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CHALLENGES IN PROPERTY VALUATION IN SUB-SAHARAN AFRICA – A SYSTEMATIC REVIEW

AZ INGATLANÉRTÉKELÉS KIHÍVÁSAI A SZUBSZAHARAI AFRIKÁBAN – EGY SZISZTEMATIKUS ÁTTEKINTÉS

Rapid demographic and urban transitions in the Sub-Saharan Africa (SSA) region are reshaping the demand for land, housing, and infrastructure. In this evolving context, property valuation is essential for real estate development, investment decisions, and economic planning. The article examines what factors influence property valuation practices in SSA, what the key challenges are, and what the differences are between valuation methods in SSA vs. developed economies. This study applies the PRISMA-based Systematic Literature Review (SLR) method to examine 25 peer-reviewed articles published between 2010 and 2024. To enrich the review with empirical insight, a correlation analysis was conducted using macroeconomic indicators. Findings reveal fragmented valuation systems, institutional inefficiencies, and informal land markets that distort property investment. The study recommends regulatory reform, data standardization, and digital valuation tools to improve transparency and market reliability across SSA's real estate sector.

Keywords: **property valuation, real estate, urbanization, technological adoption, regulatory frameworks**

A szubszaharai afrikai (SSA) régió gyors demográfiai és városi átalakulása átalakítja a földterületek, a lakások és az infrastruktúra iránti keresletet. Ebben a változó környezetben az ingatlanértékelés elengedhetetlen az ingatlanfejlesztéshez, a befektetési döntésekhez és a gazdasági tervezéshez. A cikk azt vizsgálja, hogy milyen tényezők befolyásolják az ingatlanértékelési gyakorlatot a szubszaharai afrikai térségben, mik a főbb kihívások, és milyen különbségek vannak a szubszaharai afrikai és a fejlett gazdaságok értékelési módszerei között. Ez a tanulmány a PRISMA-alapú szisztematikus irodalmi áttekintés (SLR) módszerét alkalmazza 25, 2010 és 2024 között megjelent, lektorált cikk vizsgálatára. Az áttekintés empirikus betekintéssel való gazdagítása érdekében korrelációelemzést végeztek makrogazdasági mutatók felhasználásával. Az eredmények széttagolt értékelési rendszereket, intézményi hiányosságokat és informális földpiacokat tárnak fel, amelyek torzítják az ingatlanbefektetéseket. A tanulmány szabályozási reformot, adatszabványosítást és digitális értékelési eszközöket javasol az átláthatóság és a piaci megbízhatóság javítása érdekében a szubszaharai afrikai térség ingatlanszektorában.

Kulcsszavak: **ingatlanértékelés, ingatlan, urbanizáció, technológiai adaptáció, szabályozási keretrendszerek**

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The International Value Standard Council (IVS) defines property valuation as the estimated sale price "between a willing buyer and a willing seller in an arms-length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion" (IVS, 2022). The reliability of property valuations plays a significant role in shaping real estate markets, influencing investment decisions, and ensuring economic stability across various regions.

Regardless of the increasing focus on property valuation in global literature, SSA countries' property valuation practices face persistent challenges. Many methodologies employed in SSA rely on outdated models that fail to capture the region's economic volatility, its rapid urbanization, and the prevalence of informal property markets. Furthermore, the lack of reliable data complicates valuation accuracy, undermining investor confidence and financial institutions' ability to assess risk effectively. Addressing these gaps requires an interdisciplinary approach, integrating technological advancements to reinforce valuation precision.

Historically, real estate has demonstrated sensitivity to economic fluctuations, with significant implications for financial institutions. For example, in the 1970s, the United States, like many other economies worldwide, experienced significant Inflation across various sectors, including housing inflation. This event resulted in financial challenges among lenders, reinforcing the need for longitudinal market analyses to better understand valuation trends and market variations, as suggested by Aaron (1970).

This systematic literature review (SLR) investigates these gaps by examining the challenges faced by SSA countries' real estate market, including socio-economic disparities socio-environmental and Valuation Methods influences affecting property valuation, by exploring technological advancements and institutional reforms. This study seeks to answer the following question what factors influence property valuation practices in SSA. Bartke and Schwarze (2015) argue that certified property valuers are essential in maintaining financial stability by ensuring property prices reflect market realities. However, in many SSA countries, institutional frameworks are not well developed, leading to discrepancies in valuation reliability. This issue raises the question of how technological advancements and institutional reforms strengthen property valuation practices in SSA. This study aims to provide a contextualized understanding of the challenges in property valuation practices in SSA countries and how these challenges hamper the effectiveness of the system.

Socio-economic considerations in property valuation

Property valuation in SSA is influenced by a number of interconnected socioeconomic, institutional, and technical aspects. Unlike developed markets, many SSA countries rely on outdated model and informal systems that fail to capture the dynamics of urban growth, financial volatility, and land tenure complexity. Mabin et al. (2013) explain that as urban populations grow, the demand for residential and commercial properties also increas. However, informal settlements and the absence of standardized market data further exacerbate inconsistences economic constrains in rural areas suppress valuation accuracy and limit the formalization of property rights (Isaac & O'Leary, 2017).

