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Housing and the urban premium

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ABSTRACT

Housing policy is experiencing a revival in many countries of the South after a period of neglect. There is a risk that mass housing projects may produce inefficient, exclusive and environmentally-damaging urban outcomes. Human settlements policy should serve a broader purpose than constructing more housing units. A carefully-designed approach can help to lift households out of poverty by creating opportunities for people to become more productive. It can help urban areas to function more efficiently, and expand economic activity, investment and jobs. For housing to contribute to the urban premium, it should be situated within a broader city-wide development strategy, with density, connectivity and diversity as core objectives. Implementation is challenging and requires a range of institutional reforms to facilitate coordination and capacity-building.

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1. Introduction

Access to decent housing is vital to human health and well-being. The availability of affordable and durable housing also affects whether neighbourhoods are liveable and cities inclusive. This in turn shapes whether societies are dynamic and successive generations are better off than their predecessors. Yet many cities in the South do not have adequate dwellings for most of their citizens. About one billion people occupy makeshift structures within crowded 'slums' lacking basic services and susceptible to hardship and hazards (UN-Habitat, 2003, 2012; UNDESA, 2013). The scale of the challenge is growing because of spiralling urban populations (UNEP, 2013; World Bank, 2013). This is part of the justification given for a revival of housing policy after decades of neglect, following the demise of traditional public housing projects and sites-and-services schemes (Gilbert, 2004; Tibaijuka, 2009; Woetzel, Ram, Mischke, Garemo, & Sankhe, 2014). Buckley, Kallergis, and Wainer (2015) identify 16 developing countries in which governments have launched multi-billion dollar housing programmes in recent years (see also Grant, 2015; OECD, 2013a; UN-Habitat, 2014; Watson, 2014).

Efforts to expand the housing stock are clearly important where the need is growing and the existing methods of provision fall short. Preventing the projected increase to three billion slum dwellers by 2050 (UNDESA, 2013) would transform the material welfare of a large section of global humanity. However, slum

housing does not exist in isolation of other socio-economic problems, and there are risks in responses which ignore why the housing system has under-performed. Housing shortfalls are partly the result of poor households migrating to cities in search of jobs. Their weak housing demand reflects high unemployment, precarious earnings and an undeveloped housing finance system (Buckley et al., 2015; Hammam, 2015; Tibaijuka, 2009). Supply-side obstacles are usually important as well, including poorly-functioning urban land markets, high construction costs and inappropriate building regulations (Collier & Venables, 2015; Durand-Lasserve, Durand-Lasserve, & Selod, 2015; Napier, Berrisford, Kihato, McGaffin, & Royston, 2013). Lasting solutions need to address these issues and not plough ahead regardless.

State policies to boost the volume of housing can have unintended consequences. There are many examples from around the world of mass housing programmes that have gone awry (Balchin, 1996; Bradlow, Bolnick, & Shearing, 2011; Buckley et al., 2015; Gilbert, 2004). A focus on delivering bricks and mortar can become a numbers game that relegates other qualities of housing, such as the need for diverse solutions to meet variable household needs. Vital aspects of functional urban settlements, such as density and connectivity, tend to get sacrificed when the short-term economics and politics of construction dominate. Much of the value of housing is derived from the access it affords to jobs, without which people cannot pay for basic services or maintenance of their homes, let alone essentials like food and clothing (Hammam, 2015). Yet an industrial approach tends to mean building beyond the urban fringe where land is cheap, unit costs are lower and delivery can be

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fast-tracked. The outcome has often been soulless dormitory suburbs, unpopular public housing estates, and even abandoned homes (Buckley et al., 2015; UN-Habitat, 2014; Watson, 2014).

A case is made in this paper for housing policy to serve a broader purpose beyond the provision of shelter for unspecified beneficiaries. Housing in cities has the potential to support two related objectives:

- (i) providing sustainable routes out of poverty by creating more inclusive and liveable environments in which people can become more skilled, and
- (ii) expanding economic and social opportunities by ensuring that cities function better, thereby raising productivity, output and investment.

