# Artificial Scarcity in Housebuilding and the Impact on Affordability: The Return of Absolute Rent

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**Abstract:** The slow response of volume housebuilders to changes in demand has been cited as a contributing cause of a global crisis of housing affordability and allegations of land banking have persistently dogged the industry. This article reviews the supply responsiveness of speculative housebuilders in the United Kingdom and Australia through the neglected Marxian analytic category of absolute rent. Absolute rent directs attention to the relationship between the value of land and the cost of housing and models a market in which landowners may withdraw land from supply to inflate prices. Through the lens of absolute rent, the real estate practices of the housebuilding industry can be understood as a strategy of artificial scarcity straddling land and housing markets. The findings of this investigation demonstrate the insights to be gained by a return to absolute rent that valuably expand the current debate on the supply and cost of housing.

**Keywords:** housebuilding, real estate development, land supply, rent theory, absolute rent

#### Introduction

The supply and cost of developable land are matters of significant concern in a global crisis of housing affordability. The role of land use regulation in constraining supply has come to dominate interpretations of this affordability crisis (Cox 2021), while the opposing contention that landownership itself exerts a barrier that affects house prices has gathered increasing support. Theorists point to the role of escalating land values as a cause of housing unaffordability (Ryan-Collins et al. 2017). A global run on land by capital markets has increased the ground rent component of housing costs while innovations in financial products have made it easier to invest in land and to speculate on rising prices (Knuth 2015). The value of land in the United Kingdom, for example, has outpaced returns on stocks, shares, gold, and currency markets (Murphy 2018). In this perspective, accelerating housing costs arise not just from regulatory constraints on land supply, but from an unbounded rentier market in which land and housing are investment assets of securely rising value (Hudson 2012).

In the context of these conflicting interpretations of escalating housing costs the role of a speculative housebuilding industry as both suppliers of homes and owners of land acquires particular resonance. The slow response of volume

housebuilders to changes in demand has been cited as a contributing cause of housing unaffordability (Barker 2003). Numerous studies have identified systemic delays in construction with slow build-out rates and what appears to be a large gulf between land approved for building and houses actually built (Colenutt 2020). Persistent reports of land banking are denied by the industry and the suggestion that housebuilders withhold the supply of land and housing to inflate prices does not fit the model of a competitive real estate market upheld in neoclassical economics. Housing policy analysists seeking an approach to land markets more attuned to speculative practices in housebuilding have turned instead for answers to the rent theory of classical economics (Robertson 2017; Ward and Swyngedouw 2018).

Rent theory describes the social relations associated with the ownership and productive use of land and directs attention to the monopoly privileges that can be acquired through the exclusive control of private property (Harvey 2006). In the categories of ground rent devised by classical economists, it is Marx's concept of absolute rent that most clearly models a land market in which housebuilders and landowners withdraw land from supply to artificially inflate prices (Walker 1974). Absolute rent is defined as the minimum amount that landowners will accept as payment for developable land; a reserve price upheld by their willingness to withhold land from supply until their demand is met (Economakis 2003). Applied to contemporary housing markets, the category of absolute rent directs attention to the relationship between the value of land and the cost of housing and points to constraints on land and housing supply imposed through the manufacture of artificial scarcity. An increase in the supply of developable land will not bring down the cost of housing if the payment of absolute rent remains a condition for production. On the contrary, land will be withheld from production until the price of housing reaches the level required to satisfy the demand for rent (Fratini 2018).

Absolute rent has proved challenging to translate from the agricultural setting described by Marx in the late 19<sup>th</sup> century to contemporary urban development markets and attempts to apply it to housebuilding and real estate investment in the 1970s foundered on the mechanics of this transposition (Ball et al. 1985). In the pages of this journal in 1974, David Harvey and Lata Chatterjee excised absolute rent of its complexities by renaming it "class monopoly rent", thus conflating Marxian rental categories and inspiring a lively and evolving literature on residential submarkets. In abandoning both the category of absolute rent and the methods Marx used to generate it, however, urban studies lost a comprehensive theory of land and its relation to production and the impact of ground rent on market prices and the rate of profit (Ward and Aalbers 2016). My aim in this article is to revive scholarly interest in the category of absolute rent and to devise an analytical framework in which it can be applied convincingly as a tool of inquiry in contemporary real estate markets. I present an investigation of supply responsiveness in the volume housebuilding industry in the United Kingdom and Australia that evidences the importance of absolute rent in driving the crisis of housing affordability. I begin with an exposition of Marx's theory of absolute rent and review attempts to transpose the theory to housing markets, situating the emergence of class monopoly rent as a response to the difficulties encountered. I then distil the conditions that require to be met in an application of absolute rent to contemporary real estate development and set out a research hypothesis that can be tested. Alive to Michael Ball's injunction that absolute rent can be understood only in the specific context of contemporary housing supply (Ball et al. 1985), I read the "grey" literature and academic studies of the speculative housebuilding industry in the UK and Australia through this framework of analysis. I conclude that the slow responsiveness associated with the housebuilding industry in both countries is the effective operation of a strategy of artificial scarcity straddling land and housing markets. My findings demonstrate the insights to be gained by a return to absolute rent as a conceptual device that will valuably expand the boundaries of the current debate on the supply and cost of housing.