Institutional weaknesses such inadequate regulatory bodies, inconsistent land titling practices, and political interference undermine valuation integrity. For instance, Cheloti and Mooya (2024) highlight how valuation heuristics and client influence result in bias and unpredictability. Chimhowu (2019) further elaborates on how customary land tenure systems complicates standardized valuation, necessitating a hybrid legal-regulatory approach. The author argues that in many rural and peri-urban contexts, land ownership and usage rights are governed not by formal statutory systems but by customary institutions chiefs, elders, or family lineages whose norms often conflict with national land laws.

In addition, technological advancements show promise to fill the gap but its adoption in SSA remains limited. Studies by Wachira (2016) and Abidoye and Chan (2017) emphasized the potential of AI tools, mobile apps and Geographic Information System (GIS) in improving valuation efficiency. However, such innovations are largely underutilized due to insufficient training and infrastructure. Mobilizing domestic revenue remains a critical priority for SSA countries, where limited fiscal capacity constrains development agendas, and weak revenue mobilization is a major driver of fiscal imbalances across the region.

In addition, domestic revenue mobilization also intersects with property valuation. Drummond et al. (2012) found that most low-income SSA countries were able to increase revenue ratios by over two percentage points of GDP in the short-to-medium term in a period of 10 year, though the sustainability of such gains remains fragile, especially in conflict-affected states. Panel estimates from the study indicate that economic indicators, including per capita GDP, inflation, degree of openness, rents from natural resources, and the share of agriculture in GDP are significant determinants of tax revenue performance

Socio-environment and land use factors

A social environment is generally associated with a setting where people interact, which includes infrastructures natural and artificial environments; these factors align with Sunday Emmanuel (2018), who proposes the Socio-Environmental Design Factors (SEDeF) model. The research identifies social risk factors (poverty, unemployment, juvenile delinquency, illiteracy, and homelessness) and environmental design factors (natural access control, surveillance, maintenance, territorial functioning, and target hardening) as key influences on crime rates.

The study calls on the Nigerian government, policymakers, and researchers to implement crime-reduction and neighbourhood improvement strategies for sustainable housing and property value appreciation. Similar, Krause and Bitter (2012) state that sustainable practices like eco-friendly construction and urban infrastructure investments increase property demand and value. Despite international guidelines like IVS, ineffective institutional frameworks and unregulated real estate markets make it difficult to apply these criteria in many SSA countries (Bartke & Schwarze, 2015).

According to Case et al. (2000) tax reforms and financial deregulation significantly shape real estate markets environment. However, factors like shifts in demand for urban growth and economic constraints often lead to lower property values, highly affecting rural areas, where market activity is weaker than in urban areas. For instance, property valuation assesses a property's capital value or income potential, emphasizing the economic obligations of ownership Isaac and O'Leary (2017).

Studies by Giovannetti and Tucci (2016), Muthee et al. (2022) and Labson (2016) pointed out that disparities in valuation models emphasize the need for localized approaches, according to their studies, standardized approaches like historical cost or replacement value often led to inaccuracies. For example, Baumgartner et al. (2015) note Ethiopia's rise in large-scale land acquisitions (LSLAs), is driven by external demand often neglect local needs meaning that it contrary to the common belief of the society as noted by Schoneveld (2014), the role of civil society in the diversity and risks surrounding LSLAs, from inequality to reduce local access to resources the author demonstrates that large-scale farmland investments in SSA are geographically uneven and often misunderstood in terms of investor motives and origin.

Agricultural and environmental determinants of property valuation

Based on World Bank database (2024), agriculture plays a fundamental role in the economies of SSA countries, since it is contributing significantly to both GDP and employment. While the precise contribution varies across countries, agricultural value added typically accounts for 15–40% of GDP in many SSA nations, supporting Drummond et al. (2012) arguments particularly those with less industrial diversification. For instance, in countries such as Ethiopia, Chad, and Sierra Leone, agriculture's share of GDP exceeds 30%, reflecting the sector's centrality to economic output. Even in more urbanized or resource-driven economies like Kenya, Nigeria or South Africa, where the agricultural share of GDP is lower, agriculture remains a vital component of rural livelihoods. Furthermore, agriculture supports the livelihoods of up to 80% of the population in SSA, as of 2022, and over 50% of the total labour force was engaged in agriculture especially in rural areas where subsistence farming and informal agricultural labour dominate the employment landscape. This reliance underscores the sector's role not only as a driver of food security and income, but also as a buffer against poverty and unemployment. Unlike developed economies, where urbanization often reduces agricultural reliance, rural communities in SSA remain heavily dependent on agricultural land for income, food, and social structure (World Bank, 2024).

