Real Estate Research

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Industrialised Construction: Scaling Delivery of Housing in Supply-Constrained Markets

IN A NUTSHELL

– Industrialised construction addresses Europe's housing delivery gap by shifting more of the build process into repeatable, factory-led production, improving speed, quality control and delivery certainty.
– Scale is where the model starts to pay repeated product across multiple sites turns speed and quality into a cost advantage, with standardisation compounding across each scheme rather than resetting with every project.
– Initial strategy is selective: focus on Germany, the Netherlands and Spain, low- to mid-rise apartment, and strategic partnerships that combine land access, standardised design and proven delivery capabilities.

Housing has once again moved to the centre of the real estate debate, but this time the conversation is not just about shortages, affordability or demographics. It is increasingly about how homes are delivered. Across much of Europe, the industry is being asked to do something it has repeatedly failed to do: build more homes, more quickly, with greater predictability and at lower environmental cost. And with this, methods long treated as niche or specialist are moving into the mainstream.

In our Real Estate 2040 survey of more than 200 real estate professionals globally, "Modular Housing" ranked first as the emerging real estate opportunity with the largest expected investable market size by 2040.[1] Respondents did not view it as a technical curiosity, but as a practical answer to one of the sector's most persistent constraints: the inability to deliver housing at scale, at pace and with certainty.

That ranking says something more important than simple market enthusiasm. It suggests the market increasingly sees a direct link between housing undersupply and the need for new delivery models. This is no longer just a story about building technology. It is becoming a story about investable scale.

Throughout this report, we use industrialised construction as a broad organising concept for a wider family of factory-led delivery models, while recognising that market terminology is often used loosely and inconsistently. The next section of this report sets out what these approaches include, where the boundaries blur, and why those distinctions matter for investors.

This paper is an introduction to industrialised construction, and ultimately how one could turn this concept into an actionable, and feasible investment strategy in Europe.

[1] DWS research, Real Estate 2040: Beyond the Core, March 2026

What is industrialised construction?

Industrialised construction is an umbrella term for factory-led building methods that shift work from exposed construction sites into controlled production environments. The aim is simple: make delivery faster, more predictable and less dependent on scarce site labour.

The terminology is often used loosely. Prefabrication, panelised systems, modular housing and, in the UK, Modern Methods of Construction (MMC) are often used interchangeably. But the key distinction is simpler: the higher the factory share, the more industrialised the delivery model.

Prefabrication is the broadest of these terms and simply means that certain building components are produced away from the final site before being assembled in place. That might include precast slabs, roof trusses, façade elements or bathroom pods. Circa 5-15% of the construction is factory based and industrialised.

Panelised systems go a step further by moving the building shell into the factory. Two-dimensional wall, floor or roof panels are manufactured off site, then transported and assembled on site. This increases standardisation and factory control, but the final product is still largely site-assembled rather than fully volumetric. Roughly 20-50% of construction can be outsourced to a factory, depending on the project specification.

