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For decades, the UK has faced a housing crisis. And, although the supply of new homes has in recent years improved, a shortage of housing continues to persist. The lack of homes, especially in the most unaffordable and expensive cities and large towns, is a drag on the national economy, damages local prosperity, and deepens inequality.

This report explains why the UK still faces a housing shortage, why if nothing changes it will continue, and the reforms required to end it. The problem at the heart of the housing crisis is the discretionary element in the planning system, which rations the supply of land for development and new homes. It is wasteful and inefficient and must be reformed.

England and the devolved nations need to shift from this discretionary approach to a flexible zoning system to reconnect the supply of housing to demand and end the housing crisis. This would require:

- A new flexible zoning code drawn up by central and devolved national governments to be used by cities, towns and city regions to set out patterns of development in local plans. This zoning code should have as few zones as possible and allow for land to be used flexibly and efficiently, while maintaining distinct neighbourhoods and orderly growth.

- Proposals which comply with the national zoning code and national building regulations legally must be granted permission by local authorities to develop. Zoning by local government should be sensitive to local land values and provide most neighbourhoods with a small envelope for redevelopment. National government must remain committed to supporting more housing in expensive places after reform.

- Public consultation to occur during the creation of local plans, instead of providing a potential veto for every individual development. Local rules and consultation should remain in place for aesthetic elements such as materials, facades, and landscaping.
• Non-developed land should be phased into the zoned area, conditional on actual population growth. This approach would replace the Green Belt and end the rationing of new land for development, while still protecting precious woodland, countryside, and nature reserves.

• Non-economic considerations or special designations, such as conservation areas or opportunity zones, should continue to be included in local plans, provided they are each subject to an economic cost-benefit analysis and are approved by national government.

• The discretionary negotiation of Section 106 taxation, also known as “developer contributions”, should be abolished and replaced with a flat 20 per cent levy on the value of development, to be spent on local infrastructure and new social housing.

The institutional design of the current planning system dates back to the 1940s. It inevitably causes a shortage of housing. It reduces the supply of land available for development, and forces cities to waste developed land and use it inefficiently. By using a framework developed to understand the relationship between planning systems and shortages in the former Eastern Bloc, this report shows that:

• The discretionary design of the town planning system, where planning permission is granted at the judgement of planning officers or a planning committee of locally-elected councillors, cannot work efficiently. The housing shortages created by this system are near-identical to the shortages which emerged in the planning systems of the former Eastern Bloc.

• Unusual aspects of the UK housebuilding market, including land-banking, slow construction rates, and the poor quality and location of many new build houses, all emerge from the planning system’s unpredictable rationing of new development. These institutional constraints force developers to undersupply new homes at high prices. They prevent them from competing with a strategy of maximising supply and quality, reducing costs, and building the most in the most unaffordable cities.

• The rationing of land for new homes causes shortages that cascade down the supply chain and create shortages of homes for people and families. These shortages lead to a lack of available homes, especially in the most expensive cities and large towns, force people to live in places where they would prefer not to, drive inflation in house prices and rents, and fuel speculation in the housing market.

These issues are not the result of poor planning, mistakes, or bad behaviour by developers or landowners, but emerge from the planning system’s institutional design. Yet these problems can be avoided. The housing crisis will end if the UK chooses to limit the production of new homes only by people’s desire to live in a particular place, not by how much land is rationed out for development.
The UK’s housing crisis is closely related to the planning systems in England and the devolved nations. By disconnecting the supply of housing from demand, these discretionary planning systems harm national and local economies, and make inequality worse.

Inequality is growing between renters and homeowners in the most expensive cities and large towns, as house prices and rents rise due to bottlenecks in supply that originate in the planning system. Those same bottlenecks also deepen inequality in housing wealth across the country. Average housing equity in cities and large towns in the Greater South East (London, the South East and East of England) rose by over £80,000 more than in other cities and large towns in England and Wales from 2013 to 2018, because these high-demand places were not building enough housing to stabilise prices.¹

In addition, the planning system forces places to use their land wastefully. New housing supply in cities and large towns is typically concentrated in very specific locations, such that only 4 per cent of all suburban neighbourhoods in England and Wales from 2011 to 2019 provided 45 per cent of all new suburban homes. In contrast, half of all suburban neighbourhoods built less than one house a year, or no houses, over this period, and provided only 2 per cent of all new suburban homes.²

The discretionary nature of the planning system – where planning officers and local councillors have the power to make decisions about development on a case-by-case basis – appears to be linked to these problems.³ Urban economists have observed that England’s planning system is unusually restrictive when compared internationally, and all four of the devolved nations retain a discretionary element of this sort in their systems.⁴

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¹ Breach, A., 2019, Capital Cities: How the planning system creates housing shortages and drives wealth inequality, Centre for Cities
² Breach, A. and Magrini, E., 2020, Sleepy Suburbs, Centre for Cities
³ Airey, J., 2019, Rethinking the Planning System for the 21st Century, Policy Exchange
Nevertheless, the reasons why this planning regime systematically produces poor outcomes have so far not been clearly identified. It is sometimes argued that these issues and others are the fault of ‘bad plans’ or ‘poor planning’ rather than the planning system itself.\(^5\)

As a result, the road to reform has been unclear. If the relationship between the planning system and the housing crisis remains obscure, then policy will continue to “tinker” with it and achieve marginal results. But, if the role of the planning system can be established, then it becomes possible to set out the policy changes needed to end the housing crisis.

Understanding how the design of the planning system causes the housing crisis therefore requires an institutional approach. A framework to explain the relationship between planning systems and shortages was developed by the economist János Kornai.

Kornai’s approach was formulated as an analysis of the shortages which afflicted and inevitably emerged from the planning systems of the economies of the former Eastern Bloc. It explains unusual behaviour by planners, firms, and consumers in an economy where production is controlled through the unpredictable rationing of permits by a planning system.

Centre for Cities believes this approach has never before been applied to urban planning and housing shortages in cities in the West. This report will use it to explain why a discretionary planning system cannot in practice deliver economically efficient outcomes; to explain how, by rationing land for development the current planning system, primarily in England, inevitably creates a shortage in both the production and consumption of homes; and to set out how to correctly design and regulate an urban planning system to end the housing crisis.