Nevertheless, agricultural dynamics have a direct influence on property valuation. Valuing agricultural land requires consideration of production potential, land tenure, and access to infrastructure. The Income Approach, frequently used for investment land, becomes particularly relevant when agricultural income is the primary value driver as suggested by Mazzocchi et al. (2019). However, traditional valuation models may underestimate or overlook these dynamics, especially in regions where land is governed by customary tenure or lacks formal market data.

Environmental factors, such as land fertility, climate resilience, and water access, also affect agricultural land values. In the context of SSA, where farming conditions are often volatile and reliant on rainfall, valuation methods must integrate risk and yield variability. Additionally, policies such as subsidies or development programs significantly impact land prices. Feichtinger and Salhofer (2013) show how CAP-related support in Europe inflates land values, a phenomenon with parallels in SSA where development funding or foreign land investments influence market expectations. in addition, urban expansion encroaches on peri-urban farmland, often leading to speculative land valuation. Yet, without regulatory oversight or formal planning frameworks, such shifts may result in inflated or inconsistent pricing, complicating both taxation and compensation processes.

Valuation methods in developed countries and comparative analysis

This section compares SSA countries with the European Union (EU) to highlight structural and institutional differences in property valuation practices. These differences illustrate the broader divide between developing and developed real estate markets, both in terms of regulatory enforcement and methodological application. In developed economies, such as those within the EU, property valuation is governed by internationally recognized standards and frameworks, notably those promoted by the Royal Institution of Chartered Surveyors (RICS) and the IVS. These valuations benefit from robust institutional frameworks, transparent governance, comprehensive market data, and advanced technological infrastructure. Common methodologies include the Cost Approach and the Income Approach, particularly the Discounted Cash Flow (DCF) model, which is widely employed for income-generating and investment properties (Pagourtzi et al., 2003; Baum, 2015). These methods assume the availability of reliable rental income data, appropriate discount rates, and a steady flow of comparable transactions conditions generally met in mature European real estate markets.

By contrast, many SSA countries face persistent challenges in adopting these valuation approaches due to institutional weaknesses, limited data availability, and the dominance of informal property markets. Furthermore, customary land tenure systems are prevalent, especially in rural and peri-urban areas, complicating the implementation of standardized valuation practices. As Chimhowu (2019) notes, non-statutory land governance structures often hinder efforts to apply formal models consistently. Consequently, valuers in SSA tend to rely on “traditional” methods such as the cost or sales comparison approaches, which may inadequately capture market heterogeneity and dynamic property attributes.

The application of advanced valuation methodologies in SSA is further constrained by the absence of comprehensive property transaction databases, low adoption of digital tools, and limited regulatory oversight. In comparison, EU countries integrate IVS rigorously and align with EU-level directives that ensure transparency and accountability in real estate markets. Regulatory institutions such as national Chambers of Real Estate Valuers play a significant role in maintaining professional standards and methodological rigor.

In terms of methodological approaches, property valuation in SSA still leans heavily on cost-based and sales comparison methods. These approaches are often executed using assumptions or heuristics due to insufficient and fragmented market data. As Cheloti and Mooya (2024) observe, valuers frequently encounter client pressure and lack access to reliable databases. Conversely, EU countries employ hybrid valuation models that integrate income, cost, and market-based methods, supported by robust data from land registries and financial authorities.

Technological adoption also marks a notable divide. EU member states have widely implemented GIS and AVMs, and digitized land registries, enhancing valuation accuracy and traceability. While SSA countries particularly in urban centers are increasingly experimenting with GIS and mobile-based platforms (Wachira, 2016), these technologies remain underutilized due to high costs and limited technical capacity among professionals. Furthermore, market transparency further underscores the contrast between them. For example, EU countries consistently rank higher on Transparency International’s Corruption Perceptions Index, with well-defined legal frameworks that mitigate client influence and ensure procedural consistency. In contrast, SSA countries, with lower transparency rankings, often grapple with informal land transactions, bureaucratic delays, and corruption risks in property valuation processes (Transparency International, 2024).

These systemic differences highlight the important role of institutional quality, data infrastructure, and regulatory frameworks in shaping property valuation practices. While SSA can learn from international best practices, effective adoption requires context-sensitive strategies, investments in data systems, legal reforms, and capacity-building initiatives for valuation professionals.

Material and methods

This study adopts a Systematic Literature Review (SLR) framework and adheres to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021; Liberati et al., 2009). The aim is to ensure a rigorous, transparent, and reproducible review of the existing academic literature on property valuation in SSA.

We conducted a structured search across three major academic databases: Google Scholar, Scopus, and ScienceDirect. The search string combined keywords using Boolean operators (AND/OR), such as: “property valuation in Sub-Saharan Africa”; “real estate appraisal Africa”; “land valuation”; “macroeconomic determinants of property values”. The search was limited to peer-reviewed journal articles and academic books published in English between 2010 and 2024. Fields of focus included Social Sciences, Economics, Finance, and Urban Studies. We excluded non-academic sources (e.g., blog posts, news articles, and non-peer-reviewed reports) except where such sources provided essential regional or institutional context for SSA.

