



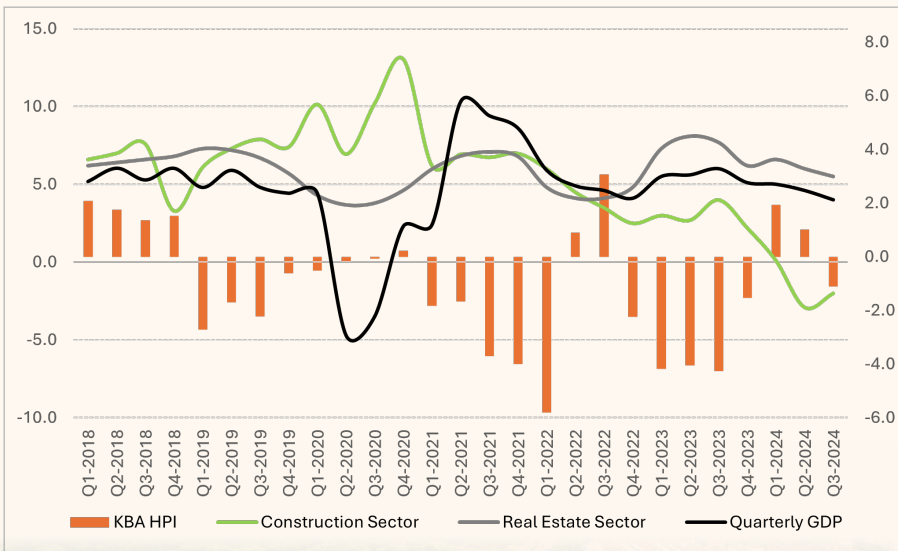
HOUSING PRICE INDEX

FEBRUARY 2025

ISSUE 33

Housing Market Demand Slows Down in Q3 2024 Amidst Price Corrections

Figure 1: Evolution of Sectoral GDP, Overall GDP and House Inflation (Q1-2018 – Q2-2024)



Source: KNBS, CBK and KBA

The Kenya Bankers Association Housing Price Index (KBA-HPI) for the third quarter of 2024 shows a notable decline compared to the previous two quarters, with the index dropping by 1.1 percent on quarter-on-quarter basis. The downward shift points to the correction in housing prices, which is occasioned by macroeconomic adjustments impacting the real estate and construction sectors. As illustrated in Figure 1, the observed decline in KBA-HPI aligns with a deceleration in the real estate sector (5.5 percent) and a contraction construction sector (-2.0 percent) during the third quarter of 2024.

The correlation between housing price movements and construction sector performance (Figure 2a) is further illustrated by trends in cement production and consumption (Figure 2b). However, it is evident that despite a decline in housing prices and overall construction sector activity, cement consumption increased from 1,957,069 metric tonnes in the second quarter to 2,196,694 metric tonnes in the third quarter of 2024. This rise in cement production and consumption suggests that certain segments of the construction industry remain active, potentially driven

Continued to page 2...

Highlights

Decline in Housing Prices:

The Kenya Bankers Association Housing Price Index (KBA-HPI) dropped by 1.1% in Q3 2024, reflecting ongoing price corrections in the housing market. Year-on-year, house prices fell by 14.28%, driven by reduced speculative demand and tighter credit conditions.

Sectoral Slowdown:

The real estate sector decelerated by 5.5%, while the construction sector contracted by 2.0% in Q3 2024, signaling a broader slowdown in the housing market.

Credit Supply Constraints:

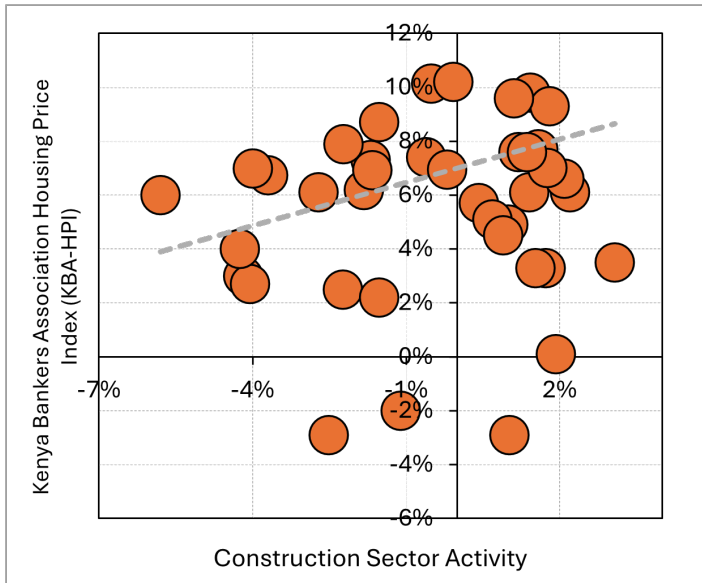
Bank credit to the construction sector declined by 13.47%, while real estate sector credit saw a marginal increase of 2.36%. Banks remain cautious in lending impacting housing demand.

Regional Price Variations:

Townhouses and maisonettes remain the most expensive, averaging Kes. 38.63 million and Kes. 26.08 million, respectively. Region 3 (high-market) recorded the highest prices, with Town Houses averaging Kes. 59 million.



Figure 2a: Correlation between construction sector and KBA HPI



Source: KNBS

Figure 2b: Cement production and consumption

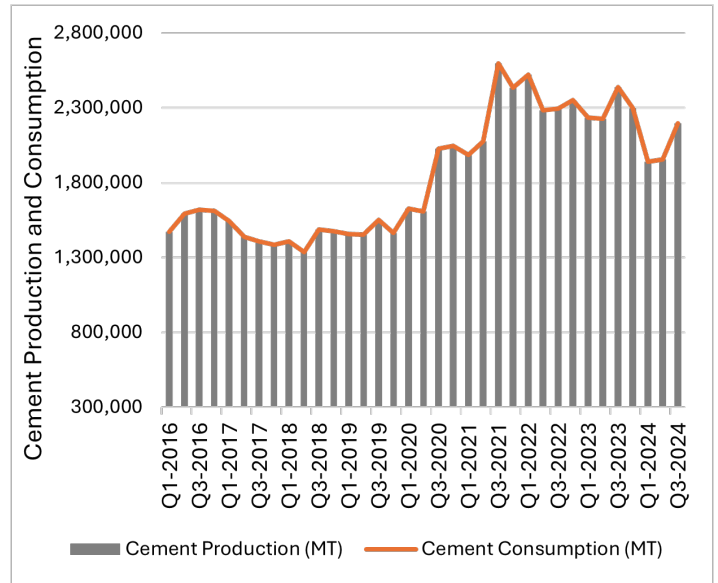
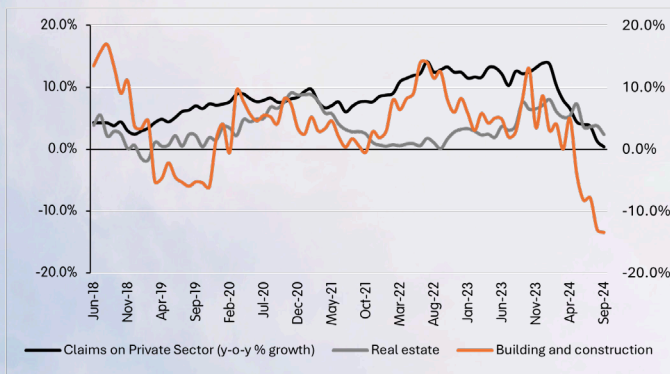


Figure 3: Bank Credit to the private sector (% Growth)



Source: CBK

...continued from page 1

by ongoing infrastructure projects rather than new housing developments. The broader slowdown in the real estate sector amidst rising construction activity, however, reflects housing supply adjustments in response to weaker demand and tighter financial conditions.

On the credit supply side, the general direction of claims on the private sector, real estate, and building and construction, as reflected in **Figure 3**, presents a mixed pattern. The year-on-year growth rate of claims on the private sector grew by 0.40 percent in September 2024, while claims specific to construction sector declined by 13.47 percent as real estate sector was marginally up by 2.36 percent. This pattern points to banks cautious approach in extending credit to the real estate sector due to perceived risks. The contraction in credit to real estate developers and homeowners may further suppress demand and affordability in the housing market. This observed demand and supply patterns points to the existing pressure in the housing market, where the interplay between reduced financing options, rising construction costs, and economic uncertainty is leading to a contraction in housing transactions.