These are vital objectives considering the scale of urbanisation that is still to happen in the South and the imperative to plan and manage the process better than in the past (Angel, 2011; Collier & Venables, 2015; Glaeser & Joshi-Ghani, 2014; UN-Habitat, 2014). However, these aims are unlikely to be achieved by stand-alone national housing programmes. According to the Global Commission on the Economy and Climate (GCEC) “to unlock a new wave of sustained, long-term urban productivity improvements, we need a systemic shift to more compact, connected and coordinated development” (2014, p.29).

The ‘urban premium’ encapsulates the idea that well-structured cities generate higher level economic and social outcomes. It is an attempt to formulate a more synthetic, integrative perspective on urban development, signifying the positive value created by the coherent spatial organisation of households, firms and public infrastructure – higher density, mixed-use activities clustered around key nodes and transport corridors. For housing to contribute to these benefits, investment decisions need to be made within a broader urban framework in which qualitative issues (such as mobility and access to employment and education) feature alongside the quantum of construction. Housing is the largest user of urban land, so it can impose serious economic, social and environmental costs if its purpose is reduced to adding physical stock, and if it is delivered in a way that produces a sprawling, haphazard urban form that is difficult to service with public transport, bulk infrastructure and other services (Glaeser & Joshi-Ghani, 2014; GCEC, 2014; Litman, 2015). Such effects are difficult to rectify after development has occurred given the inertia, sunk costs and social resistance associated with investment in the built environment. They can lock-in inefficiency, exclusion and high energy consumption for decades, leaving a costly legacy for future generations.

The structure of the paper is as follows. The next section disentangles the implications of housing for living conditions and urban economies. Section three introduces the notion of the urban premium as a way to capture the wide-ranging benefits from well-organised human settlements. The fourth section discusses the various sources of the urban premium. Section 5 explores the interaction between these mechanisms. The sixth section considers significance of urban density for prosperity and inclusion. Section 7 outlines additional considerations that are important in realising the potential of cities.

2. The social and economic impacts of housing

Housing is a multi-faceted phenomenon with far-reaching implications for human welfare and life chances (Hamnett & Ward, 2012; Smith, 2012; UN-Habitat, 2003). Everyone needs a home to protect them from the elements and to provide a safe environment in which to develop. People living in shacks have to spend more time safeguarding their property and procuring basic services, and

are more vulnerable to the spread of disease, fire, flooding and other disasters (Franklin, 2011; Huchzermeyer, 2011; Hunter & Posel, 2012). Decent homes offer privacy and self-respect, and space for study and social interaction. Housing helps people to become more productive and provides an asset to invest in for security.

Housing's contribution to living standards helps to explain why it is often a focus of national policy attention. It accounts for why political transitions from traumatic wars or authoritarian regimes to stability and democracy have often been accompanied by a boost to house-building as a tangible benefit to the poor (Balchin, 1996). In post-apartheid South Africa, housing was given priority as a means to restore dignity, citizenship and a better life to poor communities after decades of exclusion (Bundy, 2014; Presidency, 2014). Approximately 2.8 million free houses have been built since 1994, costing perhaps as much as US \$30–40 billion in today's prices. About 10 million people have benefited, lifting the proportion living in formal housing from 64% in 1996 to 78% in 2011. Continuing expectations mean that the emphasis on quantitative delivery persists. The government recently announced a new, more ambitious target to build another 1.5 million houses by 2019. The aim is to achieve economies of scale and fast-track procedures by focussing on ‘mega-projects’. This has sparked controversy because of the weak economic rationale, financial risks and isolated locations of the new schemes (Turok, 2015).

Housing also has far-reaching consequences for the economy, both directly and indirectly, and through forward and backward linkages (Tibajjuka, 2009). House-building, repairs and maintenance, and all associated infrastructure are major sources of construction activity and generate sizeable demand for cement, bricks, steel, roofing materials and other physical inputs and labour. This is a substantial value chain with potential for domestic production and job creation. Housing also supports consumption through the demand for furniture, home appliances, consumer electronics and other household goods. In addition, houses provide space for people to undertake home-based enterprises and small-scale trading activities, and assets to be used as collateral for entrepreneurs seeking to borrow capital from banks. Rudimentary housing (such as shacks) is unlikely to have anything like the same economic impact in any of these respects (Collier & Venables, 2015).

