Vol. 3(1): 93-104 (2026)

Journal of Regenerative Economics

DOI 10.5937/jre2601093G

TEMPORAL DISPOSITIONS OF URBAN FINANCE READING NEOM AND TIRANA AS PARALLEL CONDITIONS

Ogerta Gjiknuri

Co-PLAN, Institute for Habitat Development, Albania

Fulvio Papadhopulli

POLIS University, Albania

Abstract: *Urbanization in the twenty-first century unfolds less as a sequence of planned spatial interventions than as a choreography of financial time. Investments dictate how quickly cities expand, slow, or stall, producing landscapes that are governed, not by design intentions but by the rhythms of credit, speculation, and political ambitions, constructed from the new city's image. This paper examines two contexts: NEOM's The Line in the Saudi and Albania's Tirana; which at first seem incomparable in geography, scale, and intent, yet both are shaped decisively by the temporal dispositions of finance. Drawing on datasets of construction permits and exceptional approvals in Tirana (2005–2025), alongside projections and revisions from NEOM's "The Line" (2021–2080 projected), we identify two contrasting but homologous logics: exponential vertical growth, particularly over the last five years in Tirana. On the other hand, a front-loaded simulation in NEOM, where state own funds are poured into projecting an anticipatory urban living model of the future. Tirana's figures reveal a synchronized escalation in permits, areas, and construction values after 2016. 2024-2025 is a culminate moment, in unprecedented approvals, with the National Territory Council (NTC) condensing impactful projects into a short horizon. NEOM's graphs, by contrast, emphasize divergence between official narratives of compression and reported projections of inflation, delays, and cost overruns. The comparative analysis suggests that without a regenerative financial governance model, Tirana's accelerated trajectory risks crossing into NEOM's hype–inflation threshold. Rising towers approved following the territorial reform of 2015, which do not properly calculate risk-management infrastructures, risk undermining long-term resilience, growth and sustainability goals, which are vital to a city's future. Rather than anomalies, both cases exemplify how financial temporality displaces architectural intentionality in contemporary*

Original scientific paper
Received: 08.6.2026
Accepted: 29.6.2026

urbanism. They embody a new urban condition where agency is placed in the projected value of what can be built, promised, or speculated.

Keywords: *Urban Finance, Speculative Urbanism, Regenerative Finance, Comparative Futures, Tirana, NEOM*

1. Introduction

Cities today are increasingly being shaped by the temporality of finance (Sassen, 2014; Aalbers, 2019). This is not merely a matter of funding projects, but of how capital accelerates, delays, and compresses urban rhythms. In contexts as diverse as post-socialist Europe and the Arabian Peninsula, we observe how financial instruments and political exceptions dictate the pace and form of growth (Ong, 2006; Shatkin, 2017). Tirana, Albania's capital, and NEOM's *The Line* in Saudi Arabia exemplify this paradox. The first is sedimented, improvisational, and retroactive, the other spectacular, anticipatory, and simulated. Both seek to reinvent their face to the world; both reveal how finance displaces design as the city's operative intelligence.

The hypothesis is not that Tirana and NEOM are similar in scale or ambition, but that they embody parallel time dispositions of urban finance. Tirana operationalizes emergent spatial orders after the fact, through cycles of exceptional approvals; NEOM front-loads investment to simulate an entire urban order before knowing how it is exactly is going to look like. Both strategies expose cities to risks of volatility, opacity, and systemic stress. By analyzing these two cases side by side, the paper suggests new policy recommendations for Tirana, by developing, tools for regenerative economies i.e., aligning financial acceleration with ecological and social capacities mandatory prior to decision-making/permit approvals.

2. Methods

This study employs a comparative temporal analysis of urban development approvals and financial flows, focusing on Tirana as a case of realized urbanism and NEOM as a projected megaproject. The approach is a mixed-method: (i) quantitative analysis of administrative datasets; (ii) qualitative codifying categories; and (iii) cross-case comparative timelines. The first dataset (d1) represents Tirana construction permits between 2005 and 2024 includes annual counts, approved areas, and permit values. The data were retrieved from the Institute of Statistics of Albania, which were used to derive and analyze indicators such as the average area per permit and value per square meter. The second dataset (d2) covers approvals by the National Territory Council (NTC) from 2022 to 2025. The data are categorized by the number of permits per year and typology. The analysis of NEOM builds upon official and publicly available data on financial commitments, external cost estimates, write-downs, and demographic targets spanning the period from 2021 to 2080. These provide comparable timelines of official narratives and reported recalibrations.