## The Theory of Absolute Rent

In volume three of *Capital* (1981 [1894]) and *Theories of Surplus Value* (2000 [1863]), Marx advanced a forceful new response to the thorny question of how land as a natural resource can bear value. Rather than accept as many of his contemporaries did that the differential qualities of land gave it value, Marx argued that the institution of private property granted landowners a monopoly that allowed them to charge ground rent as the price extracted for land use. "Landed property presupposes that certain persons enjoy the monopoly of disposing of particular portions of the globe as exclusive spheres of their private will to the exclusion of all others", he wrote in volume three of *Capital* (Marx 1981:752). Land values could not exist without the capacity to appropriate rent which private property confers, Marx said. The value of land is a tribute in rent exacted on the labour of others who pay for the privilege of accessing the monopoly of private property.

The social and legal relationship of private property enables landowners to valorise their land, to put a price on it and extract a surplus, because it awards them the power to bar access to an essential resource. The absolute power of the landowner to charge rent rests on the ability "to withdraw his land from cultivation until economic conditions permit a valorisation of it that yields him a surplus" (Marx 1981:891). Marx argued that there is a minimum that landowners will accept as tribute so that no land is available at less than what he called absolute rent. Absolute rent expresses the fundamental power imbalance in landownership; that landowners can demand rent for all undeveloped land, no matter how marginal and unproductive it is, because they have the ability to erect an absolute barrier to the use of that land (Evans 1999). If landowners are in the position to withhold any and all land until a rent is paid, then they exercise constraint over land use, profit, and prices.

#### The Relation of Absolute Rent to Profit and Price

The landowner's ability to withhold the supply of land until a rent is paid affects the price of commodities and exerts a compelling influence over the process of

production. Only a land use that can supply commodities at a value higher than their price of production will be able satisfy the landowner's demand for absolute rent. "The market price must rise to a point at which the land can pay a surplus over the price of production, i.e. a rent ... This rent forms the excess of the value above the price of production" (Marx 1981:896). The difference between the value of a commodity and its price of production is the maximum amount of absolute rent that the landowner can charge (Fratini 2018).

In the labour theory of value, a commodity's value is a measure of the socially necessary labour time that is required to produce it. The exploitation of labour in the capitalist production process results in the generation of surplus value when the wage received by the workers is less than the value they create. The capital expended on the employment of labour is variable because human labour can create more value than it requires to reproduce itself (Shaikh 1990). The value of plant and machinery, on the other hand, is the labour that went into its manufacture, and when employed in the production process the value of that labour is reproduced as a constant factor. The ratio of constant to variable capital is of the upmost importance to the theory of absolute rent because only a production process with what Marx called a low organic composition of capital, one that relies on more variable than constant capital, generates surplus value, and only a production process that generates and retains surplus value will be able to pay the landowner absolute rent (Evans 1999).

The monopoly power of landowners enables them to seize the surplus value generated from unpaid labour and pocket it as absolute rent. By controlling the supply of land, landowners are able to obstruct the process of capitalist competition to prevent the pooling of surplus value between producers and its redistribution as a general rate of profit. By obstructing the equalising effect of competition, landowners also block the conversion of commodity values into average prices. The outcome is that commodities are sold with surplus value, over and above the price of production, generating an excess profit to be captured as absolute rent (Marx 2000:484). In *Theories of Surplus Value*, Marx imagines the landowner describing the economics of rent extraction to the capitalist producer in this manner:

If I let you have this condition of production for your use, then you will make your average profit; you will appropriate the normal quantity of unpaid labour. But your production yields an excess of surplus-value, of unpaid labour, above the rate of profit. This excess you will not throw into the common account, as is usual with you capitalists, but I am going to appropriate it myself. It belongs to me. (Marx 2000:456)

Absolute rent, then, is surplus value or unpaid labour seized by landowners by right of property. The amount of rent claimed by the landowner will rise if the productive qualities of the land or its locational advantages enable additional surplus value to be generated. Marx called this supplement differential rent, or DR1, with the amount of rent owed varying in relation to the least productive or most marginal land. Additional productivity brought about by capital investment in land can be seized as surplus value by landowners in a differential rent labelled

DR2. Monopoly rent, Marx's final category, is a tax on the exclusive market advantage enjoyed by those renting land with unique characteristics, or with products in such high demand and limited supply that they can be sold at a monopoly price.