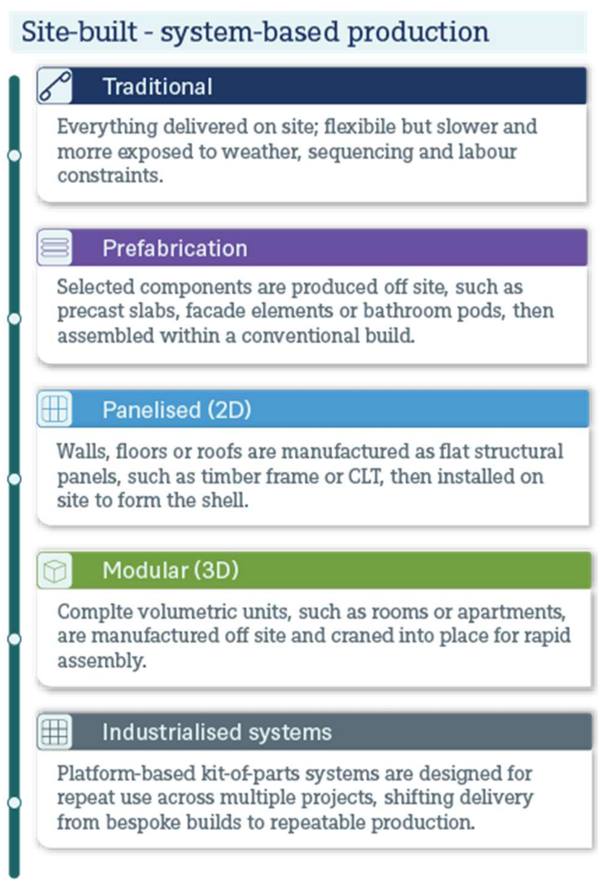
Modular construction moves further along the spectrum by shifting three-dimensional space into the factory. In volumetric systems, fully enclosed units, often complete rooms, apartments or service-heavy modules, are produced off site and then stacked or connected on site. Factory share can reach c.70 to 80%, although foundations, cores, services, external connections and final commissioning typically remain site-based.

Industrialised systems represent the most advanced stage of the spectrum. They move beyond the construction method itself and treat buildings less as bespoke projects and more as repeatable products, with material systems adapted to local regulation, supply chains and cost conditions, from concrete and steel to timber, cross laminated timber (CLT) and hybrid composites. The shift is from one-off project delivery to building platforms, where design, components, manufacturing, logistics and on-site assembly are planned as one system. Design for Manufacture and Assembly (DfMA), is the discipline behind this: buildings are designed for production from the outset, with standardised components, simpler interfaces and fewer bespoke decisions on site.

Technology then becomes an accelerator. Digital design, production planning, automated cutting, robotics and factory quality control can improve speed, consistency and precision, but only when the underlying product is repeatable. At this end of the spectrum, factory-led production can move towards c.90%. The bigger shift is not simply from site to factory, but from fragmented project delivery to scalable production.

This distinction matters. As factory share rises, the investment question changes from whether a building can be delivered faster, to whether delivery can be repeated at scale. The value shifts from site labour and project coordination to design reuse, manufacturing throughput and supply chain control. That is what makes industrialised construction more than a construction technique. It becomes a potential delivery platform for housing supply.

Methods of construction



Source: DWS, July 2026

Why might adoption grow?

Housing shortage is a delivery problem

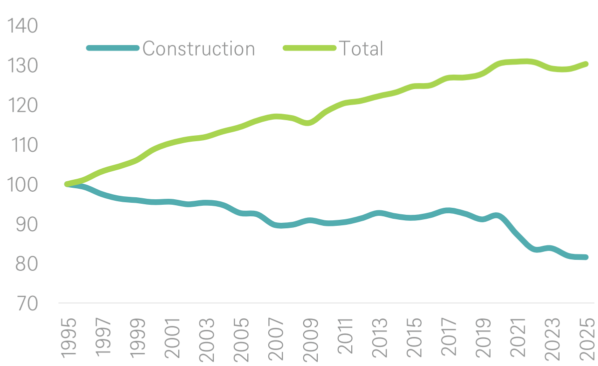
Europe's housing shortage is structural. The European Investment Bank estimates the EU needs nearly one million additional homes beyond current supply.[2] The problem is not demand; it is delivery. Traditional construction has repeatedly failed to produce enough homes at the required pace, leaving vacancy rates tight, affordability stretched and housing policy under growing pressure.

The traditional construction is under pressure

Conventional construction is becoming harder to rely on. Over the past three decades, construction has moved in the wrong direction. While labour productivity across the broader economy continued to rise, productivity in construction declined.[3] This is not a temporary setback, but evidence of a delivery model that has struggled to modernise and improve productivity.

We believe adoption will increase because industrialised construction directly addresses construction's productivity problem: it replaces fragmented site work with repeatable factory processes, standardised design and faster assembly.

