



## RELATIONSHIP BETWEEN PROPERTY TYPE-LOCATION DIVERSIFICATION AND PERFORMANCE OF REAL ESTATE INVESTMENT TRUSTS IN KENYA

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### Abstract:

The listed REITs have not performed as well as anticipated, and efforts by REIT management to issue further real estate securities have been delayed. This raised the question of whether the unexpected performance of REITs in Kenya was caused by external variables, including property diversification, which is out of the control of the investment market. Thus, the study sought to examine the relationship between property type-location diversification and the performance of REITs in Kenya. The target group included fund managers, stock brokers, investment banks, and property developers. A predictive correlational research design was used. At a 5% significance level, regression analysis was used to test the hypothesized relationship between variables. The results indicate that property type-location diversification has a significant relationship with the performance of REITs in Kenya. The findings also show that the location of properties is a very important aspect for REIT investors when it comes to property diversification. There was agreement among most respondents that diversifying REITs across location attributes reduces market risks. It can be concluded diversification of the REITs underlying property majorly in terms of geographic and economic influence performance of REITs in Kenya. Further, property diversification through the type of property is a key determinant in influencing the performance of REITs in Kenya. Thus, continued property-type location will enhance the uptake of REITs by investors. It is recommended that REITs issuers ensure that there is diversification of the properties to include multiple property types such as students' hostels, retail stores, hotels, and warehouses. Such a type of diversification is likely to attract potential investors who could be interested in properties with such diversification characteristics.

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JEL: G40, R30, C12, C51, L21

**Keywords:** property diversification, performance of REITs, investors

## 1. Introduction

According to Pham (2013), the real estate market has grown to become the second-largest investment option after fixed-income securities, but larger than the money market and equities. Real estate investment funds, property firms, and property securities funds make up the three most common kinds of listed property goods (Jakpar, 2018). One of the listed property assets, real estate investment trusts (REITs), have emerged as the top investment option for both retail and institutional investors. This has led to the focus of this study on real estate investment securities, which has made REITs a substantial asset class of investment alternatives for investors who may be looking for alternative investments. A REIT is a company registered that allows investors to pool money to buy a diverse portfolio of real estate assets. It is comparable to a mutual fund (Olanrele, 2014). REITs sell and invest directly in real estate via mortgage or property, similar to stocks on stock exchanges. Through REITs, investors who lack the resources to own real estate are offered the chance to participate in the real estate market (Cytton Investments, 2018). The current study's focus is on REITs since they give investors the ability to own a stake in either existing properties or newly constructed assets.

REITs generate revenue through rent, just like any landlord does. Frequently, a sizeable portion of this rent is paid out to investors in the form of dividends. Several factors influence the interest of investors in REITs' shares. The first benefit is that REITs trade like stocks, allowing investors access to real estate without requiring them to acquire and sell actual properties. Second, building owners might offer investors shares or units in commercial or residential properties through the capital market. Third, individual investors can own the real estate industry through REITs (Africa Business Communities, 2015; Cytton Investments, 2019). Fourth, income from REITs in terms of dividends is predictable since most rents paid by occupants are agreed upon prior to a lease agreement. Income REITs give investors an opportunity to invest in diversified properties such as shopping malls, warehouses, office blocks and hostels among others. REITs offer competitive returns to investors for the risks they assume. Fifth, since REITs are listed on the Stock Exchange, they can easily be converted into cash and hence enjoy a feature of high liquidity just as other financial securities traded in the bourse (Ndung'u & Kung'u, 2022). Through REITs, small and medium investors are accorded an opportunity to own real estate properties. This could not have been possible if they were to purchase properties directly since they would require huge sums of money (CAHF, 2017). According to Chang, Chen and Leung (2011), the growth of the REIT market is critical for investors and the real estate market. The authors opine that, since the underlying assets of REITs such as office building, commercial buildings, shopping malls, residential buildings, warehouses and tourism hotels, are diverse and widespread,

enhancing the growth of REITs market can spur economic growth. The current study sought to examine the benefits accruing from the performance of REITs in terms of uptake by individual and institutional investors in Kenya.

Daud, Ali, Sipan and Wilson (2012) assert that there exists a significant correlation between property location attributes and REIT return. This relationship could be supported by the fact that the return of REIT is determined strongly by the income derived from the properties (Alias & Soi Tho, 2011; Hwa & Rahman, 2007). In addition, REITs diversification across economic locations reduces risks and improves the performance of the REITs portfolio. As highlighted, the performance of the listed Income REIT has not been as expected since the first listing five years ago. In addition, efforts by other property developers to issue more Income and Development REITs have been unsuccessful as evidenced by the failure to meet the set targets and minimum listing requirements. There is a lack of information as to why this current situation exists. This prompted the question as to whether the unexpected performance has been a result of external factors outside market control such as property location and property type. Property diversification is a factor that is not under the direct control of the investment market but could majorly affect investment performance. Thus, the main objective of the study was to examine the relationship between property type-location diversification and the performance of Real Estate Investment Trusts in Kenya. Based on this objective, the study sought to test the null hypothesis ( $H_0$ ) that there is *no statistically significant relationship between property type-location diversification and the performance of REITs in Kenya*.

## 2. Literature Review

This section contains the reviewed literature relating to the topic under study on Real Estate Investment Trusts, property diversification and performance of REITs.

### 2.1 Global Perspective of the REITs Markets

Historically, the development of REITs markets began in the 1960s, when the United States of America Congress initiated the process of creating Real Estate Investment Trusts meant to provide access to affordable investments in commercial real estate properties (Oranlee, 2014). The introduction of REITs was based on the desire to help prospective investors who did not have huge amounts of money required to purchase real estate property but was willing and could buy REITs shares (Naidoo, 2014). Before the REIT regime was introduced in the US, individuals who have a high net worth, as well as institutional investors dominated the commercial property market. Retail investors were able to buy partial ownership of large income-generating real estate assets through REITs, while also receiving tax benefits (Pham, 2013). REITs have become significant investment vehicles among investors in many economies around the globe. This can be attested by a huge amount of investments in REITs sectors across many economies (Drew, 2016). Ernst and Young Global (2019) reported that the concept of REIT across the globe was still

gathering much pace, with over 37 economies having an active REITs market with an approximate market value of over 1.7 trillion US dollars. By the year 2018, the US had a REITs market value of 1.05 trillion US dollars while the number of REITs that were operating in the US stood at 226 by the end of 2018. The number of REITs operating in the US had fallen from 233 by the end of 2015. Furthermore, with a market capitalization of over US\$ 29.5 billion at the end of 2019, Welltower was the largest housing REIT on the US market. According to Statista (2019), by the year 2019, the top ten REITs in the world were all based in the United States. With a total market capitalization of US\$19.11 billion at the end of 2019, Boston-based American Tower was the world's largest REIT (Macro trends, 2020).