All categories of rent impact on commodity prices, but in the case of differential rent and monopoly rent, the tribute is paid from profits generated by the attributes of the land or by the scarcity of the product itself. It is only in the payment of absolute rent—the original claim of tribute demanded for any and all land, no matter how marginal or unproductive—that rent itself sets above-average prices. "Then landed property is the creative basis of this rise in price. Landed property has produced this rent itself", as Marx (1981:889) wrote. Marx's theory of absolute rent clearly offers a powerful conceptual device to analyse the effect of landownership on prices and production. The transposition of the concept to housing and real estate markets in the 1970s was, however, to result in a decades-long neglect of absolute rent and its replacement by a different model, as the next section explores.

## **Class Monopoly Rent**

The insights that the theory of absolute rent might yield if it could be applied to urban development markets were clearly perceived by Marxian academics seeking a trenchant response to the property bubbles of the 1970s. Any application of this theory, however, seemed to depend on identifying the existence of a low organic composition of capital in real estate markets; in other words, finding a development process that was labour-intensive. The speculative housebuilding industry appeared to fit this criterion and its poor responsiveness to demand was explained by the low productivity of construction methods dependent on a casual labour force (Bruegel 1975; Edel 1976). This attempt to apply the theory of absolute rent to the housebuilding industry resulted in a circular argument in which the evidence for absolute rent was the sector's reliance on labour, and the reliance on labour in the sector was down to absolute rent. "A static and incomplete understanding of the idea of absolute rent" resulted from this mechanistic endeavour to rigidly address the criteria (Ball et al. 1985:8). As a result, the focus on the organic composition of capital was abandoned, and absolute rent as a theory of price and profit fell into neglect, and when Harvey and Chatterjee's article "Absolute Rent and the Structuring of Space" was published in Antipode in 1974, a much-narrower definition of the category was offered, alongside a change of name to "class monopoly rent". In Harvey's sole authored paper of the same year, "Class-Monopoly Rent, Finance Capital, and the Urban Revolution", absolute rent, and the theory behind it, all but disappeared.

In class monopoly rent, the barriers to supply associated with absolute rent were to be evidenced in the differentiation of housing submarkets where scarcities could be engineered or obstacles to choice erected. Harvey (1974:249) identified the fragmentation of urban space into sub-markets as the purposeful creation of "a series of man-made islands on which class monopolies produce absolute scarcities". The potential of rent theory as a tool of analysis was unleashed in the

investigation of exploitative practices in the circuits of real estate capital. In sterling work, King (1987) evidenced how the fragmentation of urban space in Melbourne established the conditions for property owners to act as a cartel to reduce access to housing and acquire the desired return on their investment. Wyly et al. (2006) showed how subprime mortgage lending in the USA extracted higher interest rates from Black households whose access to loans was otherwise restricted. Teresa (2022) demonstrated how the erection of barriers to mortgage credit allowed lenders to charge exorbitant fees to racialised groups marginalised from mainstream housing markets. Revington (2021) argued that preferential access to credit can also provide the conditions for class monopoly rent when scarcity is induced through the additional constraints of segmentation in the student housing sub-market. Anderson (2014, 2019) identified the demolition of public and social housing as a continuing exercise in the construction of scarcity and demonstrated class monopoly collusion between landowners and developers to inflate rents in the gentrification of urban neighbourhoods.

In class monopoly rent the exclusionary power of landowners is vividly depicted at work in the contemporary urban development market. The barriers to housing erected by credit agencies, developers and landowners are identified and valuable insights into rent differentials and the construction of monopoly prices provided. But the housing sub-market divisions analysed through the lens of class monopoly rent correspond more closely to Marx's category of differential rent, since they describe the work done to establish locational advantages and to differentiate one market from another. Similarly, attempts to construct sub-markets as uniquely desirable suggest the operation of monopoly rent (Bruegel 1975). Further category confusion resulted when Lauria (1984) renamed class monopoly rent Monopoly Rent II, and so conflated monopoly and absolute rents.