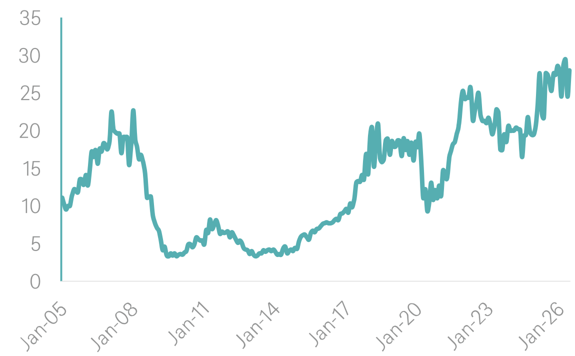
EU Productivity Growth (1995 = 100)



Source: DWS, Eurostat, June 2026

Labour reinforces the same argument. Construction is increasingly constrained by both labour availability and the skills needed to deliver complex projects reliably. Around 30% of construction firms now report labour shortages as a constraint on output, materially higher than a decade ago.[4] Unlike some previous labour shortages, this one looks less likely to self-correct quickly. The workforce is ageing, replenishment is limited, and the historic pool of lower-cost labour from Eastern Europe may be less available than in previous cycles.

% of EU Construction Firms Reporting Labour Shortages



Source: DWS, European Commission – Business and Consumer Survey, June 2026

Labour is no longer just constraining delivery; it is reshaping project economies, making factory-led production attractive because it reduces reliance on scarce on-site trades and broadens the labour pool. BCIS forecasts UK tender prices rising by around 2.8% per annum over the five years to 2031, with labour identified as the primary cost driver.[5] The longer-term trajectory is potentially more severe: Deutsche Bank expects European construction costs in conventional building to rise by around 5% per annum through 2040, with labour costs rising by around 6.5% per annum.[6] Industrialised construction, with its factory efficiencies, offers reduced labour dependency and greater cost certainty.

Policy is creating pipeline

Policy matters because industrialised construction needs volume, not isolated pilots. Procurement targets, public land, faster permitting, funding support and simpler technical standards can all help convert housing pressure into a visible development pipeline. Governments are already starting to do this, using housing policy and public procurement to create more predictable demand for factory-led delivery. That is where the investment case becomes more tangible: not just faster construction on one site, but a repeatable route to delivering homes at scale.

[2] European Investment Bank, June 2025
[3] Eurostat, June 2026
[4] European Commission – Business and Consumer Survey, June 2026
[5] BCIS building forecast, March 2026
[6] Deutsche Bank Economic Research, August 2025

Who's doing it?

Policy support is turning need into pipeline

Government policies are increasingly shaping the market. In the UK, the Affordable Homes Programme has a renewed commitment to delivering homes using modern methods of construction (MMC), with 25% of homes delivered through Strategic Partnerships using MMC. Similarly, in Ireland at least 25% of all new social and affordable homes should be delivered using MMC. At a different scale, China has demonstrated what policy-driven adoption can achieve: a national mandate for factory-built construction to account for more than 30% of new construction by 2025.

This policy shift is not happening in a vacuum. It is reinforcing and accelerating a market transition that was already underway. Developer platforms and construction firms have been moving in this direction independently. Industrialised construction is not new, but its reputation has been shaped by earlier generations of prefabrication: lower quality, weak design and predominantly temporary uses. That association is now a distraction from what is happening. Across the most active markets, the industry has moved on materially. Developers are investing in manufacturing capability, design quality and repeatable systems at scale that earlier prefabrication never achieved.

Where adoption is already taking hold

Sweden is often seen as one of the clearest proof points for industrialised construction, with at least 45% of new homes built using off-site methods, and 84% of detached houses incorporating prefabricated timber elements.[7] Its model has developed primarily through single-family and lower-rise timber systems rather than dense, apartment-led urban schemes. Which means it is less directly replicable for institutional residential investors at scale.