House prices weakened in the third quarter of 2024 compared to previous quarters. Based on the Laspeyres Index methodology (**See Technical Note**), the computed prices indicate that house prices was down by 1.1 percent in the third quarter of 2024 on the moving-base basis and 14.28 percent on the fixed-base basis (**Table 1 and Figure 4**), thereby reflecting the ongoing price corrections in the housing market in response to reduced speculative demand and tighter credit conditions.

The distribution of houses by category and region further highlights the shifting market dynamics. As depicted in **Figure 5a**, a shift in quarterly distribution of house transactions is evident. Apartments, although still dominating, saw a slight decline in their share of completed transactions, accounting



Table 1: KBA-HPI Movement (Q4-2019 to Q4-2023)

Period	Fixed Base Index (Base Period = Q1 2013)	Moving Base Index (Q-o-Q)
Q4-2019	109.04	118.04
Q1-2020	106.87	117.44
Q2-2020	106.66	117.20
Q3-2020	106.63	117.11
Q4-2020	107.60	117.37
Q1-2021	108.69	115.23
Q2-2021	108.19	113.32
Q3-2021	110.33	109.13
Q4-2021	109.35	104.77
Q1-2022	109.10	98.69
Q2-2022	104.78	99.58
Q3-2022	123.04	102.64
Q4-2022	126.72	100.35
Q1-2023	120.00	96.15
Q2-2023	120.01	92.25
Q3-2023	123.28	99.75
Q4-2023	118.21	98.22
Q1-2024	130.33	100.11
Q2-2024	116.01	102.41
Q3-2024	96.29	100.01

Source: KBA computation from housing prices survey

for 43.07 percent in the third quarter compared to 44.23 percent in the second quarter of 2024. The share of bungalows increased slightly to 28.01 percent, from 26.92 percent, while Maisonettes, town houses and double storey houses shares stood at 23.36 percent, 2.92 percent and 3.65 percent, respectively.

Similarly, there is regional shift in activities on account of demand and affordability concerns. Housing activity in the low-market segment (**Region 1**) declined to account for 45.3 percent of transactions during the third quarter of 2024 from 48.1 percent in the previous quarter. Likewise, activity in the mid-market segment (**Region 2**) saw a decline from accounting for 18.3 percent in the second quarter of 2024 to 17.5 percent in the quarter under review. However, the high-market segment (**Region 3**) registered a significant increase in activity- from accounting for 33.7 percent in the second quarter of 2024 to 37.2 percent of all transactions in the third quarter of 2024 (**Figure 5b**).

House price variations by region and type remain pronounced, with certain areas experiencing sharper price corrections. Townhouses averaged Kes. 38.63 million, followed closely by maisonettes at Kes. 26.08 million, while apartments, double

Figure 4: KBA-HPI Movement (Q2-2013 to Q4-2023)