In Marxian theory, all rent is the valorisation of exclusive property rights and entails a class monopoly (Edel 1976). The term class monopoly rent merely conflates the various means through which this exclusion can be monetised and diverts attention from the social relationship that allows landowners to extract rent from control over an essential resource. In his 1982 book The Limits to Capital, Harvey argued that what united landowners as a class was that they shared a common characteristic, the tendency to treat their land "as a pure financial asset that is bought and sold according to the rent it yields" (Harvey 2006:347). If land is treated as a pure financial asset, it will be withheld to extract its highest rent, or dedicated to the use that pays the premier price. The tendency to treat land as a pure financial asset also suggests, as Anne Haila pointed out, a continuous search for potential rents, and for the opportunity to speculate on the rent gap between current and future land use. Haila (1990:290) explained "that the investing motive, compared with the use motive, becomes more prevalent ... It is expected rents that coordinate land uses". It is the highest and best use that land can be put to that determines its value and real estate markets are concerned with potential rather than actual rent and speculate on the gap between the two (Savini and Aalbers 2016). Land can be traded on the likelihood that its potential use will bring in a higher rent than it currently attracts and it is the title to a future income stream that is bought and sold (Harvey 2006). The tendency to

pursue the highest rental yield from land requires no collusion or cartel formation to unite the otherwise heterogeneous assembly of individual and corporate landowners in one common goal (Massey and Catalano 1978; Shrubsole 2019). That goal is the valorisation of the monopoly of property ownership through the extraction of a rental tribute for access to any and all land. In a financialised land market, it is the Marxian category of absolute rent, not its more limited replacement, that assumes precise analytic power. Its capacity to explain the relation between landownership and prices has particular relevance to the cost of housing supplied by a speculative housebuilding industry (Kerr 1996).

#### Housebuilders, Landowners, and Absolute Rent

The large speculative housebuilding companies that dominate the real estate industry in the United Kingdom and Australia straddle both land and construction markets and housing is, for them, a means of improving the rental value of land. The uplift in ground rent is capitalised in the sale price of the homes. The gross development value from the sale of homes pays the costs of construction, the housebuilder's profit, and the cost of the land negotiated with the landowner (Ball et al. 2022). The housebuilder's profit, expressed as a percentage of gross development value, comprises not just profit on construction but an uplift on land value. "It is ground rent and not the houses themselves that forms the real basic object of speculative building", as Marx (1981:909) said.

Housebuilders anticipate the amount they can bid for land using a residual valuation method in which construction costs and developer profits are subtracted from the gross development value to be accrued from the sale price of homes. What is left after these costs are met is the amount that can be paid for the land and any additional charge associated with zoning or planning conditions. In this valuation model the price paid for the land is determined by the sale price of the dwelling. Prices for new dwellings are established in comparison with prices in the housing market as a whole where the majority of transactions are for existing homes. The residual valuation model is illustrated below (Crook and Whitehead 2019):

Gross Development Value of Completed Homes (GDV) less Cost (direct and indirect) of development less Developer's Profit = Residual—£ developer willing to pay for land

Where the price of land is already established, for instance through exclusive contracts and option agreements, it is included in known costs and the developer's profit becomes the residual. Developer profit is expressed as a percentage of gross development value and established in valuation practice at between 15% and 20%.

Gross Development Value of Completed Homes (GDV) less Cost (direct and indirect) of development less Cost of Land = Residual—Developer's Profits (15–20% of GDV)

Speculative housebuilding, as Michael Ball (1983:51) noted, is "a form of land investment and a particular means of realizing gains from landownership". Land is bought when it is cheap and housing built when it is dear and, in a rising

market with expanded credit, these two activities are timed to maximise the uplift in ground rent (Robertson 2017). Each piece of land acquired will be subject to its own calculation of price and value, and decisions on when to build and when to delay involve speculative bets on potential rental streams. While the value of land is determined by the future sale price of houses, potential rent can be pulled into present circulation when the land is used as an asset in the leveraging of debt (Ward and Swyngedouw 2018), or sold as an investment yielding a putative revenue stream. Housebuilders combine land speculation with construction, and they manage the timing of land purchase and house sales to maintain a reserved prices for the homes and enhance the current value of their land by erecting barriers to supply.