Recognition of the sizeable multiplier effects of house-building and home consumption has prompted many countries to use housing as a vehicle to stimulate economic recovery following the global recession. This was one of the main reasons Brazil launched its public housing programme *Minha Casa Minha Vida* (My House, My Life) in 2009, aimed at building three million additional houses (UN-Habitat, 2014). Within the first two years a million homes had been built at a cost of about US \$18 billion (Buckley et al., 2015). Both middle- and low-income households have been targeted.

China has encouraged housing investment in recent years to sustain national growth and rebalance its economy from export-oriented production towards domestic consumption (OECD, 2013b). This is an about-turn from the government's traditional view of housing as an unproductive form of investment required to accommodate an expanding urban workforce. Greater emphasis has also been placed on inland cities in order to narrow regional economic disparities with the coastal belt. Success at fostering consumer-driven growth depends on rural migrant households becoming more secure and integrated in the cities, and adjusting their behaviour from saving to spending (Miller, 2012). This necessitates a new approach to urban development, to create more inclusive, liveable and consumer-friendly places, while avoiding excessive car travel and environmental degradation (GCEC, 2014). It also elevates the status of housing investment from a subordinate position relative to industrial production into a more strategic role.

A broader point that follows from these examples is that the long-term potential of housing in any country is unlikely to be realised if it is purely designed to meet the need for shelter. Its economic impact will also be restricted if the approach is to attract foreign property developers and construction companies to build new satellite cities, as in Angola, Ghana, Nigeria, Kenya and Tanzania (Cain, 2014; Grant, 2015; Watson, 2014). Housing ultimately derives much of its value from being an integral part of a dynamic urban system. Its contribution to social mobility and overall development is enhanced by strong links to jobs, schools and other public facilities (Glaeser & Joshi-Ghani, 2014; Hammam, 2015). This requires ongoing coordination between housing investment decisions, business location decisions and the provision of public infrastructure (Collier & Venables, 2015). This is difficult for governments that are structured on the basis of separate administrative functions, professional specialisations and accountability arrangements.

3. The urban premium

The urban premium is a novel term that seeks to encapsulate what is special about large human settlements that function well. It indicates the distinctive value of these complex systems that is enhanced over time through aligned actions by households, firms and government. A range of beneficial outcomes may be generated by housing and complementary activities being co-located in space. Proximity and mobility promote the bustle and buzz of ongoing interaction, transaction, competition and cooperation between people and firms (Glaeser, 2011; Polese, 2009; Storper, 2013; Venables, 2015). The outcomes often include stronger output and employment growth, more diverse and valuable amenities, and higher levels of human development. As more value is created and efficiencies gained, higher incomes may be produced, more taxes generated and public services improved. Cities are fundamentally economic entities, which is why people migrate to live in them.

The urban premium stems partly from the economies of scale and the opportunities for specialisation that arise from concentrated activity. These reduce transactions costs, stimulate enterprise, spur creativity and enhance social vitality. Higher productivity is a fundamental driver of economic development and long-term living standards (World Bank, 2009). A review of the growing volume of evidence from econometric studies (mostly based in the North) concluded that doubling the size of a city's population raises productivity by between three and eight per cent (Rosenthal & Strange, 2004; see also Melo, Graham, & Noland, 2009; Puga, 2010). This is less than the gains from major advances in science, technology, engineering and business organisation, but it is still sizeable. There is considerable variation between national contexts, and the benefits may be larger in developing countries (Duranton, 2014). This makes it all the more important to secure these gains by managing urbanisation better to make more efficient use of the land, and avoiding the pitfalls of haphazard and unserviced urban growth (GCEC, 2014).

The advantages of agglomeration are more accurately described as a premium than a dividend (or windfall) because there is a price to pay for the benefits of dense interaction. This may take the form of congestion, overloaded infrastructure or polluted ecosystems, especially if urban development is uncontrolled and unstructured (Glaeser & Sims, 2015). Such 'negative externalities' generally translate into higher costs of living and/or doing business, which offset the productivity gains and deter private investment. In many African countries the balance between the positive and negative effects of urban growth seem to be unfavourable, resulting in a subdued impact on productivity, jobs and living standards (Buckley & Kallergis, 2014; Turok & McGranahan, 2013). This may be

attributable to unplanned urbanisation, deficient urban infrastructure and weak governing institutions. Extensive informality in human settlements and urban economies is a symptom of the low productivity of many African cities (Collier & Venables, 2015).

