermore the ongoing foreign currency shortages on the interbank market have had a negative impact on sales inquiries, rental payments and property sector buys. Property sales in Harare are generally indexed in the United States Dollar as a way to hedge against the local currency inflation. A snap survey in Harare central business district (CBD) shows that most office and industrial space has become vacant with occupancy levels below 60%.

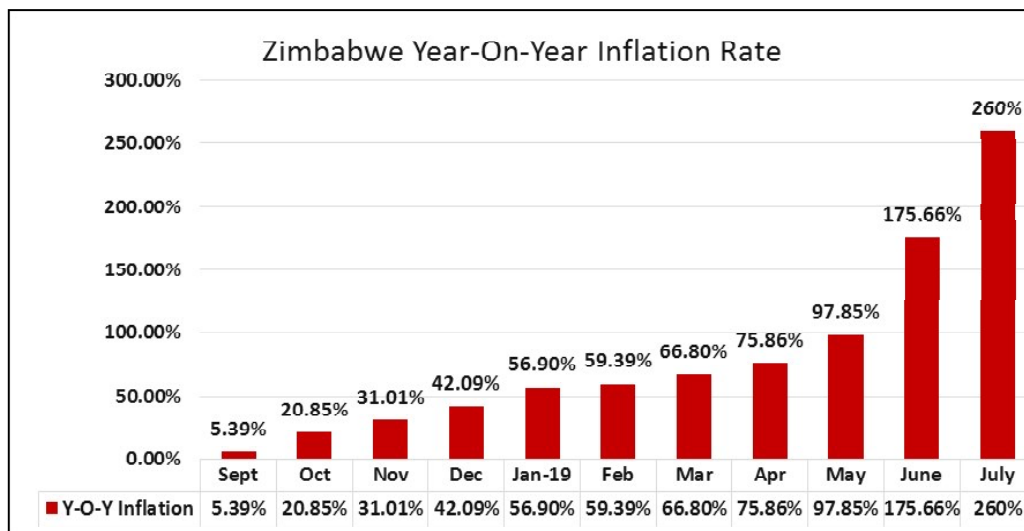


Figure 1.1: Zimbabwe Inflation Rate, ZIMSTATS (2019)

The growth in money supply in the Zimbabwean economy has caused a lot of headaches for the real estate sector. According to the RBZ MPS Report (2018), the aggregate money supply (M3) grew from \$4.3 billion as of October 2016 to over \$10.5 billion in October 2018. This growth was fuelled by the issuance of Treasury Bills and Bond Notes by the central bank to finance the budget deficit resulted in

the re-emergence of high inflation rates after the monetary policy statement of October 2018 from 5.39% in September to 20.85% in October. According to RBZ (2019), month on month inflation for January 2019 was 56.9%, rising to over 175% by June 2019. The inflation rate has been advancing by 37.5% every month since September 2018, thereby depreciating the value of the local Zimbabwean Dollar. Mackle (2017) points that the growth in inflation rate increases the cost of doing business for real estate sector players and decreases effective demand from residential buyers. High inflation rates also affect consumer buyer behaviour and lengthens the decision making process.