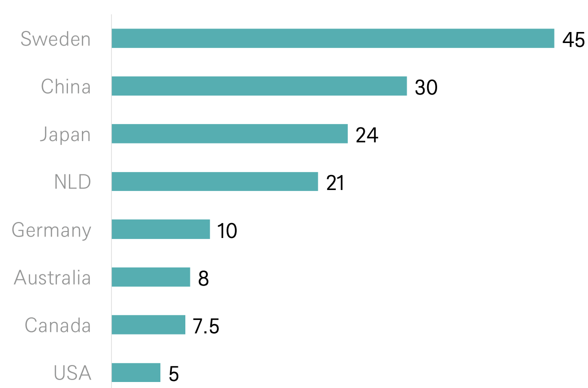
By contrast, the Netherlands looks more directly relevant. Industrialised construction is increasingly apartment-led and embedded in mainstream urban new-build. A fifth of residential new builds, up from 10% in 2020, have some form of industrialised construction. This is expected to increase to 30-40% by 2030.[8] Some developers have created repeatable apartment systems now being deployed across multiple cities, providing early evidence that the platform model can work at institutional scale in an urban context.

Japan offers a different but equally important proof point. Industrialised and system-built methods are already mainstream, with prefabricated and two-by-four housing accounting for around 24% of 2024 housing starts.[9] This shows that factory-led and standardised delivery can move well beyond niche adoption. The more relevant point for investors is that, despite this maturity, Japan's model remains largely outside institutional residential ownership.

Germany is perhaps the most interesting market because it sits at an inflection point. Adoption is still lower than in the European leaders, but the direction of travel is becoming clearer: the share of factory-led construction in multi-family housing doubled from 3.5% to over 7% between 2014 and 2024, while in single-family housing it increased from 15% to 25%.[10] At the same time, the market is shifting away from detached housing and towards larger, apartment-led urban schemes, while delivery is moving away from private self-build and towards larger developer and construction platforms. Germany is also home to some of the most capitalised industrialised housing platforms in Europe.

That combination matters because Germany is not yet the most advanced industrialised housing market, but it may prove one of the most strategically important, as labour scarcity, weak productivity, rising capital intensity and the need for more repeatable urban housing supply are becoming harder to ignore. Deep adoption in markets such as Sweden, rapid growth in the Netherlands, and a clearer shift into multifamily delivery in Germany all point in the same direction: industrialised housing is becoming a more credible route to supply.

Share of industrial construction (% of new builds)



Source: DWS, Mordor Intelligence, Roland Berger, Canada Wood Group, MLIT, prefabAUS, Canadian Modular Industry Report, U.S. Permanent Modular Construction Industry Report, Deutsche Bank Research, Federal Statistics Office

[7] Mordor Intelligence, 2026
[8] Roland Berger, Prefab homes radar 2025, February 2026
[9] Canada Wood Group / MLIT housing-starts data, March 2025
[10] Deutsche Bank Research, Federal Statistics Office, August 2025

Why should we do it?

Faster delivery, higher quality and better sustainability

Industrialised construction addresses the three failures that have made traditional delivery increasingly difficult: it is faster, more controlled and less dependent on increasingly scarce site labour. By shifting a large share of the build process off site and into a controlled factory environment, housing can be delivered materially faster, with modular approaches often cutting construction periods by up to 50-70%, or closer to 50% on a total delivery basis once upfront design and factory preparation are included. In many systems, around 80% of the building is produced off site, rising to 90% in more advanced formats. That improves quality control, programme certainty and execution risk, while bringing homes to market sooner and supporting earlier cash flows.

Just as importantly, industrialised construction can raise productivity through standardised design, predefined planning and repeatable production systems. On-site labour needs can fall by up to 40%,[11] with factory-intensive and robotics-led models claiming reductions of around 60% or more as work shifts from site to factory.

