

The macroeconomic impact of residential construction on national productivity

Mustafa Arıcan^{*1a}, Soner Şeker^{2b}

¹ Independent Researcher, Ankara, Türkiye

² Department of Civil Engineering, Faculty of Engineering and Natural Sciences, Uşak University, Uşak, Türkiye

Article Info

Article History:

Received:

11 Mar 2026

Accepted:

14 June 2026

Keywords:

Residential construction,
Macroeconomic multipliers,
Crowding-out effect,
Capital allocation,
Housing financialization,
Economic value added

Abstract

While housing development generates substantial output and employment multipliers that accelerate domestic monetary velocity, its hyper-financialization introduces severe macroeconomic vulnerabilities. The economic impact of housing construction is characterized by high multipliers and complex resource allocations. Quantifying these effects reveals that in specific contexts, such as Australia, every \$1 million in residential output generates \$2.9 million in total economic output and sustains nine jobs. While housing acts as a significant catalyst, the sector faces a global productivity paradox and substantial risks of resource misallocation. For instance, China exhibits a 22.4% vacancy rate, highlighting potential inefficiencies in large-scale residential development. Furthermore, housing construction can exert a crowding-out effect on industrial investment, potentially hindering broader manufacturing growth. Despite these challenges, targeted investments in affordable housing demonstrate significant social value, with Social Return on Investment (SROI) ratios reaching up to 1 to 3.22. This research suggests that while residential development is a powerful economic engine, its efficacy depends on balancing immediate output with long-term industrial health and occupancy stability. Strategic planning is required to mitigate the productivity gap and ensure that the substantial economic multipliers of housing construction translate into sustainable national growth without depleting resources from other vital sectors.

© 2026 MIM Research Group. All rights reserved

1. Introduction

Housing represents the largest asset owned by most households globally and serves as a primary vehicle for wealth accumulation, particularly within the middle class [1]. Beyond individual wealth parameters, housing plays a transformative and often volatile role in shaping aggregate macroeconomic outcomes. Because homeownership is simultaneously the largest source of domestic debt and private wealth, the housing sector is central to understanding the genesis and propagation of boom-and-bust economic cycles [2]. Currently, the macroeconomic pressures surrounding residential real estate are unprecedented; real global house prices sit approximately 20 percent above their levels following the 2008 global financial crisis, and demographic projections indicate that 3 billion people will require access to adequate, newly constructed housing by 2030 [3]. Consequently, housing operates within a highly unique dual capacity in modern economic theory, it is an absolute biological and social necessity required for labor reproduction and stability, while simultaneously functioning as the most heavily financialized asset class anchoring the global banking system.

*Corresponding author: mustafarican15@gmail.com

^aorcid.org/0000-0002-0716-2729, ^borcid.org/0000-0002-7632-9713

DOI: <http://dx.doi.org/10.17515/rede2026-020ec1103rs>

Res. Des. Vol. 3 Iss. 1 (2026) 65-77

This dual nature generates a profound debate among central bankers, macroeconomic policymakers, and urban economists regarding the optimal allocation of a nation's capital. The core research question addressed in this article is whether aggregate capital directed into residential construction acts as a sustainable economic stimulant, or whether it ultimately devolves into a parasitic drain on national productivity. In traditional financial literature, investments in advanced manufacturing, technological research, or commercial infrastructure are unequivocally classified as "productive assets" because they generate compounding revenue, continuous innovation, and intrinsic value independent of speculative market pricing [4]. The macroeconomic classification of housing construction, however, is heavily contested. While immediate Keynesian multipliers suggest construction drives localized employment, recent empirical evidence indicates that persistent, rapid increases in real house prices, and the subsequent over-allocation of capital to residential construction, can negatively impact long-term labor productivity growth across advanced economies [5]. Furthermore, excessive housing booms have been linked to severe resource misallocation at the industry level [6]. Therefore, this article seeks to systematically delineate the precise conditions under which building houses creates compounding economic surplus versus when it generates structural macroeconomic vulnerability.

To rigorously evaluate the opposing dynamics of residential construction, this article synthesizes a multifaceted quantitative methodology. The scope of the analysis transcends standard GDP growth accounting by integrating cross-country econometric data, input-output sector multipliers, and advanced corporate valuation metrics such as Economic Value Added (EVA). Central to this methodology is the application of recent theoretical frameworks that quantify a "sufficient statistic" to measure the net effect of housing prices on real investment [7]. This framework isolates the tension between the "collateral channel," where rising real estate values relax corporate borrowing constraints to spur industrial investment, and the "crowding-out channel," where inflated land and construction costs drain capital away from productive non-housing sectors [6,7]. By applying this framework alongside structural vector autoregression (SVAR) analyses and difference-in-differences approaches across divergent markets, from the advanced economies of the European Union to the construction-led growth models of emerging markets, this article provides a comprehensive assessment of how institutional and regulatory environments dictate the ultimate economic utility of residential construction [8].

2. Theoretical Framework of Housing as Economic Capital

To accurately evaluate the macroeconomic utility of residential construction, it is first necessary to establish the epistemological classification of housing within modern economic theory. Assets are fundamentally bifurcated into productive and non-productive categories. A productive asset is defined as an investment that generates continuous income or appreciates in intrinsic value through its own economic utility, such as commercial real estate, equities, or industrial machinery [4]. Conversely, non-productive assets, such as gold or certain speculative commodities, generate no independent yield; their value relies entirely on market sentiment, fear, and capital appreciation driven by subsequent buyers [4].