The key players in the Asia-Pacific REITs industry include; Japan, Hong Kong, Australia, and Singapore, as well as smaller economies like Taiwan, Malaysia, and Thailand. The launch REITs in Japan in 2001 sparked the growth of the REIT industry, which was quickly followed by Singapore, Hong Kong, South Korea, Taiwan, and Malaysia. Despite global economic uncertainty, Asian REITs became the most popular among investors. After the Global Financial Crisis, Asian REIT markets have delivered higher returns, lower risk, and better-adjusted performance than their respective securities' markets (Price Waterhouse Coopers, 2019). With 63 reported REITs and a market capitalization of 147.2 billion dollars, Japan's REIT market is the largest in Asia Pacific (Savills Research, 2019). By the year 2019, Asia-Pacific (APAC) REITs had grown to over 250 and combined market capitalization has swelled to reach over 330 billion US dollars (Vreeker, 2020). While new REIT markets were also expected to lead to further growth following approved legislation in India, the Philippines and Thailand, China is still in progress. PWC (2019) observed that the eventuation of REITs in China would be relatively unique in having a strong showing of residential REIT products in addition to the usual office building and shopping mall-themed ones. In late April 2020, China launched a REIT trial, which would initially concentrate on pooling capital to finance infrastructure projects such as highways and airports. According to Bloomberg (2020), the success of the program exposed individual investors to a market potentially worth as much as \$3 trillion in the future. Such successes provide positive lessons for other economies such as Kenya. In the Gulf region, the first economy to allow the introduction of REITs was Dubai. When REITs law came into place in the year 2006, the REITs were allowed by the law to manage and own real estate property portfolios. Abu Dhabi, Saudi Arabia, Oman and Bahrain followed suit in the introduction of REITs markets from the year 2015. Overall, the United Arab Emirates has a REIT market capitalization of more than 800 million dollars, which represents only 3% of the total value of the listed real estate firms. On other hand, the equivalent figure in economies such as the United States and the United Kingdom is around 80% (Global Ethical Banking, 2019).

## **2.2 Development of REITs Markets in Africa**

The REIT regime in South Africa was enacted in May 2013. The legislation established two distinct types of REITs: Trust REITs and Company REITs. The specifications and

rules for the Johannesburg Stock Exchange listings, govern the SA-REITs in line with global standards. In their REITs structure, rental income must account for at least 75 percent of the annual earnings. Shareholders receive at least 75% of non-taxable taxable income at the end of the year. At the company level, other income is taxed at a rate of 28 percent. South Africa's real estate market is considered mature in comparison to other African countries (EPRA, 2013). There are about 23 active REITs in South Africa, with a total market capitalization of around 26.1 billion US dollars (Cytonn Investments, 2019). The Nigerian Securities Exchange Commission adopted the Investment and Securities Act in 2007, which regulates the REIT scheme. Nigerian REITs are asset-backed securities that are structured as closed-end or open-end trusts. To qualify for tax-exempt status, N-REITs must have at least 100 unit holders and a minimum share capital of US\$ 6.18 million at the time of the initial public offering (Nigerian Stock Exchange, 2014). 70 percent of open-end REITs must be made up of real estate asset groups. Closed-end REITs' real estate properties, on the other hand, must account for at least 75% of the total asset value. Both are limited to holding domestic real estate asset groups. At least 75% of annual revenue must come from mortgage rent and property sales. Only three REITs are listed in Nigeria, with a total market capitalization of about 151 million US dollars (Press Reader, 2019).

The REIT law was adopted in 1994 by the Ghanaian Stock Exchange Commission. The first company to implement the REIT system was Housing Finance Company Bank in 1995. Since then, Ghana's REIT market has remained relatively undeveloped. HFC-REIT is an open-end fund that invests in both residential and commercial real estate. The REITs' main operation is to invest pooled funds in the growth of the real estate and real estate firm capital markets. The initial investment is limited to \$15 US dollars (Bunten, 2015). According to the Oxford Business Group (2019), Ghana, the oldest REIT market in the region has one listed REIT with a market capitalization of an estimated 11 million US dollars. In 2011, Tanzania enacted regulations on collective investment schemes and REITs. According to the Collective Investment Schemes, only close-ended structured funds are authorized by the CMA. Under Rule 51 of the Tanzania Collective Investment Schemes, REIT investments in real estate must surpass the value of the total assets (CMSA, 2011). Watumishi Housing Company (WHC-REIT) established in the year 2014, is the only residential REIT in Tanzania. As a property developer, WHC-REIT is the major implementer of the Tanzanian Public Scheme which is tasked with ensuring over 50,000 affordable housings units are built in phases. Once the houses are complete, they are sold to civil servants, private sector employees and members of pension funds in Tanzania. The houses are sold under hire purchases cum rent-to-own or mortgage arrangements (Watumishi Housing Company, 2019). According to Oxford Business Group (2019), WHC-REIT had an industry value of approximately 40 million US dollars. Despite the introduction of REITs regulation in the Republic of Rwanda, no REIT has been registered in that jurisdiction to date. Similarly in Uganda, the establishment of REITs regulations was done in 2017 but to date, no REIT has been registered (NAREIT, 2019).