In large cities that function well, property prices tend to be higher than in towns and rural areas. These reflect the positive externalities and spillovers of concentrated activity being capitalised in land prices. They can be traced to the finite supply of land in the context of strong demand. Property prices are further magnified by natural barriers or planning restrictions that seek to contain urban growth (Angel, 2011). They can complicate the ability of poorer households and land-intensive firms (such as manufacturing and warehousing) to find affordable accommodation. The pressures can be moderated by enabling and encouraging more property to be built, and preventing unwarranted regulation of new development. This can be accommodated by some combination of higher density development (infill projects and more intensive redevelopment of existing buildings) and horizontal physical expansion of the city. Striking the right balance between intensive and extensive urban growth is a major challenge for urban planning and management. The appropriate balance is likely to vary between cities depending on factors such as the rate of household growth, the density of the existing urban structure, the availability of vacant land, average incomes and the city's economic trajectory.

4. Housing and other sources of the urban premium

There are many ways in which the urban premium is generated. Despite burgeoning research on the subject, there remain many uncertainties about the precise nature and magnitude of these mechanisms (Duranton, 2014; Melo et al., 2009; Puga, 2010; Yusuf, 2014). One of the traditional sources is the economies of scale in production and distribution, which enable all kinds of goods and services to be provided more cheaply in big cities than in small towns (Polese, 2009). Internal connectivity can help cities in low income countries secure these benefits and facilitate economic progress. A second mechanism is the more effective matching of workers and employers in large urban labour markets (Quigley, 2013). Well-located housing facilitates this process by limiting transport frictions between where people live and work (Rode et al., 2014). A third source is the sharing of inputs, component suppliers and infrastructure in large cities, including business services, finance and research. Big cities enable greater specialisation among service providers, which become more advanced and can reduce costs compared to operators in smaller cities. This improves the competitiveness of service users.

A fourth mechanism involves learning and relates to the generation, diffusion and accumulation of knowledge. Ideas and information are spread more easily when people and firms cluster together in large urban areas. Face-to-face contact strengthens trust and enables cross-fertilisation of knowledge, which makes workers more skilled and entrepreneurs more productive (Storper, 2013). Innovation is most likely to emerge from the mixing of diverse skill-sets, creative talent and entrepreneurship in deep labour pools (Jacobs, 1984). Affordable housing assists youthful migrants to access the city, thereby refreshing the supply of ideas and energy, and reinforcing the dynamism of the system.

Other agglomeration mechanisms relate to the function of cities as places of human and social development, in which consumption drives economic growth (Glaeser, 2011). Large cities can offer better opportunities than small towns because of the variety of educational institutions, social amenities, leisure facilities and housing options. Economies of scale enable specialisation to suit different tastes. The bigger choice of neighbourhood types can attract and

retain skilled workers, entrepreneurs and professionals, as long as reasonable schools, a reliable transport system and a safe environment are also in place.

Housing performs various roles in strengthening cities as sites for human development. Low cost housing can help to integrate less-skilled groups into the urban economy. It can spur consumer spending if it provides security and releases pent-up demand for urban lifestyles. Affordability is crucial to create gateways to the city and free up expenditure on other items. Creative solutions to contain the costs of accommodation may involve subdividing older buildings, encouraging backyard dwellings, converting redundant offices or industrial premises into small flats, and even building dormitory-type premises with communal facilities. Older urban precincts often present unique opportunities because of their accessibility and existing infrastructure. Retrofitting these areas can stimulate new, mixed-use property solutions combining new consumer markets and sites of entrepreneurial activity (Seeliger & Turok, 2015). With a range of options available, filtering processes may occur and households upgrade to better accommodation as their incomes grow, thereby creating pathways to progress.