The analysis employs an asymmetrical comparative temporal method. Graphing the trajectories of each case revealed their financial rhythms and identified breakpoints where acceleration, inflation, or drift occurred. These breakpoints were

then interpreted through the framework of speculative urbanism (Aalbers, 2019; Cugurullo, 2021; Sassen, 2014).

3. Tirana: Vertical Escalation

The graphs of Tirana's permits tell a clear story. From 2005 to 2010, approvals were modest but steady. Between 2011 and 2015, activity collapsed, with permits, areas, and values shrinking in unison. After 2016, with the new territorial reform which impacted NTPA (National Territorial Planning Agency) competencies while reconfiguring the structure and operational scope of the National Territory Council (NTC), growth returned explosively. The permit value considered here corresponds to the official value applied for the calculation of fiscal obligations, including the infrastructure impact tax and related charges. Nevertheless, it should be noted that the market value at which these square meters are actually transacted is considerably higher. The trajectories synchronize so tightly that the lines appear braided: number, area, and value moving almost in lockstep (Figure 1).

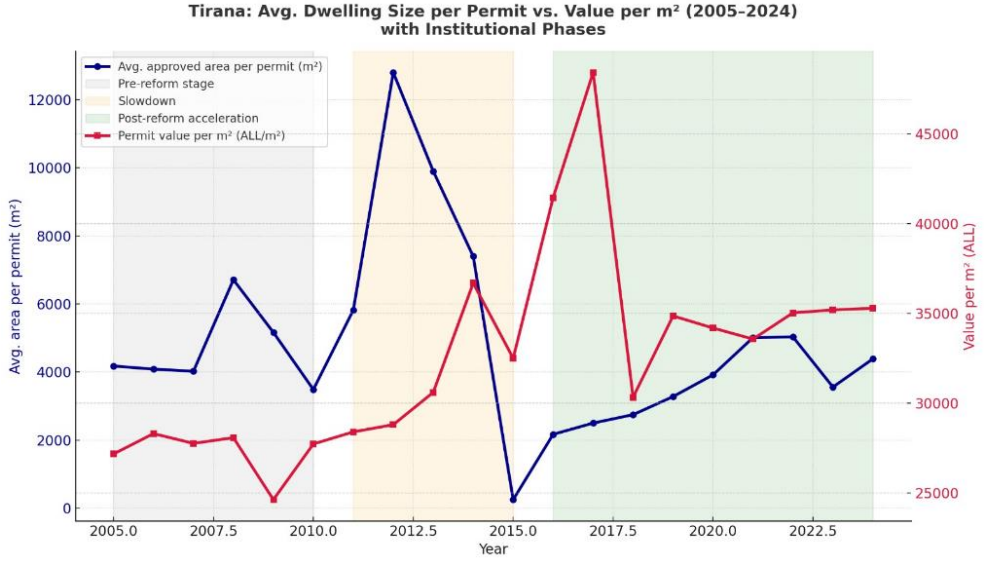
Figure 1. Construction permits in Tirana: number, value and approved area



Source: Authors' processing based on INSTAT data.