Inclusion criteria:

- published in peer-reviewed journals or academic books,
- focus on Sub-Saharan African (SSA) countries or regions,
- published between 2010 and 2024,
- written in English,
- provides relevant data on property valuation practices or macroeconomic context.

Exclusion criteria:

- non-peer-reviewed sources lacking academic rigor,
- studies not related to SSA or unconnected to real estate valuation,
- articles not written in English.

A two-stage screening process was applied; first by title and abstract, followed by full-text evaluation. The following variables were extracted from each eligible article: Author(s) and year of publication; research objectives; study area (country/region); methodological approach (qualitative, quantitative, or mixed); key findings and policy implications; and the type of valuation method used. The second stage complement the SLR and bridge theoretical findings with empirical insights, a correlation analysis was conducted using macroeconomic indicators. These indicators were selected based on both their frequency in the reviewed literature and their theoretical relevance to property valuation in SSA. The macroeconomic variables included GDP per capita (USD), urban population as a percentage of the total population, FDI net inflows as a percentage of GDP, the inflation rate, domestic credit to the private sector as a percentage of GDP, in addition included agriculture, forestry, and fishing, value added (% of GDP) as it is the one of the main share of the GDP SSA countries and corruption Perceptions Index. These variables were drawn from Transparency International Database and World Bank data covering the period from 2010 to 2022.

Correlation matrices were generated in Microsoft Excel to examine the pairwise relationships between variables. The results offer preliminary insights and serve as a foundation for future econometric analysis (e.g., multivariate regression, panel models).

Hypotheses tested:

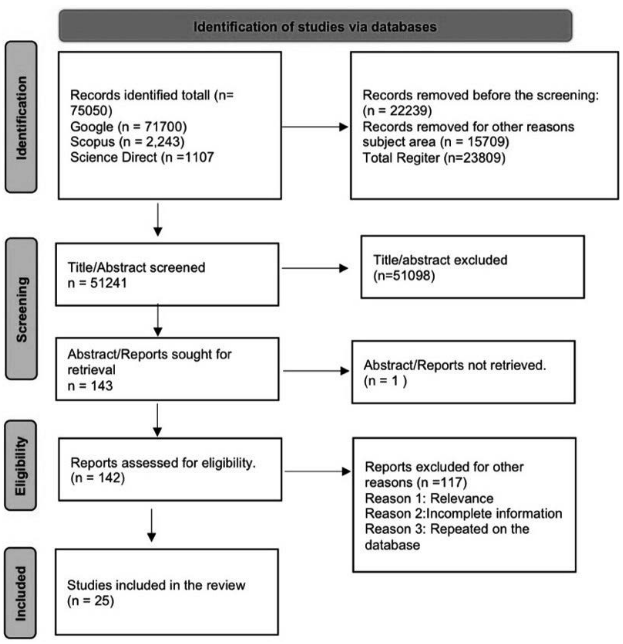
H1: Higher domestic credit availability positively correlates with property valuation trends.

H2: Urbanization is positively correlated with FDI inflows.

H3: Inflation negatively impacts valuation reliability.

Figure 1

PRISMA flowchart illustrating the systematic review process, showing the number of records identified, screened, and included in the study



Source: own search from records identified through databases, Google Scholar, Scopus, and ScienceDirect

Figure 1 illustrates the systematic review process for identifying, screening, and selecting relevant articles on property valuation in Sub-Saharan Africa. Initially, we identified 75,050 records from Google Scholar, Scopus, and ScienceDirect, but the pre-screening process eliminated 22,239. We then screened 51,241 records based on their title and abstract, excluding 51,098. After this deduction, we conducted a detailed review of 143 abstracts/reports, retrieving 142 for eligibility assessment. Following a final evaluation, we included 25 studies in the systematic review.

Results

Table 1 presents a comparative overview of property valuation practices in SSA and developed economies, highlighting key structural, institutional, and methodological differences. It shows that SSA countries predominantly rely on traditional methods (e.g., cost and sales comparison) supported by limited data and informal systems, while developed markets utilize data-rich, standardized, and technologically advanced approaches. The comparison underscores critical gaps in data access, land tenure formalization, regulatory enforcement, technological adoption, and valuation transparency in SSA, pointing to the need for systemic reforms to align with international best practices and enhance valuation reliability.

Table 2 presents key differences among studies on property valuation in SSA. The table summarises key findings from various academic sources related to real estate investment, property valuation, land use, taxation, and urban planning in different regions. It consists of three main columns that provide insights into each study, such as Gap Identified, which highlights the limitations or missing aspects, and Policy/Practical Implications, which suggests real-world applications or recommendations based on the findings. These range from strengthening tax regulations and integrating AI in property valuation to improving transparency in land investments. In the Region/Study Context, the analysis offers localized valuation issues.