The urban premium also refers to the cost-effective delivery of public infrastructure in cities because of the lower unit costs of providing bulk facilities, the shorter distances involved, and the more efficient use of land (GCEC, 2014; Polese, 2009; Quigley, 2013; UNFPA, 2007). Higher order functions offering diverse services, such as hospitals and technical colleges, require large population thresholds for viability. Urban infrastructure is notoriously expensive, hence the value of the asset being created needs to be maximised. An integrated approach can help, such as aligning public transport with housing and land-use decisions to increase ridership and revenues (Rode et al., 2014). It is vital that housing is conceived in close relation to mobility issues and public space for infrastructure and amenities, particularly when new housing is laid down. The full benefits of infrastructure investment should be recognised, including the enhanced workforce capabilities through improved skills and health. Kalarickal (2007) shows how spending on low-cost housing and basic services in African informal settlements improved people's productivity. The cost-benefit calculation favoured investment in urban areas because residents were more likely to generate incomes than in rural areas.

5. An interdependent urban system

The sources of the urban premium are not independent mechanisms operating in isolation. Cities are complex systems whose advantages stem from the relationships between elements. Prosperity depends on an efficient business environment with sufficient land for firms to expand, liveable neighbourhoods, an adequate housing supply and reliable public services. A positive trajectory stems from many separate decisions by people reinforcing each other. The whole is more than the sum of the parts and is held together by a range of state organisations (particularly local government), intermediary institutions (such as civil society associations) and many norms of behaviour and conventions that generate confidence in the future, reduce opportunism and facilitate long-term decision-making (Storper, 2013).

Recognising the city as an interconnected system means that the advantages of agglomeration are not inevitable. Delivering more housing via a national programme will not automatically spur prosperity. If the different components of the city do not mesh together, all kinds of bottlenecks can obstruct the creation of opportunities for poor communities. Poor coordination between employment nodes and residential areas may worsen traffic congestion and inflate transport costs (Rode et al., 2014). A disjuncture between the education system and the labour market

can dampen productivity and life chances. An unresponsive financial system can impede the supply of affordable housing and limit household demand. An inflexible housing system can frustrate social progress if households can't improve their living conditions as their incomes rise. Social discontent from constrained housing opportunities can create instability and undermine the investment climate. All of these problems are apparent to some extent in African cities (Buckley & Kallergis, 2014; Parnell & Pieterse, 2014).

Realising the gains of agglomeration also depends on workers and firms being able to move to productive locations. The processes of land consolidation and property redevelopment need to be reasonably efficient. The agglomeration literature tends to assume that property markets function well to enable concentration and connectivity (Turok & McGranahan, 2013). Public authorities are supposed to respond to coordination problems so that relocation and redevelopment operate smoothly. This is particularly problematic in many developing countries, because land allocation is notoriously inefficient, inequitable and unpredictable (Durand-Lasserve et al., 2015; Napier et al., 2013). Parallel land registration systems often co-exist, and powerful private interests consistently trump collective needs. Planning procedures, building standards and density limits also tend to be out-dated, bureaucratic and inappropriate (Parnell, Pieterse, & Watson, 2009; UN-Habitat, 2009, 2013a, b; Woetzel et al., 2014). Consequently, land transactions are often subject to arbitrary and exploitative practices, and property development is slow and complicated to organise. Deficient infrastructure capacity is a further obstacle, resulting in regular power cuts, water shortages and polluted drainage systems.

The outcome is often highly fragmented development, with a patchwork of projects where developers can access developable land, sometimes bearing little relationship to formal municipal plans or existing infrastructure networks. The simplest location for new building is on the urban periphery, where land is cheapest, sites are easiest to consolidate, there is no opposition from established communities, and the whole process can be streamlined (UN-Habitat, 2014). The logic is irresistible when governments and developers are committed to large-scale housing construction (Buckley et al., 2015; Turok, 2015). Mega-projects economise on the land, permit standardised house designs, industrial building techniques (such as prefabrication and bulk procurement), lower maintenance costs and simplified administration (Woetzel et al., 2014). However, dispersed, single-use development undermines a basic principle of efficient, dynamic and inclusive cities – density.