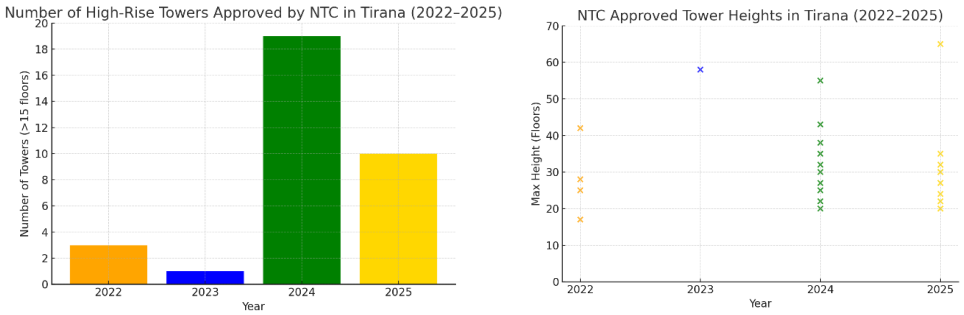
Derived indicators refine the picture. In 2024, the aggregate data show 1.77 million m² approved across 403 permits with a declared value of 62,389 million ALL, which equates to an average of about 4,400 m² per project and 35,000 ALL/m² (Figure 2). Higher averages, however, derive from the selective cluster of exceptional NTC approvals in 2022– mid 2025 alone (as the most impactful years closer to the present time of writing this inquiry, temporally long enough to analyze and explore certain short-term trend domains). Large-scale towers with fiscal valuations well above the median distort the distribution and make financial intensity appear disproportionately higher than the systemic observed baseline. (Figures 3a, 3b)

Figure 2. Average dwelling size per permit vs value per sqm per institutional phases.



Source: Authors' processing based on INSTAT data.

Figures 3a (left) - Number of high-rise approved by the NTC; 3b (right) - Mapping the no. of floors approved by NTC, higher than 15 floors. Both diagrams consider filtered data for Tirana to create a dataset for the temporal frame of 2022-2025.

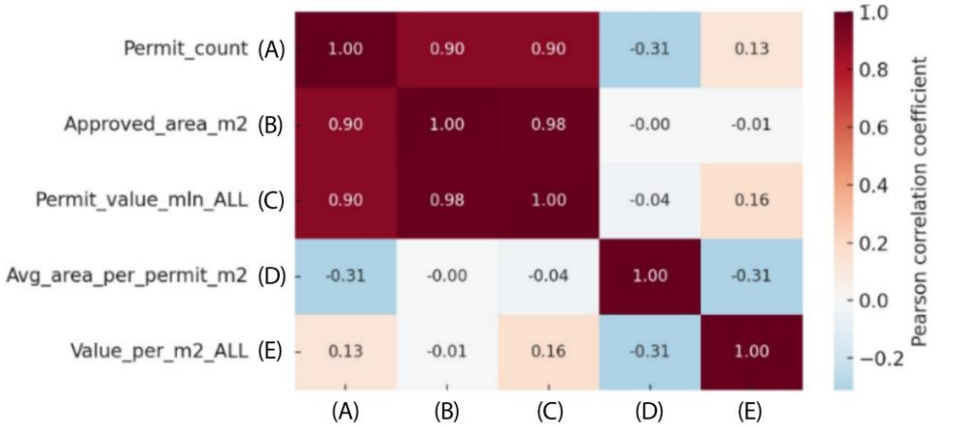


Source: Authors' processing based on INSTAT data.

Correlation analysis indicates that permits, built areas, and declared values are tightly interdependent ($r \approx 0.90–0.98$), reflecting a systemic coupling of volume and capital. By contrast, value per m² displays only a weak association with these measures, suggesting that speculative premiums are imposed selectively on particular projects rather than evenly across the urban stock. These coefficients were derived using Pearson's correlation on the log-transformed yearly aggregates of permits, areas, and declared values, thereby normalizing scale effects and ensuring comparability across variables (Figure 4).

Tirana's boom is thus not only volumetric but financial: not simply more buildings, but larger and more capital-dense buildings. Moreover, the higher market value of transactions amplifies the speculative dimension of prices, a process further reinforced by informality (UN-Habitat, 2020) and the influx of unregulated financial resources (World Bank, 2017).