From a sustainability perspective, the advantages are also measurable: embodied carbon is typically 20% lower than equivalent conventional construction,[12] but project-level savings could be higher where modular systems reduce material use, enable reuse or avoid demolition. Construction waste can be materially lower, with studies showing reductions of up to 83%.[13]

The value does not stop at faster delivery. Factory-led construction can produce a more consistent asset at handover, with tighter control over interfaces, installation quality and component specification. For asset managers, that matters after completion: standardised components and better structured handover data can support more reliable maintenance planning, lifecycle management and digital twin-style asset management. Evidence on operational performance is still limited, but the available multifamily case-study evidence points to comparable energy use and stronger measured building performance versus site-built assets.

Show me the money

The financial case requires careful framing. On a stand-alone transaction, industrialised construction does not automatically deliver a lower all-in cost. Factory overhead, transportation and crane cost add line items that conventional builds do not carry. And conventional development risks around land sourcing and planning sit outside the industrialised system entirely.

The cost case strengthens at scale. A repeated product across multiple sites can unlock savings through stronger purchasing power, lower design and pre-construction costs, and a smoother route through planning where local authorities and delivery partners are aligned around a proven model. Research suggests construction cost savings can reach up to around 20% in the right environment,[14] but transport, craneage and site assembly mean this is not automatic. Based on our discussions with developers, 5–15% appears a more realistic working range, especially in structured partnerships with visible pipeline volume.

Industrialised Construction Benefits

Source: DWS, July 2026

[11] McKinsey, 2025
[12] Wei et al., Scientific Reports, 2024
[13] Loizou et al., Buildings, 2021
[14] McKinsey, Modular construction: From projects to products (2019)

Investment strategy: Where and how to play

Start where the bottleneck is real

The investment case should start with the market problem, not the construction method. Industrialised construction is most compelling where demand is deep, new supply is constrained and proof of concept is emerging. The investment case follows directly from the supply problem: where the bottleneck is structural, the premium for a faster, more certain delivery model is real and sustainable.

For now, the focus should be deliberately narrow: Germany, the Netherlands and Spain. Each market offers a different route into the theme. The Netherlands has the clearest evidence of apartment-led adoption, with industrialised construction already becoming more visible in mainstream urban new-build. Germany is strategically important because adoption is starting to move into multi-family housing, while the market is shifting towards larger developer and construction platforms. Spain is especially relevant because Plan Vive[15] demonstrates that public land concessions, affordable rental housing and industrialised delivery can be combined in a format that institutional capital can underwrite.

Plan Vive assets in Spain

Source: DWS, July 2026

The UK and Ireland should remain on the watchlist, but as later-stage opportunities rather than immediate core targets. Both markets have clear housing shortages and policy support for modern methods of construction, but that support is more concentrated in the social and affordable housing sector. That can help create demand, but it may also narrow the product universe and limit the scale of capital deployment for private institutional investors. The near-term priority should therefore be to build conviction in markets where product, structure and investability are already more closely aligned.

Prioritise low- to mid-rise, repeatable rental product

The product should be equally focused. The strongest fit is low- to mid-rise apartment-led rental housing, not detached homes. Industrialised construction works best where layouts can be repeated, components standardised and procurement scaled across more than one project. That points to mid-market commuter residential, affordable housing, and selected student housing as the most relevant formats for institutional capital. These are formats where the standardisation benefits of industrialised construction are the greatest and where institutional investors have established valuation and exit frameworks.

This does not need to be limited to capital cities. Regional cities may offer a better risk-adjusted entry point where land is more available, affordability pressure is still acute and planning or public-sector cooperation may be easier to structure. The key requirement is not prime location at any price, but repeatable demand, a land pipeline of relatively regular, planning ready sites and a product specification that can be deployed across multiple assets. Industrialised construction is less suited to highly irregular plots, steep gradients or complex site constraints, where bespoke design can erode the benefits of standardisation.

The investment opportunity is therefore not to take a construction technology bet. It is to use industrialised construction as a delivery advantage for apartment led housing in markets where the traditional model is no longer delivering enough supply. The key is repeatability: standardised product, suitable land, planning visibility and a delivery partner that can execute across multiple schemes. Without that land pipeline, whether sourced directly or through municipal sale, lease or concession, the model risks remaining a one-off delivery tool rather than a scalable investment strategy.