Table 1

Comparison: Valuation Methods – SSA vs. Developed Economies

Aspect	Sub-Saharan Africa	Developed Economies
Dominant Valuation Models	Cost Approach, sales comparison professional heuristics	Income Approach (DCFI, Cost Market, Hedonic Pricing, Hybrid models
Data Access	Limited market Data, informal property records	Comprehensive transaction databases, digital land registries
Land tenure System	Customary, informal and often undocumented ownership	Legally registered titles, formal documentation
Regulatory oversight	Weak or inconsistently enforced regulations (e.g., VRB, struggles)	Strong legal and professional regulation (e.g., RICS, IVS)
Technological adoption	Low adoption of GIS, AVM, AI due to cost and training barriers	Independent, auditable, and legally protected valuation process
Transparency and objectivity	Valuation often influenced by client pressure or political interference	Independent, auditable, and legally protected valuation process
Methodological flexibility	Rigid reliance on traditional cost or expert judgment	Integrated hybrid methods based on property type and market segment

Source: literature context based

Table 2

Comparison and founded gaps addressed in the articles

Author Year of publication	Gap Identified	Policy/practical implications	Region/Study context
Abidoye et al. (2017)	Lacks post-crisis market evolution environmental, social and Governance (ESG) factors	Include emerging markets, risk management and sustainability	International (USA, UK, Asia)
Bartke & Schwarze (2015)	Excludes AI, AND AVMs	Support AI-driven Valuation tools to intensify accuracy	International
Baum (2015)	Low empirical analysis on high-risk economies in Africa, Asia, and Latin America.	Strengthening legal and institutional frameworks in emerging markets to attract investment and improve transparency.	USA
Baumgartner et al. (2015)	Lacks biodiversity loss and policy impact analysis	Implement strict land-use Planning and sustainable investment models	Ethiopia
Bello (2018)	No ROI or economic trend impact passement	Introduce Zoning regulation and include investment performance indicator	Nigeria
Chelot (2022)	Lacks AI. Data integration and Valuation transparency	Strengthen regulation, data collection, and ethics enforcement	Kenya
Chelot & Mooya (2024)	No detailed study on bias types or mitigation	Introduce ethical standards and digital valuation tools.	Kenya
Chimhowu (2019)	it lacks detailed country-specific case studies or quantitative analysis of the impacts.	Policymakers need to balance statutory governance and customary land rights	Sub-Saharan Africa
Drummond (2012)	Omits external economic influences and industry roles.	Strengthen and broaden the tax base	Sub-Saharan Africa
Feichtiger & Salhofer (2013)	Lacks Policy influence, Inflation and tech integration	Align subsidies with productivity and regulate land price inflation	Europe
Giovannetti & Ticci (2016)	Lack of impact assessment on local communities and food security	Strengthen land to ensure responsible investment	Sub-Saharan Africa
Issac & O'Leary (2017)	Excludes market volatility and valuation fraud	Update with digital valuation trends and sustainability factors	International
Krause & Bitter (2012)	No analysis of investor policymakers	Create regulatory guidelines and training programs	USA
Labson (2016)	extensive normative analysis, but there are limited practical price-cost tests.	Propose a clear framework integrating regulatory economics with competition law.	South Africa and Zambia
Lindley et al. (2018)	Insufficient empirical data on effectiveness	Develop localized UGI strategies and invest in research	Sub-Saharan Africa
Mabin et al. (2013)	Lacks data comparisons and infrastructure impact	Impalement of long-term urban planning with infrastructure investment	Sub-Saharan Africa
Mazzocchi et al. (2019)	There are no specifics on climate variables or policy impact	Implement climate-resilient farming policies and zoning regulation	Northern Italy
Schoenfeld (2014).	There is no assessment of social and environmental impact.	Improve transparency, ensure fair compensation and track impact	Sub-Saharan Africa
Silva (2015)	Lacks informal settlement and infrastructure impact analysis	Integrate informal settlements and modernize urban planning	Sub-Saharan Africa
Simgelsky et al. (2014)	There is no data on economic impact or policy responses	Integrate mental health services into healthcare and policy	Sub-Saharan Africa
Sjaastad & Bromley (2017)	No empirical data validation or comparative analysis	Strengthen land tenure policies without full privatization	Sub-Saharan Africa
Sunday Emmanuel (2018)	No crime economic loss correlation or community involvement	Use urban design and social programs to reduce crime	Nigeria
Tusting et al. (2019)	No analysis of policy or affordability trends	Expand affordable housing and track policy effectiveness	Sub-Saharan Africa
Van de Niet (2021)	No industry comparison or long-term effect analysis	Improve investor education and enforce disclosure rules	South Africa
Watchira (2016)	No performance evaluation or fraud prevention mechanisms	Verification and expansion adoption	Kenya

Source: own compilation

Table 3

Macroeconomic Indicators (affecting Property Valuation, Sub-Saharan Africa).