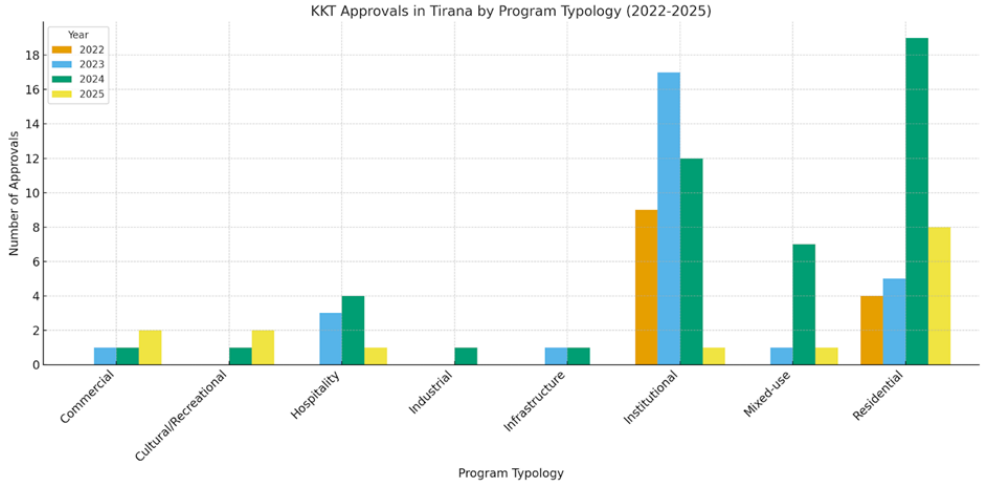
Figure 4. Correlation matrix of construction permits' indicators in Tirana 2005-2024.



Source: Authors' processing based on INSTAT data.

Investment corporations, alongside emerging financial instruments such as T-Blocks, designed to fractionalize real estate investment through tokenization, have found their way in, and have penetrated the Albanian market. This further demonstrates how speculative capital is being incentivized to be re-channeled into urban development (T-Blocks, 2025). However, evidence remains limited to early projects and pipelines, without clear proof of systemic alteration of permit legacies or financial intensity per square meter.

Figure 5. Tirana, NTC approvals by typology (2022-mid 2025)



Source: Authors' processing based on INSTAT data.

A new NTC sub-set filtering 2022– mid 2025 approvals, illustrates how these can further operate (filtered from *d4* dataset - Figure 4). Approvals cluster in exceptional verticalities rising from 15 to 65 floors, primarily residential and institutional complexes/infrastructures (Figure 5). Hotel and commercial projects appear in 2025, diversifying, but not diluting the vertical trend. Also, some of them were primarily integrated within the mixed-used categories and therefore were not

duplicated for data structural integrity reasons, but would be de facto, even higher than shown in Figure 1. Statistics confirm concentration. From 2022 until now, the tallest approval reached 65 floors; till mid 2025, fewer archipunctures are being approved in comparison with last year, but typologies has widened. The result shows a temporal condensation: decades of vertical growth compressed into years of exceptional decisions.