6. Urban density

Density has been a crucial concept in urban planning, design and architecture for many years (Boyco & Cooper, 2011; Ng, 2010; Urban Task Force, 1999). It is associated with more intense land use, a more compact built form and reduced pressure on open space. It has risen in importance with global concerns about resource consumption and environmental sustainability (Newton, 2008; GCEC, 2014). Its economic significance has been recognised more recently, with the World Bank a strong advocate of higher densities (2009, 2013; see also Bertaud, 2010, 2013). Urban density has some of the characteristics of a public good in that there are benefits to firms and residents from concentrated activity, but it is difficult or costly to exclude them. The desire for proximity causes congestion problems, which makes density more like a 'common-pool resource' than a pure public good. One implication is that it is vital to set aside and protect public space when new housing is developed, particularly for the purposes of mobility and providing basic infrastructure.

Density refers to the number of units (e.g. of population, dwellings or jobs) in a given geographical area (a site, precinct,

neighbourhood or city). It is calculated in a variety of different ways and at different spatial scales, depending on the specific purpose. A key distinction is between the human element (the population density) and the physical structure (the density of dwelling units or the habitable area). Both measures neglect the vertical dimension of the built environment, and whether activity is crammed together at ground level or dispersed vertically across multiple storeys. Hence a third measure may be useful, such as the floor area ratio, which gives a clue to the relative height of the buildings.

There is growing evidence that density contributes to prosperity, social vitality and other positive urban outcomes (Boyco & Cooper, 2011; Churchman, 1999; Cohen & Gutman, 2007; Howley, Scott, & Redmond, 2009; Rode et al., 2014; Turok, 2011; Urban Task Force, 1999; Willis, 2008). City size needs to be accompanied by some level of density in order to generate agglomeration economies (Ciccone & Hall, 1996). A spread-out city is less efficient for human interaction, and imposes large economic and environmental costs (Litman, 2015). Density necessitates proximity, which makes it easier to move goods, people and ideas, and improves productivity. A UK econometric study found that the effects of proximity on productivity diminished quickly with distance from the core city (Rice, Venables, & Patacchini, 2006). The benefits were four times stronger 30 min driving-time away than 60 min away. Density also enables more connections between people because it fosters convenience, so there is more creative buzz and entrepreneurial dynamism (Carlinio, Chatterjee, & Hunt, 2007). It improves accessibility to jobs and amenities, and thereby reduces search costs and commuting costs. This is particularly important for workers with low paid and precarious jobs.

In addition, a dense, compact urban form reduces the capital and operating costs of many forms of shared infrastructure because people and buildings are physically closer. Public transport, for example, requires high residential densities in order to be viable (Churchman, 1999; Rode et al., 2014). Many other public services can also be provided at lower cost in dense urban environments. Sprawling suburbs with outlying shopping centres and business parks encourage motor vehicle travel, which tends to produce traffic congestion and pollution from exhaust fumes (Howley et al., 2009; Litman, 2015; Newton, 2008). Compact cities support non-motorised transport and are generally more efficient at using energy and natural resources (Jenks, Burton, & Williams, 1996; Urban Task Force, 1999; Willis, 2008). They also reduce carbon emissions and are better at protecting agricultural land, watercourses, ecosystems and biodiversity from urban encroachment (Rode et al., 2014).

There is a limit beyond which the positive effects are offset by negatives (Boyco & Cooper, 2011; Churchman, 1999; Glaeser & Sims, 2015). The threshold is bound to vary between and within cities depending on average incomes, transport technology, cultural traditions, local topography and land availability (Bertaud, 2010, 2013). Traffic congestion and parking problems often accompany high urban densities. Air pollution from vehicles and overloaded energy, water and sanitation systems may be other localised effects, depending on the infrastructure capacity. Tall buildings use more energy to construct and are more expensive to build and operate, so the homes may be more costly too. Cramped living environments can undermine health, and dense neighbourhoods reduce privacy. There are fewer and smaller gardens, fewer recreational opportunities, and car parking is more expensive than in suburbs. Developers give these reasons for promoting suburban housing rather than apartment blocks (Seeliger & Turok, 2015). This implies that market forces will tend to produce low density outcomes. Governments give similar reasons for controlling population densities through zoning regulations which limit building heights. More research is needed on household preferences in relation to density

and affordability, and the trade-offs between having more private space versus convenient access to jobs and amenities (Litman, 2015).