In this context, residential real estate stands as a clearly productive asset. Conventional economic principles suggest that food and housing are the two most critical requirements for sustaining a healthy economy and a functional workforce. From an investment perspective, housing generates wealth through two distinct channels: the growth of its market value and the production of ongoing revenue. While landlords collect this revenue through direct rental payments, homeowners receive what is known as 'imputed rent' a theoretical financial benefit they essentially pay themselves for the continued use and utility of their own residence [9].

Furthermore, behavioral economic surveys conducted by the Federal Reserve Bank of New York reveal that households view housing as an optimal investment not merely for its financial return, but because it functions as an accessible source of leverage, acts as a commitment device for forced saving through mortgage amortization, and provides a critical hedge against rising localized housing costs [1]. Therefore, the foundational act of building a home creates a durably productive

asset that yields societal and individual dividends for decades, directly enhancing the stability and efficacy of the national workforce.

2.1. The Financialization of Real Estate

While the individual utility of housing is well established, its aggregate macroeconomic impact cannot be fully comprehended without examining its deep integration into the modern financial architecture. Over the past century, global real estate has undergone a profound structural transformation characterized by intense financialization. Historically, banking institutions engaged in a highly diverse array of commercial and industrial lending; today, however, most banks across the developed and developing world function primarily as mortgage creation vehicles [10].

This phenomenon, frequently termed "The Great Mortgaging" within economic literature, has inextricably linked the stability of the global banking sector to the underlying price of land and residential property [10]. Because homeownership represents the largest single source of both private wealth and household debt, the housing sector serves as the central conduit through which boom-and-bust economic cycles are generated and propagated across the broader economy [2].

When land and housing prices rise, the collateral base of the economy expands. This dynamic fundamentally alters credit availability, loosening borrowing constraints not just for households, but for corporate entities that hold real estate on their balance sheets [10]. However, this deep financialization introduces systemic vulnerabilities. As housing evolves into a heavily traded financial commodity, its price dynamics often detach from the organic demographic demand for shelter, driven instead by mortgage credit availability and speculative investment flows. The macroeconomic stability of a nation thus becomes deeply dependent on maintaining a delicate balance between utilizing real estate as productive collateral and preventing the sector from morphing into a speculative vacuum that distorts the national allocation of capital.

3. Quantifying Output and Employment Multipliers

To accurately measure the macroeconomic stimulus provided by residential construction, economists rely heavily on input-output multipliers. These multipliers capture the extensive horizontal and vertical linkages the construction sector maintains with the broader economy [11,12]. Vertical linkages refer to the deep supply chains required to source building materials, encompassing raw material extraction, manufacturing, and logistics, while horizontal linkages involve complementary sectors such as financial services, real estate brokerage, and legal underwriting [12].

Empirical data confirms that due to these interdependencies, residential construction generates some of the highest economic multipliers of any sector. An exhaustive analysis conducted by the National Housing Finance and Investment Corporation (NHFIC) in Australia demonstrated that the residential building construction industry possesses the second-largest economic multiplier among all 114 industries within the national economy [13]. Specifically, the NHFIC determined that every \$1 million of output in residential building construction supports approximately \$2.9 million in total industry output and consumption across the broader economy [13]. The widespread economic impact and employment multipliers generated by housing construction are summarized in Table 1 to illustrate the sector's place in the national economy as adapted from [11].

Table 1: The Keynesian Stimulus and Domestic Multiplier Effects of Residential Construction

Impact Category	Key Input / Metric	Multiplier Effect / Outcome	Explanation and Macroeconomic Mechanism
Economic Output	\$1 Million of Output	\$2.9 Million Total Output	Driven by high interdependencies, residential construction generates some of the highest economic multipliers, supporting total industry output and consumption across the broader economy.
Job Creation (Investment-Driven)	\$1 Million of Output	9 Jobs Supported	The sector acts as a vital engine for employment generation, supporting robust indirect and direct employment across the broader economy.
Job Creation (Unit-Driven)	1 Average New Home	3 Full-Time Equivalent Jobs	The construction of a single physical structure directly translates into strong labor demand, supporting full-time equivalent employment.
Velocity of Domestic Capital	Localized Supply Chains	Minimal Import Leakage, High Velocity of Money	Because structures cannot be efficiently imported as finished products, capital predominantly circulates domestically, supercharging recovery efforts without worsening national trade deficits.
Labor Intensity by Developmental Stage	Capital vs. Labor Distribution	Poverty Alleviation in Emerging Markets	While advanced economies rely on mechanization, labor-intensive methods in developing economies act as a critical sponge for unskilled labor and a mechanism for wealth distribution.

3.1. Labor Intensity and Job Creation

Beyond gross output, the construction sector is a vital engine for employment generation, accounting for roughly 5 percent of annual gross domestic product in economies like Australia and directly employing hundreds of thousands of individuals [13]. The employment multiplier effect is particularly robust; for every \$1 million of economic output generated by the residential construction industry, nine jobs are supported across the broader economy, meaning the construction of a single average new home supports three full-time equivalent jobs [13].