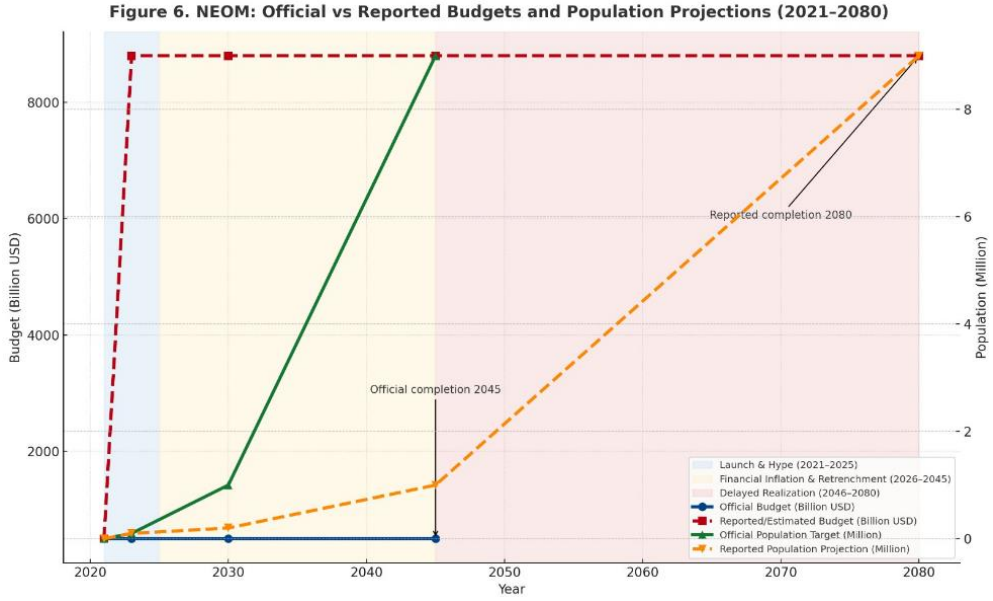
4. NEOM: Front-Loaded Simulation

NEOM, first announced in 2017, as the Saudi's new branding image of the future, spread across their northwest region, part of the kingdom's Vision 2030. It comprises ten integrated projects including *The Line*: a 170-kilometer linear city designed to house nine million residents and redefine urban living through renewable energy, car-free mobility, and advanced digital infrastructure (Kingdom of Saudi Arabia, 2016; NEOM, 2022; NEOM, 2023).

Its figures yet tell a different story, comparable under a temporal point of view (Figure 6). Officially, the project was a fixed $500B investment, with *The Line* to be completed by 2045 (Reuters, 2022; NEOM, n.d.). However, reported data diverge dramatically. External estimates suggest costs as high as $8.8 trillion (WSJ, 2025, cited in NDTV, 2025). In 2023, reports emerged of significant financial reassessment and cost overruns within the NEOM project, signalling internal retrenchment. Completion for the full NEOM development is now speculated to extend toward 2080, with The Line's first phase drastically reduced from 5 km to 2.4 km (WSJ, 2025, cited in NDTV, 2025). Population projections for The Line fall far short of initial goals: only 200,000 residents are anticipated by 2030 (WSJ, 2025 cited in NDTV, 2025), rising to 1 million by 2045, with the flagship target of 9 million residents now officially set for 2045 but contingent on a financial and construction timeline that reports suggest could stretch for decades.

When visualized (Figure 6) the indicators disclose two temporal dimensions layered upon one another: the official compression of time, in which a megacity is delivered whole by mid-century, and the reported inflation of time, in which budgets balloon and completion drifts beyond a lifetime. The divergence between the navy and crimson lines (budget) and between the green and orange lines (population) is stark. The shaded temporal frames clarify the dynamics: launch and hype (2021–2024), financial inflation and retrenchment (2025–2045), and temporal drift (2046–2080). NEOM, in short, is an anticipatory city in which the logical finance pre-scripts the urban future in advance, but whose temporality already reveals cracking under the strain of delayed implementation and shifting of dynamics.

Figure 6. NEOM official vs reported budget, and population projections 2021-2080



Source: Authors' processing based on official data reported from NEOM (2016-2025) and the WSJ (2025).

5. Comparative Analysis

Placed side by side, Tirana and NEOM reveal not similarity but homology. Both are cities governed more by financial timing and methods than design-space. Tirana accelerates retroactively, overlapping synchronized approvals; NEOM accelerates anticipatorily, projecting speculative futures through sovereign capital. Tirana compresses decades of verticality into exceptional bursts; NEOM compresses decades of growth into instant renderings, only to defer them in practice.

The correlation analysis (Figure 4) reveals two distinct dynamics in Tirana's construction landscape. On one hand, permit count, approved area, and total permit value are strongly correlated ($r = 0.90$ -- 0.98), indicating that growth has been primarily scale-driven: more permits systematically translate into larger built volumes and higher aggregate financial commitments. On the other side, average project size and value per square meter are weakly or negatively correlated with these scale indicators ($r \approx -0.31$ to 0.16). This suggests that while the system underwent substantial growth in absolute terms, financial intensity per unit of space followed a different rationale, likely associated with project typologies, location, or speculative pricing rather than sheer volume; as evidenced by the clustering of exceptional high-rise approvals from 2022 to 2025. In other words, a dual disposition is reflected in the city's trajectory: quantitative expansion that is closely aligned with permitting cycles and institutional reforms, as well as a partially decoupled financial density that is operated according to market indicators or political selectivity.