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Are Soviet planning and the English town planning system really comparable?

There are of course large differences between English town planning and Soviet-style planning. In the former Eastern Bloc, the entire economy was planned; strict price controls were set for the vast majority of consumer goods; and price signals and formal channels of finance were extremely limited. In contrast, in England only land and development are subject to planning; price and rent controls are absent; and finance plays an important role in shaping house prices within business cycles.

But, in two crucial features these planning systems are similar: the discretionary rationing of inputs, and the systemic shortages that result.

The planning systems of both the former Eastern Bloc and English town planning are both discretionary

The first similarity is that in both a Soviet-style economy and the English town planning system, the supply of inputs to businesses is rationed. In both the former Eastern Bloc and the English housebuilding market, firms must apply to planners for a permit, or a planning permission, to get the inputs they need to do business.

In a Soviet-style economy, this discretionary rationing applies to all manner of inputs, such as steel, fuel, and electronics. In modern urban planning in England, planning permission is needed for lawful development on a plot of land to proceed.\(^6\) It is not possible for the firms within these systems to acquire the inputs they need by simply buying them – they must have a permit.

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\(^6\) There are exceptions, such as permitted development rights given certain conditions, and mechanisms by which developers receive greater certainty about the granting of permissions, such as site allocations or permission-in-principle. But the vast majority of development requires a planning permission before it can proceed. Likewise, it is typical that a small amount of economic activity in Soviet-style economies such as handicrafts or garden plots would either formally or informally sit outside the plan.
For firms, access to these inputs is fundamentally uncertain as the planning permissions that allocate them are decided by planners case by case. While both systems are led by a formal plan, actual production is ultimately rationed out by planners at their discretion and with bargaining. Firms can at this stage have their ability to acquire inputs reduced or even denied if planners decide to do so, regardless of how much money firms are prepared to pay to acquire what they need. This risk changes firms’ behaviour.

For instance, the Local Government Association says local planning authorities reject one in 10 of applications to develop land, either by planning officers or councillors at planning committee. This implies not just that there is a 10 per cent chance that a planning application will fail, but that there is also an unknown number of applications which are never made as firms suspect they will not succeed.

The consumer economies of the former Eastern Bloc were and England’s housing market is stuck in permanent shortage

The second important feature is that the behaviour of people in both the former Eastern Bloc economies and the English housing market are defined by shortage. The economy is in a permanent state of shortage, rather than experiencing a temporary period of undersupply, such as the brief shortage of toilet paper and pasta many supermarkets faced in England in early 2020.

An economic system can be said to be a “shortage economy” where a shortage is so deep that it changes the behaviour of everyone who participates in it and sets the economy’s limits of production and consumption, if four conditions are met:

- The shortage is general – all aspects of the economy or sector are affected, across labour, investment, consumption, and production.
- The shortage is frequently encountered – it is common and unremarkable to interact with it.
- The shortage is chronic or constant – it is not temporary or unusual.
- The shortage is intensive – its costs are keenly felt in everyday life.

7 In both systems, there is a distinction between plans which set strategic objectives over a longer time horizon (for the UK this is strategic planning, such as the London Plan, and in a Soviet-style economy these are the famous Five-Year Plans), and the plans which actually allocate inputs and determine the quantity of production day to day (local plans in England, annual plans in a Soviet-style economy). It is these latter plans that are the most important and are the focus of this report.

8 LGA, 2020 Housing backlog – more than a million homes with planning permission not yet built https://www.local.gov.uk/housing-backlog-more-million-homes-planning-permission-not-yet-built

While a temporary shortage in toilet paper will resolve itself with time as supply, demand, and prices change, in a shortage economy these adjustments struggle to or cannot take place. Economic activity is restricted by bottlenecks which are part of the economy’s institutional set-up and cannot be avoided by producers or consumers.

These conditions applied in the economies of the former Eastern Bloc. The housing crisis in England and in many cities around the world meet the criteria of a shortage economy too. New housing supply in England is ultimately determined by how much land is rationed out for development in each place by the planning system, rather than by people’s ability to pay for new homes in places where they want to live.

In practice, a discretionary planning system can never achieve efficient outcomes

The core features that these two systems share suggests that analysis of Soviet-style planned economies can inform our understanding of contemporary urban planning, even if major differences remain and are acknowledged. In particular, it makes it possible to establish the theoretical conditions required for a discretionary planning system to achieve efficient outcomes.

Kornai and Lipták developed a model of ‘perfect planning’, which is equivalent to the theoretical concept of ‘perfect competition’ in mainstream economics, whereby markets create efficient outcomes that balance supply and demand.

In this model, which is based upon how Soviet-style economies operated, supply and demand is gradually set through the flow of information between central planners and firms rather than by prices:

- Information from central planners on allocations for inputs and production targets flows down to sectors and then onto firms.
- Information on the output, consumption, and the use of those resources then flows up from the firms up to sectors and then to the centre, which adjusts its allocations and production targets.

This is comparable to England’s approach to housebuilding, where central government establishes supply targets for each local authority, and then local authorities allocate specific sites for development as an input to firms. Information on housebuilding rates, affordability and demand then flows up from local authorities to central government to shape policy and supply targets.

10 For example, see Duranton, G. and Puga, D., 2019, Urban Growth and its Aggregate Implications NBER Working Paper No. 26591
11 Kornai, J., 1979, Resource-Constrained versus Demand-Constrained Systems, Econometrica Vol. 47, No. 4
13 Although the UK housing market does have prices which convey information, MHCLG sets production targets rather than price targets. Leonid Kantorovich built theoretical models to do the same thing as Kornai-Lipták where planners aimed for "shadow prices" rather than production quotas, but these were never implemented at scale.
Kornai and Lipták demonstrated with their model that it is possible to construct an idealised discretionary planning system. The proof that they developed shows that a discretionary planning framework can reach an efficient outcome, under certain conditions.

These conditions are:

1. **Government has clear and constant goals.** In the reality of the English planning system, Government housing and planning policy frequently pursues contradictory objectives (such as building new homes to end the housing crisis, and protecting the Green Belt) which occasionally change.