However, the nature of this labor intensity varies significantly depending on a nation's developmental stage. In advanced economies, high labor costs have driven the industry toward equipment-intensive technologies and mechanization [14]. Conversely, in developing, capital-scarce, and labor-abundant economies, housing construction relies heavily on labor-intensive methods, acting as a critical sponge for unskilled and semi-skilled workers [15]. Research demonstrates that with appropriate managerial oversight, these labor-intensive construction programs are highly competitive in terms of productivity and quality with mechanized methods, providing essential wealth distribution and poverty alleviation mechanisms in emerging markets [15].

3.2. Velocity of Domestic Capital

The macroeconomic efficacy of the construction multiplier is further amplified by the sector's geographic independence and localized market scale [12]. Unlike manufactured consumer goods, residential structures cannot be efficiently imported as finished products. Consequently, the capital expended on housing construction, from paying local subcontractors to purchasing heavy building materials, predominantly circulates within domestic borders.

This reliance on localized supply chains minimizes macroeconomic import leakage, ensuring that the initial investment retains a high velocity of money as it cascades through the regional economy [12]. Especially during periods of economic downturn characterized by high spare capacity, this localized spending creates positive payroll effects and supercharges recovery efforts without disproportionately worsening national trade deficits [12,13].

4. The Collateral and Crowding Out Channels

The macroeconomic impact of residential construction and the ensuing fluctuations in real estate prices are transmitted to the broader economy through two primary, opposing mechanisms, the first of which is the collateral channel. The collateral effect represents a positive economic externality wherein an increase in real estate prices raises the value of a firm’s existing real estate assets [7]. Because physical property is the most widely accepted form of collateral within the global banking system, this appreciation directly relaxes a firm's borrowing constraints, enabling it to secure additional capital to invest in its own productive processes, technological upgrades, and labor expansion [7]. This theoretical mechanism is robustly supported by empirical spatial panel data models from Chinese urban centers, which demonstrate a significant "crowding-in" effect where rising house prices lead to greater manufacturing concentration and industrial capital expansion due to the enhanced collateral values held by local firms [16]. In this scenario, strong residential construction markets act as a financial catalyst for broader industrial growth by enhancing corporate liquidity. Whether construction activities are a productive economic engine or a systemic risk leading to resource waste can be analyzed using the conditional value matrix presented in Table 2 as conceptualized based on [17–19].

Table 2: The Conditional Value Matrix for distinguishing economic stimulants from systemic risks

Value Creation (Economic Engine)	Resource Waste (Systemic Risk)
Driven by genuine demographic shelter deficits.	Decoupled from demographics to meet speculative GDP targets.
Triggers the Collateral Channel (crowding-in productive investment).	Triggers the Crowding-Out Channel (starving commercial credit).
Maintains positive Economic Value Added (EVA) corporate structures.	Relies entirely on artificially suppressed interest rates.
Yields high SROI, pre-emptively reducing state emergency costs.	Results in physical 'Ghost Cities' and sovereign banking collapse.

4.1. The Crowding Out Effect

Conversely, the crowding-out effect introduces a severe negative externality that can transform a housing boom into a parasitic drain on national productivity. While rising prices relax constraints for existing property owners, they simultaneously inflate the cost of acquiring new real estate assets [7]. For growing firms that require additional land or facilities to expand physical operations, these inflated real estate acquisition costs drain capital that would otherwise be allocated to real, productive investments such as machinery or research and development [7].

This dynamic is particularly detrimental to innovative firms with limited existing tangible assets. Recent empirical analysis utilizing detailed firm-level data from 2000 to 2023 in Canada reveals that persistent house price increases actively dampen investment for firms with fewer tangible assets, while stimulating those with substantial existing property portfolios [6]. Consequently, while aggregate output might initially appear stable during a construction boom, industries heavily reliant on acquiring new physical footprints experience significant resource misallocation, ultimately stifling long-term macroeconomic innovation and productivity [6].

4.2. The Sufficient Statistic Framework

To mathematically resolve the tension between these opposing channels and determine whether a regional housing market is stimulating or cannibalizing industrial investment, economists utilize an advanced quantitative framework that generates a "sufficient statistic" [7]. This model measures the net effect of housing prices on real aggregate investment by analyzing observable firm-level quantities [7]. For each firm within a region, the framework calculates a specific metric by multiplying its marginal productivity of capital by factors that increase with the firm's new real estate purchases and decrease with both its existing property inventory and its permissible loan-to-value ratio [7].

When these individual firm values are aggregated, the resulting sum indicates which macroeconomic force is dictating the broader economy. If the sum is positive, the crowding-out effect dominates, indicating that real estate has become too expensive, capital is being misallocated, and total economic surplus is being actively destroyed [7]. In such parasitic scenarios, the framework suggests policymakers must implement expansionary supply-side policies, such as targeted construction subsidies, combined with contractionary demand-side policies, like taxes on speculative real estate purchases, to correct the imbalance [7]. The severity of this crowding-out is further exacerbated if regional banks are capital-constrained; smaller banks may shift their lending portfolios heavily toward real estate to capitalize on rising collateral values, thereby deliberately starving non-housing commercial sectors of vital credit [7].