The comparison is illuminating precisely because the cases diverge. Tirana is happening, NEOM is projected; one is sedimented in layers of improvisation, the

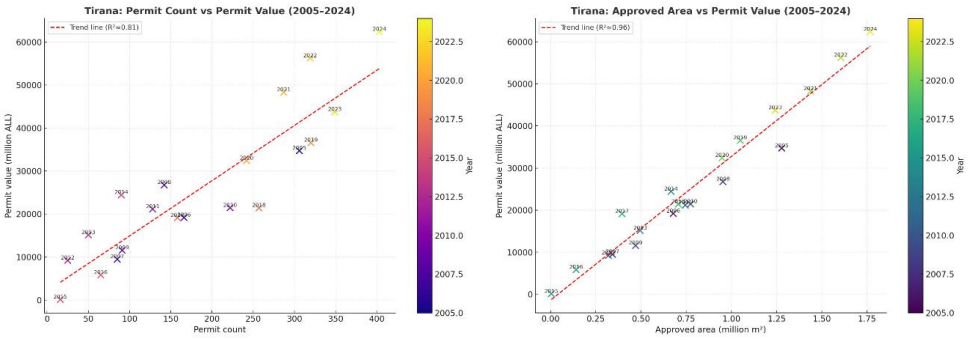
other simulated in advance. However, both cases reveal a shared structural condition: urban agency lies less in the consistency of the planning process but in the volatility of financial temporality. The Euro-Mediterranean region emerges with an example of this shift, where cities like Tirana are stuck between the slow pace of bureaucratic planning and the rapid advance of global capital seeking new opportunities.

6. A Call on Tirana's Future: Risks of Crossing the Hype-Inflation Threshold

The most consequential insight arises when Tirana's trajectories are read through NEOM's frames. The datasets suggest that Tirana, if current trends continue to evolve, may cross from a blue zone of hype into a yellow zone of inflation (Figure 6). The evidence confirms synchronized escalation in permits, areas, and values; sharp rises in average project size; selective speculative premiums; and exceptional approvals of towers. These are classic precursors of financial overheating, recognized in both urban studies and project management literature (Aalbers, 2019; Flyvbjerg, 2014; Shatkin, 2017).

What does it mean to cross into inflation? It means that inputs like permits, capitalized area, financial valuations, and others, outpace outputs like network capacity, mobility reliability, and systemic resilience. NEOM shows this in projection through escalating budgets, delayed populations and deferred completion. Tirana risks this in realization. Towers are rising faster than the infrastructure to serve and support them. The city already suffers from strained mobility. The danger here lies that short-termism in approvals, due to a lack of considerations which take time and deep analytics, might undermine long-term sustainability goals and the city's urgent needs for alternatives. If public mass transit solutions are delayed, congestion risks compound to levels that degrade resilience. As a consequence, financial acceleration without infrastructural concurrency risks tipping Tirana from hype to inflation.

Figure 7. Tirana - permit count vs value (a); Tirana - approved area vs permit value (b). Period 2005-2024.



Source: Authors' processing based on INSTAT data.

Figures make things more visible. Figures 1 and 7 show permits, area, and value rising in lockstep. Figure 2 shows project sizes surging. Figure 4 shows NTC

approvals concentrating on verticality. These patterns map precisely onto the conditions that, in NEOM, have already produced divergence between narrative and projection. Tirana, in other words, risks becoming a realised mirror of NEOM's yellow zone: overinflated, underserviced, temporally unbalanced.

The call, therefore, is for temporal governance. The challenge is not to stop growth but synchronize it with infrastructural capacity. This could be operationalized through a 'concurrency delivery' mandate, inspired by systems in Florida or California, where approvals above a specific scale are legally contingent on proving adequate mobility, water, and energy capacity exist or is funded concurrently. Approvals would be tied to a developer's commitment to forward-fund specific infrastructure upgrades, ensuring financial acceleration does not outpace its own foundational support.

Despite being unprecedented, Tirana addresses a core tension in Euro-Mediterranean urbanism: the pressure to accelerate development and attract capital in a competitive global context, often at the expense of long-term resilience and equitable planning. The proposed analytical approach offers a replicable framework for other Mediterranean cities grappling with similar cycles of speculative booms driven by tourism, diaspora investment, or EU integration prospects. Implementing such a framework could be a cornerstone of a truly integrated Euro-Mediterranean approach to resilient territorial development, ensuring that financial time is synchronized with human and ecological time.