2. **Councils and firms have no purposes of their own and pursue only the goals of the centre.** In practice, local authorities and firms have distinct objectives and try to achieve them while navigating the planning system.

3. **Plans are bounded by known and real resource and capacity constraints.** Again, in practice, overly-ambitious targets are frequently set (such as the draft London Plan’s housebuilding target for small sites, or perhaps even the Government’s national housebuilding target of 300,000 homes a year.)

4. **All information in the system is accurate and everyone tells the truth.** Throughout the English planning system, information held each by planners, firms, and consumers is often uncertain at best, even if it is honestly shared.

5. **All agents enjoy perfect discipline – in other words, nothing is late or goes wrong.** This is not how the English housing market actually works. Plans and developments are often delayed, rejected, or subject to appeal which make the process unpredictable.

6. **The planning system is patient, and repeatedly and immediately adjusts as demand and information changes.** In practice, elements of the system can remain stuck in place for years or even decades. York, for example, has not formally agreed a new local plan since the 1950s. The English green belts have remained practically unchanged since the 1980s.

If these conditions were met, then the discretionary planning system of the former Eastern Bloc and the English planning system could achieve perfectly efficient outcomes as defined by central government. However, as set out above, these conditions are not and cannot be met because they are so strict. They are far harder to satisfy than the conditions required for an efficient market equilibrium.
This inefficiency explains why Soviet-style economies were extremely wasteful even as they experienced a shortage. The alternative approach, where production is controlled by prices instead of planning, ensures that transactions are typically efficient and minimise waste, as new information rapidly alters consumer and producer behaviour by changing prices. As a result, many of the problems these planning systems try to resolve are themselves forms of waste created by the planning system.

The implication of this is that some of the alternative explanations for the housing crisis - mistakes in local plans, poor Government policy, or the behaviour of bad actors - are incorrect or incomplete. Rather, it is the system’s inefficient use of land and its rationing of land that result in a permanent shortage economy for housing.

As the conditions which discretionary planning systems require to work cannot be satisfied, it is not possible for a discretionary planning system to work efficiently. There will always be waste and costs in the operation of any such discretionary system, whether for organising an entire economy or simply for how places use land. These problems will persist until there is comprehensive reform of the system’s institutional design. Until then, piecemeal reform will only deliver piecemeal results.
Kornai’s analysis states that there will always be problems and shortages in a discretionary planning system. But how does the institutional design of the UK’s planning systems actually result in a shortage of new homes in expensive places and create a housing crisis? The framework divides the problems that appear in shortage economies day to day into two categories.  

For housing in the UK, there are shortages faced when building new homes that are caused by the rationing of land. These “vertical shortages” change developers’ behaviour and the information planners have to calculate supply. These shortages in production cascade down into a shortage of homes faced by consumers in the housing market. These “horizontal shortages” change the behaviour of homeowners and renters and, again, the information planners have to calculate demand.

In this shortage economy, the supply of land for development is always inadequate, and the land made available for development or developed is always used inefficiently. Avoiding these problems and ending the shortage of homes requires a new approach to planning in cities.

Problems on the production side, or “vertical shortages”

Firms land-bank to reduce planning risk

Discretionary planning permissions create uncontrolled uncertainty for developers. If demand suddenly increases, they cannot just buy more land to satisfy it, as more development requires a new permit. Alternatively, they may receive far fewer planning permissions in the next period than they expected and need to sustain production. The amount of land that they can develop tomorrow is fundamentally unknown.

14 In correspondence with the author, Prof. János Kornai stated that “A partially controlled housing market in big cities is certainly a field, where you find all the symptoms of a shortage economy.”
Such “planning risk” includes changes in Government policy, or local authorities reducing the amount of houses a site can due to local opposition, or changes in a local authority’s political composition, or if there is a judicial appeal against a scheme, or if a structure is listed after planning permission has already been granted.\footnote{For the latter, see Robson, S. 2019, How Mancunians from 250 years ago are stopping flats from being built in the Northern Quarter, Manchester Evening News https://www.manchestereveningnews.co.uk/news/greater-manchester-news/how-mancunians-250-years-ago-15850690} Negotiation over “developer contributions” in the form of Section 106 taxation also draws out this process and makes the returns for housebuilders highly uncertain.

This planning risk has two effects for developers. First, they demand more land and units than they suspect can actually get planning permission, in the expectation that some applications are unsuccessful. Second, they then hoard the land which is granted planning permission to spread planning risk over time. As developers’ access to equipment, finance, and workers is relatively fixed in the short term, this ‘hamster-like’ behaviour is rational as it means they will always have land on which those assets can be operating, even if planning permissions temporarily dry up.\footnote{Both of these behaviours were key characteristics of the relationship between firms and planners across a range of industries in the former Eastern Bloc. See: Kornai, J., 1992, The Socialist System, OUP, pp. 121-124, 244, 268}

In practice, this land-banking primarily operates through developers and land promoters holding options on large areas of undeveloped land, but it can also be seen in the gap between planning permissions granted and housing completions.\footnote{Shelter research note, 2019, Planning permissions and completions https://england.shelter.org.uk/__data/assets/pdf_file/0010/1812862/Research_note_Planning_permissions_and_completions.pdf}

Crucially, this behaviour is caused by discretionary rationing in the planning system. This approach to controlling the supply of land actually changes developers’ demand for land, making it difficult for planners to calculate local supply and demand for new homes. If instead it were possible for developers to just buy land and build on it, they would demand only as much land as they needed, as their strategic response to uncertainty would be unnecessary.

**Rationing land for development forces developers to build at a slow “absorption rate”**

To actually build new homes, developers must first buy land that can lawfully be developed from landowners. Land that will never receive a planning permission is worthless to a developer, regardless of how suitable it is for development. The sites that do or are expected to receive planning permission are therefore essential for developers to acquire.

However, although these developable sites are rationed by the planning system, developers can only acquire them by paying market prices to the original landowners. As these sites are in short supply, a site which is granted...
or is suspected to have a high chance of receiving a planning permission can greatly increase this price, especially near cities and large towns with successful economies and expensive housing.

