From Village Community to Megacity

Building a Nation, Building a People

Public Housing in Singapore as a Holistic,
Multi-Dimensional Public Policy Construct

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No single policy issue is as indicative of Singapore's success and its social, cultural, and political DNA as its public housing. In a few decades, the city-state has transformed from a slum-invested port town into one of the world's most developed nations. One cannot understand Singapore if one does not understand Singaporean public housing.

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Introduction

Many countries are proud of their public housing projects. Yet, in very few does public housing reveal the very DNA of the state and its people quite as much; in very few states are citizens quite as devoted to and supportive of their public housing as in Singapore. Hardly a day goes by without newspapers and TV channels discussing the topic. If one wants to understand the distinctive nature of the world's only true city-state, Singapore, one need not look any further than its public housing. Arguably, no single subject matter, landmark, sight or historical event better encapsulates the fabric of Singaporean politics and society, its history, self-perception, and challenges and successes in one go.

How did Singapore transform, in only a few decades, from a slum-infested mess, with one of the worst housing crises, into one of the most developed countries on par with Denmark and Germany? Moreover, into a country, where almost all citizens own their own well-maintained home, despite its population tripling over that period? This paper argues that Singapore's public housing symbolises what the city-state has achieved and how it achieved it more than any other public policy. It provides a holistic perspective on this unique Singaporean story and explores how something as profane as public housing became the trademark of what characterises the uniquely different city-state of Singapore.

HDB Estates – the Linchpin of the Singaporean DNA

Like all local politics in Singapore, public housing operates top-down, entirely government-driven.

More than three quarters of all residential property in the country is built by the government agency Housing & Development Board (HDB). Homeownership is largely financed through Central Provident Fund (CPF) savings, a compulsory employment-based savings scheme for working Singaporeans into which employees pay 20 per cent of their monthly salary (employers contribute a further 17 per cent). The complimenting interdependence of those two schemes results in almost universal coverage, with no less than 82 per cent of all Singaporeans living in public housing and about 90 per cent owning their home.[1] Singapore's 91 per cent overall homeownership rate is the second highest in the world (52 per cent in Germany).

The HDB scheme is a cornerstone of Singapore's socio-economic policy framework, a hallmark of Singaporean identity, and an anchor for the ruling People's Action Party (PAP), which has ruled Singapore since independence. Under the leadership of Prime Minister Lee Kuan Yew (LKY, 1959 to 1990), Singapore transformed from a tropical slum with shantytowns and high poverty and crime rates into one of the world's most developed nations. Modern Singapore was built under two generations of highly capable and committed leadership, who never concealed their conviction that such unparalleled development required strong top-down government: a semi-autocracy, as critics argue.

From Shanty to State-of-the-Art Towns

The Singapore of the 1950s and 1960s was in an abysmal state. The British colonial administration had taken a laissez-faire approach towards such basic needs as housing and city planning.

A housing committee reported in 1947 that Singapore suffered from unrestrained, unplanned growth to the detriment of health and morals.[2] One third of the entire population were reported to live in cramped squatter settlements, consisting of wooden huts and rusty, corrugated makeshift constructions with inadequate ventilation and sanitation facilities on the fringes of the island or ramshackle shop houses in the city. A rapidly growing population merely exacerbated overcrowding.[3]

What was required was a radical policy approach to address such detrimental living conditions and the determined Prime Minister Lee oversaw the establishment of the HDB on 1 February 1960. With the Chairman Lim Kim San in the lead, HDB became the primary component of the government's visionary overall housing strategy.[4] The strategy also included the Land Acquisition Act (LAA) in 1966 and the 1968 restructuring of the CPF to become a means of housing finance under the Public Housing Scheme.[5] Henceforth, Singaporeans could use their mandatory retirement savings to finance HDB mortgages instead of having to rely on their disposable income. Originally, HDB intended to build rental housing only to rehouse the poor from the slums, but within four years, it had switched to the concept of "leasehold ownership" for all. In less than three years, the government built 21,000 flats and 54,000 in less than five, and at the time of writing HDB had completed over one million apartments to house an entire nation.

Residential HDB complexes are clustered around 23 planned townships (suburbs and city centre) that extend in a semicircle around the island of Singapore, alternatively painted in unaspiring shades of brown or bristling pastel colours. Each HDB block is maintained, serviced and regularly renovated by the government. By virtue of this continuous general maintenance as well as irregular major renovation and modernisation schemes, the government ensures that no area or block becomes derelict and no neighbourhoods become undesirable due to neglect. Singapore also uses its regulation privilege to cover ground on its sustainable development strategy and it introduced solar photovoltaic technology to public housing. HDB has installed solar PV systems across approx. 1,000 HDB blocks throughout the island; by 2020, it will have been extended to 5,500 blocks.[6]