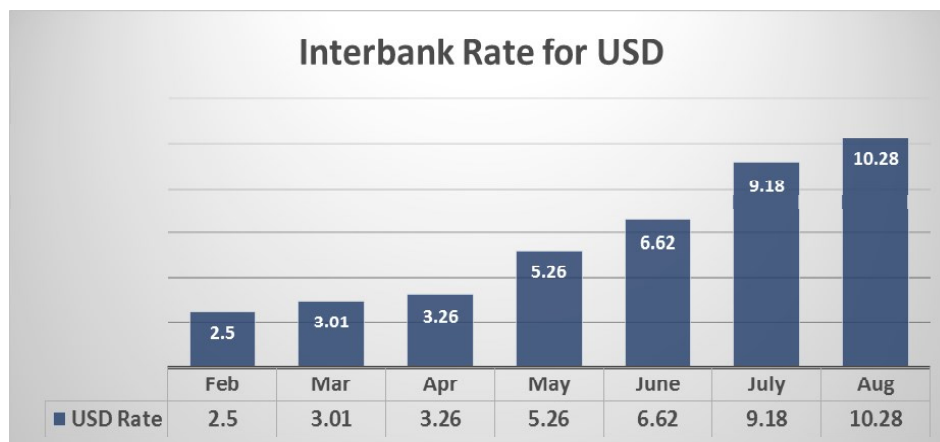


Figure 1.2: Interbank rate for the USD since Feb 2019_RBZ (2019)

Figure 1.2 above shows that the value of the Zimbabwean Dollar to the US Dollar on the interbank market has been falling from the February high of 2.5 to 10.28 as of August 2019. The fall in the exchange rate means that real estate customers need more units of the local currency to buy one unit of the US Dollar. This has a negative effect on property pricing and sales as property prices in Zimbabwe are generally indexed in the US Dollar.

1.1. Statement of the Problem

Due to the prevailing high exchange rates between the local Zimbabwean Dollar and the US dollar of more than Z\$127.6 (February 2022) on the interbank market where most business tenants and individual property buyers are supposed to buy foreign currency. Sales and rental payments in the real estate sector have drastically fallen in the past 12 months. According to REIZ (2018), occupancy levels for

commercial properties in Harare have declined to 60% for the first half of the year 2019 from 85% witnessed in the same period from 2013 to 2015. REIZ (2018) also points to similar trends in residential properties as most home seekers are relocating to semi-finished houses and buying own stands as opposed to renting. If this trend continues, the real estate sector in Harare may contract in its contribution to the overall economy. This threatens thousands of jobs and the viability of the whole economy. The investigation therefore sought to examine the impact of exchange rate fluctuations and property sector performance in Harare.

1.2. Research Objectives

The study sought to:

- i) Establish exchange rate fluctuations on the foreign exchange market,
- ii) Examine the performance of the real estate sector in Zimbabwe,
- iii) Assess the impact of exchange rate fluctuations on real estate sector performance.

1.3. Research Hypothesis

H₀: There is no relationship between exchange rate fluctuations and the performance of the real estate sector in Harare.

H₁: There is relationship between exchange rate fluctuations and the performance of the real estate sector in Harare.

2. Literature Review

Real estate is land, which is divided into properties. A property is bounded either horizontally or both horizontally and vertically (Lindholm & Nordback, 2017). On the property there may be one or more buildings. A building can either be fully owned by the landowner/property owner or it can be leased. A commercial real estate is composed of several tenancy agreements or lease contracts that yields recurring revenue. According to Geltner & Miller (2014), the commercial real estate market is divided into the space market and the asset market. An additional component in the real estate market is the commercial property development industry. The space market and the asset market are linked together by the development industry. Together they form the real estate system.

Real Estate investors have long been aware of the challenges of translating the returns of property investment into reliable time-series data (Fisher & Goetzmann,

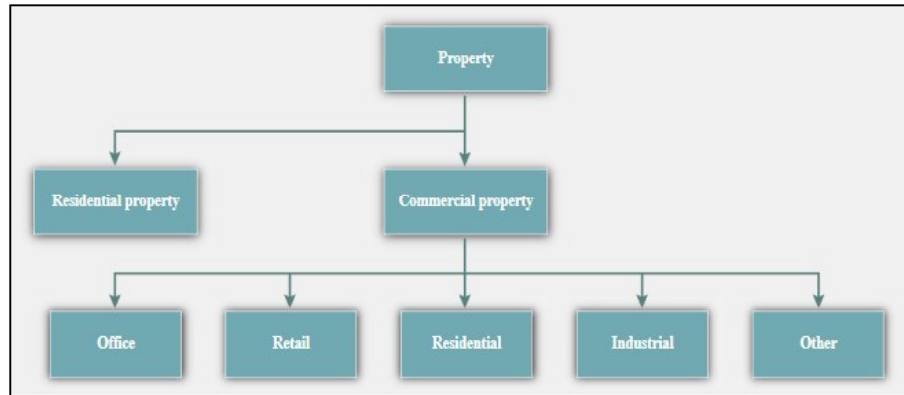


Figure 2.1: Commercial sector categories adopted from Miller (2015:245)

2015). Miller (2015) and UN European Report (2016) measure real estate performance by analysing return on asset.