This increase in the price of land is sometimes known as “planning gain”, and is a windfall to the landowner. As Kate Barker has observed, in 2010 agricultural land without planning permission around Cambridge was worth roughly £18,500 per hectare. Once it received planning permission for housing, the value per hectare increased to £2.9m.\(^{18}\)

Developers must cover these high land costs, and they cannot escape them by increasing production or efficiency as the planning system rations the supply of land they require. They therefore need to pass their land costs onto consumers and sell new houses at high prices.

**The rational strategy for developers, once their site is granted a planning permission, is to build at a slow rate which maintains high prices for their product and avoids swamping the local market with new supply.** Building at this speed, where the market absorbs new supply without price falls, is possible even though there is competition as every other developer faces the same problem. This is the “absorption rate” discussed by the Letwin Review.\(^{19}\)

The result is that the planning gain for landowners is passed down to consumers in the form of higher house prices. Although firms experience a disadvantage trying to acquire land which can be lawfully developed, they enjoy the advantage of a sellers’ market when selling new properties to consumers due to slow build-out rates.\(^{20}\) This is how the vertical shortage of land for developers cascades down into a shortage of homes in the housing market for renters and homeowners.

At its core, this absorption rate is an artefact of the discretionary design of the planning system.

If developers could instead just buy land and develop it without applying for a planning permission, then “planning gain” and thereby the absorption rate would both disappear. The price of land would reflect local demand and, as firms would and could only buy what they immediately needed, they would be forced to build new housing as quickly as possible to outcompete rival firms that could now do the same.

\(^{18}\) Barker, K., 2014 Housing: Where’s the Plan?, LPP

\(^{19}\) Letwin, O., 2018, Independent Review of Build Out, MHCLG. Implicitly, the Letwin Review recognises the analysis above – by recommending that large sites offer a variety of products and tenures to distinct consumer sub-markets, it attempts to increase the rate at which new dwellings are built without disrupting local house prices.

\(^{20}\) This is functionally identical to the relationship between consumers, firms, and planners in the former Eastern Bloc. See Kornai, J., 1992, The Socialist System, OUP, pp. 245-252, and 287 for a case study of the Hungarian car market.
The shortage of housing results in poor quality homes

Paradoxically, the low quantity of production leads to poor quality and inefficient production in discretionary planning systems. This occurs in several ways. First, the undersupply of housing discussed above means that there is little need to compete on quality. Firms can be confident that they can produce poor quality products and people will have no choice but to buy them.

Second, the existing stock is often of poor quality as it is difficult to replace. The UK had in 2014 the oldest dwelling stock in Europe, with 37 per cent of houses built before 1945 and 62 per cent built before 1970. Other countries take a different approach. In Japan for instance, houses depreciate like other capital goods and are routinely demolished and rebuilt when they reach the end of their lifespan to be replaced by new and better-quality housing.

Third, the shortage of housing focuses Government policy at all levels around increasing production. But, because policy is so focused on increasing supply, within and due to the tight constraints upon supply due to the planning system, new homes’ quality is sacrificed to increase their quantity.

With the housing shortage in cities and large towns, this affects both the physical quality of the new housing stock and the quality of the location of new housing. New-build houses are widely considered to be of poor quality, and new developments on the outskirts of cities are frequently car-dependent and dense with little supporting infrastructure, while existing suburban neighbourhoods with ample infrastructure see little development.

This is due to the lack of pressure on the planning system to use land efficiently. There is pressure on local authorities to build to a housing target, but there is also political pressure on them from activists to block development when it is perceived to infringe upon the neighbourhood. Local authorities therefore use their discretion to permit certain types of development in locations that minimise this pressure, rather than allowing land to be used most efficiently by permitting what people want where they want it.

21 There are parallels here too with the economies of the former Eastern Bloc. The poor quality and choice available of consumer goods in these economies is well known. See: Kornai, J., 1992, The Socialist System, OUP, p. 307-310. Cities in Soviet-style economies were also characterised by extremely inefficient and wasteful land-use, such as high-density apartment complexes on the outskirts of cities with little infrastructure (e.g.: Troeshchyna in Kyiv), as decisions were determined by arbitrary and non-economic factors. See: Bertaud, A., 2018, Order without Design: How Markets Shape Cities; and Bertaud, A. and Renaud, B., 1997 Socialist Cities without Land Markets, Journal of Urban Economics
22 EU Building Stock Observatory, Building stock characteristics factsheet, European Commission, https://ec.europa.eu/energy/eu-buildings-factsheets_en
26 Einstein, K., Glick, D., Palmer, M., 2019, Neighborhood Defenders, Cambridge University Press
Problems on the consumption side, or “horizontal shortages”

There are not enough empty homes

Counter-intuitively, for supply to meet actual demand, there must be a surplus of unused stock.\(^\text{27}\) For housing, this means that in a healthy housing market not experiencing a shortage, there needs to be a considerable number of empty homes.

Surpluses of stock emerge frequently in a market economy when supply meets demand, and they are not wasteful.\(^\text{28}\) For businesses, surpluses provide a strategic reserve which they can use to respond to sudden changes in consumer demand. For consumers, surpluses, such as full shelves in a supermarket, are a signal that supply is ample and that there is no need to panic buy.

Surpluses can vanish quickly in temporary shortages and can actually accelerate them, as their disappearance indicates to consumers that they should rapidly increase their demand. This signal is why toilet paper and pasta became hard to acquire in supermarkets in early 2020: even though the actual supply of these goods was always able to meet actual need, emptying shelves told consumers to buy more, creating a brief shortage before visible surpluses returned.