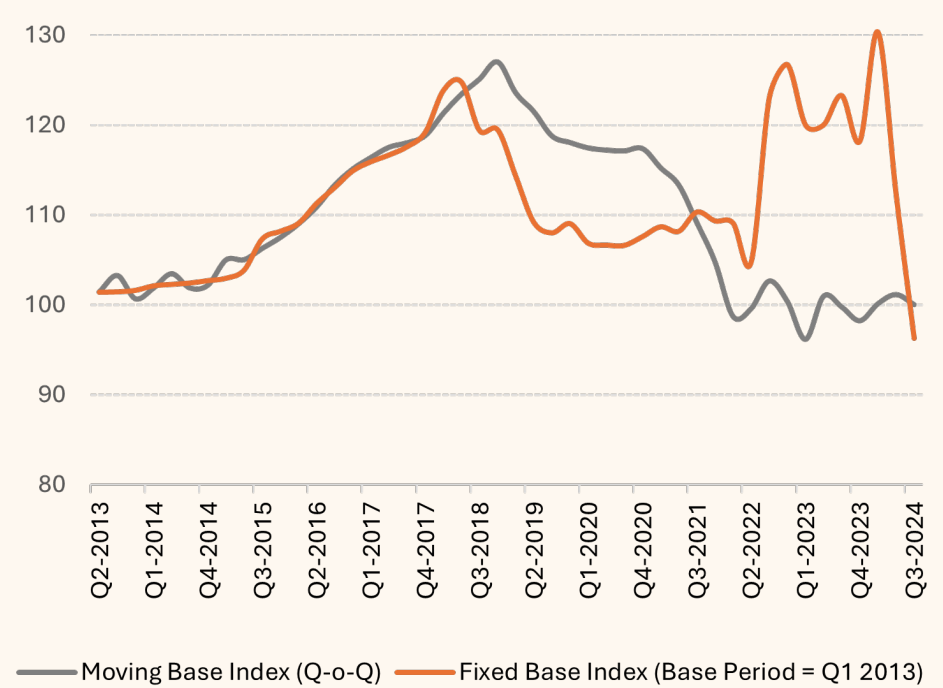


Figure 5a: Quarterly distribution of house transactions by region (%)

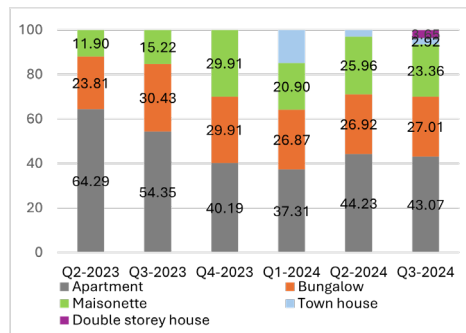
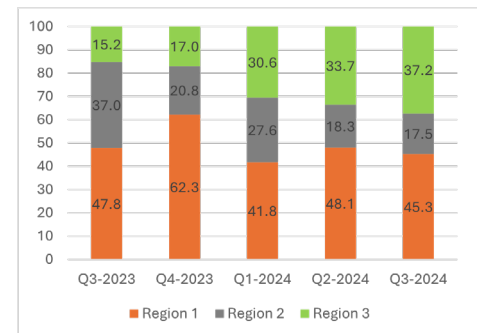


Figure 5b: Quarterly distribution of house transactions by house type (%)

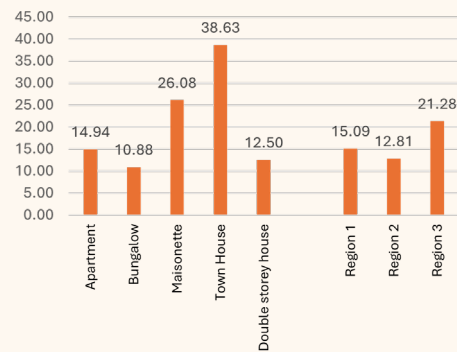


Source: KBA computation from housing prices survey

storey houses and bungalows averaged Kes. 14.94 million, Kes. 12.50 million and Kes. 10.88 million, respectively, in Q3 2024. Price differences also emerged across market segments: high-market houses averaged Kes. 21.28 million, mid-market Kes. 12.81 million, and low-market Kes. 15.09 million (**Figure 6a**).

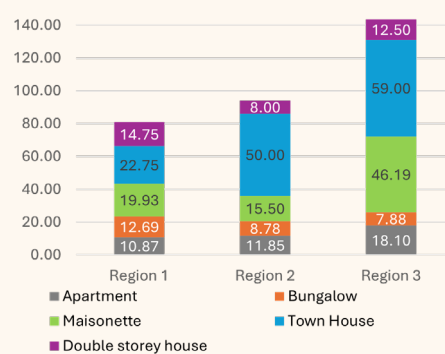
Moreover, the variation in property prices across regions mirrors the earlier observed trends. In Region 1, maisonettes are priced averaged at KES 19.93 million, apartments at KES 22.75 million, townhouses at KES 10.87 million, bungalows at KES 12.69 million, and double storey houses at KES 14.75 million. Region 2 shows townhouses leading at KES 50.00 million, followed by maisonettes at KES 15.50 million, apartments at 11.85 million, bungalows at KES 8.78 million, and double storey houses at KES 8.00 million. Region 3 has the highest prices, with Town houses at KES 59.00 million, maisonettes at KES 46.19 million, apartments at KES 18.10 million, bungalows at KES 7.88 million, and double storey houses at KES 12.50 million (**Figure 6b**).