5. Opportunity Costs and the Construction Productivity Paradox

The macroeconomic decision to funnel domestic savings and credit into residential real estate inherently involves massive opportunity costs. Historically, sustainable economic development and transition to high-income status have been heavily correlated with industrialization and the expansion of the manufacturing sector. Empirical analyses of global growth episodes over the last half-century demonstrate that the manufacturing sector drove two-thirds of all significant economic growth periods, providing longer-lasting expansions and greater per capita income generation than service or construction-led growth [20].

Therefore, when a nation over-indexes its capital allocation into residential housing, it risks starving advanced manufacturing and technological sectors of vital resources. The magnitude of this opportunity cost is starkly visible when examining recent industrial policy shifts in advanced economies. In the United States, targeted federal legislation, such as the CHIPS Act and the Inflation Reduction Act, successfully doubled real manufacturing construction spending between 2021 and 2023, aggressively funneling capital into highly productive semiconductor and electronics fabrication facilities [21]. While this specific industrial boom did not strictly crowd out other private investments due to the exceptional depth of U.S. capital markets [21], it highlights the sheer volume of capital required to build technologically compounding infrastructure. In developing or transition economies with scarce capital, directing these immense financial flows toward speculative residential builds actively deprives the industrial base of the physical plants necessary for global competitiveness.

5.1. The Global Productivity Drag

Compounding the macroeconomic opportunity cost is the severe internal inefficiency of the construction sector itself. If an economy relies on building housing as an aggregate stimulus, it is effectively funneling national wealth into an industry experiencing a profound and enduring productivity paradox. According to comprehensive industry data tracking tens of thousands of large-scale global projects, construction productivity has effectively stagnated for decades [22].

Between the years 2000 and 2022, the global construction industry's aggregate productivity improved by a mere 10 percent, translating to an annualized compound growth rate of just 0.4 percent [22] (Figure 1). To place this structural failure in a macroeconomic context, the broader global economy achieved a 50 percent improvement in productivity during the same period, while the manufacturing sector achieved a staggering 90 percent improvement, or a 3 percent annual growth rate [22].

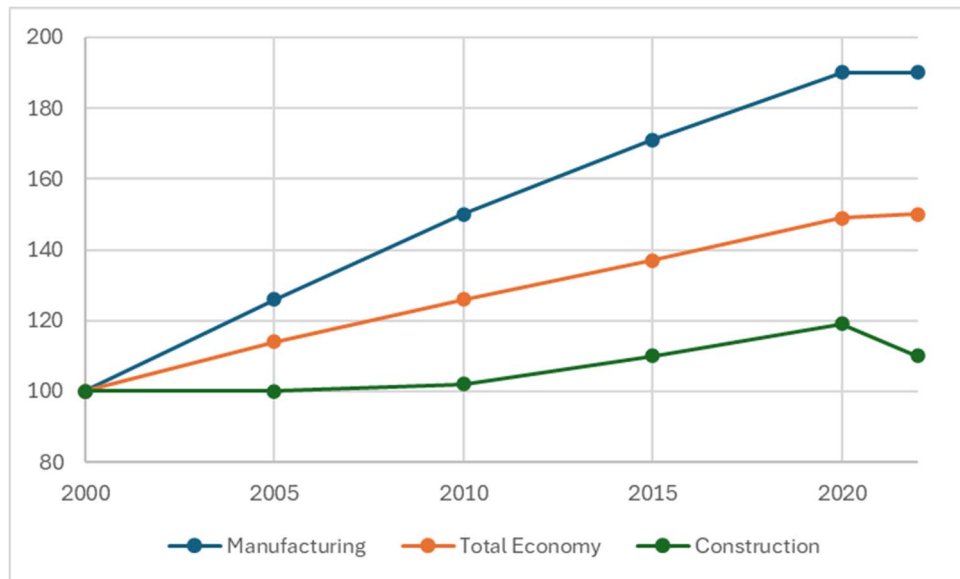


Fig. 1: Real gross value added per hour worked (global). Adapted from [23]

This productivity drag is driven by fragmented supply chains, thin profit margins, and a systemic under-investment in digital modernization. Construction firms historically allocate less than 1 percent of their revenues to information technology and operational modernization, compared to over 3 percent in advanced manufacturing sectors like aerospace and automotive [22]. Because sector productivity is flatlining, construction costs persistently outpace general macroeconomic inflation, rising by an additional 1 to 3 percent annually, acting as a direct, compounding tax on national capital formation [22].

5.2. Economic Value Added

To determine if large-scale housing investments truly contribute to national economic growth, modern financial analysts prioritize Economic Value Added (EVA) over conventional measures like Return on Equity (ROE) or Return on Assets (ROA). As a rigorous performance indicator, EVA identifies genuine economic profit by subtracting the comprehensive cost of all financing—including both debt and equity from the net operating profit remaining after taxes. This approach ensures that a project is only considered value-adding if its returns exceed the total cost of the capital used to fund it, distinguishing real economic engines from mere resource waste [24,25].

The application of EVA exposes how artificially cheap credit can mask the destruction of wealth in real estate development. A prime macroeconomic example occurred in China, where the State-Owned Assets Supervision and Administration Commission (SASAC) historically utilized ROE to evaluate the performance of state-owned enterprises (SOEs) [26]. This metric perversely incentivized managers to overspend on massive, low-return real estate and infrastructure projects simply because bank loans were artificially cheap, even when the actual returns on these projects were lower than the interest on the debt. Recognizing this massive resource waste, SASAC shifted its primary evaluation metric to EVA in 2010 to force capital discipline, ensuring that heavy capital expenditures in construction genuinely exceeded the opportunity cost of the funds deployed. Ultimately, if construction firms operate with a negative EVA, the physical act of building houses ceases to be an economic stimulant and instead systematically destroys aggregate national wealth [24–26].