7. Conclusions & Recommendations

By reading Tirana and NEOM together, this paper has argued that contemporary urbanism is governed less by plans than by financial times and methods. In Tirana, however, evidence shows a double-layered operationalization of the city's urban growth: (a) with the normative building permits that follow under a partial (PDV) or general plan (PPV); (b) buildings which exceed planned limits or context-specific constraints, approved by the NTC. The territorial reform of 2015 is producing synchronized booms and quick vertical bursts. On the other hand, NEOM's data reveal a front-loaded simulation: a city projected in advance, compressing futures into a showcase, only to defer them under financial strain.

The comparison highlights a concerning parallel. Tirana's present trajectories resemble NEOM's hype frame; the risk is that it drifts into inflation without supporting infrastructural and ecological capacities. NEOM shows how easily narratives diverge from realities when finance overdetermines time. Both contexts, in their difference, exemplify the same condition: urban intelligence displaced by the temporality of finance.

This study, while global in its implications, is firmly situated in the Euro-Mediterranean context. Tirana's experience of retroactive legitimization is not an anomaly but a strong example of a broader phenomenon affecting secondary cities from the Balkans to the Southern European coast. These cities are subject to the disjointed rhythms of global finance, which often exploit regulatory ambiguities and post-political planning environments. Therefore, a conscious Euro-Mediterranean

approach to urban development is necessary to create new governance models that can manage these temporal dispositions. This requires moving beyond traditional spatial planning and embracing temporal governance. This new approach involves actively monitoring, regulating, and synchronizing the financial rhythms that now fundamentally shape urban futures. The comparative method employed here - juxtaposing a regional case with a global extreme - provides a template for understanding and mitigating these risks across the Mediterranean basin.

What emerges is not a story of failure or critique but of epistemic transformation. Cities today are produced in the gaps between hype and inflation, simulation and sediment. To study them is to study finance and development over time. Tirana and NEOM are not outliers but laboratories for this condition, reminders that the most consequential dimension of urban planning is no longer where or what is built, but when, how fast, and at what temporal costs. Only when approvals, infrastructures, and capacities advance in synchrony can acceleration translate into resilience. What is required are instruments of measurement rather than prescriptive rules, a methodological lens that makes temporal risk legible and transforms fragile expansion into governable urban intelligence.

References

Aalbers, M. B. (2019). Financial geography III: The financialization of the city. *Progress in Human Geography, 43*(6), 1137–1146. https://doi.org/10.1177/0309132518819503

Cugurullo, F. (2021). Urban artificial intelligence: From smart cities to artificial intelligence urbanism. *Frontiers in Sustainable Cities, 3,* 670328. https://doi.org/10.3389/frsc.2021.670328

Duranton, G., & Turner, M. A. (2011). The fundamental law of road congestion: Evidence from US cities. *American Economic Review, 101*(6), 2616–2652. https://doi.org/10.1257/aer.101.6.2616

Elshahed, M. (2023). The Line: Saudi Arabia's city of the future or speculative mirage? *Journal of Urban Design, 28*(6), 789–804. https://doi.org/10.1080/13574809.2023.2187459

Flyvbjerg, B. (2014). What you should know about megaprojects and why: An overview. *Project Management Journal, 45*(2), 6–19. https://doi.org/10.1002/pmj.21409

Goldman, M. (2011). Speculative urbanism and the making of the next world city. *International Journal of Urban and Regional Research, 35*(3), 555–581. https://doi.org/10.1111/j.1468-2427.2010.01001.x

Kingdom of Saudi Arabia. (2016). *Vision 2030.* Retrieved from https://www.vision2030.gov.sa

Miles, H. (2022). Sovereign wealth and the making of NEOM: The political economy of Saudi Arabia's urban futurism. *Middle East Journal, 76*(3), 365–387. https://doi.org/10.3751/76.3.07

NDTV. (2025, March 11). Saudi Arabia's mega-city faces mega problem: The price of a desert paradise. Retrieved from https://www.ndtv.com/world-news/saudi-arabia-neom-the-line-50-billion-spent-what-went-wrong-at-saudi-arabias-sci-fi-desert-paradise-7898670