The downsides of density are most acute in crowded informal settlements, favelas and inner city shantytowns. There is often very little public space in these neighbourhoods, which complicates personal mobility and basic infrastructure provision. Although these neighbourhoods are often socially vibrant, residents are very poor and cannot afford to pay much for accommodation (UN-Habitat, 2003). Some occupy run-down and abandoned buildings that were invaded illegally at some point. Many others inhabit single storey shacks within backyards or on unauthorised land. Their living space is tightly constrained because of intense competition for land close to economic opportunities (Bertaud, 2013). Living cheek-by-jowl without fresh water and sanitation systems is damaging to people's well-being and safety (Buckley & Kallergis, 2014; Glaeser & Sims, 2015). These places often lack access roads, open space and recreational amenities, adding to the social pressures. Densely packed shacks on unsuitable land are prone to fires, flooding and other hazards that put people at risk of disaster (Huchzermeyer, 2011). With no security over their property, people have little incentive to invest in upgrading their dwellings.

This form of unplanned density emerges through ad hoc individual decisions. It illustrates a highly imperfect market that is dysfunctional in various respects: "left to an unregulated market, building heights and density will be too low" (Collier & Venables, 2015). People are crowded together but this does not spur investment in productive activity, consumer services and jobs. Enterprises are small-scale and geared to trading activities, so value added and earnings are low. The stigma of slums can also deter private investment. These areas are costly to retrofit with public infrastructure, schools and clinics because of the social disruption involved in relocating households.

There are some interesting examples of land consolidation and readjustment, involving the rearrangement of plots to create a more efficient grid-layout with access roads and underground infrastructure (UN-Habitat, 2013a, 2013b). By selling off part of the land for commercial development, these have sometimes enabled multi-storey residential development and freed up space for public facilities. However, they are complicated to negotiate and therefore unusual. Retrospective coordination of urban development is difficult in democratic societies and a degree of coercion may be required. The wholesale clearance of communities would be simpler, but is obviously unacceptable. It is easier to prevent slums emerging by planning ahead and preparing for urban growth. This has led to the controversial argument that governments and international bodies such as UN-Habitat should focus their scarce resources on planned urban extensions and new cities, rather than upgrading, improving and infilling existing cities (Angel, 2011; UN-Habitat, 2013a, 2013b).

7. Additional considerations

It seems that urban density on its own is no panacea for prosperity. It appears to be a valuable condition to support human interaction and resource efficiency, but it is not sufficient. Density does not automatically generate positive social outcomes. Indeed it can be damaging and dangerous if it takes the form of slum urbanism. Density that creates positive value and improves efficiency cannot easily be engineered by government planners either (Bertaud, 2013; Buckley et al., 2015). For housing to contribute to the urban premium, it therefore appears that greater attention needs to be given to (i) additional qualities of the built environment besides density, and (ii) institutional processes and mechanisms

that can promote these qualities. Only the briefest of treatments is possible here, given space constraints. The details will also vary greatly in different contexts, so it is difficult to generalise.

One of the additional qualities to complement residential density is connectivity (GCEC, 2014; World Bank, 2013; Rode et al., 2014). This is necessary to limit the congestion effects of high densities and to safeguard mobility. Density is damaging to the efficient movement of people, freight and waste if it produces overcrowding and gridlock (Glaeser & Sims, 2015). Connectivity within and between neighbourhoods may be promoted most effectively by public transport and sufficient space for walking and cycling. It requires preserving a reasonable proportion of the land in any new housing development for roads, sidewalks and underground infrastructure, and possibly dedicated space for bus rapid transit or light rail. One of the interesting innovations in recent years has been the retrospective installation of cable cars in many Colombian and Brazilian hillside favelas to improve mobility.