2.2. Exchange Rate

Exchange rate is the price of one country's currency in relation to another's, (Evans, 2016). In the era of trade liberalization, appropriate policy mix that ensures an effective rate of exchange is imperative because its variation has economic implications. Variation in exchange rate is an important endogenous factor that affects economic performance, due to its impact on macroeconomic variables like outputs, imports, export prices, interest rate and inflation rate. A sound exchange rate policy and an appropriate exchange rate are crucial conditions for improving economic performance (Faver, 2018 Chang & Tan, 2018). In practice, however, no exchange rate is purely floating or completely determined by market forces. Recently there is an exchange rate system

Generally an exchange rate regime can be a free floating exchange rate system which is a system that allows the exchange rate to be determined by supply and demand (Hengan, 2017). On the other hand, a managed float is partly determined by the market forces and kept within range by the monetary authorities. The extreme being the fixed exchange rate which is a regime applied by a government or central bank that ties the country's currency official exchange rate to another country's currency or the price of gold (Smith, 2013). The purpose of a fixed exchange rate system is to keep a currency's value within a narrow band. The stiffness of fixed exchange rates might worsen the distortions which result from structural modifying

in economic activities. More recently the government of Zimbabwe introduced an auction system where the central bank regularly sells a given amount of foreign exchange through a bidding process and buys foreign exchange in the intervening periods at the previous auction-determined rate. An exchange rate thus has two components, the domestic currency and a foreign currency, and can be quoted either directly or indirectly. Exchange rate movements significantly affect the real estate market owing to its information content to the investors. When there are high fluctuations in the exchange rates, the exchange rates movement, there would be high movements of market return volatility. Some studies have concluded that there is a strong relationship between exchange rate movement and interest rates volatility (Ottoman, 2012; Faver, 2014; Smith, 2014), while others have not (Adam, 2015). Most exchange rates use the US Dollar as the base currency and other currencies as the counter currency. However, there are a few exceptions to this rule, such as the euro and Commonwealth currencies like the British pound, Australian dollar and New Zealand dollar (Monger, 2011).

2.2.1. Macro-economic Factors that affect Exchange Rates

The macro-economic factors are; real GDP, the unemployment rate, the inflation rate, the interest rate, the level of the stock market, and the exchange rate (Khalid *et al.*, 2012). The five common macro-economic factors; rate of inflation – affects prices for inputs and outputs in the short run and interest rates over the longer run in an economy, rates of interest– affects cost of capital which is the interest expenses hence property values, rate of unemployment– affects available income and hence disposable income for investments since this is an important source of internal equity capital, rate of growth in GDP– affects the domestic demand for national outputs, and rate of foreign exchange– affects the value of the currency relative to international currency hence affecting property values where different currencies are involved as well as the export demand for outputs. Exchange rates, like any other commodity, are based on supply and demand for particular forms of currency. Domestic currency supply changes as a result of a country's fiscal and monetary policies. Demand for currency can be influenced by a large number of factors, including interest rates, inflation, and views on impending government regulation. The continuing increases in the world trade and capital volatility have made the exchange rates as one of the main determinants of business profitability and the country's balance of payments (Kim, 2018).