### **2.3 Development of the REITs Markets in Kenya**

In Kenya, the cost of financing for the growth of the property industry has remained high due to the undersupply of houses for the lowest segment of the economy. The significant costs linked with the development or financing of housing units for the lower segment of the market have made the attainment of this goal extremely difficult. REITs can enhance liquidity in the capital markets and also help raise money to finance affordable housing projects (Ndung'u & Onyuma, 2020). The Nairobi Securities Exchange has introduced innovative products to boost its market capitalization and grow its number of listed securities. Among the products that have been introduced include SMEs listing segments known as Growth Enterprise Market Segment (GEMS). An incubation and acceleration program for firms with growth prospects known as Ibuka has also been established. Further, derivatives, financial instruments which derive value from underlying assets have been introduced as well as REITs. The introduction of REITs was one of the initiatives which were meant to grow the NSE listings. The Capital Markets Authority established the REITs regulations in the year 2013. Stanlib Fahari Income-REIT (FAHR) was the first real estate security to be listed in the Nairobi Securities Exchange through a public offering in 2015. The launching of REIT structures was meant to bolster financial inclusion in the capital market. The platform was met to offer prospective investors a chance to make investments in real estate properties without the requirement of huge capital. In return, the investors would enjoy distributable income or dividends from the issuing firm. The objective of establishing a REIT market was to ensure that the investors benefited from income and capital appreciation of the diversified portfolio invested with the pooled funds. The REITs market was also to create a liquid of immovable properties. In, Kenya the REITs are structured as trusts as opposed to companies (CMA, 2019).

### **2.4 Performance of REITs in Kenya**

REIT performance analysis has become significant since investors are getting attracted to these asset classes and are examining REITs performance. Since Stanlib Fahari Income REIT was issued, its performance upon registration was very low (29 percent) uptake of Ksh. 3.6 billion, as opposed to the Ksh 2.6 billion to Ksh 12.5 billion that was anticipated. The I-REIT shed almost 50 percent of its value since the listing while the share price remained in the range of Ksh 9 and Sh14 (Rich, 2019). In the year 2016, Fusion Capital, a property developer, attempted to list a Ksh 2.3 billion Development REIT, however, the listing was unsuccessful. Fusion Capital only met the minimum criteria of seven investors and only received a 38 percent subscription, totaling Ksh 873 million. The company wanted to utilize the listing's revenues to fund the construction of Greenwood City, a mixed-use project in Meru County (Crested Capital, 2016). Fusion Capital quit the D-REIT and opted to raise the money privately. The failure of the Stalib I-REIT and Fusion Capital D-REIT to meet the minimum subscription and investor requirements is a clear indication that there is low performance and uptake of REITs. This was a focal aspect that the current study sought to examine. Additionally, the Real Estate Investment Trust (REIT) offering by student housing developer Acorn Holdings in February 2021 only

managed to garner Sh2.1 billion from investors, falling short of its Ksh7.5 billion target. Investors had the choice between two REITs offered by Acorn: one specialized in the construction of student dormitories, and the other offered income from finished units (Khusoko, 2020). I-REIT generated a profit of Ksh 1.4 billion, while D-REIT generated a profit of Ksh 641.5 million (Accorn Holdings, 2021). The most recent undersubscribed REIT is Acorn Holdings REIT, which is noteworthy for the current analysis because it indicates a lack of interest among investors in the new investment vehicles.

## **2.5 Property Type-Location Diversification and Performance of REITs**

REITs are classified either as diversified into many sectors of property or as concentrated only in a single sector of property. This is inclusive of commercial, retail, hospitality, healthcare, manufacturing, and other examples of property sectors. Using panel regression, Ooi and Liow (2004) looked at the performance of real estate stocks in rising Asian economies including Indonesia, Malaysia, South Korea, Singapore, Hong Kong, Thailand, and Taiwan. The analysis found that over time, the risk-adjusted returns of real estate stocks differed across various markets. The performance of real estate equities was significantly affected by market diversification. The study asserts that the geographic locations of properties, as well as the property types, were important determinants in explaining residential REITs' performance. In this study, the product market component of REITs was the focus of the diversification analysis. In this context, a REIT can target a variety of property types to make up its portfolio or it can concentrate on a single type of property.

Dynamic relationships between REIT sub-sectors and diversification in the USA from 1990 to 2008 were examined by Chong, Krystalogianni, and Stevenson (2012). The methodology used in the study was GARCH-DCC. Less than 10% of equity REITs were identified as being diversified, and there was a classification of REITs that specialized in a single property type, according to the survey. While their study used the GARCH model, the current study employed SEM in examining these correlations. Further, their study was conducted in mature REITs markets while the current study focused on a nascent REITs market. In addition, their study emphasized Equity REITs rather than Development REITs. Apart from Equity REITs, the current study also focused on D-REITs which were significant real estate security in spurring the development of projects. Furthermore, their study was inclined towards correlation dynamics between REIT sub-sectors and their effect on diversification while this current study assessed the correlations between property diversification and the performance of REITs with a minimal inclination towards testing correlations across property types and locations.

From 1997 to 2006, Ro and Ziobrowski (2009) looked at how property specialization or diversification affected the value of US equity REITs. The Fama French three-factor model with momentum and CAPM were both used in the study. Their research indicates that REITs have a strong propensity to seek out a specific type of property. They came to the conclusion that there was no proof of better performance connected with specialized REITs after doing their analysis. According to their

assessment, specialised REITs were more susceptible to market risk than diversified REITs. Their study used different methodologies from what this current study employed. Similar to the previous study, the current study assessed whether specialized real estate investment trusts (REITs) in a specific property type outperform diversified REITs by utilizing structural equation modelling to successfully test the predicted relationships. Further, the study concluded that specialized REITs outperform diversified REITs associating superior performance with superior management expertise. However, diversified REITs could have been failing to perform as expected due to other factors other than management expertise such as the quality and type of the underlying assets which their study overlooked. The current study examined investors' opinions on the correct valuation of the underlying properties. Further, the study assessed investors' opinions on the diversification aspect of the diversified property whether in commercial or residential REITs.

In their study, Benefield, Anderson and Zumpano (2009) did a comparison where they evaluated whether those REITs that were diversified by property type differed in performance from those REITs that were specialized in a particular property in the USA. Data collected covered the period 1995 to 2006 while the sample size comprised 75 equity REITs, Performance was also measured using Jensen Alpha, Treynor Index, and Sharpe ratio. The findings demonstrated that property-type diversified REITs outperformed similarly diversified REITs in terms of performance. The diversified property type REITs were more in office properties than retail properties limiting the generalization of the results. The current study also examined whether diversified REITs outperformed single specialized REITs in the context of commercial and retail properties.