In her review of housing supply in the UK in 2003, Kate Barker identified land speculation, slow build-out rates, and a risk-averse attitude in the housebuilding industry as barriers to supply. In the following sections, I investigate these three barriers through the lens of absolute rent to establish the conditions that are required to be met for any effective application of Marx's theory to the housebuilding industry in the UK and Australia. The first barrier can be investigated through the persistent allegations of land banking that plague the industry. It is necessary to demonstrate that volume housebuilders own developable land in the quantities and locations sufficient to provide them with monopoly privileges. Secondly, I investigate a consistent pattern of constrained production as a barrier to the supply of housing that effectively exacts absolute rent from the sale price of homes. I demonstrate the withholding of land by housebuilders and the imposition of delays in the start of construction which also serve as barriers to reduce housing supply. Thirdly, and finally, if the specification of absolute rent in Marx's Capital is applicable to the housebuilding industry, it should be possible to demonstrate that the desire to maximise the ground rent retained as profit acts as a barrier to capital investment, enabling the industry to generate and maintain a surplus by raising the sale price of housing above the price of production. The hypothesis here is that the high ratio of labour in construction, and the sector's resistance to investment in new methods of construction, are strategies to maximise the receipt of absolute rent.

## **Housebuilders and Barriers to Supply**

The assertion that housebuilders are land banking, or hoarding sites under their control or ownership, has a long history (Robertson 2014). The volume housebuilders have always denied it and a succession of government reports in the UK failed to find evidence that housebuilders profited from the hoarding of land (Payne et al. 2019). The cost of maintaining a bank of land is assumed to outweigh any benefits and residential developers are expected to maximise construction and sales and minimise their inventories of land. When Cameron Murray (2020) put this efficient market model to the test in Australian states, he found none of the anticipated patterns. Reviewing the land holdings of the transnational housing developer Lendlease and another seven Australian based housebuilders, Murray found they held over 13 years' worth of potential housing

supply, with eight years of that approved for construction. He concluded: "Instead of landbanks being costly inventories that are minimised with rapid housing construction, as static models assume, the evidence suggests that they are instead capital investments that earn a return even without housing production" (Murray 2020:7). The cost of land banking decreased in relation to the growth in the asset value of the land, providing incentives to housing developers to delay construction to capitalise on market cycles and profit from increasing rental yields. Maintaining a long-term supply of developable land can lower the ratio of land acquisition costs to the gross development value of a built-out site, enabling housebuilders to capture a larger slice of the uplift in ground rent when the completed development is sold (Karadimitriou 2013). A supply of land that is either owned or controlled at an agreed price gives the housebuilders certainty over the element of gross development value accruing to the landowner and thus greater freedom to speculate on the reserve price for new homes.

Land banks are, however, chiefly a barrier to competition, and provide the housebuilders with the privileges associated with the monopoly control of resources. In England, for example, the top three housebuilders each own a supply pipeline of six years' worth of housing land with residential planning permission and add to it by purchasing more developable sites at auction from land promoters (Chamberlain Walker 2017). They also control another six or seven years' worth of land in their strategic pipelines through exclusive options agreements or restrictive contracts with landowners. A spate of mergers and acquisitions in the industry during the decade to 2020 consolidated land holdings and reduced competition and, as an outcome of this process of corporate amalgamation, ten volume housebuilders now command over 70% of all new residential development land in England (Cochrane et al. 2015). Ownership or control of such a sizeable land supply makes it difficult for other housebuilders to enter the market and has a cartel-like effect, enabling the largest housebuilders to influence land values and land use policy. Most of the potential housing land around cities and large towns in England is owned or controlled by these developers, granting them the power to shape the development plans of municipal authorities to maximise the value of their holdings (Colenutt 2020).

## **Artificial Scarcity in Housebuilding**

If the first barrier erected by the housebuilding industry is created by the acquisition of quantities of developable land sufficient to command a controlling interest in the supply of housing, the second barrier operates through the purposeful restriction of that supply to maintain a reserve price for new homes. The tendency of the housebuilders in England to deliberately restrict output to maintain prices had been conclusively demonstrated in a succession of government investigations. The Barker Review of Housing Supply (Barker 2003), the Callcutt Review (2007) and the Letwin (2018) review, and the industry's own reports, all confirm the practice of drip-feeding the supply of new homes onto the market, with fewer than 60 homes completed per year, per sales outlet, across all housing construction sites. The most recent research suggested further reductions in build-out rates

with the average number of homes now falling to 45 homes built per year per site (Lichfields 2021). The build-out rate of a housing site is so constrained that homes are completed only when they have been already purchased and this snail pace of construction has been identified as a consistent practice across all volume housebuilders (Payne et al. 2019).