2.3. Theoretical Framework

The predominant theories explaining the exchange rate determination include the Purchasing Power Parity theory (PPP) which equalises the purchasing power of two currencies by taking into account the cost of living and inflation differences (Taylor and Taylor, 2004). The general idea behind purchasing power parity is that a unit of currency should be able to buy the same basket of goods in one country as the equivalent amount of foreign currency, at the going exchange rate, can buy in a foreign country, so that there is parity in the purchasing power of the unit of currency across the two economies.

Interest Rate Parity (IRP) is another theory in which the differentials between the interest rates of two countries remains equal to the differential calculated by using the forward exchange rate and the spot exchange rate techniques, Davies (2013). Other theories explaining the determination of the exchange rate include Adam Smith's theory of absolute advantage and the Comparative advantage (Smith, 1776). The two theories look at resource endowment and comparative production costs as giving exchange rate differentials.

3. Methodology

A mixed approach was used in the investigation with a strong bias towards quantitative orientation as this philosophy is mainly embraced when reality is represented by objects that are considered to be real and the data collected about them are less open to bias and therefore objective, as in natural science experiments (Saunders et al., 2012). Thus the enquiry the relationship between exchange rate fluctuations and performance of the real estate sector. The study sought to investigate the cause and effect relationship between the independent variable (exchange rate fluctuations) and dependent variable (performance of the real estate sector). The research utilized the survey research design, by collecting data from the sampled respondents operating under real estate firms in Harare. Data was collected on the respondent's views about exchange rate movements and other factors that may be aligned to monetary movements in the local market. Information was presented in a quantitative format.

The target population for this research are real estate sector professionals operating in Zimbabwe's capital (Harare) and working under formally registered real estate firms. According to the Real Estate Institute of Zimbabwe (REIZ) report (2018), there were 20 fully registered and compliant real estate agents in Harare. The study therefore worked with a population size of 300 as informed by the REIZ

report of 2020 which specified registered and compliant real estate firms in Harare. The study adopted Yamane's (1967) simplified formula to determining the appropriate sample size of the research project. Using probability sampling where each compliant real estate firm had an equal chance of being selected, the researcher selected all the 20 registered and compliant real estate firms in Harare as specified by REIZ (2020) report. The sample size deduced was one hundred and seventy one (realised after the calculation below). The formula, with a 95 percent confidence level and a ± 5 percent level of precision is presented as follows:

$$n = \frac{N}{1 + N(e)^2}$$

Where: n = sample size

N = Population size (300)

e = Level of precision (5%)

The sample size from the population was calculated as follows:

$$\begin{aligned} n &= \frac{300}{1 + 300(0.05)^2} \\ &= 171 \end{aligned}$$

The sample of respondents from registered real estate firms operating in Harare was administered using stratified random sampling. Real estate professionals were divided into different strata based on their specialty i.e. Real Estate Agents (100), Property Valuers (30), Property Estate Supervisors (30) and Managers (11). The following instruments were used in the study; a questionnaire, interview guide and the documentary analysis guide. Primary data through administering direct survey questionnaires on the sampled respondents was used in the investigation. Secondary data was used in analysing REIZ reports, journals, past researches, articles, texts and studies done by other scholars on the topic real estate in Zimbabwe in the past 5 years. Bloomfield *et al.* (2017) point that primary data is data that is collected by a researcher from first-hand sources, using methods like surveys, interviews, or experiments. Data analysis was done using SPSS version 20. Normality tests were used to test whether data was normal (parametric) or non-normal (non-parametric) and Regression analysis was done to generate an equation to describe the statistical relationship between exchange rate fluctuations and real estate sector performance. Research ethics relating to moral standards considered in all research methods (Wakefield, 2014) were observed at all stages of the research design.

4. Findings and Discussions

This section presents, analyses and interprets the findings from the investigation, commencing with the response rate. This is followed by descriptive data analysis as well as regression and correlation analysis.