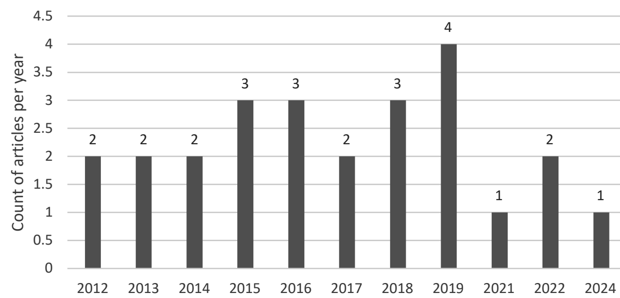
Year	Countries/ Region	GDP per capita (USD)	Urban Population (% of total population)	FDI net inflow (% GDP)	Inflation rate	Domestic Credit to the private sector (% of GDP)
2010	Sub-Saharan Africa	1620.23	36.06	2.07	4.03	50.73
2011		1771.92	36.58	2.46	5.37	46.44
2012		1791.52	37.092	2.64	6.58	46.08
2013		1852.63	37.61	2.30	4.89	42.77
2014		1879.96	38.14	2.41	4.40	41.83
2015		1628.91	38.69	2.61	3.55	41.61
2016		1446.87	39.22	1.90	5.43	42.31
2017		1536.482	39.76	1.23	5.20	43.93
2018		1606.13	40.30	1.18	4.09	40.51
2019		1611.67	40.83	1.34	2.84	38.901
2020		1474.06	41.37	1.26	3.48	37.17
2021		1613.88	41.91	3.61	4.61	35.51
2022		1688.40	42.45	1.49	9.39	33.37
2023		1622.81	42.99	1.39	6.70	

Source: own search from records identified on the World Bank database

In Table 3 the data provides an overview of key macroeconomic indicators influencing property valuation in SSA from 2010 to 2023. For instance, GDP per capita fluctuated over the years, peaking in 2014 at $1,879 before declining to $1,446 in 2016. In more recent years, it has stabilized around $1,600. On the other hand, urbanization trends show a consistent rise, with the percentage of the population living in urban areas steadily increasing. Meanwhile, FDI net inflows as a percentage of GDP have shown volatility, with noticeable fluctuations over the years. A significant rise in FDI occurred in 2021, reaching 3.6%, before declining again in 2022 and 2023. Inflation rates have also shown considerable variation, peaking at 9.39% in 2022. Domestic Credit to the private sector as a percentage of GDP has steadily declined in Sub-Saharan Africa, dropping from 50.73% in 2010 to 33.37% in 2022. This trend suggests tightening credit conditions due to regulatory changes, economic instability, and rising lending risks.

Figure 2

Bar chart displaying the annual distribution of research articles on SSA (2010 to 2024)



Source: author own selection from World Bank national accounts data, and OECD National Accounts data files

Table 4

SSA Macroeconomic Indicators correlation (Affecting Property Valuation)

	GDP per capita (USD)	Urban Population (% of total population)	FDI net inflow (% GDP)	Inflation rate	Domestic Credit to the private sector (% of GDP)
GDP per capita (USD)	1				
Urban Population (% of total population)	-0.46	1			
FDI net inflow (% GDP)	0.43	-0.36	1		
Inflation rate	0.20	0.25	-0.05	1	
Domestic Credit to the private sector (% of GDP)	0.22	-0.94	0.11	-0.21	1

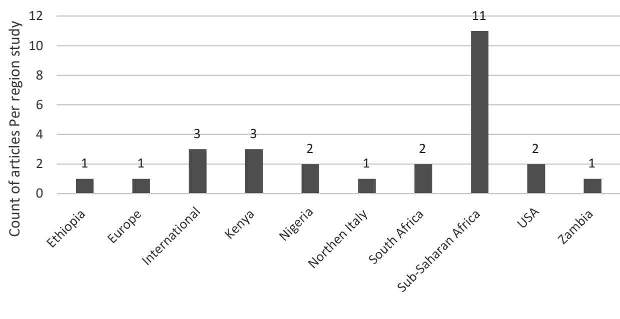
Source: own calculation used excel statistics analysis from records identified on the World Bank database

Table 4 data provides a correlation among macroeconomic indicators in SSA, resulting in a negative correlation between GDP per capita and urban population of (-0.46), a positive correlation between GDP per capita and FDI inflow (0.43), a weak positive correlation between Domestic Credit to the private sector with GDP per capita of (0.22), strong negative correlation between urban population and domestic Credit (-0.935), Foreign direct investment negatively correlates with urbanization (-0.36), Inflation weakly correlates with other indicators, including a slight positive relationship with GDP per capita (0.20), urban population (0.25) and negative correlation with domestic Credit (-0.21).

Figure 2 bar chart illustrates the annual distribution of articles on property valuation in SSA from 2012 to 2024. Research activity peaked in 2019 with four articles. The fluctuations suggest varying research interests, possibly driven by emerging challenges or regional policy developments.