Using data from 10 years, Jalil, Mohammad, and Chai (2018) investigated the impact of location factors on the performance of REITs in Malaysia (2006-2015). They used trend analysis and Pearson correlation in their analysis. According to the study, economic diversification is more effective than the more common geographical diversification strategy. As opposed to operational performance or investor uptake, the study focused more on the impact of location attributes on the financial performance of REITs. Additionally, based on the results of the correlation coefficients, Anderson, Liang, and Shain (2001) hypothesized that the diversification of REITs across economic locations had a significant impact on the performance of REITs. They discovered that the location of the property has a significant role in determining the real estate's rent levels, indicating a significant correlation between the location of the properties the REIT issuing company invests in and the performance of the REIT. Similarly, this study extended their works using a different methodological approach in a bid to make inferences on the relationship between location attributes and REITs' performance.

Rohaya and Hishamuddin (2015) examined the relationship between property location and the performance of REITs in various Malaysian REITs, the study found that there was deferring unattractiveness among Malaysian REITs as a result of the difference in property locations. Similarly, Newell and Osmadi (2009) indicated found that property location was a significant determinant of the performance of REITs since the difference

in REITs' property type may lead to a difference in performance. Further, the study concluded that the type of the underlying asset is a significant determinant of REITs' performance. For instance, REITs that concentrate on a single type of property in their portfolio typically have significantly higher levels of liquidity than REITs that concentrate on a variety of property types (Danielsen & Harrison, 2007). These studies focused more on economic locations as opposed to geographic locations. The current study examined both the influence of economic and geographic locations on REIT's performance. The study also extended their work by examining whether REITs which are specialized in a single type of property performed well than those that targeted multiple property types in the Kenyan market.

Anderson, Randy, Liang and Shain (2001) pointed out that compared to geographical locations; the economic location is the alternative effective approach to constructing the property portfolio. In their analysis, Tiong and Jalil (2015) explicitly stated that factors related to property location, such as rental income, occupancy rates, and proximity to the property from the CBD, did not statistically significantly affect the financial performance of Malaysian REITs. The results revealed that most Malaysian REITs companies had their underlying properties in those areas which were crucial in adding value to their business majorly, including the CBD in Kuala Lumpur. Likewise, In Kenya, the underlying properties of the Kenyan REIT company (Stanlib Fahari) were mainly located in Nairobi. Other REITs finance properties such as the students' hostel by Arcon holdings- a property developer was in the outskirts of Nairobi. The choice of the location by the property developer could be value-oriented in terms of the target clientele. These REIT issuing companies could have chosen such locations for their underlying properties since those areas are crucial in adding value to their business. The current study assessed whether the economic and geographic location of such properties enhanced the uptake of REITs among investors.

Thus, the property location whether geographic or economic, was a significant factor that could enhance the performance of REITs in Kenya. From the reviewed literature, it was important to consider diversification in property influence on REITs' performance. This study, therefore, established a similarity in the findings of these studies with Kenyan REITs. Further, although most of the studies concerning the effect of diversification related to diversification by REITs across developed economies, there was scanty literature on investors' concerns in real estate securities, about the diversification of REITs, in developing economies such as Kenya. This was the gap that this study sought to address.

### **3. Data and Methodology**

To ascertain whether there were any predictive correlations between the factors, the study used a correlational research design. Gall, Gall and Borg (2007) assert that predictive correlational designs are appropriate for studies that seek to use two quantitative variables in the prediction of relationships. The target population comprised

twenty-seven Fund Managers, twenty-five Stock Brokers and Investment Banks, seventy-nine Property Developers, four corporate members of the REITs Association of Kenya and one listed REIT at the Nairobi Securities Exchange. A representative sample size was established using stratified random sampling. Because the target population, which consisted of important players in the REITs business, was separated into sub-groups based on their homogeneity, stratified random sampling was the most suitable method for this study. Structured questionnaires were utilized to obtain the primary data. Through pretesting, the data instrument's reliability and validity were confirmed. Descriptive statistics such as mean and percentages were used to summarise data while inferential statistics such as correlation were used to test non-causal relationships while regression analysis was used to test a causal relationship or hypothesised relationship at a 0.05 significance level. Exploratory Factor Analysis (EFA) was utilized to determine the degree of independence and convergence of the constructs as they related to the study.

#### 4. Results and Discussions

This section presents the results of the study and the discussion there off.

##### 4.1 Property Type- Location Diversification

The respondents were asked to rate how much they agreed with statements about property type- location diversification on a scale of one to five. Table 1 shows the results.

**Table 1:** Property Type-Location Diversification Descriptive Results

Statements	Strongly Agree - 5 (%)	Agree - 4 (%)	Moderate - 3 (%)	Disagree - 2 (%)	Strongly Disagree - 1 (%)	Mean
The location of properties is a very important consideration for REIT investors.	29.5	33.7	25.9	9.0	1.8	3.798
The nature of the location of the property depends on the economic activities at these locations.	18.7	36.7	25.3	14.5	4.8	3.5
Diversification of REITs portfolios on locations enhances REIT return.	21.7	38.0	22.9	10.2	7.2	3.568
Diversifying REITs across location attributes reduces market risks.	12.7	36.1	23.5	17.5	10.2	3.236
Current and new tenants are opting to move to new phases in the established malls to tap into existing clientele rather than open shops in new retail centres.	16.3	27.7	25.3	14.5	16.3	3.135

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REIT that targets multiple types of properties to compose their portfolio perform better.	15.7	22.9	28.9	21.7	10.8	3.11
REIT that focusses on only one type or one property perform better.	31.3	30.1	21.7	13.3	3.6	3.722
Different property types have a varying performance which depends on property nature.	24.7	29.5	26.5	12.7	6.6	3.53
Those REITs which are specialized in a single type of property perform better than those that target multiple property types.	28.9	33.7	22.9	6.6	7.8	3.69
As the level of diversification increases, the return on assets do.	32.5	30.1	21.7	13.9	1.8	3.776
Commercial REITs (REITs specializing in malls, offices, retail stores, hotels, warehouse) perform better than Industrial REITs (REITs specializing in warehouses and industrial properties).	25.3	33.1	24.1	12.7	4.8	3.614
Residential REITs (REITs specializing in apartment buildings, students' hostels) perform better than commercial REITs (REITs specializing in malls, offices, retail stores, hotels, warehouse).	27.1	24.7	30.7	9.6	7.8	3.534
REITs' systematic risk is influenced by the property types they invest in.	21.7	31.3	29.5	10.8	6.6	3.504
One of the most appealing investment characteristics for REIT investors is the quality of the underlying properties.	21.7	34.9	26.5	12.0	4.8	3.564