But in shortage economies, such as the modern urban housing crisis, the lack of a surplus is permanent and a defining characteristic of the system. As there is a housing shortage in cities and large towns, there is therefore almost no surplus of unoccupied or long-term vacant homes in urban areas, especially in the most expensive places with the highest demand. Figure 1 shows just how little housing stock is vacant for more than six months across cities and large towns in England.\(^\text{29}\)

\(^{27}\) Kornai, J., 2014, Dynamism, Rivalry, and the Surplus Economy, Oxford
\(^{28}\) An additional reason is if there is no supply left then no further transactions can take place and neither firms nor consumers can observe “true demand” at that price. Kornai refers to this as “the rule of the shorter side”. See Kornai 2014.
In total, only 0.9 per cent of houses in cities and large towns are long-term vacant. The surplus of stock is lowest in the most expensive places where demand is highest, such as 0.7 per cent in London, 0.5 per cent in Cambridge, 0.4 per cent in Bristol, and 0.1 per cent in Crawley. Vacancy rates are in contrast higher in more affordable cities and large towns. This indicates that the national shortage of housing is at its tightest in high-demand, economically successful places, and that there is a severe mismatch between local supply and demand.

There are much lower rates of surplus stock than in countries and cities abroad which have much more affordable housing overall. For example, 5.6 per cent of houses in Japan are long-term vacant, including 2.4 per cent in the capital.\textsuperscript{30} This means that Tokyo has a larger share of surplus homes than Burnley does (2.1 per cent), the most affordable city or large town in the UK and the one with the highest vacancy rate in England.\textsuperscript{31}

\textsuperscript{30} Japan’s Housing and Land Survey 2018 – Approximate Tabulation of Dwellings, Table 00200522
\textsuperscript{31} Wider measures of vacancy rates including unoccupied homes – i.e. those which are available for sale or rent but for less than six months – and excluding second homes show a similar pattern. 1.9 per cent of all homes in England are either unoccupied or long-term vacant, as are 12.9 per cent in Japan, and 10.4 per cent in Tokyo.
Suppressing vacancy rates does very little for those homeless and struggling to make rent who are facing the worst inequalities of the housing crisis. Rather than “tackling the scandal of empty homes”32 policy should be doing precisely the opposite. Cities and large towns should be building so many houses that the number of surplus homes rises and the horizontal shortage of homes is relieved. However, it is not currently possible for places to create a surplus of homes as vertical shortages reduce the supply of new homes.

**Horizontal shortages artificially increase demand for housing in low-demand areas**

When a product is not available in a shop, people will find a substitute and buy their second choice instead, which may be more expensive, or cheaper and less desirable. If this second choice is not available either, they will buy their third choice and so on.33 The lack of supply in a shortage does not cause demand to disappear, it just adjusts it by artificially increasing it for substitutes.34

This same substitution behaviour also appears and is ever-present when housing is in a permanent state of shortage. It causes three major problems.

**The first is that, if people are unwilling to live in flat- or house-shares, the shortage can price people out of a place completely, so that they buy or rent in other, lower demand areas.** This artificially increases housing demand in these cities and large towns. Some people may see this as a good thing as it spreads population away from high-demand cities like London. But this is not a good outcome for the person who is not able to live where they want, and it is not a solution to the shortage of homes in London.

The second is that it makes calculating demand in a discretionary planning system more difficult. Currently, the Ministry of Housing, Communities and Local Government (MHCLG) sets housing targets for places based on projections for household growth. But this estimate of demand is influenced by the undersupply in other places, as people adjust to the shortage in expensive cities and large towns by moving to lower-demand places. In this situation it is possible for all places to meet their housing targets while still having supply challenges in high demand areas.

The third is that it creates inequalities. People who are able to acquire the undersupplied good - or housing - first are better off than those who are forced to have or live in an unsatisfactory alternative when the desired product or dwelling runs out. Even if these consumers have identical incomes, desires, and do eventually find places to live, the shortage of housing means those who are forced out have unequal outcomes.

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33 For a model of how the shopping process works in a shortage economy, see Kornai, J., 1992, The Socialist System, OUP, pp. 229-234
34 For a more detailed exploration of the process of demand adjustment in a shortage economy, see Kornai, J., 1992, The Socialist System, OUP, pp. 234-240
This inequality is not due to a lack of redistribution, but a lack of production.\textsuperscript{35} Redistributing the limited amounts of housing available, or subsidising housing so it is cheaper for lower-income residents does not solve this. There is simply not enough housing to go around. Building sufficient homes that people are free to choose rather than forced to choose where to live is the only way to address this type of inequality.

**The shortage means housing in expensive places experiences inflation, fuelling inequality**

As supply and demand in a market change, so do prices. During brief shortages, prices will often rise to reduce demand and balance it with lower supply. If prices do not rise, empty shelves can appear.

This same relationship applies to shortage economies too. As their lack of supply is permanent, rising prices – inflation – are impossible to avoid. Even if policymakers set price controls and grant subsidies, there is still a latent, “repressed” inflation baked in.

In the classical Soviet-style economy, shortages were managed by strict price controls, and goods and services are allocated to consumers through waiting lists and queueing. This does not prevent inflation though, but only represses it temporarily.\textsuperscript{36} Once price controls in the former Eastern Bloc were lifted towards the end of the 1980s, decades of pent-up inflation were released and soared across these economies, before stabilising once the transition away from the shortage economy was complete.\textsuperscript{37}

In contrast, the modern housing market does not suppress housing cost inflation through rent or price control or waiting lists.\textsuperscript{38} Instead, it allows house prices and rents in the private sector to change. This does achieve a more efficient allocation of housing than price controls or waiting lists would, and cities’ housing markets and prices vary along with different levels of demand across the country.

**But, as the supply of homes is unable to meet demand, prices rise over the longer term, especially in the most expensive cities and large towns with the deepest shortages.** This creates huge inequalities in housing costs between renters and homeowners, and in housing wealth between homeowners in richer and in less prosperous places. While the average house in Oxford saw its equity rise by £89,000 from 2013 to 2018, it rose by only £3,000 in Sunderland and Middlesbrough.\textsuperscript{39} The planning system makes the country less fair by

\textsuperscript{35} Incidentally, housing was a particularly clear example of this inequality in the former Eastern Bloc. Kornai 1992 on page 321 has two Lorenz Curves showing the distribution of income and square metres of housing per household adjusted for quality and location in Hungary in 1985. The distribution of housing was much more unequal than the distribution of income.

\textsuperscript{36} See Kornai, J., 1992, The Socialist System, OUP, pp. 278-280


\textsuperscript{38} Apart from social housing, for which there is a form of rent control and long waiting lists.