A second essential quality of functional urban environments is diversity (Jacobs, 1984). This means mixed land-uses rather than mono-functional neighbourhoods, and a mix of new and older buildings for variety and character (GCEC, 2014). Key elements of vital and sustainable human settlements are economic activities, schools, health centres, shops and public spaces. These ensure access to jobs and essential facilities and reduce the extent of travel. Density should create viable levels of demand for these facilities. There is also a strong case for socially-diverse neighbourhoods rather than segregation in order to promote social cohesion and stability, and to facilitate a degree of cross-subsidisation from high-end to affordable housing. Social diversity implies a range of physical sizes and tenures, including small rental properties for people on low incomes.

Both of these considerations raise complex issues of planning/conception, coordination and implementation (Collier & Venables, 2015; GCEC, 2014; World Bank, 2013). It seems that various forms of institution are required to set priorities and manage the trade-offs involved in creating dense, diverse and connected urban environments. The fundamental challenge is to harness the positive aspects of density, such as human interaction at scale, while alleviating the negative consequences, such as congestion. According to Glaeser and Sims, “overcoming the downsides of density is one of the great policy challenges of the 21st century” (2015, p.1).

One of the critical institutions is an effective regulatory framework to improve the efficiency of land transactions and facilitate the development and redevelopment of well-located land. This relates to land registration and property rights. It also relates to regulations that govern building standards and zoning to promote higher-density, mixed-use development. The setting aside and protection of public space for infrastructure in new settlements is another necessity. These are essential responsibilities of government, although difficult where public institutions are weak and enforcement is ineffective (Glaeser & Joshi-Ghani, 2014; UN-Habitat, 2014).

A second set of institutions is concerned with financing higher density housing and associated infrastructure. More innovative financial methods and new institutions are required to replace slums with multi-storey housing in properly serviced neighbourhoods, while maintaining affordability (GCEC, 2014; World Bank, 2013). The long-term nature of these investments and their contribution to creating more valuable places warrants novel models of patient financing. Instruments to capture the rising value of the land accompanying the development should be a logical part of the financial package (Napier et al., 2013). The private sector is bound to have a part to play in financing better urban development, especially for the housing itself.

A third set of institutions is required to plan, design and co-

produce liveable urban environments. This requires ‘place-making’ skills as well as mechanisms to align and integrate different investment streams, particularly the different types of public infrastructure. Well-managed city governments are best placed to take a strategic view of new urban development and to connect new projects into the existing urban fabric (UN-Habitat, 2014). It is vital they work in partnership with local communities, the private sector and other stakeholders to harness the collective knowledge, energy and resources of all spheres of society. Successful places are rarely achieved by planners, engineers, designers or architects working in isolation and imposing their visions on a passive citizenry.

8. Conclusion

Housing policy is experiencing a revival in many countries of the South after a period of neglect. Recognition of the key role of housing in human, social and economic development is important bearing in mind the widespread growth of urban slums with all their deleterious effects on human well-being. However, narrowly-conceived and stand-alone housing programmes could create more problems than they resolve. Large-scale, monolithic delivery of housing risks creating inefficient and exclusive urban environments, as well as places that are environmentally damaging.

Housing policy should serve a broader purpose beyond increasing the sheer number of houses. A carefully-designed human settlements policy can help to lift households out of poverty by creating opportunities for people to become more productive. It can help urban areas to function more efficiently, and expand economic activity, investment and jobs. For housing to contribute to the urban premium, it should be integrated into a broader city-wide development strategy, with density, connectivity and diversity as core objectives. Implementation is challenging and requires a range of institutional reforms to facilitate coordination and capacity-building.

Density and proximity are important foundations on which prosperous cities are built. Connectivity facilitates the intense interactions between people and firms that spur productivity and dynamism. Diversity helps to create the mixture and variety that enriches and refreshes urban activity. The combination generates more vibrant and valuable places, in which economic and social outcomes improve over time. Achieving these objectives requires more than a state housing programme or subsidies to developers. Housing decisions need to be bolstered by institutional reforms to facilitate coordination and capacity-building. Managing the tensions between dense, diverse and connected urban environments requires improved regulations relating to the allocation and development of land. Transforming slum urbanism into better urban environments also requires new financial institutions and techniques to generate the necessary investment. A third set of institutions is needed to plan and design efficient and equitable urban environments through sensitive place-making and coordination of different investment flows. City governments should play a strategic role in shaping more prosperous cities of the future, working together with local residential and business communities.

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