The independent review of build-out rates in 2018 led by Sir Oliver Letwin confirmed that this systemic go-slow in production is structured to the "absorption" rate of local housing markets, or "the rate at which newly constructed homes can be sold into (or are believed by the house builder to be able to be sold successfully into) the local market without materially disturbing the market price" (Letwin 2018:11). Absorption rates derive from the financial appraisals undertaken by housebuilders and the construction of new homes is tailored to a reserve price established at the time of the original valuation (Adams et al. 2009). The slow build-out rate of housing construction is a barrier to supply that acts to prevent house prices falling below this reserve price. It is also therefore a barrier to the productive use of housing land. If the purchase price of the land is a fixed item in the residual valuation method, secured either through a restrictive contract or through previous acquisition, slowing the build-out rate of housing construction can provide opportunities to benefit from rising asset prices and boost the share of ground rent appropriated by the housebuilder in the sale price of new homes. Another systemic barrier to the supply of housing land and completed homes operates through the potential to submit multiple planning applications for the same development site. An estimated 20% of annual residential planning permissions in England are renegotiated by developers after the first application has been approved. Subsequent revisions to the planning application are submitted to increase housing density or change the proposed house types. The ability to revise the site layout and detailed specification of the approved development to take advantage of a changing market provides an opportunity to delay the start of construction and translate rising house and land prices into increased ground rent (BuiltPlace 2021).

Slow build-out rates and delays in construction characterise the housing development industry in Australia where residential construction is also dominated by a few large companies. In New South Wales, for example, ten housebuilders own 70% of all housing land (Gurran et al. 2016). The industry is a powerful force in politics and in land markets, but despite clamorous lobbying from the Property Council of Australia, the rezoning of land for higher density housing and the deregulation of land use planning does not appear to have stimulated any increase in new housing supply. The housebuilders prefer to build out slowly to maintain premium house prices and benefit from the upwards trajectory of the market. Only half of all housing approved in Melbourne, between 2002 and 2007 was under construction or completed by 2009. The higher density developments had not been built, instead the sites had been sold on at a value inflated by rezoning. Impressive capital gains had been banked without the need for any of the promised homes to be delivered (Woodcock et al. 2011).

Significant gaps between the number of homes approved for development and the number actually built demonstrate the tendency among housebuilders to withdraw land from supply as they balance future income against current value. In England, the gulf between homes planned and completed has widened over a ten-year period and in 2020 the Local Government Association demonstrated that one million homes given planning permission over the previous decade had not yet been built (LGA 2020). In that same year, the English housing charity Shelter compared the number of homes approved in the years 2011–2017 with the number completed between 2013 and 2019, to demonstrate that 40% of new supply remained unbuilt (Shelter 2020). The housebuilding industry responded by pointing to the length of time required for construction (Lichfields 2021), taking on average four years from the award of planning permission and having increased by over a year in a decade (Chamberlain Walker 2017:23).

Achieving an accurate count of the number of homes approved is hindered by the potential for developers and landowners to submit multiple planning applications. There are further problems with accurate data, since the English government does not collect official statistics on the number of homes given planning permission and maintains three separate statistical methods of calculating the number of completed homes, with the most reliable providing only incomplete and outdated information (Bradley 2022). The lack of dependable data hinders conclusive research into the land trading practices of English housebuilders, but the industry admits to what is called a "lapse rate" in residential permissions, with between 10% and 20% of homes given approval each year never getting built. In London, this lapse rate rises to as much as 50% of all permitted homes (Lichfields 2017). Planning permissions are lapsed because the land is sold to take advantage of the uplift in potential ground rent brought about by the approval of a change of use, or because the developer has decided to delay construction to wait for further price rises in the housing market (McAllister et al. 2016). A study commissioned by top housebuilder Barratt Homes confirmed that around half their lapsed sites were sold by the developer at a value inflated by the grant of residential planning permission (Chamberlain Walker 2017). Sites selected for housebuilding were those that offered the highest margins and the decision to lapse permissioned land suggested it offered a better return as a tradable asset than as a resource for production (Griffith 2011). The scale of unimplemented residential planning permissions in the supply chain pointed to speculation by housebuilders on the asset value of their land and confirmed a monopolistic business model that fostered artificial scarcity in housing supply while squeezing higher returns from ground rent.