Each year, HDB sells a new batch of unfinished flats (17,000 in 2018) mostly to first-time buyers, who must then wait until completion. Alternatively, one can choose to buy existing apartments directly from their previous owners, who have been able to sell at controlled but attractive market prices since the 1990s. However, all HDB apartments are bought on a 99-year leasehold within which the flat can be rented out or sold under certain conditions; but after which the flat must be returned to the government. Three-bedroom flats cost an average of 250,000 to 350,000 Singapore dollar (150,000 to 220,000 euro), depending on factors such as remaining lease period and location. Government grants entitle first-time buyers in particular to cut 50,000 Singapore dollar or more off the purchase price. Buying a comparable private flat from private property developers, who primarily cater to wealthy Singaporeans and expatriates, costs three times as much or more. Selling implies a profit motive, which is only true for the resale market, however. The government sells at below-market price and citizens are entitled to use some of their CPF savings for initial down payment as well as to generous government grants and comparatively cheap mortgages, which can also be met by drawing from the buyer's CPF. Hence, Singaporeans pay in practice, but the government does not incur a profit – at least not in monetary terms – nor is there a significant tangible impact on the personal disposable income of the buyer.

By all measures, HDB is a unique Singaporean success story that enjoys ongoing high levels of popular as well as political support. Estates can be somewhat monotonous, but they are clean, well maintained, virtually crime-free and safe. The latest HDB survey found 91 per cent owner satisfaction with their flat, neighbourhood, and

estate facilities.[7] The scheme also ensures that housing is more affordable than in other rich, popular, and dense cities, such as Hong Kong or London. There is hardly any homelessness in Singapore, nor are there slums or ghettos, and almost all working citizens, by current accounts, will be able to live in their own home at old age. There is no doubt that HDB is an expensive programme, but it does bear fruit.

Accounting for Singapore's Limited Space

Singapore's limited space is optimised by centralised urban planning, approximating perfection. The country's 730 square kilometre landmass is even less than the comparatively small German City of Hamburg. Yet, while Hamburg is home to only 1.8 million people, the Republic of Singapore's population trends at 5.8 million. It accommodates approx. 8,000 people per square kilometre, making it the third densest country in the world (Hamburg houses 2,400 per square kilometre). At the same time, Singapore is one of the world's greenest cities with one third of urban area covered by greenery, ahead of Oslo and Vancouver.[8] Home to many large parks, wetlands, and rainforests, Singapore attempts to reduce its carbon emissions and be a liveable and attractive home. Combining such facts, one can easily imagine the pressures on public housing. Land is Singapore's most sacred resource.

The enactment of the LAA bestowed the government with vast powers over all Singaporean land and enabled it to acquire virtually all of it from private landowners at well below market prices. Nowadays, more than 90 per cent of all Singaporean landmass belongs to the state, building the backbone of public housing.[9] LKY justified the drastic LAA:

"*When we were confronted with an enormous problem of bad housing, no development, overcrowding, we decided that unless drastic measures were taken to break the law, break the rules, we would never solve it. We therefore took overriding powers to acquire land at low cost, which was in breach of one of the fundamentals of British constitutional law – the sanctity of property. But that had to be overcome, because the sanctity of the society seeking to preserve itself was greater.*"[10]

The fact that a limited number of very wealthy individuals owned much of the private land in

Urban Green: Singapore is one of the most densely populated cities in the world, while also being one of the greenest.
Source: © Lucas Foglia.

Singapore in the 1960s[11] helps to explain why government and people regarded large-scale nationalisation of land as fair. In addition, by artificially reclaiming land from the sea with imported sand, Singapore has grown some 22 per cent since independence.[12] To date, there is no right to, nor indeed culture of owning land.

HDB, itself a government agency, "leases" the land from the government to build high-rise blocks to then sub-lease individual units to leasehold owners.[13]

Impressive governance capacity in Singapore and the ability to plan and implement over the

Table 1: Use of Singapore's Public Land

Land use	Planned land supply (hectare)	
	2010	**2030**
Housing	10,000 **(14 %)**	13,000 **(17 %)**
Industry and commerce	9,700 **(13 %)**	12,800 **(17 %)**
Parks and nature reserves	5,700 **(8 %)**	7,250 **(9 %)**
Community, institution and recreation facilities	5,400 **(8 %)**	5,500 **(7 %)**
Utilities (e. g. power, water treatment plants)	1,850 **(3 %)**	2,600 **(3 %)**
Reservoirs	3,700 **(5 %)**	3,700 **(5 %)**
Land transport infrastructure	8,300 **(12 %)**	9,700 **(13 %)**
Ports and airports	2,200 **(3 %)**	4,400 **(6 %)**
Defence requirements	13,300 **(19 %)**	14,800 **(19 %)**
Others	10,000 **(14 %)**	2,800 **(4 %)**
Total	71,000 **(100 %)**	76,600 **(100 %)**

Source: Ministry of National Development Singapore: A High Quality Living Environment For All Singaporeans, Land Use Plan to Support Singapore's Future Population, Jan 2013.