4.1. Response Rate

Table 4.1 Questionnaire Response Rate

<i>Sampled Respondents</i>	<i>Issued Questionnaires</i>	<i>Collected Questionnaires</i>	<i>Response Rate</i>
Real Estate Agents	100	78	78%
Property Valuers	30	23	77%
Property Estate Supervisors	30	20	67%
Property Managers	11	6	55%
Total	171	127	74%

Table 4.1 shows the response rate from the survey questionnaire distributed to different groups (strata) of the sampled population in the Real Estate sector. There were 100 Questionnaires for Real Estate Agents, 30 apiece for property Valuers and property estate supervisors and 11 for Property Managers. The highest response rate was amongst the real estate agents who responded to 78% of the questionnaires handed out. Property managers had the lowest response rate with only 55% of the questionnaires responded to. The overall response rate was 127 answered against 171 questionnaires and this resulted in a response rate of 74%. The overall high response rate of 74% was an indication of interest by the respondents on the problem being investigated. According to Mugenda and Mugenda (2003), a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. Willimack (2002) cited by Snijkers (2008) suggested that response rate in the range of 50-65% is considered credible for analysis. Baruch (1999) however advanced that there are no agreed norms as to what may be considered reasonable response rate (RR). The response rate was considered credible for further statistical analysis as it was above the minimum threshold of 60% recommended by Mugenda and Mugenda (2003) and Willimack (2002) cited by Snijkers (2008).

4.2. Descriptive Analysis

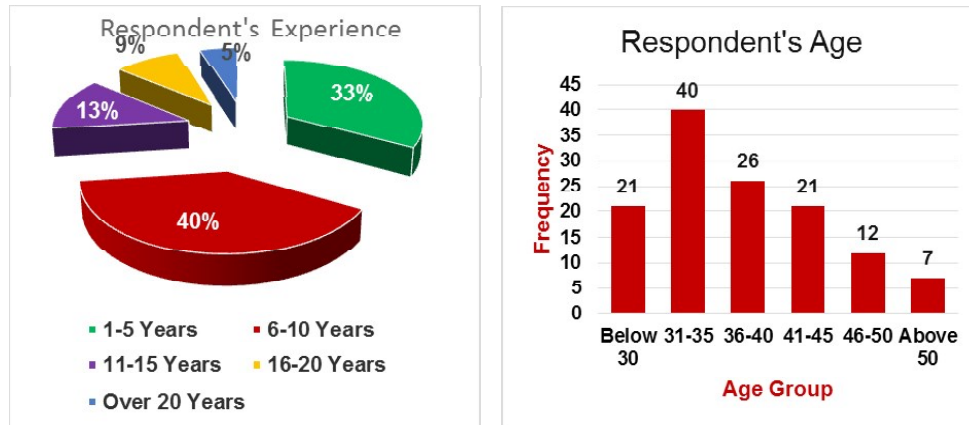


Figure 4.1: Respondent's Real estate experience and Age

Figure 4.1 shows the age groups and numbers for the respondents from the field of study. It can be observed that 78% of the respondents fall between the 31 to 50 age group which is considered the more economically active and employable for exposure reasons. Only 7 of the respondents are above 50 years of age. The dominance of the economically active group was also reflected in a study by Masika (2012) who found that 74% of Kenya's Real Estate sector professionals fell under the age of 45. Figure 4.1 also shows respondent's work experience in Real Estate Sector in Zimbabwe. The figures show that over 73% are in the below 10 years range which means that they entered the industry post 2009. There is however 5% which has weathered the storms and possess immense exposure in the sector with over 20 years experience. These respondents are more in supervisory and management positions at the surveyed firms.

4.3. Correlation Analysis

Cooper *et al.* (2009) pointed that correlation tests are conducted to determine how the variables correlate with each other and also how they each in turn correlate with the dependent variable, real estate sector performance in this case. This analysis further shows the direction of strength of the relationship thus, either positive or negative correlation. It can also be said to be weak or strong. Magnitude quantifies the depth or strength of the relationship between 2 or more variables in a study. Whether it's weak (between 0.1-0.3), moderate (0.3-0.5) or strong (>0.5) (Saunders *et al.*, 2012).