**Source:** (Author, 2022).

According to Table 1, most respondents (63.2%) agreed that the location of properties is a very important aspect for REIT investors when it comes to property diversification. Additionally, 29.5% of the respondents were in strong agreement with this statement (mean=3.79). The results are consistent with those of Rohaya and Hishamuddin (2015) who examined the relationship between property location and the performance of REITs in various Malaysian REITs and found that there was deferring unattractiveness among Malaysian REITs as a result of the difference in property locations. Additionally, Tiong and Jalil (2015) found out that most Malaysian REITs companies had underlying

properties in those areas which were crucial in adding value to their business majorly, including the CBD in Kuala Lumpur. There was agreement among most respondents (55.4%) that the nature of the location of the property depends on the economic activities at these locations with 25.3% of the respondents holding a moderate opinion (mean=3.50). The findings are consistent with those of Wang and Zhou (2021) who found that there is a significant association between the economic-geographic location of underlying assets and the choice of investment among investors in China. This implies that investors put into consideration the economic and geographic location of underlying assets while investing in real estate financial securities such as REITs. Most respondents (59.7%) agreed that diversification of REITs portfolios on locations enhances REIT return while 22.9% showed neutrality in opinion (mean=3.56). The results agree with those of Zhu and Lizieri (2020) who reported that maintaining REITs' location risks can be used by investors in the construction of portfolios. This implies that portfolio construction and asset allocation can be enhanced by spreading location risks.

There was agreement among most respondents (48.8%) that diversifying REITs across location attributes reduces market risks with 23.5% indicating moderate opinion on this statement (mean=3.23). Anderson, Randy, Liang and Shain (2001) maintain that compared to geographical locations; the economic location is the alternative effective approach to constructing the property portfolio. A fair majority (44%) agreed that current and new tenants are opting to move to new phases in the established malls to tap into existing clientele rather than open shops in new retail centers. Additionally, 25.3% held moderate opinion while 30.8% disagreed (mean=3.13). Most respondents (38.6%) agreed that REITs that target multiple types of properties to compose their portfolio perform better. Moreover, 32.5% disagreed with this statement while 28.9% showed neutrality (mean=3.11). According to the majority of respondents (61.4%), there was agreement that REITs that focus on only one type or one property perform better with 21.7% holding a neutral opinion (mean=3.72). A fair majority of respondents (54.2%) agreed that different property types have varying performance which depends on the property nature while 26.5% held a neutral opinion on the statement (mean=3.53). The results are consistent with those of Chong, Krystalogianni and Stevenson (2012) evaluated dynamic correlations between REIT sub-sectors and diversification in the USA and found that less than 10% of equity REITs were classified as diversified, and there was a predominance of specializing REITs in a single property type.

There was agreement among most respondents (62.6%) that those REITs which are specialized in a single type of property perform better than those that target multiple property types (mean=3.69). Further, 62.6% of the respondents were in agreement that as the level of diversification increases, the return on assets does while 21.7% held a neutral opinion regarding this statement (mean=3.77). There was agreement from most respondents (58.1%) that REITs specializing in malls, offices, retail stores, and hotels perform better than REITs specializing in warehouses and industrial properties (mean=3.61). The majority of respondents (51.8%) were in agreement with the statement that REITs specializing in apartment buildings and student hostels perform better than

REITs specializing in malls, offices, retail stores, hotels, and warehouses. Additionally, 30.7% of the respondents held a neutral opinion on this (mean=3.53).

There was agreement among most respondents (53%) of the respondents that REITs' systematic risk is influenced by the property types they invest in with 29.5% holding a neutral opinion (mean=3.50). The results show consistency with those of Mariya, Corbitt, Stacy and Emily (2019) who found that idiosyncratic risk was greater in those REITs which had bottommost previous returns than those with greater previous returns in the USA. In this scenario, investors require compensation for assuming firm-specific risks in form of lower premium risk. Most respondents (56.6%) agreed that one of the most appealing investment characteristics for REIT investors is the quality of the underlying properties. However, 26.5% held a neutral opinion on this statement (mean=3.56). The results are in agreement with those of David and Bing (2019) found that underlying assets liquidity and characteristics were associated with REIT return in the USA. Such characteristics include the physical layout of the underlying asset and ease of liquidity. Similarly, Block (2012) reported that unique attributes in property types enhance the profitability of the properties depending on occupancy rates and tenants' quality.

#### 4.2 Performance of REITs

Respondents were asked to indicate their level of agreement on a series of statements about REIT performance. Table 2 presents the findings.

**Table 2:** Performance of REITs Descriptive Results

Statements	Strongly Agree - 5 %	Agree - 4 %	Moderate - 3 %	Disagree - 2 %	Strongly Disagree - 1 %	Mean
There has been an increase in the number of investors subscribing to REITs due to adequate investor awareness.	26.5	39.2	25.3	7.2	1.8	3.814
REITs have continually offered easy access to the real estate property market at relatively low transaction costs.	25.9	47.6	22.3	3.0	1.2	3.94
There is growth in residential projects (students' hostels) being funded through REITs.	28.3	36.7	30.1	4.2	0.6	3.876
There is a growing demand among property developers' investment managers (Promoters of REITs) to issue Development REITs meant to diversify real estate funding.	22.3	34.3	26.5	13.3	3.6	4.192
appetite for REITs has grown since the value of real estate properties	33.1	37.3	20.5	7.2	1.8	3.924

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keeps on appreciating thus minimizing the risks of capital loss.						
REITs uptake have attained a critical mass necessary to create liquidity in the capital market.	25.9	22.3	31.3	15.7	4.8	3.488
Real estate indices in Kenya are quite high.	15.1	26.5	35.5	13.9	9.0	3.248
Investments in REITs have delivered strong long-term total returns to investors.	25.9	37.3	22.9	10.8	3.0	3.72
There has been increased competitive price discovery for residential properties (apartments) occasioned by REITs backed real estate projects.	24.1	39.2	27.1	9.0	0.6	3.772
There has been increasingly competitive price discovery for commercial properties (warehouses, offices, malls, shops) occasioned by REITs backed real estate projects.	28.3	33.7	28.3	9.6	0	3.804
Due to rental defaults and low occupancy rates, REIT returns have declined, resulting in low earnings.	20.5	44.6	25.3	8.4	1.2	3.748
REITs have delivered competitive returns thus attracting more institutional investors.	17.5	28.9	31.9	15.7	6.0	3.362
REITs have delivered competitive returns thus attracting more retail investors.	19.3	27.7	24.1	19.3	9.6	3.278
REITs have provided investors with portfolio diversification since investors can now invest in a diverse portfolio containing residential buildings, office blocks, industrial facilities and shopping malls.	14.5	25.9	33.1	19.3	7.2	3.212
REITs have been recording increased dividend yields.	16.9	19.3	36.1	18.1	9.6	3.158

Source: Author, 2022.