#### Absolute Rent, Housebuilders, and Capital Investment

Absolute rent denotes the ability of landowners to monopolise the supply of land and to withdraw it from supply in order to obtain a reserve price or rental yield. The evidence presented in the previous two sections points to systemic rationing in the supply of housing and developable land by the volume housebuilders with a view to maximising the ground rent realised through the sale of homes. The defining characteristic of absolute rent in Marx's *Capital* was that it brought about an increase in product price that was limited to the difference between the value

of the goods and their lower price of production. The demand for absolute rent could only be met if producers were able to sell their products at an excess profit generating surplus value. They could only keep prices at this elevated level if they operated a business model based on a low organic composition of capital; in effect, one that relied on human labour rather than capital equipment. Absolute rent acted therefore as an effective barrier to the investment of new capital in productive technology and prevented competition that might lower prices. Only by using labour intensive methods could surplus value be extracted in sufficient amounts from the sale of products to pay the landowner's demand for a rental tribute.

The resistance of the volume housebuilders to capital intensive methods of construction is widely acknowledged (Pan et al. 2007), and this characteristic made the industry a candidate for the static interpretation of absolute rent essayed in the Marxian literature of the 1970s. 90% of all homes in Britain are built using traditional, labour-intensive methods and, although sectors of the industry are gradually embracing modern methods of construction, such as the use of prefabricated components and modular homes, these methods currently contribute to less than a quarter of output (Savills Research 2020). The majority of housing construction continues to be carried out using a casual labour force that is temporary, sub-contracted and precarious, and can be deployed and withdrawn to match build-out rates to reserve prices and provide the flexibility required to extract the highest values from the land. The housebuilders seek to pay for both land and infrastructure costs from the revenue generated from batches of house sales in order to minimise capital outlay in production and site assembly (Payne 2020). Developable sites that require significant upfront capital investment are avoided in preference for greenfield land that has few complications and calculable risks (Ball 2003). Capital is deployed to maximise the margins achieved on land purchase while production is artificially constrained by withholding the supply of land to maintain reserve prices. Competitive advantage is achieved through landownership and land speculation rather than through the efficiency of production (Robertson 2014).

The profitability of the industry is factored on the difference between the constant capital invested in land and the variability of the capital employed in labour. Should the volume housebuilders adopt modern methods of construction entirely, and increase their investment in constant capital, Marxian theory suggests their profits would decline (Harvey 2006). A low organic composition of capital provides only one route to profitability, however, since the strategies employed in the industry to limit production capture surplus value, not just from labour in construction, but from the future labour of homebuyers. The speculative house-builders combine landownership with residential development and claim a tribute in ground rent from the land value component of house sales. Absolute rent is collected from the sale price of housing and paid by homebuyers as they labour to pay off their mortgage debt with interest (Topalov 1985). The barriers to competition that ensure this surplus value is retained by the housebuilders may lie not only in the organic composition of the capital employed in residential construction but in the relationship of that capital to the extraction of rent from house

sales. The function of variable capital in the housing construction process is to stretch the variable between the purchase price of land and the sale price of completed homes to maximise the surplus value extracted from homebuyers.

Analysis of the annual accounts of the largest UK housebuilders permits a detailed assessment of the relationship between housing production, sales, prices, and profits. Between 2010 and 2017, the revenue of the nine largest UK housebuilders increased by 178%, their profit before tax rose by 703%, while the output of new homes grew by only 70%. In 2017, these top housebuilders extracted profits of 22% from the sale price of each new home completed; a level of profitability reflected in sale prices that are higher than the average in local housing markets (Archer and Cole 2021). An industry review of the top seven housebuilders revealed their profits had increased by 800% per completed plot of land over the previous seven-year period (RICS 2019). The accounts of the top three UK volume housebuilders for 2021 evidence the significance of land values in generating these returns. Land purchasing by the three largest companies increased during the economic downturn associated with the Covid pandemic in 2020, with Persimmon Homes (2022) adding 21,000 plots to their 88,000 owned land supply, while Taylor Wimpey (2022) acquired a further 29,000 plots for its 85,000-plot short-term land bank. Taylor Wimpey buy land at no more than 15% of the gross development value of house sales. This purchase price target can be represented in the following residual valuation formula:

Gross development value (GDV) = 100% less Construction costs = 65% less Profit = 20% = Land = 15%

While land may be bought at only 15% of gross development value, Barratt Homes aim to make a gross margin of 23% on land purchase when they build and sell houses. This margin on land value is appropriated by the housebuilder as additional profit. As the land purchase price was fixed at the beginning of the development, the housebuilder secures the uplift in land value by establishing a reserve sale price for the completed homes and tailoring production to achieve that price. The gross profit margin will be higher than 23% if land values rise more steeply than build costs. In 2021 Barratt Homes achieved a gross margin of 34% per home, despite increased construction costs (Barratt Developments 2022). This profit was generated on the margin between the reserve sale price for the completed homes and the cost of sales. Since construction costs rose and profits on construction fell, the principal source of the increase in profits was the margin secured on the land purchase price, understood as the ground rent element of sale price. The overall picture is of an industry that successfully extracts absolute rent from surplus value generated in production and sales through the management of artificial scarcity in land supply and retains this surplus by erecting barriers to competition through the monopoly ownership and control of developable land.