6. Divergent National Paradigms and Macroeconomic Outcomes

To empirically validate the theoretical mechanisms of the collateral and crowding-out channels, it is necessary to examine nations that have explicitly adopted construction-led growth models. While aggressive residential construction can effectively pull an economy out of a localized recession, relying on real estate development as a primary, long-term engine for macroeconomic expansion routinely generates severe structural vulnerabilities. The following sub-sections analyze three

distinct global paradigms, demonstrating how the over-allocation of capital into housing manifests in emerging markets, state-directed economies, and advanced financial systems. Analysis of different national paradigms demonstrates that the macroeconomic impact of housing should be assessed not only through its direct contribution to GDP but also through the social externalities ecosystem as shown in Figure 2 based on data from [29, 30].



Fig. 2: Monetizing externalities with SROI

When SROI methodologies are empirically applied to affordable residential housing, the net positive macroeconomic value decisively outpaces the resources expended.

6.1. Structural Vulnerabilities in Turkey

The Republic of Türkiye provides a highly documented empirical case study regarding the limitations and risks of a construction-centric economic paradigm. Following the 2001 financial crisis, Turkey experienced a period of rapid economic expansion, heavily utilizing the construction sector to drive employment and output. However, a rigorous econometric analysis of the Turkish economy utilizing Vector Autoregression (VAR) models and Granger causality tests spanning from 1998 to 2014 reveals a problematic structural evolution [27]. For the majority of this period, real GDP growth preceded construction activity, indicating that housing was a follower of organic macroeconomic fluctuations [27].

A profound structural break occurred between 2010 and 2014, during which the direction of causality entirely reversed; expansion in the construction sector began to artificially drive a 9 percent real GDP growth rate [27]. This reversal was engineered by a highly accommodative monetary environment where average real interest rates plummeted to a mere 0.14 percent, sparking a massive credit-fueled building boom [27].

While this generated immense short-term output, it structurally compromised the Turkish economy. The building sector accounts for more than 35 percent of the country's total final energy consumption, heavily exacerbating Turkey's reliance on imported natural gas and coal, thereby exposing the national budget to global energy price shocks [28,29]. Furthermore, the rapid, under-regulated nature of this "neoliberal urbanism", which fostered an incestuous cycle between state-led developers and private contractors, resulted in catastrophic human and economic costs during the 2023 earthquakes, which claimed over 50,000 lives and destroyed 1.9 million housing units [30,31]. Despite these vulnerabilities, the Turkish economy remains deeply tied to this sector, with construction output hitting a record high index of 151.2 in late 2025 and driving a 3.6 percent GDP growth rate, prompting the International Monetary Fund to urge tighter monetary and fiscal policies to transition the economy toward sustainable, high-productivity sectors [32-34].

6.2. Speculative Excess and Dead-Weight Loss in China

If Turkey illustrates the regulatory and inflationary limits of a construction-led growth strategy, China demonstrates the absolute physical and environmental limits of utilizing housing as a synthetic macroeconomic stimulus. The Chinese urban real estate market has historically served as a foundational pillar of the national economy, accounting for approximately 15 percent of the country's GDP [35]. To sustain aggressive, predetermined GDP growth targets, particularly

following the 2008 global financial crisis, Chinese local governments engaged in debt-fueled, land-centered urbanization that became entirely decoupled from organic demographic demand [36].

Because real estate was perceived by the Chinese middle class as the safest, preferred investment vehicle, immense capital flows bypassed equity markets and productive industrial investments, flooding directly into property speculation [37]. The direct macroeconomic result was the proliferation of ghost cities, vast, newly built urban metropolises designed to accommodate future growth that remain almost entirely uninhabited [37]. By 2013, researchers estimated that approximately 49 million newly constructed residential units sat empty, representing a staggering national urban vacancy rate of 22.4 percent, with specific developments reporting vacancy rates as high as 90 percent [38].

From a strict macroeconomic perspective, utilizing labor and materials to construct homes that are never inhabited represents an unprecedented dead-weight economic loss. It generates immense negative externalities, including massive local government debt pressure, property devaluation, and severe resource exhaustion [39]. Globally, the construction industry consumes an average of 30 percent of all fresh water; pumping these critical resources, alongside millions of tons of steel and cement, into vacant assets represents an irrecoverable environmental and material loss that actively drags down aggregate economic efficiency [40].

6.3. Sovereign Contagion in the European Periphery

The systemic risks of construction-led financial distortion are equally prevalent in advanced Western economies. Prior to the 2008 global financial crisis, Spain and Ireland developed the most housing-centric economies within the entire OECD [41]. The integration of these periphery nations into the Eurozone drastically lowered their domestic borrowing costs, resulting in unprecedented inflows of mobile foreign capital [41,42]. Instead of this liquidity flowing into highly productive, tradable sectors such as export manufacturing, it overwhelmingly flooded the residential real estate market, driving home price growth to roughly 10 percent year-over-year in 2006go[41,43].