Figure 3

Geographic distribution of property valuation research in SSA (2010-2024)

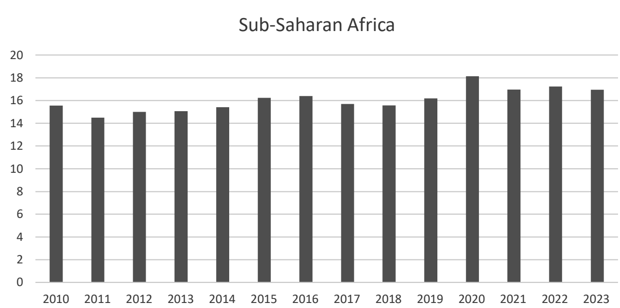


Source: author own selection from World Bank national accounts data, and OECD National Accounts data files

Figure 3 illustrates the distribution of articles on property valuation across different regions and countries. Property Valuations vary significantly in their accuracy, applicability, and reliability (Figure 4).

Figure 4

Sub-Saharan Africa Agriculture, forestry, and fishing, value added (% of GDP)



Source: author own selection from World Bank national accounts data, and OECD National Accounts data files.

Discussion

Macroeconomic analysis and Property Valuation challenges

The correlation analysis conducted in this study reveals complex and, at times, counterintuitive relationships between macroeconomic indicators and property valuation in SSA countries. One key finding is the strong negative correlation between urbanization and domestic credit to the private sector (-0.94), indicating that as urban populations grow, access to formal credit mechanisms does not increase proportionately. This suggests a significant structural constraint: while urban expansion progresses, the financial infrastructure needed to support real estate valuation remains underdeveloped. This supports Hypothesis 1, confirming that credit availability is a critical determinant of property market functionality.

Another important result is the negative correlation between urban population growth and FDI inflow (-0.36). Contrary to Hypothesis 2, this suggests that urbanization in SSA does not automatically attract foreign capital, possibly due to the prevalence of informal land markets, inadequate infrastructure, and governance challenges. In contrast to developed economies where urban growth often correlates with investment, SSA experiences a divergence that undermines valuation predictability. These valuation distortions are not solely economic but deeply rooted in institutional and legal structures land governance in SSA is characterized by dual legal systems, where customary tenure overlaps with formal law. This ambiguity limits the enforceability of property rights and hinders market-based valuation. In many cases, informal settlements lack official recognition, yet hold significant value due to proximity to urban centers. These socio-political dynamics create environments where valuations are shaped less by market logic and more by negotiation, patronage, or exclusion

The descriptive statistics in Table 3 reflect broader structural challenges in SSA's macroeconomic environment. While GDP per capita shows moderate growth over the period, this is not matched by corresponding increases in domestic credit to the private sector, which declined significantly. Additionally, inflation volatility and fluctuating FDI inflows point to an unstable investment climate. These inconsistencies have direct implications for property valuation: for instance, inflationary pressures distort long-term projections, making income and DCF-based valuation models less reliable. The decline in credit availability also limits the effectiveness of market comparison approaches, particularly where transaction data are scarce.

Moreover, it is important to emphasize although the Cost and Comparative Methods dominate valuation practice in SSA, still DCF is a good alternative method offer greater adaptability. DCF is particularly useful in urban and peri-urban contexts where rental income data is emerging but not yet standardized. Its forward-looking nature accommodates economic volatility and investor uncertainty, especially in commercial and mixed-use developments. Valuation of commercial property in Kenya (Nairobi's central business district), for example, would benefit more from a DCF or Income Approach model due to regular rental cash flows and investor interest. In contrast, agricultural land in northern Ghana may require a hybrid model integrating local yield data and environmental risk factors.

Financial constraints and property market limitations

Inflation shows a weak positive correlation with GDP per capita (0.20) and a weak negative correlation with credit availability (-0.21), partially supporting Hypothesis 3. While moderate inflation may not hinder economic growth, prolonged inflation erodes purchasing power, raises construction costs, and disrupts valuation reliability. This complexity suggests that valuation models must incorporate inflation variability when assessing long-term investment potential. As highlighted by Drummond et al. (2012), weak financial institutions and poor macroeconomic management intensify these pressures. Similarly, Van der Niet (2021) emphasizes that inconsistent monetary policies and inflationary volatility undermine long-term real estate profitability and valuation accuracy.

An often overlooked but essential component of the valuation landscape in SSA is agriculture. Agriculture contributes between 15% and 40% of GDP in many SSA countries and provides livelihoods for up to 80% of the population (World Bank, 2024). However, a substantial share of agricultural activity occurs in the informal economy and is not captured in GDP or valuation frameworks. This disconnect leads to the systematic undervaluation of agricultural land, especially in rural and peri-urban areas. The reliance on traditional valuation models often based on limited data and formal land ownership fails to consider land productivity, tenure insecurity, or environmental variability. Valuation of agricultural land must take into account yield potential, land tenure, and environmental inputs like rainfall and soil quality. The Income Approach becomes particularly useful here but is underutilized due to limited access to reliable data. Furthermore, urban encroachment on peri-urban agricultural land adds speculative pressures that are not reflected in formal valuation systems due to weak regulatory oversight.