#### The Return of Absolute Rent: Concluding Discussion

To follow Marx's specification of absolute rent in an investigation of housebuilding, it is necessary to demonstrate the barriers that prevent the "general

equalisation of surplus-value to give the average profit" (Marx 1981:896). These barriers enable the industry to establish above-average house prices and extract surplus value from ground rent. The first barrier erected by the housebuilding industry is imposed through the acquisition of quantities of developable land sufficient to provide monopoly privileges. Exclusive control over multiple years' worth of housing land ensures that a small number of volume builders exercise a near monopoly over the delivery of family homes. The second barrier operates through the purposeful restriction of land supply to maintain a reserve price for new homes. In a rising land market, practices that aim to fix the percentage of profits paid to the original landowners, delay construction with drip-feed building practices, and reduce risk by selling lapsed sites, can effectively maximise the element of ground rent capitalised in the sale price of new homes that accrues to the housebuilder. The supply of completed homes is conditional on the extraction of the anticipated ground rent from sales and land is withdrawn from supply until a reserve price can be met. The third barrier is erected through flexible methods of construction that minimise the capital tied up in production and allow the housebuilders to concentrate their resources on maximising uplift on land value. A business model factored on the employment of casual labour, with costs met from revenue rather than capital, is deliberately unproductive and unresponsive to changes in demand. The construction of homes is attuned to the value of land and to the maximisation of ground rent through purposeful restriction of production. The escalating profits of the housebuilders demonstrate the capture of surplus value not just from construction but from the sale of completed homes, paid for by the labour of homebuyers, which is surplus value extracted from other sectors of the economy.

Previous attempts to base an analysis of urban development markets on the category of absolute rent were criticised for their mechanistic approach, and for inferring the existence of absolute rent from the low organic composition of capital in the housebuilding industry. Absolute rent cannot be imposed as a category; it can be applied only as a method of analysis that uncovers the role of ground rent in the urban development process (Ball et al. 1985). Anne Haila's (2016) description of a financialised housing market in which the supply of completed homes is conditional on the rent generated from land provides a suitable starting point for this analysis and the theory of absolute rent delivers a convincing explanation of barriers to supply in the volume housebuilding industry in UK and Australia. It is clearly impossible to identify the specific component of absolute rent in house prices and Evans (1991) argued that an effect on housing costs could only be inferred from the existence of monopolies in landownership. The level of rent extracted in the urban development process varies according to the locational advantages of the land—Marx's differential rent 1; the amount of capital invested in land—differential rent 2; and the demand for and scarcity of the land or the completed development—monopoly rent. These rental charges are concealed within the cost of housing, but they constitute real transfers of surplus value that drive a crisis of affordability (Topalov 1985). It may not be possible to distinguish whether the housebuilders use their control over supply to establish a monopoly price for new homes or use their monopoly over land to raise house prices. The

attraction of the concept of class monopoly rent is that it blurs the distinctions between profit generated from monopoly price and from the ground rent component of that price. In confining its insights to the construction of price differentials in housing sub-markets, however, class monopoly rent abandoned inquiry into the mechanism through which rent is extracted from all land, across the city and across housing markets, and effectively marginalised Marxian rent theory in the debate over the crisis of housing affordability.

A return to the theory of absolute rent promises to integrate the valorisation of land ownership into a theory of profit and price and direct us to the effect of land values on the cost of housing. It provides a coherent rationale for the barriers to supply evidenced in the speculative housebuilding industry. A monopoly in landownership allows housebuilders to generate surplus value from construction and sales by driving house prices above their cost of production. The record profits extracted by the housebuilders, the uplift on land costs, and the increasing percentage of profit per house sale, testify to the relevance of absolute rent as a tool of analysis. The slow responsiveness associated with the housebuilding industry can be understood as an effective strategy of rent extraction through artificial scarcity in the supply of land and housing. The theory of absolute rent emphasises the effect of capital flows into land and property in defining the market conditions for housing supply. It demonstrates a fundamental flaw in the supply-side explanations of housing unaffordability. An increase in the supply of land to housebuilders will not lead to a fall in housing costs. On the contrary, both housing and land will be withheld from supply until a reserve price is met.

## **Data Availability Statement**

Data sharing is not applicable to this article as no new data were created and data analysed is already publicly available

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