\textsuperscript{39} Breach, A., 2019, Capital Cities: How the planning system creates housing shortages and drives wealth inequality, Centre for Cities, London
shovelling wealth to the wealthy, and divides people between the comfortably housed and those struggling to pay the bills.

The actual rate of house price inflation in each city is influenced by a range of factors, including the strength of the local economy, conditions in the financial system, and population growth. House prices can decline temporarily or stall if any of these conditions experience serious reversals. But fundamentally, inflation in house prices and housing costs in the most expensive cities and large towns is driven by a permanent housing shortage.

**The shortage economy in housing induces speculation**

Another explanation sometimes given for the housing crisis is “speculation” or financialisation. That is that, by treating houses as assets and using cheap capital to buy and build real estate, investors and landlords drive up the price of land and make affordability and homelessness worse.40

However, this argument does not address how shortage economies encourage speculative behaviour. When there is a shortage of consumer goods, it is common for consumers to buy far more than they need, not just for their own use as a substitute but as a hedge with the hope that they can later sell or trade the goods they have acquired for something they prefer.

**In effect, goods that are in shortage acquire asset-like properties, which increases demand for them.** This further complicates the ability of planners to calculate the right level and type of supply. In the former Eastern Bloc, ordinary consumer goods in shortage, such as mayonnaise, served not just as condiments but as investment assets which could be swapped for other goods and services.41

In England, there is no need to barter houses in this way due to an effective price system but the shortage of houses still deepens their appeal as an asset class. As houses in high-demand cities and large towns experience long-term inflation, homeowners and landlords in these expensive places enjoy large capital gains to their housing equity over the long term and a hedge on future increases in rents. This speculation does not just have origins in reforms to mortgage lending or the financial system, but also has roots in the permanent undersupply problem that emerges from discretionary planning.

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40 Eg Silver, J., 2018, From homes to assets: Housing financialisation in Greater Manchester. Working Paper
41 For an account of this behaviour in the USSR with mayonnaise, see Edel, A., 2017, A Soviet New Year, With Mayonnaise, New York Review of Books
Zoning systems can overcome a housing shortage, provided they are well designed by national government

This analysis may sound daunting. It means the discretionary planning system inevitably creates a housing shortage in England. But that does not mean that a housing shortage is unavoidable. Rather, it is a predictable outcome of certain institutions, which political choices can change.

Minimising the discretionary element in the planning system is the key to overcoming this housing crisis. In England, this requires a shift away from the current discretionary planning system towards the distinct approach of a flexible zoning system, as seen in other countries with more affordable housing. These problems discussed above are creations of the current planning system, and cannot be resolved so long as the fundamentals of the system remain untouched.

In general, zoning systems frontload much more of their decision-making and public consultation into the creation of the rules and the initial plan, while discretionary systems regulate more on a case-by-case basis.

Some zoning systems, like Japan’s highly-flexible zoning code, are very affordable and do not experience housing shortages. While almost 200,000 of housing starts a year is a decade-long high for England, in Japan there are about 950,000 starts a year, almost twice as many as after accounting for differences in population. Despite the shrinking population, about 360,000 additional new dwellings are added to the total number of homes every year in Japan, primarily in the most popular cities like Tokyo and Nagoya, compared to about 240,000 in England. These flexible zoning approaches with a much greater supply and more efficient use of land should be a model for reform of England’s institutions.

However, housing shortages are not just found in discretionary planning systems. Multiple cities in the US with zoning systems have housing crises too, including New York City, Boston, and Seattle.

In these places with zoning codes and housing crises, there is in theory more flexibility about development. But in practice, their zoning codes are often highly restrictive, with each zone corresponding to a single possible use, or imposing tight limits on density. In effect, these inflexible zoning systems have replicated the problems of discretionary planning. “Rezonings” to change how land is zoned are rare, meaning that inflexible zoning codes that specify a single use or a tight envelope for density effectively freeze the existing use of land.

42 Breach, A., 2019, Can Tokyo show us how to solve Britain’s housing shortage? https://www.centreforcities.org/blog/can-tokyo-show-us-how-to-solve-britains-housing-shortage/ Centre for Cities
Currently, England’s planning system actually avoids some of these specific design flaws, which emerge from how cities write and then apply their own zoning rules. The National Planning Policy Framework means there is now a strong distinction between national government as a “referee” setting the rules and enforcing them across “players” in local government than in large parts of the US. In addition, how England regulates uses is much more flexible than many US zoning codes.

Any new zoning system if it is to work well should retain these advantages of the current system in its uses, its distinction for national and local government between “referee” and “players”, and an ongoing commitment by national government to support more housing at the local level.
The discretionary element in the planning system must be reduced

England’s current planning system is at the core of the housing crisis. Its discretionary design predictably disconnects the local supply of houses from local demand. Yet this can be changed, if government is prepared to make the political choice to solve the housing crisis, and end the inequality it causes.

**The solution is not deregulation, but the correct mechanism for regulation.** It does not require any reduction in social or council housing. Urban planning as a discipline and state function will remain, as will its consideration of some non-economic matters. But the institutional design of the planning system must change to fix the problems the UK has experienced for decades. Marginal change will achieve only marginal results.

A discretionary element could remain for those kinds of development which otherwise do not comply with these criteria, such as new cottages in rural areas or proposals which depart from the zoning in an urban area. Local areas will still be able to use a planning process to shape development takes place. But the vast majority of new development will be supplied under a non-discretionary process. To avoid the problems set out in the previous section, the planning system must cease rationing land and minimise discretionary control of development.

A flexible zoning system would achieve this and require that:

- A flexible zoning code should be drawn up by national government which is implemented by local government at the level of economic geography and across their developed area. This zoning code must have as few zones as possible which each allow for many different uses.
- Proposals which comply with the national zoning code and national building regulations legally must be granted permission to develop by the local planning authority.
• Zoning will be done at the city, town or city-region level. For local plans to be approved by national government, zoning by local government should be sensitive to local land values and provide most neighbourhoods with an envelope for redevelopment.

• Non-developed areas can be phased into the zoned area, conditional on actual population growth. In cities and large towns with high demand, the amount of land available for development increases, and housing supply rises to match demand. This approach would replace the Green Belt.