Figure 6a: House Prices By Region and Type of House



Source: KBA computation from housing prices survey

Figure 6b: Average house prices across the region & by house type



Trends in the average plinth area are shifting, with large spaces becoming preferred. In terms of house categories, town houses took the lead with approximately 3,713.5 square feet, followed by maisonettes (3,178.0 square feet), double storey houses (2,598.6 square feet) bungalows (1,771.9 square feet) and apartments (1,843.0 square feet) (Figure 7a). Regionally, region 3 had the largest plinth area (2,406.9 square feet), followed by region 1 (2,369.2 square feet) and region 2 (1,395.5 square feet) (Figure 7b).

Figure 7a: Average plinth area by house type

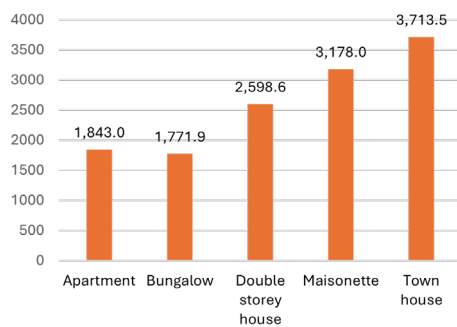
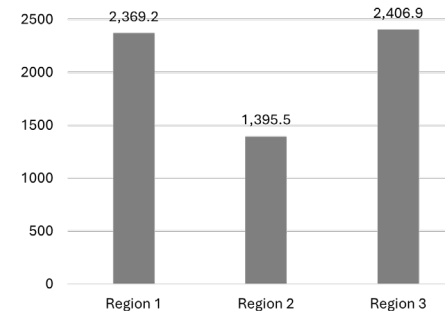


Figure 7b: Average plinth area across the region



Source: KBA computation from housing prices survey



Technical Note

The index follows a Laspeyers index method. In this method, the index is computed by getting the ratio of the estimated current quarter price from the hedonic method (multiplied by the weights of the preceding quarter) to the price of the preceding quarter (multiplied by the respective weights of that quarter).

The weights of the quantitative variables are obtained by getting their respective mean values. For the dummy variables however, their weights are computed as the proportions of the number of houses possessing a certain attribute to the total number of houses. Thus the index is computed by the formula:

$$Index = \sum_{i=1}^n w_i \frac{P_{i,t}}{P_{i,t-1}} = \frac{\sum_{i=1}^n w_i P_{i,t}}{\sum_{i=1}^n w_i P_{i,t-1}}$$

Where; $P_{i,t}$ is the shadow price from the estimated hedonic function for the current quarter;

$P_{i,t-1}$ is the shadow prices from the estimated hedonic function for the preceding quarter;

And w_0 are the weights of the respective variables for the preceding quarter.



The drivers of house prices based on Hedonic Regression

The hedonic regression results in **Table 2** reveal notable shifts in the drivers of house prices compared to previous quarters. Three key patterns emerge for shadow price attributes.

- **First, plinth area remains a significant driver of market prices, with a strong positive effect, confirming that larger spaces attract higher prices.** While the number of bedrooms and bathrooms show positive impacts on house prices, their marginal statistical significance is marginal is a clear indication that while these features influence prices, they are not as strong as plinth area.
- **Second, regional price variations persist.** Contrary to expectations, the upper market segment (Region 3) does not show a statistically significant price premium despite higher coefficients, while Region 1's negative coefficient suggests subdued price growth, possibly due to market saturation.
- **Third, property type and affordability continue to shape buyer choices.** Townhouses show a positive price influence, a clear indication of its strong demand in the market. Conversely, apartments, while popular among budget-conscious buyers, have minimal impact on price appreciation, highlighting their role in the entry-level segment.

The computation of the KBA-HPI is underpinned by estimating the weights and the shadow prices. The weighting scheme applied to the shadow prices varies from one quarter to another and relates to the units transacted during the quarter (**See Technical Note for details**).