The findings in Table 2 show that most respondents (65.7%) agreed that there has been an increase in the number of investors subscribing to REITs due to adequate investor awareness (mean=3.81). Most respondents (73.5%) agreed that REITs have continually offered easy access to the real estate property market at relatively low transaction costs (mean=3.94). Most respondents (65%) agreed, that there was growth in residential projects (students' hostels) being funded through REITs (mean=3.87). A simple majority (56.6%) of respondents agreed that there was a growing demand among property developers and investment managers (promoters of REITs) to issue Development REITs meant to diversify real estate funding (mean=4.19). Most respondents (70.4%) agreed that the appetite for REITs had grown since the value of real estate properties kept on

appreciating thus minimizing the risks of capital loss (mean=3.92). A fair majority of the respondents (48.2%) agreed that REITs uptake had attained a critical mass necessary to create liquidity in the capital market (mean=3.48). Most respondents (41.6%) agreed that real estate indices in Kenya were quite high (mean=3.24). There was agreement among most respondents (63.2%) that investment in REITs had delivered strong long-term total returns to investors (mean=3.72).

Additionally, 63.3% of the respondents agreed that there has been increasingly competitive price discovery for residential properties (apartments) occasioned by REITs-backed real estate projects (mean=3.77). A majority of respondents (62%) agreed that there has been increasingly competitive price discovery for commercial properties (warehouses, offices, malls, shops) occasioned by REITs backed real estate projects (mean=3.80). The majority of the respondents (65.1%) agreed that due to rental defaults and low occupancy rates, REIT returns have declined, resulting in low earnings (mean=3.74). Most respondents (46.4%) agreed that REITs have delivered competitive returns thus attracting more institutional investors (mean=3.36). A small majority of the respondents (47%) agreed that REITs have delivered competitive returns thus attracting more retail investors (mean=3.27). Additionally, most respondents (40.4%) agreed that REITs have provided investors with portfolio diversification since investors can now invest in a diverse portfolio containing residential buildings, office blocks, industrial facilities, and shopping malls (mean=3.21). Further, 36.2% of the respondents agreed that REITs have been recording increased dividend yields while 36% of the respondents held a neutral opinion (mean=3.15).

### 4.3 Exploratory Factor Analysis

In order to extract a few key factors from a big number of variables and use them to explain the variance seen in the larger number of variables, one method is to use factor analysis to discover factors among observable variables (Hair, Black, Babin, Anderson & Tatham, 2006). Principal component analysis was employed to check if items extracted through EFA were related. The component matrix factor loadings for property diversification are shown in Table 3.

**Table 3: Component Matrix for Property Diversification**

	Component
	1
PD1-Diversification of REITs portfolios on locations enhance REIT return.	.707
PD2-Diversifying REITs across location attributes reduces market risks.	.774
PD3-Current and new tenants are opting to move to new phases in the established malls to tap into existing clientele rather than open shops in new retail centres.	.836
PD4-Different property types have varying performance which depends on the property nature.	.753
PD5-Commercial REITs (REITs specializing in malls,	.731

offices, retail stores, hotels, warehouse) perform better than Industrial REITs (REITs specializing in warehouses and industrial properties).	
PD6-Residential REITs (REITs specializing in apartment buildings, students' hostels) perform better than commercial REITs (REITs specializing in malls, offices, retail stores, hotels, warehouse).	.796
PD7-One of the most appealing investment characteristics for REIT investors is the quality of the underlying properties.	.799

Source: Author, 2022.

As shown in Table 3, the loadings of the factors range from 0.707 to 0.836 which suggested high convergence since they were above 0.7 and thus perfectly related to a factor pattern. Only seven items have a recommended threshold of 0.7. Hence, the items were employed in further analysis. Further, as presented in Table 4, the component matrix factor loadings for the performance of REITs ranged from 0.728 to 0.817. The results show that five items passed the 0.7 loading threshold and were thus retained for the study.

**Table 4:** Component Matrix for Performance of REITs

	Component
	1
RP1-There is growth in residential projects (students' hostels) being funded through REITs.	.728
RP2-Appetite for REITs has grown since the value of real estate properties keeps on appreciating thus minimizing the risks of capital loss.	.798
RP3-There has been an increased competitive price discovery for residential properties (apartments) occasioned by REITs backed real estate projects.	.746
RP4-There has been an increased competitive price discovery for commercial properties (warehouses, offices, malls, shops) occasioned by REITs backed real estate projects.	.817
RP5-REITs returns have decreased due to rental defaults and low occupancy rates which have yielded low income.	.737

Source: Author, 2022.

#### 4.4 Hypothesis Testing

The results in Table 5 show that the R<sup>2</sup> was 0.301. This means that property type-location diversification accounts for 30.1 percent of the variation in performance of Real Estate Investment Trusts in Kenya. Further, the non-causal relationship between property type-location diversification and performance of REITs was positive ( $r = 0.559$ ,  $p < 0.05$ ). This implies that when property type-location increases, the performance of REITs increases. If properties are diversified in terms of economic locations and property type, this is likely to enhance the uptake of REITs among investors.

**Table 5: Model Summary with Property Type-Location Diversification as a Predictor**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.549 <sup>a</sup>	.301	.297	.60425	.301	70.781	1	164	.000
a. Predictors: (Constant), Property Type-Location diversification									
c. Dependent Variable: performance of REITs									

Source: Author, 2022.