• Non-economic considerations or special designations, such as conservation areas or opportunity zones, can be included in local plans, provided they are each subject to an economic cost-benefit analysis and are approved by national government.

• Public consultation is frontloaded into the creation of the local plan, rather than allowing feedback and vetoes with each individual development. Local rules and consultation can remain in place regarding materials, facades, and other aesthetic elements.

• The discretionary negotiation of Section 106 taxation, or “developer contributions”, be abolished and replaced with a flat 20 per cent levy on the value of development.

To expand upon each of these in turn:

**Proposals which comply with the national zoning code and national building regulations legally must be granted permission**

For the housing market to shift from being constrained by supply – the limited amount of land which is rationed out for development – to being able to satisfy people’s desire for more homes, planning must make much more land available and become more certain. Rather than using the judgement of planning officers or councillor planning committees to decide almost all development, local planning authorities should regulate development by allocating their built-up area to different zones that allow varying uses and densities.

This approach would require that ordinary schemes legally must be granted planning permission by the local planning authority if they comply with the national zoning code and national building regulations. Such a system would apply to the built-up area of cities and towns.

The effect of this new institutional environment would be to give complete and immediate certainty on the possibility of providing new supply on every plot of land to firms and landowners. It would change their incentives to compete on developing land as quickly and to as high a quality level as possible, rather than land-banking and building to a slow absorption rate.
Proposed development on a plot which does not comply with the zoning could still proceed through a discretionary process for bespoke or unusual schemes, but the great majority of new supply would proceed through compliance with the zoning code.

**A flexible, national zoning code**

For such a new approach to avoid the mistakes of poorly performing zoning elsewhere in the world, national government (MHCLG in England, and the devolved Governments in the rest of the UK) in its role as a “referee” of the system must write the rules so that there are as few zones as possible. These zones should each allow a large number of uses and varying densities and broadly correspond to a level of economic activity. As the intensity of the zones increases, the number of uses and the density allowed on a site should grow.

For instance, there may be a suburban zone which permits semi-detached housing and neighbourhood shops, and a commercial city centre zone which allows for hotels and high-rise apartment buildings, but which does not forbid suburban uses. Unusual or special one-of-a-kind uses with demonstrable spatial externalities, such as polluting heavy industry, could be designated either as special segregated zones or continue to require a discretionary permit.

Japan’s flexible national zoning code has 12 zones, each allowing multiple uses, such as houses, clinics and small shops and offices in the lowest intensity suburban residential zone. The density of new development in less intense zones is managed through floor area ratios, which set out how tall structures can be relative to the size of the plot and width of the road, and rules about light and air penetration which correspond to the floor area ratio.

Similar flexibilities are already present in the current use classes system in England, which has 14 different broad classes, and allows easy changes without any need for planning permission between many of them. The current approach to regulating land use in England is a better inspiration than the “exclusionary” zoning codes with dozens of distinct zones which are common in US cities.

Very low-density and exclusionary zones, such as those that only allow “single family housing”, have proved to be deeply problematic for affordable housing in the US. Places like Minneapolis and Oregon have recently abolished these types of zones, and they should be pre-emptively avoided in the UK.

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Zoning should be sensitive to land values and must allow an envelope for redevelopment

Local government will continue to be able to draw up local plans through flexible zoning, and to decide on how zones are assigned and how orderly urban growth proceeds. This zoning should take place at the city, town or city-region level to correspond with the geography of the local economy.

Alongside setting the rules of the zoning code, national government would have a role in evaluating local plans. Zones should be applied by local government in a manner sensitive to a place’s pattern of land values, so that neighbourhoods where there is higher demand and land values (such as city centres, near railway stations, etc) are able to provide more floorspace.

As well as this, national government will need to stipulate that zones are applied by local government to provide room for housing supply to expand if demand grows, rather than “freezing” the existing built environment. Zones should be applied in a way so that, for most neighbourhoods, they have an intensity one zone “above” the existing urban form. If every residential neighbourhood allows some potential for further development, then most will only experience a small degree of change.

Not every neighbourhood would need to be zoned in this way. There are places that have specific historical, aesthetic, architectural, or otherwise non-economic community significance and may merit a tighter zoning. But most ordinary neighbourhoods should allow slightly denser housing than their existing form, to allow orderly but predictable suburban densification.

Local plans would need to demonstrate their zoning has been applied flexibly to be signed off by national government. Local plans should be continuously reviewed as populations and local patterns of land uses and prices change, and be subject to regular evaluations by national government. If local housing unaffordability rises, such as rent per square foot relative to local incomes, then rezoning land at a higher intensity should be the first tool at planners’ disposal. “Downzoning” a zone to a lower intensity should require national government approval and almost never be permitted.

The result would be a planning system where local government could still shape the development of the community and manage externalities that emerge, but discretionary control over the supply of housing would end. Housebuilding numbers and vacancy rates would rise in the most expensive cities, and as the shortage eases, prices and rents would become affordable.
Non-developed plots to be phased into the zoned area, having experienced population growth

Zoning can easily be applied within a built-up area, but it is trickier to apply on undeveloped, greenfield land. If greenfield sites are not to be zoned, then they require a non-discretionary method of being introduced into the zoned area and increasing the supply of land for new development.

Japan handles this problem by phasing in land every five to seven years depending on actual population growth\(^\text{45}\). Depending on how much the city’s population has grown in the zoned area, there is then a requirement by the local authority to zone an according amount of unzoned, non-developed land and prepare it for development. If it has not grown, then there is no such requirement.

Developers in growing cities who come forward with unzoned, greenfield large sites that can provide significant amounts of additional housing legally must have their land added to the zoned area. The sites are then zoned by the local authority. Main roads and major infrastructure (e.g. sewerage, schools) are planned and paid for by the municipal government, while access and minor infrastructure is paid for and built by the developer. Once the new sites are divided up and ready for new homes, if they are occupied and the population grows such that the vacancy rate falls, then in five to seven years the cycle begins again.