The weights applied in the case of quantitative attributes (i.e., plinth area, number of bedrooms, number of bathrooms, and number of floors) are their respective averages, and proportions are applied as weights in the case of the qualitative attributes (i.e., type of house, and the region). The qualitative and quantitative parameters, that drive the house price change and feed into the

construction of the KBA-HPI, are based on an estimation of a hedonic regression. The regression generates the shadow prices or marginal contributions, taking cognizance of the heterogeneous nature of housing goods best characterized by their attributes.

The hedonic regressions recognize that a dwelling is composed of a bundle of characteristics for which no market for them exists, as they cannot be sold separately, so the prices of the characteristics are not independently observed. The demand and supply for the properties implicitly determine the characteristics' marginal contributions to the prices of the properties.



Table 2: Housing Price Index Drivers for Quarter 3 of 2024

Source	SS	df	MS
Model	37.49	10.0	3.75
Residual	37.20	126.0	0.30
Total	74.70	136.00	0.55

Number of obs = 137.00
 F (10, 126) = 12.70
 Prob > F = 0.00
 R-squared = 0.502
 Adj R-squared = 0.462
 Root MSE = 0.543

Market Value	Coefficient	Std. err.	t	P>t	[95% conf. interval]
Constant	13.646	0.56	24.33	0.000	12.536 14.756
Plinth Area	0.265	0.083	3.2	0.002	0.101 0.429
No. of Bedrooms	0.427	0.231	1.85	0.067	-0.03 0.886
No. of Bathrooms	0.272	0.15	1.81	0.073	-0.025 0.57
No. of Floors	0.11	0.069	1.59	0.114	-0.027 0.249
House Type Dummy					
Townhouse	0.455	0.292	1.56	0.122	-0.122 1.034
Apartment	-0.003	0.15	0.02	0.998	-0.298 0.297
Bungalow	-0.2	0.155	-1.32	0.188	-0.512 0.101
Double Storey House	-0.277	0.286	-0.97	0.335	-0.844 0.288
Regional Dummy					
Region 1	-0.154	0.133	-1.16	0.249	-0.419 0.109
Region 3	0.188	0.138	1.31	0.193	-0.091 0.455

Notes:

- All the Quantitative variables (Plinth Area, No. of Bedrooms, No. of Bathrooms, No. of Floors) enter the hedonic regression function in their natural logarithm. The house price is also expressed in its natural logarithmic form.
- Reference categories for the dummy variables for house types and region were maisonettes and region 2, respectively.



Housing Price Index
 Quarter 3 2024



100.01

Table 3: Housing Price Index Drivers for Quarter 2 of 2024

Source	SS	df	MS
Model	32.89	9.0	3.65
Residual	23.68	94.0	0.25
Total	56.57	103.00	0.55

Number of obs = 104.00
 F(8, 93) = 12.94
 Prob > F = 0.00
 R-squared = 0.582
 Adj R-squared = 0.537
 Root MSE = 0.504

Market Value	Coefficient	Std. err.	t	P>t	[95% conf. interval]
Constant	14.272	0.032	31.890	0.000	13.384 15.161
Plinth Area	0.096	0.239	3.030	0.003	0.088 1.038
No. of Bedrooms	0.563	0.146	2.350	0.021	0.327 0.909
No. of Bathrooms	0.618	0.076	4.220	0.000	-0.168 0.136
No. of Floors	-0.016	0.319	-0.210	0.835	-0.803 0.465
House Type Dummy					
Townhouse	-0.169	0.151	-0.530	0.597	-0.425 0.174
Apartment	-0.125	0.163	-0.830	0.409	-0.750 -0.104
Bungalow	-0.427	0.138	-2.630	0.010	-0.387 0.161
Regional Dummy					
Region 1	-0.113	0.161	-0.820	0.415	0.283 0.923
Region 3	0.603	0.448	3.740	0.000	0.033 0.159

Notes:

- All the Quantitative variables (Plinth Area, No. of Bedrooms, No. of Bathrooms, No. of Floors) enter the hedonic regression function in their natural logarithm. The house price is also expressed in its natural logarithmic form.
- Reference categories for the dummy variables for house types and region were maisonettes and region 2, respectively.