[15] Madrid's public-land concession programme for affordable rental housing

Investment Strategy: How to invest

Status Quo: Buy from the developer

The standard route into residential development remains a forward purchase or forward funding agreement with a conventional developer. This gives investors access to new build housing without taking direct land, planning or construction management risk. The trade-off is that the developer usually controls the key value drivers: site origination, planning, procurement and delivery. For industrialised construction, that distinction matters. Traditional developers often bring land and planning with them. Industrialised construction companies typically bring the delivery system, not the site pipeline.

Secure land access

To capture more of the upside, investors need access to land, not manufacturing capacity. The first route is to buy residential zoned land, sites with planning permission, or selectively take planning risk where consent is sufficiently visible. This moves the investor closer to a developer role, but industrialised delivery can reduce later stage cost and programme risk, while allowing part of the developer margin to be retained.

The second route is to partner with a municipality or public sector landowner. The municipality can sell land, grant a lease or provide a concession. This route is especially relevant where public authorities want more affordable rental housing but need private capital and delivery capability. Plan Vive in Spain is a clear example of this, with municipalities granting long-term concessions over public plots at no land cost to private entities that develop and operate the housing, in return for rents below market levels.

One-off transaction: Better delivery, limited cost upside

A one-off transaction is unlikely to deliver a materially lower build cost. Even if land is acquired separately by the investor, factory overhead, transport, craneage and installation logistics can offset savings in site labour and programme time. The delivery partner also has little incentive to pass through the full value of a faster, more certain and higher-quality product, particularly in a supply-constrained market. The benefit is therefore more likely to show up in earlier income, better quality control, potentially lower execution risk and greater delivery certainty than in a meaningfully lower construction cost. 50% faster delivery could see a meaningful higher IRR (+0.8% p.a.) over a 7-year period.

Programme or partnership: Where the economics improve

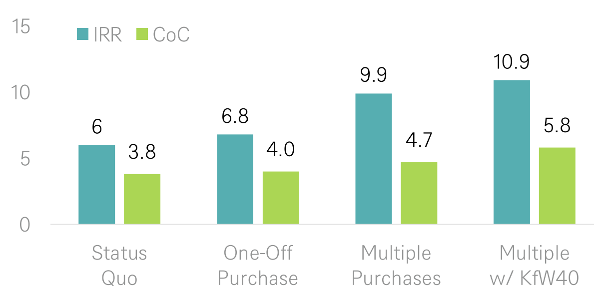
The stronger investment case sits in repeatability. If investors can secure multiple sites and deploy the same product specification across them, design work can be reused, procurement can be repeated, factory capacity can be better utilised, and delivery can become more efficient across a pipeline rather than negotiated project by project. In a programme or partnership model, we would expect potential cost savings of around 5 to 15% over time, driven by standardised design, repeat procurement, fewer bespoke interfaces and better production flow. By committing to multiple schemes, the investor gives the developer or delivery partner greater visibility and scale, which should reduce delivery costs and improve pricing.

The return uplift comes from faster delivery and lower, more predictable delivery costs. Earlier income improves the timing of cash flows, while repeat procurement and better production flow can reduce the build cost over time. In our illustrative scenarios, a 10% discount could translate into an IRR uplift of roughly 300 basis points per annum over a seven-year hold compared to the status quo.

Subsidised financing can sharpen returns

Financing incentives can add further return, but they should sit behind the core thesis. In Germany, a KfW40-compliant scheme[16] can benefit from subsidised financing where the required energy and sustainability standards are met, improving the capital stack without necessarily changing the rental model. In our illustrative scenario, this financing benefit helps lift returns, but it does not replace the main drivers of value: faster delivery, repeatable product, lower delivery costs and a scalable land pipeline.