Table 4.2: Correction Statistics

		<i>Exchange Rate Fluctuations</i>	<i>Real Estate Sector Performance</i>
Exchange Rate Fluctuations	Pearson Correlation	1	-.589
	Sig. (2-tailed)		.000
	N	127	127
Real Estate Sector Performance	Pearson Correlation	-.589	1
	Sig. (2-tailed)	.000	
	N	127	127

Table 4.2 above show a strong negative correlation between exchange rate fluctuations and real estate sector performance in Zimbabwe with a Beta value (Pearson correlation = -0.589). In terms of the probability value of 0.00, it shows the two variables are dependent on each other. Real Estate sector was affected by exchange rate fluctuations. The results above are in line with findings from Lewin *et al.* (2014) who found out that exchange rate movements on the New York Stock were directly correlated to real estate sector performance in the city. The findings followed a series of observations on mortgage highs and lows in a space of 5 years from 2008 to 2013 in the city. It was observed that high exchange rates for the dollar discouraged investment into real estate development especially from foreign investment, hence the relationship was negative.

5. Summary of Findings

- The real estate sector is dominated by the economically active group (30 to 50 years of age). It can be observed from the findings that 78% of the respondents fall between the 31 to 50 age group which is considered the more economically active and mobile enough for property sector sales management.
- Exchange rate fluctuations have negatively impacted property sector investments and vacancy levels in Harare and Zimbabwe as a whole since the implementation of the interbank market. Thus performance has declined in 2019. The main determinant rate is the rate between the local Zimbabwean Dollar and the United States Dollar (US\$). The loss of value for the local unit means that property seekers or tenants have to use more units of the Zimbabwean Dollar to buy properties which are mainly indexed in the US Dollar.

- There is a statistically significant, strong and positive relationship between rental/property yield and exchange rate. When exchange rates for the local currency depreciate against the major currencies, rental yield for properties decline especially commercial properties.
- There is statistically significant, moderate and positive relationship between vacancy levels and exchange rate. When exchange rates for the local currency depreciate against the major currencies, vacancy levels for both commercial and residential property goes up as tenants or property investor buying power is reduced.
- There is a moderate, positive and statistically significant relationship exists between property sales and exchange rate. When exchange rates for the local currency depreciate against the major currencies, property sales for commercial and residential properties decline due to increase in exchange rate costs.

6. Research Implications

Results showed a negative correlation between exchange rate fluctuations and real estate sector performance as measured through sales, property yield, and return on investment as well as vacancy levels. It is imperative for players in real estate development to hedge their properties against possible exchange rate risks that may arise from any losses in the currency of trade. Exchange rate losses may be incurred midway through the transaction or after funding has been secured to develop properties.

The fall in disposable incomes as a result of inflation and exchange rate fluctuations bring loss of business to property sector players. In order to avoid perennial loss of business, real estate players should partner local commercial banks and building societies to offer semi completed residential or commercial properties that are affordable to the market and fetch a lower price on the market. This can yield a win-win scenario between the banks, the property holder, the buyer and the real estate firm.

Respondents strongly agreed that exchange rate fluctuations on the local market are mainly pushed by money supply growth which increases the demand for foreign currencies. In order to tame these fluctuations, Zimbabwe's central bank (RBZ) needs to manage money supply growth in line with economic growth so as to curb artificial demand for real estate from speculators who hedge against inflation and inflation property prices once demand picks.

The central bank therefore needs to effectively manage interest rates to levels that encourage investment in real estate while also minimizing the risk of speculative borrowing. High interest rates have a negative impact on property sector investment as they discourage borrowers from borrowing for onward investment.

Exchange rate volatility and fluctuations are a result of high demand for foreign currency on the interbank market or parallel market. There is need for the central bank to find ways to incentivise foreign currency holders to dump it on the formal market for the benefit would be property buyers and eliminate the cost of multi-tier pricing on the local market.

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