Housing Price Index
 Quarter 2 2024



102.41

Table 4: Housing Price Index Drivers for Quarter 1 of 2024

Source	SS	df	MS
Model	25.38	8.0	3.14
Residual	22.29	93.0	0.24
Total	47.66	101.00	0.47

Number of obs = 102.00
 F(8, 88) = 12.93
 Prob > F = 0.00
 R-squared = 0.527
 Adj R-squared = 0.486
 Root MSE = 0.493

Market Value	Coefficient	Std. err.	t	P>t	[95% conf. interval]
Constant	14.451	0.443	2.510	0.014	13.572 15.330
Plinth Area	0.055	0.030	1.830	0.070	-0.005 0.760
No. of Bedrooms	0.200	0.282	0.710	0.480	-0.360 0.760
No. of Bathrooms	0.772	0.203	3.810	0.000	0.370 1.175
No. of Floors	0.085	0.079	1.080	0.282	-0.071 0.241
House Type Dummy					
Apartment	-0.081	0.136	-0.600	0.553	-0.350 0.189
Bungalow	-0.315	0.189	-1.670	0.099	-0.690 0.060
Regional Dummy					
Region 1	0.202	-2.070	0.202	-2.070	0.202 -2.070
Region 3	0.202	-2.070	0.202	-2.070	0.202 -2.070

Notes:

- All the Quantitative variables (Plinth Area, No. of Bedrooms, No. of Bathrooms, No. of Floors) enter the hedonic regression function in their natural logarithm. The house price is also expressed in its natural logarithmic form.
- Reference categories for the dummy variables for house types and region were maisonettes and region 2, respectively.



Housing Price Index
 Quarter 1 2024



100.11

Table 5: Housing Price Index Drivers for Quarter 4 of 2023

Source	SS	df	MS
Model	26.14	8.0	3.27
Residual	21.61	88.0	0.25
Total	47.75	96.00	0.50

Number of obs = 97.00
 F(8, 88) = 13.31
 Prob > F = 0.00
 R-squared = 0.547
 Adj R-squared = 0.506
 Root MSE = 0.496

Market Value	Coefficient	Std. err.	t	P>t	[95% conf. interval]
Constant	14.716	0.420	3.280	0.002	13.881 15.550
Plinth Area	0.004	0.030	0.130	0.897	-0.056 0.063
No. of Bedrooms	0.823	0.278	2.960	0.004	0.271 1.375
No. of Bathrooms	0.469	0.175	2.680	0.009	0.121 0.818
No. of Floors	0.032	0.070	0.450	0.652	-0.107 0.171
House Type Dummy					
Apartment	-0.032	0.147	-0.220	0.826	-0.326 0.261
Bungalow	-0.364	0.147	-2.480	0.015	-0.655 -0.072
Regional Dummy					
Region 1	-0.418	0.202	-2.070	0.042	-0.821 -0.016
Region 3	0.056	0.214	0.260	0.795	-0.370 0.481

Notes:

- All the Quantitative variables (Plinth Area, No. of Bedrooms, No. of Bathrooms, No. of Floors) enter the hedonic regression function in their natural logarithm. The house price is also expressed in its natural logarithmic form.
- Reference categories for the dummy variables for house types and region were maisonettes and region 2, respectively.

Housing Price Index
 Quarter 4 2023



98.22

THE DEFINITION OF THE SUB-REGIONS

REGION 1

Athi River, Mlolongo, Mavoko, Nakuru, Ngong, Ruaka, Syokimau, Embakasi, Kahawa, Wendani, Thika, Mtwapa, Utange, Kitengela, Kiembeni, Nyeri, Likoni, Eldoret, Ruiru, Kilifi, Thika road (Kasarani, Roysambu, Ruaraka), Meru, Bungoma.

REGION 2

Thindigua (Kiambu Road), Kiambu, South B, South C, Kabete, Komarock, Imara Daima, Membley, Buruburu, Rongai, Waiyaki Way (Uthiru, Regen, Kinoo, Kikuyu), Mbagathi road, Ngong Road, Langata.

REGION 3

Kileleshwa, Kilimani, Lavington, Westlands, Spring Valley, Riverside, Milimani (Kisumu), Milimani (Nakuru), Runda, Karen, Garden Estate, Parklands, Ridgeways, Muthaiga, Loresho, Kitisuru, Adams Arcade, Nyali, Mountain View, Nyari.



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