Expected Returns: IRR and Cash-on-Cash (%)



Note: Illustrative fees after fund fees and taxes. 40% LTV, 7-year hold
Multiple purchases assumes a 10% discount on total construction cost
Source: DWS, July 2026

[16] Germany's subsidised financing for highly energy-efficient new buildings

Challenges and Next Steps

Land, planning and pipeline are the real constraints

The main challenge is that the bottleneck often sits before construction begins. Industrialised construction can improve speed, labour efficiency and certainty once a project is ready to build, but it does not automatically solve land origination, planning or site assembly.

Scaling the model therefore requires more than factory capacity. It needs a visible pipeline of suitable sites, planning certainty and partners able to repeat the same product across multiple schemes. That is why developer partnerships, municipal land, housing associations and concession-style models are likely to be central to turning industrialised housing from a construction method into an investable delivery platform.

Scale required

Scale is the second constraint. Factory-led delivery works best when production is predictable and capacity is well utilised. Without a repeatable pipeline, the fixed cost of manufacturing capacity can quickly become a burden.

Recent UK experience is a clear warning: several modular builders have struggled or failed after investing heavily in factory capacity without securing sufficient volumes to sustain production. TopHat, for example, cited a "continued reduction in future pipeline" when winding down its operations, while reporting that the sector had not achieved the volumes needed to sustain the business model. Whilst, Ilke Homes also entered administration after facing inflationary pressures and a lack of land supply linked to planning processes, despite having a strong product and pipeline.

Counterparty depth is another constraint. The strategy needs proven construction partners with repeatable systems, balance-sheet strength and warranties acceptable to investors and lenders, not just available factory capacity.

Execution risk still matters

The track record of the sector warrants scrutiny. Earlier generations left a legacy of mixed perceptions, and recent failures in parts of the modular sector have reinforced concerns around scalability, funding and counterparty risk. The response should not be to avoid the theme, but to underwrite it selectively. The focus should be on proven partners, established delivery systems, clear warranties, mainstream residential specifications and assets that can be financed, valued, let and operated like conventional multifamily housing, with no assumed rent discount where the finished product is indistinguishable to the tenant.

Financing

Construction financing is less straightforward. Factory-led delivery shifts more value creation off site and earlier in the build, while banks still tend to lend against visible on-site progress. That can create a cash-flow mismatch during construction, as factory output is harder to monitor, value and secure. In our experience, this is a delivery-phase issue only: once completed, banks make no distinction versus conventional residential assets.

Investment conclusion: high hurdle, but worth starting

The investment case is strongest where industrialised housing moves beyond one-off delivery and becomes a repeatable platform. A single transaction can bring cash flows forward and reduce programme risk, but the larger value creation comes from partnerships, multiple purchases and standardised delivery across a pipeline. In Germany, KfW40 financing could add a further return kicker where projects meet the required energy standard.

The hurdle is high. Building a partnership, securing land, aligning public-sector objectives and creating a repeatable specification will take time. It is a bigger ask than a conventional forward purchase and requires more coordination across developers, municipalities, manufacturers and capital partners. But that is precisely why the opportunity could be attractive. If it were easy, the value would already have been competed away.

The next step could therefore be focused and practical: start with Germany, the Netherlands and Spain, target low- to mid-rise multifamily rental housing, and prioritise partners that can bring either land, planning visibility or proven industrialised delivery capability. Spain provides the clearest precedent through Plan Vive and similar schemes; the Netherlands offers the strongest apartment-led adoption signal; and Germany offers scale, a deep institutional rental market, early proof of concept in multifamily delivery and potential KfW40 financing support. The UK and Ireland remain relevant, but policy support is more concentrated in social and affordable housing, which may limit product breadth and private capital deployment.

In short, industrialised construction becomes most investable when it stops being a construction method and becomes a route to creating scalable residential supply. The challenge is building that platform; the reason to start is that the traditional model is no longer delivering enough homes, quickly enough, or with enough certainty.

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