This hyper-financialization created a profound fiscal illusion. The construction boom generated massive, immediate tax revenues, which prompted governments to engage in populist fiscal policies and aggressive tax cuts that severely eroded their structural fiscal bases [41]. In Ireland, the tax system was altered so drastically that by 2008, approximately 40 percent of employees paid absolutely no income tax, a structural deficit masked entirely by the extraordinary, yet temporary, revenue flows generated by transactional construction activity [41,44].

When the housing bubble inevitably burst, the macroeconomic spillover effects transmitted through the credit market were devastating. The net worth of domestic banks heavily exposed to the housing bubble collapsed, severely contracting the credit available to non-housing firms and plunging both countries into protracted sovereign debt crises [42]. The Spanish and Irish case studies empirically illustrate that unchecked residential construction booms distort a nation's banking risk profile, create false fiscal security, and ultimately result in massive wealth destruction when asset prices correct.

7. Monetizing Social Externalities through SROI

Traditional macroeconomic metrics, such as gross domestic product (GDP) contributions or the previously discussed Economic Value Added (EVA), are strictly confined to direct financial flows, material expenditures, and market-clearing prices. Consequently, they structurally fail to capture the profound public health, environmental, and social externalities generated by the provision of secure shelter. To comprehensively determine whether the construction of new housing creates more aggregate value than it expends, macroeconomic analysis must look beyond pure financial returns and incorporate alternative econometric methodologies, most notably the Social Return on Investment (SROI) framework.

SROI is an advanced metric adapted from traditional return on investment (ROI) that explicitly identifies, measures, and monetizes the social, environmental, and broader economic gains that result from a specific capital investment [19]. By translating traditionally intangible human outcomes, such as psychological well-being, neighborhood safety, increased individual

independence, and generational wealth preservation, into a tangible dollar value, SROI utilizes a benefit-cost ratio to communicate holistic value creation [19,45]. This allows policymakers to accurately weigh the true, society-wide dividends of housing construction against the initial physical and financial costs.

7.1. Valuing Affordable Development

When SROI methodologies are empirically applied to affordable and dedicated-site supportive residential housing, the net-positive macroeconomic value of construction becomes undeniably apparent. A detailed SROI evaluation of dedicated-site supportive housing in British Columbia, Canada, specifically analyzing facilities such as the Cardington Apartments in Kelowna, demonstrates that the construction and ongoing operation of such residential units generates massive, cross-sectoral savings for both the state and the local municipality [46]. The preventative impact of strategic housing projects on the public in terms of urgent health and justice costs, and their net social return per investment, are presented comparatively in Figure 3 based on data from [29, 30].

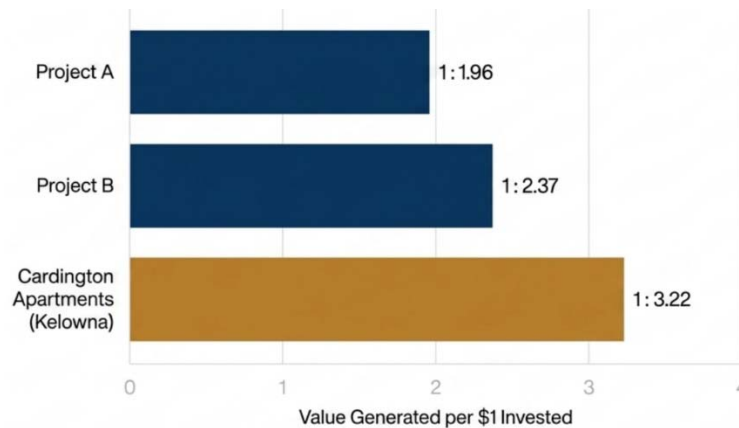


Fig. 3: Affordable housing construction pre-emptively eliminates massive public expenditures

Providing newly constructed, stable housing to vulnerable populations directly leads to quantifiable, monetized reductions in the utilization of expensive emergency medical services (such as ambulances and emergency room visits), long-term hospital stays, and reliance on temporary homeless shelters [46]. Simultaneously, secure housing significantly decreases resident involvement in the criminal justice system, thereby lowering state policing and incarceration costs, while increasing local economic activity through resident spending and improved neighborhood quality [46].

Quantitative data from BC Housing evaluating multiple supportive housing projects, with initial capital investments ranging from \$1.7 million to \$13.2 million, revealed highly positive SROI ratios ranging from 1:1.96 up to 1:3.22 [45]. In the most efficient developments, for every single dollar of capital investment expended on purchasing, renovating, or constructing these residential units, society reaped over three dollars in measurable social and economic value [45].

Similar independent SROI analyses conducted by organizations such as Inn from the Cold and Rebuilding Together corroborate these findings, demonstrating that strategic investments in housing yield highly monetized benefits in physical health, emotional well-being, and poverty alleviation [19,47]. Crucially, economic analysts note that these high SROI ratios still likely represent a conservative estimate of total value, as many compounding long-term impacts, such as the intergenerational life skills gained through housing stability, cannot be perfectly monetized into the future [46]. Therefore, when residential construction is strictly aligned with genuine demographic deficits and utilized to house a population, its aggregate long-term value creation decisively outpaces the resources it expends.