Although this approach may appear similar to the site-allocation process England currently uses, there are important differences. It is not a discretionary system – sites large enough to contribute legally must be zoned, and there is no attempt to calculate supply and demand. This system would replace the Green Belt, but still ensure a phasing of development and orderly urban expansion that keeps pace with infrastructure.

Box 1: What would happen to the Green Belt?

The distinction between zoned and unzoned areas would replace the green belt and entail two significant changes. First, it would be extended to all of the undeveloped land in England. Second, all development within unzoned land would either require a discretionary planning permission for small, bespoke schemes, or it would be introduced into the zoned area in the manner discussed in this section.

This new approach could be easily combined with other designations such as Sites of Special Scientific Interest, National Parks, Areas of Outstanding Natural Beauty, etc to prevent development for special parts of the countryside and environment. But unremarkable land that is currently Green Belt would be granted the same protections as unremarkable countryside elsewhere. If the land can be prepared in a way which allows orderly urban growth, and there is demand for new homes, then developers can apply to introduce those sites into the zoned area.

The result would be a system where local supply is closely connected to local demand. New homes would be concentrated in the most expensive areas with the highest demand. Lower-demand places would see much less development.

There would be little to no “planning gain” for landowners because the legal certainty of development means there is no rationing of land - all of the land value uplift comes from assembling lots into sites large enough to develop. Land for housing and new homes would therefore be cheaper than they are now.

In Japan, this changes developer behaviour so that, rather than a single firm building all of the houses on a greenfield site and selling them one-by-one to homebuyers as the UK does, homebuyers would first buy plots in this newly-zoned area. Then, as planning permission is legally certain due to zoning, they pick their new house out of a catalogue or speak with a builder to customise their design and it is built for them.

Quality is high as the developer is directly accountable to the consumers, who can choose between different firms as to who builds their new home. Build-out rates are fast both because there is no rationing of supply elsewhere in the city, and because the new landowner is the future homeowner who wants to move into their new home.
Non-economic considerations and special districts can be included, subject to cost-benefit analysis and approval from national government

The planning system’s responsibilities currently include things with important non-economic value such as wildlife and environment conservation and heritage protection. These can continue to be included under a flexible zoning planning system. Conservation areas or listed buildings could be layered on top of the zones already laid out within a city and require a special process for development, and areas of woodland or nature reserves could be protected from any future development. Special districts such as opportunity zones or regeneration areas where higher densities than normal are permitted could also be layered in this way.

Such special districts must be subject to two tests. First, they must proceed through an independent economic cost-benefit analysis. Poor economic outcomes from this analysis may not necessarily prevent a special designation, but advocates and the local planning authority should be required to defend its non-economic value given such costs.

Second, all non-economic designations like this must be approved by national government, in the context of all such designations a local planning authority applies for and the economic analysis. This would allow the costs of any such special designations to be scrutinised by the referee of the planning system, and ensure that any such decisions are made in the interest of both the local community and the rest of the country.

Public consultation is frontloaded into the creation of the local plan and can provide input into aesthetics

The planning system currently gives great weight to public feedback in the form of consultation meetings and comments for individual developments on a case-by-case basis. These arrangements do not just reinforce the discretionary nature of the planning system and make it less efficient. Even though they are justified as supposedly democratic, they reproduce inequality by giving a much greater say to older, wealthier homeowning members of the community who oppose new construction, and under-represent less advantaged groups, renters, and those who support or who are indifferent to new development.46

If a degree of public comment and input is to be retained, it should be frontloaded into the creation of the initial local plan to reduce this discretionary element and inequality, and allow public feedback to be incorporated into the planning process in a more organised manner.

46 Einstein, K., Glick, D., Palmer, M., 2019, Neighborhood Defenders, Cambridge University Press
These comments and feedback could also be used to inform decisions about the special districts set out above, and local design guides as the Government’s Building Better, Building Beautiful Commission has set out. Rules about facades, materials, and landscaping can be established by local planning authorities, subject to approval from national government, without a negative impact on the supply of land or floorspace. If such design guides are approved after consultation with the community, a discretionary process could be retained purely for the design elements of schemes that deviate from the design guides.

Section 106 taxation should be abolished and replaced with a flat 20 per cent levy on the value of development

An additional problem with the current operation of the planning system is its reliance on Section 106 “developer contributions” as a form of taxation. The logic is that as the land value increases due to planning gain which is caused by a discretionary, public decision, some of that increase should be captured by the public.

In practice though, this form of taxation is highly flawed. As it needs to be negotiated development by development, Section 106 taxation is arbitrary, uncertain, and wasteful. Even when used to subsidise “affordable housing”, Section 106 in its current form is an extremely expensive and inefficient form of redistribution.47

In a flexible zoning planning system, this discretionary model of taxation would need to be replaced by a much simpler approach. Centre for Cities has previously suggested an alternative Land Development Charge of a flat 20 per cent levy on the value of new development.48 Even just restricted to “button development” of new suburban homes around train stations in the existing Green Belt around Birmingham, Bristol, London, Manchester, and Newcastle, this would raise between £93 billion and £116 billion from 1.7 to 2.1 million new homes, which would be reserved for funding infrastructure and new social housing. This could be combined with further tax devolution to further align the incentives for local government towards supporting economic growth.

48 Cheshire P. and Buyuklieva B., 2019, Homes on the Right Track, London, Centre for Cities
Conclusion

Housing does not need to be unaffordable. The housing crisis is a political choice, a commitment to sustain a system which undersupplies new homes by design. The shortage of homes fuels inequality between prosperous places and those struggling, between homeowners and their children, and between the lucky and the unfortunate.

If we want, we can end the housing crisis. To do so, government needs to make the political choice to minimise the discretionary element in the planning system. Much as the Soviet-style economies of the former Eastern Bloc experienced shortages for decades until they underwent systemic reform, the only option is reform of the planning system from first principles.

A flexible zoning system can make this happen. There will of course be debates and disagreements about the details of any new approach. But a flexible zoning system will use land more efficiently, make more land available for development, and provide more homes in places where the housing crisis is most desperate than the system today.

Ending the rationing of new homes is the choice politicians must take to repair Britain’s divides. A failure to do so would be to choose shortage and inequality over housing and prosperity for all.