Weak institutional capacity and limited legal enforcement create environments ripe (Corruption) incapacitating property valuer, for manipulation and bias, especially in areas where property rights are contested or undocumented. As Chimhowu (2019) suggest, opaque governance structures particularly those grounded in customary land tenure enable discretionary practices that compromise valuation reliability. Incorporating governance quality and corruption perception indices into valuation frameworks could provide a more accurate and transparent assessment of property values.

Research trends and policy implications

The systematic literature review and publication trends reveal that research on property valuation SSA is often reactive, driven by macroeconomic shocks or emerging policy challenges rather than sustained scholarly engagement. This irregular pattern underscores a deeper issue the fragmented and underdeveloped state of real estate research and valuation methodologies across SSA.

As Cheloti (2022). and Sjaastad and Bromley (2015) emphasize, persistent regulatory weaknesses contribute to valuation distortions. Regional disparities in academic coverage further exacerbate the problem, with South Africa and Nigeria receiving more attention than other dynamic markets like Kenya or Ethiopia. Isaac and O'Leary (2017) attribute these inconsistencies to limited data availability and uneven regulatory enforcement. Moreover, the limited adoption of cross-country comparative studies restricts the transfer of best practices across SSA.

The continued reliance on traditional valuation approaches such as the cost and sales comparison methods present additional challenges. Despite global trends toward digital transformation, SSA lags behind in adopting AVMs, GIS and integrated databases. Wachira (2016) and Bartke and Schwarze (2015) argue that this gap weakens the responsiveness of valuation systems to changing economic conditions. Three key challenges emerge from the synthesis of literature and empirical results:

1. Misalignment between urban growth and financial inclusion: While urbanization in SSA is accelerating, formal credit systems have not kept pace. This undermines real estate financing and distorts valuation baselines, particularly in peri-urban areas.
2. Weak regulatory enforcement and valuation standards: Inconsistent application of valuation guidelines leads to variable quality in appraisals, reducing investor confidence. As Cheloti and Mooya (2024) note, client influence and valuation heuristics often replace standardized procedures.
3. Technological underdevelopment and data scarcity: The absence of comprehensive property registries, market databases, and digital valuation tools limits the accuracy and comparability of valuations across countries and property types.

Nevertheless, in order to address these issues, this study recommends several policy and research directions. First, regulatory frameworks should be strengthened, and enforcement mechanisms improved to ensure consistency in valuation practices across SSA. The adoption of digital tools, including GIS, AVMs, and mobile-based technologies, should be expanded to modernize valuation systems. It is also essential to develop training programs for valuation professionals that emphasize ethics, the use of digital tools, and market analysis. In parallel, reforms aimed at broadening financial inclusion particularly in the areas of mortgage financing and lending criteria can help enhance access to real estate credit. Finally, future research should encourage cross-country studies that identify context-appropriate valuation models and promote regional knowledge exchange to support more standardized and effective valuation practices.

Conclusion

This SLR points out the challenges in property valuation across SSA countries. By applying the PRISMA guidelines, the study reveals a scarcity of research on this topic among the SSA countries, although the region consists of 46 countries. Through a rigorous screening process using the guideline, 143 relevant studies were identified, of which 25 were selected for in-depth analysis. To assess how macroeconomic conditions, institutional factors, and valuation methodologies influence valuation practices across the region. This dual approach was designed to bridge theoretical insights with empirical evidence and provide a more holistic understanding of the valuation landscape in SSA. The literature review confirmed that SSA property markets remain highly fragmented, characterized by outdated valuation methodologies, weak regulatory enforcement, informal land markets, and limited access to reliable data. These issues directly undermine valuation consistency and investor confidence. The study also met its objective of identifying how socio-economic, environmental, and institutional variables such as urbanization, credit availability, and land tenure systems influence valuation processes. These identified influences, reveals that factors such as urbanization, credit availability, land tenure complexity, and institutional weaknesses significantly impact property valuation practices across SSA.

For instance, the correlation analysis revealed several non-intuitive relationships, such as the negative correlation between urbanization and credit access, and between urban growth and FDI inflows. These findings underscore the limitations of applying conventional valuation models in SSA contexts without accounting for institutional weakness and informality. This supports the need for models that can flexibly account for market fragmentation, volatility, and governance risks.

Despite these contributions, several areas warrant further investigation. First, future research should engage in country-specific case studies to evaluate how valuation practices respond to local governance structures, economic reforms, and land use patterns. Second, econometric modelling using panel data could offer deeper insights into causal relationships between macroeconomic variables and valuation outcomes. Third, there is a need for impact assessments of regulatory reforms and technological adoption, particularly in rapidly urbanizing contexts where valuation demand is rising but institutional capacity is weak. Finally, longitudinal studies tracking valuation changes in response to investment, policy shifts, and environmental pressures could help build more adaptive and resilient valuation systems in SSA. By addressing both conceptual and empirical gaps, this study contributes to a growing body of literature calling for modernization, standardization, and contextualization in SSA's property valuation sector. Aligning valuation practices with international standards, while adapting to local realities, is essential for improving market transparency, financial planning, and sustainable development across the region.

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