The results in Table 6 show that the causal relationship between property type-location diversification and the performance of REITs in Kenya is positive and statistically significant ( $\beta=0.427$ ,  $p<0.05$ ) in Table 4.56. This means that increasing property type-location diversification by one unit, improves REIT performance in Kenya by 0.427 units. *As a result, the study failed to accept the null hypothesis ( $H_0$ ), concluding there is a statistically significant relationship between property type-location diversification and the performance of REITs in Kenya.* The results are consistent with those of Badji, Benetti, and Guimaraes (2021) who examined the diversification advantages of European REITs. The findings indicated that diversification of underlying assets was significant in influencing the performance of REITs. The results are in agreement with those of Ooi and Liow (2004) who assert that the geographic locations of properties, as well as the property types, were important determinants in explaining residential REITs' performance. Additionally, Newell and Osmadi (2009) found that property location was a significant determinant of the performance of REITs since the difference in REITs' property type may lead to a difference in performance. The results also agree with those of Jalil, Mohammad and Chai (2018) who found that diversification by economic location attributes influences the performance of REITs in Malaysia. Further, from the current findings, it can be implied that property diversification plays a significant role in portfolio formation and the minimisation of portfolio risks.

The following regression model was fitted;

$$\text{Performance of REITs} = 2.344 + 0.427 \text{ Property Type-Location Diversification}$$

**Table 6: Coefficients with Property Type-Location Diversification as a Predictor**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.344	.182		12.860	.000
	Property Type-Location Diversification	.427	.051	.549	8.413	.000
a. Dependent Variable: Performance of REITs						

Source: Author, 2022.

## 5. Conclusion

Property diversification has a substantial influence on the performance of Real Estate Investment Trusts in Kenya, according to the findings. The location of properties is a very important aspect for REITs investors when it comes to property diversification. The nature of the location of the property depends on the economic activities in such locations. Diversification of REITs portfolios on locations enhances REITs' return. Diversifying REITs across location attributes reduces market risks. Current and new tenants are opting to move to new phases in the established malls to tap into existing clientele rather than open shops in new retail centres. As a result, REITs that concentrate on a single type of property outperform REITs that target a variety of property types. It can therefore be that different property types have varying performances which depend on the property nature. Compared to REITs that target several property types, those that specialize in a particular type of property do better. Thus, as the level of diversification increases, the return on assets does. REITs specializing in malls, offices, retail stores, and hotels perform better than those specializing in warehouses and industrial properties. Real Estate Investment Trusts' systematic risk is influenced by the property types they invest in. Therefore, one of the most appealing investment characteristics for REIT investors is the quality of the underlying properties. It can be concluded diversification of the REITs underlying property majorly in terms of geographic and economic influence performance of REITs in Kenya. A significant factor affecting the performance of REITs in Kenya is property diversification based on the type of property. Therefore, continuous property-type locations will increase investors' interest in REITs. The results indicated that there is a substantial positive causal association between the performance of REITs in Kenya and the diversification of property types and locations. The findings address the knowledge gap on the influence of property location, type of property, and performance of REITs, an area with scant empirical literature.

## 6. Recommendations

REITs that focus on only one type or one property perform better than REITs that target multiple types of properties. It is recommended that REITs issuers ensure that there is diversification of the properties to include multiple property types such as students' hostels, retail stores, hotels, and warehouses. Such a type of diversification is likely to attract potential investors who could be interested in properties with such diversification characteristics.

## Conflict of Interest Statement

The authors declare no conflicts of interest.

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### References

- Africa Business Communities. (2015). *Real estate building the future of Africa*.  
<https://www.africanbusinesscentral.com/wpcontent/uploads/2015/05/Real-estate-Building-the-future-of-Africa-PwC.pdf>
- Alias, A. and Soi Tho, C. Y. (2011). Performance analysis of REITs: Comparison between M-REITs and UK-REITs. *Journal of Surveying, Construction and Property*, 2, 38-61.
- Anderson, R. I., Liang, Y. and Shain, J. R. (2001). Deriving REIT returns by economic location. *Real Estate Finance*, 18 (3), 14–19
- Badji, C. F., Benetti, C. and Guimaraes, R. (2021). Diversification benefits of European REIT, Equities and Bonds. *New Challenges in Accounting and Finance*, 6, 31-49.
- Benfield, J. D., Anderson, R. I. and Zumpano, L. V. (2009). Performance differences in property-type diversified versus specialized real estate investment trusts (REITs). *Review of Financial Economics*, 18 (2), 70–79.
- Bing, Z. and Lizieri, C.M. (2020). *Local beta: Have location risks been priced in REIT returns?* SSRN: <https://ssrn.com/abstract=3772717> or <http://dx.doi.org/10.2139/ssrn.3772717>
- Block, R. L. (2011). *Investing in REITs: real estate investment trusts*. John Wiley & Sons, USA.
- CAHF. (2017). *Residential real estate investment trusts in Africa*.  
<http://housingfinanceafrica.org/projects/residential-real-estate-investment-trusts-africa/>
- Chang, K. L., Chen, N. K. and Leung, C. K. Y. (2011). Monetary policy, term structure and asset return: comparing REIT, housing and stock. *Journal of Real Estate Finance and Economics*, 43, 221-257.
- Chong, J., Krystalogianni, A. and Stevenson, S. (2012). Dynamic correlations between REIT sub-sectors and the implications for diversification. *Applied Financial Economics*, 22 (13), 1089–1109.
- CMSA. (2011). *Capital markets and securities collective investment schemes regulations 2011*.  
<https://cmsa-tz.org/index.php/regulation>