8. Conclusion and Policy Implications

This study has systematically evaluated the macroeconomic dichotomy of residential construction, investigating whether it functions as a sustainable economic stimulant or a parasitic drain on national productivity. The novelty of this research lies in its synthesis of the collateral and crowding-out channels with advanced corporate valuation metrics across divergent global development paradigms. Furthermore, the methodological novelty of this paper is significantly enhanced by incorporating primary empirical data, localized municipal reports, and published literature. Main conclusions of the study may be listed as follows:

- Residential construction acts as a potent, highly localized economic stimulant when an economy operates below full capacity and possesses a genuine demographic deficit of shelter.
- Through deep vertical and horizontal supply chain linkages, the construction sector generates exceptional output and employment multipliers that accelerate domestic monetary velocity and actively minimize macroeconomic import leakage.
- When real estate values appreciate organically alongside wage growth, the collateral channel is activated, allowing commercial firms to leverage physical property to secure credit and crowd-in broader industrial and technological investments.
- Conversely, when housing markets transition into speculative financial instruments decoupled from demographic realities, the crowding-out channel dominates aggregate economic activity.
- This crowding-out effect actively drains vital financial capital and credit away from innovative, high-yield manufacturing and tradable sectors, stifling long-term national competitiveness.
- The global construction industry suffers from a severe, decades-long productivity stagnation driven by fragmented supply chains, thin profit margins, and a chronic under-investment in digital modernization.
- Because of this enduring productivity paradox, over-indexing national capital into the physical construction of housing inherently acts as a compounding tax on aggregate economic efficiency.
- Debt-fueled, construction-led growth models, while highly capable of temporarily inflating gross domestic product and generating immediate tax revenues, routinely mask and generate severe structural vulnerabilities.
- These localized vulnerabilities rapidly scale into systemic threats, manifesting as massive environmental dead-weight losses, sovereign banking contagion, and the severe erosion of a nation's structural fiscal base when over-leveraged asset prices inevitably correct.
- Targeted capital deployment into affordable and dedicated-site supportive housing circumvents speculative financial waste and generates profound, measurable societal dividends.
- These affordable housing developments yield exceptional Social Return on Investment ratios by preemptively reducing downstream state expenditures on emergency healthcare, temporary welfare, and criminal justice systems.

Ultimately, the macroeconomic impact of building houses is not an absolute constant but a highly conditional outcome dictated by regulatory frameworks, financial oversight, and capital discipline. When aligned with genuine human necessity and evaluated through stringent, value-based metrics like Economic Value Added and Social Return on Investment, residential construction is a fundamentally productive endeavor that stabilizes the labor force. However, without aggressive macroprudential regulations, comprehensive zoning reforms to unlock land, and targeted demand-side interventions to curb speculation, unchecked housing booms risk transforming from vital engines of domestic growth into profound systemic liabilities.

References

- [1] Haughwout AF, Liu H, Parker D, Zhang X. Do People View Housing as a Good Investment and Why? Liberty Street Economics. Federal Reserve Bank of New York; 2021;
- [2] Bhatt G. Housing's Unique Role in Lives and Economies Demands Greater Understanding. 2024.
- [3] Santander. Housing Markets Trends Challenges and Policy Responses. Santander Press Room. 2025.
- [4] Daneshrad P. Why Productive Assets Outperform Nonproductive Ones [Internet]. <https://www.forbes.com/councils/forbesfinancecouncil/2024/01/16/why-productive-assets-outperform-nonproductive-ones/>. Accessed 6 Apr 2026
- [5] Gholipour HF, Farzanegan MR, Abu Al-Foul MN. House Prices and Labour Productivity Growth: Evidence From OECD Countries. Construction Management And Economics. Routledge; 2024;42:582–9. <https://doi.org/10.1080/01446193.2023.2291082>
- [6] Yang Y, Lutz F, Liu L. Housing Booms and Productivity Growth. Canada; 2025. Report No.: 2025/161.
- [7] Gupta D, Goldstein I. Housing Prices and Real Investment: Collateral vs. Crowding-out Effects. Working Paper. 2021.
- [8] Jordà Ò, Schularick M, Taylor A. The Great Mortgaging: Housing Finance, Crises, and Business Cycles. Econ Policy. 2016;31:107–52.
- [9] Steurer, M., Schulz, R., & Hill, R. J. Hedonic price indexes for housing: A comparison of alternative methods using large datasets. Journal of Housing Economics. 2004; 63, 101980.
- [10] Garcia C, Bird M. The Surprising Economics of the World's Most Valuable Asset. 2025.
- [11] Giang D, Pheng L. Role of Construction in Economic Development: Review of Key Concepts in The Past 40 Years. Habitat Int. 2011;35:118–25.
- [12] National Association of Home Builders. Residential Construction Economic Study. Leading Builders of America. 2020.
- [13] National Housing Finance and Investment Corporation. Building Jobs How Residential Construction Drives The Economy. 2020.
- [14] International Labour Office. The Construction Industry in The Twenty-First Century : Its Image, Employment Prospects and Skill Requirements. Geneva: ILO; 2001.
- [15] World Bank. The Study of Labor and Capital Substitution in Civil Engineering Construction. Washington, D.C.; 1984.
- [16] Feng P, Yasar M, Cohen JP. Do Higher House Prices Crowd-Out Or Crowd-in Manufacturing? A Spatial Econometrics Approach. The Journal of Real Estate Finance and Economics. Springer; 2025;70:457–82. <https://doi.org/10.1007/S11146-023-09956-X>
- [17] Rogoff KS, Yang Y, Housing C. Peak China Housing. NBER Working Paper Series. 2020;
- [18] Bleck A, Liu X. Credit Expansion and Credit Misallocation. J Monet Econ. 2018;
- [19] Rebuilding Together & Ecotone Analytics. Rebuilding Together. Social Return on Investment (SROI) Executive Summary. 2023.
- [20] Lavopa A, Riccio F. Manufacturing-led Growth: Driving and Sustaining Economies. Insights on Industrial Development, UNIDO. 2024;
- [21] Nostrand EV, Sinclair T, Gupta S. Unpacking the Boom in U.S. Construction of Manufacturing Facilities | U.S. Department of the Treasury. U.S. Department of the Treasury. 2023.
- [22] McKinsey & Company. Delivering on Construction Productivity is No Longer Optional. McKinsey Operations Insights. 2024.
- [23] Mischke J, Stokvis K, Vermeltfoor K. Delivering on Construction Productivity is No Longer Optional. 2024.
- [24] Subedi M, Farazmand A. Economic Value Added (EVA) for Performance Evaluation of Public Organizations. Public Organization Review. Springer; 2020;20:613–30. <https://doi.org/10.1007/S11115-020-00493-2>
- [25] Berk, J., & De Marzo, P. Corporate Finance (6th ed.). 2023. Pearson.
- [26] Chen S, Dodd J. Economic value added (EVATM): An Empirical Examination of A New Corporate Performance Measure. Journal of Managerial Issues. 1997;9:318–33.
- [27] Erol I, Unal U. Role of Construction Sector in Economic Growth: New Evidence from Turkey. Munich Personal RePEc Archive (MPRA). 2015;