NEOM. (2022). *The Line: A revolution in urban living.* Retrieved from https://www.neom.com

NEOM. (n.d.). *The Line: A revolution in urban living.* NEOM.com. Retrieved October 16, 2025, from https://www.neom.com/en-us/regions/theline

NEOM Company. (2023). *About NEOM*. Retrieved from https://www.neom.com/en-us/about

Reuters. (2022, July 25). Saudi crown prince says NEOM mega-project to list in 2024. Retrieved from https://www.reuters.com/world/middle-east/saudi-crown-prince-says-zero-carbon-city-neom-will-likely-be-listed-2024-2022-07-25/

Sassen, S. (2014). *Expulsions: Brutality and complexity in the global economy.* Harvard University Press.

Shatkin, G. (2017). *Cities for profit: The real estate turn in Asia's urban politics.* Cornell University Press.

T-Blocks. (2025). *About us.* T-Blocks. https://tblocks.io/about-us

Transportation Research Board. (2013). *Transit capacity and quality of service manual* (3rd ed.). TRB, National Academies.

Vuchic, V. R. (2007). *Urban transit systems and technology.* John Wiley & Sons.

VREMENSKI OBRASCI URBANOG FINANSIRANJA NEOM I TIRANA KAO PARALELNA URBANA STANJA

Apstrakt: *Urbanizacija u dvadeset prvom veku odvija se manje kao niz planiranih prostornih intervencija, a više kao koreografija finansijskog vremena. Investicije određuju koliko brzo se gradovi šire, usporavaju ili stagniraju, stvarajući urbane predele kojima ne upravljaju projektantske namere, već ritmovi kreditiranja, spekulacije i političkih ambicija zasnovanih na predstavi o novom gradu. Rad razmatra dva konteksta: projekat The Line u okviru NEOM-a u Saudijskoj Arabiji i Tiranu u Albaniji. Iako na prvi pogled deluju neuporedivo u pogledu geografije, razmera i namere, oba su presudno oblikovana vremenskim obrascima finansiranja. Na osnovu skupova podataka o građevinskim dozvolama i izuzetnim odobrenjima u Tirani (2005–2025), kao i projekcija i njihovih revizija za projekat The Line u okviru NEOM-a (projekcioni period 2021–2080), identifikovane su dve suprotstavljene, ali strukturno analogne logike: eksponencijalni vertikalni rast, naročito tokom poslednjih pet godina u Tirani, i simulacija zasnovana na velikim ulaganjima u početnoj fazi u NEOM-u, gde se državna sredstva usmeravaju u anticipativni model budućeg urbanog života. Podaci za Tiranu pokazuju usklađen rast broja dozvola, odobrenih površina i vrednosti izgradnje nakon 2016. godine. Period 2024–2025. predstavlja kulminaciju, sa odobrenjima bez presedana i koncentrisanjem projekata sa značajnim uticajem u kratkom vremenskom okviru kroz odluke Nacionalnog teritorijalnog saveta (NTC). Nasuprot tome, grafikoni za NEOM ukazuju na razilaženje između zvaničnih narativa o vremenskom sažimanju i objavljenih projekcija uvećanja troškova, kašnjenja i prekoračenja budžeta. Komparativna analiza ukazuje da, bez modela regenerativnog finansijskog upravljanja, ubrzana putanja Tirane nosi rizik prelaska praga između prenaglašenih očekivanja i inflacije, uočenog kod NEOM-a. Visoki objekti odobreni nakon teritorijalne reforme iz 2015. godine, bez odgovarajućeg sagledavanja infrastrukture za upravljanje rizicima, mogu ugroziti dugoročnu otpornost, rast i ciljeve održivosti koji su ključni za budućnost*

grada. Oba slučaja pokazuju kako finansijska temporalnost u savremenom urbanizmu potiskuje arhitektonsku intencionalnost. Oni predstavljaju novo urbano stanje u kojem se delatna moć zasniva na projektovanoj vrednosti onoga što se može izgraditi, obećati ili pretvoriti u predmet spekulacije.

Ključne reči: *Urbano finansiranje, spekulativni urbanizam, regenerativno finansiranje, komparativne budućnosti, Tirana, NEOM.*