- Cytonn Investments. (2018). *Understanding real estate investment trusts*. <https://cytonnrealestate.com/blog/article/understanding-real-estate-investment-trusts-reits>
- Cytonn Investments. (2019). *Real estate investment trusts, REITs, as an investment alternative*. <https://cytonnreport.com/topicals/real-estate-investment>
- Danielsen, B. and Harrison, D. (2007). The impact of property type diversification on REIT liquidity. *Journal of Real Estate Portfolio Management*, 13 (4), 329-34.
- Daud, S. Z., Mohd, A. H., Sipan, I. A. and Wilson, A. J. (2012). *Impact of location attributes on REITs' return*. Paper presented at the 3rd International Conference on Business and Economic Research 2012, Bandung: Indonesia.
- David, D. and Bing, Z. (2019). *REITs, Underlying property markets and liquidity: A firm-level analysis*. In 26th Annual European Real Estate Society Conference. ERES: Conference. Cergy-Pontoise, France.
- Drew, A. (2016). Preserving existing affordability through a social purpose REIT. *Journal of case study research*, 1 (1), 39-41.
- EPRA, (2012). *Global REIT survey, South Africa PUT and PLS company EPRA reporting*. South Africa: Ernst and Young.
- EY (2019). *Global REIT markets*. [https://www.ey.com/Publication/vwLUAssets/ey-global-reit-markets/\\$FILE/ey-global-reit-markets.pdf](https://www.ey.com/Publication/vwLUAssets/ey-global-reit-markets/$FILE/ey-global-reit-markets.pdf)
- Gall, M. D., Gall, J. P. and Borg, W. R. (2007). *Educational research: An introduction*. Boston, USA: Pearson Education.
- Global Ethical Banking. (2019). *Gulf's REITs bring IPO receipts, but investor returns not neat*. <https://www.globalethicalbanking.com/gulfs-reits-bring-ipo-receipts-investor-returns-not-neat/>
- Hair, J., Black, W., Babin, B., Anderson, R. and Tatham, R. (2006). *Multivariate data analysis*. (6th ed). Upper Saddle River, New Jersey: Pearson Education Inc.
- Hu, L. and Bentler, P. M. (1999). Cut off criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modelling*, 6 (1), 1-55.
- Hwa, T. K. and Rahman, A. M. Y. (2007). *Stability of dividends and FFOs: The case of REITs in Malaysia*. Paper presented at the 13<sup>th</sup> Pacific Rim Real Estate Society Annual Conference, Perth: Australia.
- Jakpar, S., Tinggi, M., Tak, A. H. and Ruzlan, N. A. (2018). Determinant factors of profitability in Malaysia's Real Estate Investment Trusts (M-REITS). *UNIMAS Review of Accounting and Finance*, 1 (1), 72-84.
- Jalil, R. A., Mohammad, S. I. and Chai, P. T. (2018). The dynamic of location attributes toward Malaysian real estate investment trust performance. *International Journal of Engineering & Technology*, 7 (2.29), 1121-1125.
- Khusoko. (2020). *Property developer, Accorn to sell Qwetu and qejani students hostels stake through D-REIT*. <https://khusoko.com/2020/03/09/property-developer-acorn-to-sell-qwetu-and-qejani-student-hostels-stake-through-d-reit/>

- Macrotrends. (2020). *American Tower (REIT) market cap*.  
<https://www.macrotrends.net/stocks/charts/AMT/american-tower-reit/market-cap>.
- Mariya, L., Corbitt, S. S., Sirmans, G. S. and Emily, N. Z. (2019). Explaining REIT returns. *Journal of Real Estate Literature*, 27 (1), 1-25.
- McDonald, R. P. and Ho, M. H. R. (2002). Principles and practice in reporting statistical equation analyses. *Psychological Methods*, 7 (1), 64-82.
- Naidoo, H. (2014). *The introduction of REITs to the South African property market: Opportunities for fund managers*. Unpublished master's thesis, Wits Business School, Johannesburg: South Africa.
- NARIET. (2019). *REITs: A look back at 2018 and a look forward to 2019*.  
<https://www.reit.com/data-research/research/nareit-research/2019-reit-outlooklook-back-2018-and-look-forward-2019>
- Ndung'u, D. T. and Kung'u, J. N. (2022). Influence of investor awareness on performance of real estate investment trusts in Kenya. *Journal of Business, Economics and Finance*, 1(3), 122-129.
- Ndung'u, D. T. and Onyuma, S. O. (2020). Financing affordable housing in Africa through real estate investment trusts. *Africa Growth Agenda*, 17 (2), 14-15.
- Newell, G. and Osmadi, A. (2009). The development and preliminary performance analysis of Islamic REITs in Malaysia. *Journal of Property Research*, 26 (4), 329-347.
- Olanrele, O.O. (2014). REIT performance analysis: Are other factor determinants constant?, *Asian Economic and Financial Review*, 4 (4), 492-502.
- Ooi, J. T. L. and Liow, H. K. (2004). Risk-adjusted performance of real estate stocks: Evidence from developing markets. *Journal of Real Estate Research*, 26 (4):371-396.
- Oxford Business Group. (2019). *Real estate investment trusts in Kenya*.  
<https://oxfordbusinessgroup.com/analysis/reit-time-real-estate-investment-trusts-reits>
- Oxford Business Group. (2019). *Real estate: Although real estate in Ghana has slowed down, REITs hold potential*. <https://oxfordbusinessgroup.com/analysis/real-estate-although-real-estate-has-slowed-down-reits-hold-potential>
- Pham, A. K. (2013). *An empirical analysis of real estate investment trusts in Asia: Structure, performance and strategic investment implications*. Unpublished PhD thesis, University of Western Sydney, Sydney: Australia.
- Press Reader. (2019). *Why time is now for REITs investors to reconsider residential properties*.  
<https://www.pressreadercom/nigeria/business-day-nigeria/20191231/281977494540509>
- PricewaterhouseCoopers. (2019). *Global REIT regimes*. <https://www.pwc.com/gx/en/asset-management/assets/pdf/worldwide-reit-regimes-nov-2019.pdf>
- Ro, S. and Ziobrowski, A. J. (2009). Does focus really matter? Specialized vs. diversified REITs, *Journal of Real Estate Finance and Economics*, 42 (1), 68-83.
- Rohaya A. J. and Hishamuddin, M. A. (2015). Performance determinants of Malaysian real estate investment trusts. *Journal Teknologi*, 73 (5), 151-159.

- Savills Research. (2019). *REIT market 101*. <https://pdf.savills.asia/selected-international-research/reits-en-1111.pdf>
- Tabachnick, B. G. and Fidell, L. S. (2007). *Using multivariate statistics (5th ed)*. Boston, USA: Allyn & Bacon.
- Tiong, C. P. and Jalil, R. A. (2015). A literature review on the diversification strategy of Malaysian Real estate investment trust (M-REIT) and its performance. *International Journal of Real Estate Studies*, 9, 17-22.
- Vreeker, J (2020). *Asia Pacific listed property sector surges 22.8% in 2019, despite marginal loss in December 2019*. <https://www.reitasiapac.com/>
- Watumishi Housing Company. (2020). *WHC-REIT*. <https://www.whc.go.tz/>

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