- [28] World Bank. Türkiye: Energy Efficient Buildings Bring Savings, Security, and Better Lives. 2025.
- [29] United Nations Environment Program (UNEP). Turkish Building Sector Executive Summary and Roadmap. Copenhagen Climate Centre. 2018.
- [30] The Political Economy of Housing Bubbles and Neoliberal Urbanism. *Academic Review*. 2024;
- [31] World Bank. Türkiye Overview [Internet]. 2024. <https://www.worldbank.org/en/country/turkey/overview>. Accessed 20 Apr 2026
- [32] Deggins C. Turkey Economy Grows 3.6% in 2025 as Construction Leads . *Property Turkey*. 2026.
- [33] International Monetary Fund (IMF). Republic of Türkiye: Staff Concluding Statement of the 2025 Article IV Mission. 2025.
- [34] Türkiye's Construction Output Hit Peak in December 2025 | Daily Sabah [Internet]. [cited 2026 Apr 6]. <https://www.dailysabah.com/sports/ethnosports-gain-pace-as-bilal-erdogan-links-2027-vision-to-peace/news>. Accessed 6 Apr 2026
- [35] Glaeser E, Huang W, Ma Y, Shleifer A. A Real Estate Boom with Chinese Characteristics. *Journal of Economic Perspectives*. American Economic Association; 2017;31:93–116. <https://doi.org/10.1257/JEP.31.1.93>
- [36] Chen K, Wen Y. The Great Housing Boom of China. *American Economic Journal: Macroeconomics*. American Economic Association; 2017;9:73–114. <https://doi.org/10.1257/MAC.20140234>
- [37] Gyanesh. Ghost Cities of China: Examples, Economic Drivers, and Policy. *Planning Times*. 2024.
- [38] Hsieh C, Moretti E. Housing Constraints and Spatial Misallocation. *American Economic Journal: Macroeconomics*. American Economic Association; 2019;11:1–39. <https://doi.org/10.1257/MAC.20170388>
- [39] Glaeser E, Gyourko J. The Economic Implications of Housing Supply. *Journal of Economic Perspectives*. American Economic Association; 2018;32:3–29. <https://doi.org/10.1257/JEP.32.1.3>
- [40] Rogoff K, Yang Y. Has China's Housing Production Peaked? *China & World Economy*. Blackwell Publishing Ltd; 2021;29:1–31. <https://doi.org/10.1111/CWE.12360>
- [41] Hardiman N, Dellepiane S, Las Heras J. Building on Easy Money: The Political Economy of Housing Bubbles in Ireland and Spain. *American Political Science Association 2013 Annual Meeting*. 2013;35:1277–90. <https://doi.org/10.1111/J.1467-9701.2012.01483.X>
- [42] Martin A, Moral-Benito E, Schmitz T. The Financial Transmission of Housing Bubbles: Evidence from Spain. *ECB Working Paper Series*. 2018;1–66.
- [43] Chakraborty I, Goldstein I, MacKinlay A. Housing Price Booms and Crowding-out Effects in Bank Lending. *Rev Financ Stud*. 2018;
- [44] Honohan P, Donovan D, Gorecki P, Mottiar R. The Irish Banking Crisis: Regulatory and Financial Stability Policy. *Munich Personal RePEc Archive*. 2010;
- [45] BC HOUSING. SROI Analysis: The Social and Economic Value of Dedicated-Site Supportive Housing in B.C. 2018;
- [46] Housing B. Dedicated-Site Supportive Housing SROI Series: Cardington Apartments, Kelowna. 2018.
- [47] Inn from the Cold SROI Report. 2023.