long-term, facilitates urban design. In 1971, Singapore announced the first of several Concept Plans, a design plan for future land use, which was instrumental in shaping modern Singapore. It was the first coherent and coordinated urban development strategy to address the initial basic infrastructure needs of a young nation. It mapped out broad principles to develop new housing towns, industrial estates, transport infrastructure, and recreational areas across Singapore by creating a semicircle of satellite towns around the waterfront Central Area. Modern Singapore's urban design, with its many nature reserves and water reservoirs, surrounded by satellite towns, is a direct result of the Concept Plan. The same applies to the all-connecting urban transport infrastructure, such as the Expressways and the public transport Mass Rapid Transit (MRT). This near-perfect network was implemented as planned since the government knew the precise

development trajectory and could set aside land for eventual construction well in advance. All government agencies and ministries had a reference document guiding and coordinating their respective activities. This whole-of-government approach to address the country's needs is exemplary for all public policy in Singapore and aided by a trusting populace and an unchanging, highly centralised single-party government.

Identity and Nation Building

While the acute space and housing shortage was the main driver behind the HDB scheme, there is much more to it than this. The role public housing plays in the shaping of Singaporean society and identity cannot be overestimated. Housing and homeownership became important institutional pillars of Singapore's nation-building efforts and a power-anchor for the PAP.

In the aftermath of its independence, Singapore had to forge a nation from scratch.

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Achieving national unity was the primary concern for all Southeast Asian nations emerging from colonialism. Singapore was the only state that never strove for independence, believing that the city was not capable of survival following its expulsion from Malaysia. 1965, however, presented a *fait accompli* and Singapore was confronted with the need to forge a nation out of a diverse population; mostly generations of ethnic Chinese, Indian, and Malay immigrants of different religions. Previously, Singapore had never been a nation and therefore inherited colonial structures and legacies. It was felt that Singapore lacked the binding glue every nation needs: an experience of common nationhood, a sense of nationalism and belonging, a sense of being part of the same people. Without a significant degree of this, all other efforts of post-independence nation building would be in vain. LKY and his government had to build not only a state, but a nation from scratch.

Homeownership was regarded as vital for identity building, for considering oneself not Malay, Indian, or Chinese, but Singaporean. LKY notes, "[m]y primary preoccupation was to give every citizen a stake in the country and its future. I wanted a home-owning society." It was also:

> "*to give all parents whose sons would have to do national service [Singapore's compulsory military service] a stake in the Singapore their sons had to defend. If the soldier's family did not own their home, he would soon conclude he would be fighting to protect the properties of the wealthy. I believed this sense of ownership was vital for our new society which had no deep roots in a common historical experience.*"[14]

Indeed, the above-cited survey indicates a great sense of belonging of people to their communities (98.8 per cent).[15]

The PAP also had power motives. Singapore's slums were breeding grounds for political dissatisfaction and leftist forces. LKY was convinced that in contrast to this, proud home-owning families would make Singapore "more stable."[16]

> "*I had seen how voters in capital cities always tended to vote against the government of the day and was determined that our householders should become homeowners, otherwise we would not have political stability.*"[17]

Political stability – read: PAP longevity – did not only develop from well-maintained infrastructure, but from continuing trust and appreciation of steady and effective governance, which was best demonstrated if people could rely on safe and sound living conditions. HDB demonstrates the PAP's concern for the ordinary people. Allocation also ensured that potentially leftist opposition supporters could be dispersed across the islands without the re-emergence of a political stronghold. To date, the opposition, such as the Workers' Party, have repeatedly alleged that the government maintains and renovates PAP stronghold estates more than opposition districts.

Integration in a Multi-Ethnic Society

Singapore is the only ethnic Chinese majority state in Southeast Asia and sits within an immediate environment dominated by Malays and Indonesian ethnicities. Post-independence, it faced manifold racial challenges that were aggravated by a hostile regional environment. Domestically, Singapore was and still is a multiracial and -religious country, with the Chinese majority roughly comprising 76 per cent of the population, Malays 15 per cent, Indians seven per cent, and others two per cent.[18] Owed partly to its favourable maritime location, attracting seafaring and trading migration over centuries; owed, however, even more to the sinister logic of colonialisation which creates artificial multi-ethnic societies alongside racial segregation in order to "divide and rule" their subjects. Singapore's diverse ethnicities dwelled in mostly separate living spaces across the island,

retaining their distinct cultures with neither the aim, nor the opportunity to interact.[19] It was a divided society, and remnants of this, such as heightened ethnic sensitivities, are still palpable today. Unlike today, however, immediate post-colonialism was characterised by serious conflicts, especially Sino-Malay sectarian tensions that came to a head on several occasions across Singapore (and Peninsular Malaysia). In 1964, such violence led to dozens of deaths and hundreds of injured persons in Singapore alone.

Given the ethnic diversity in Singapore, assimilation policies were adopted to maintain social cohesion.

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PAP leaders were determined to put an end to this and to build a harmonious multi-racial, ethnically egalitarian society that would allow various ethnic groups to practise their own culture and religion; a policy priority to this day. However, they were also mindful of the complete absence of social cohesion, leading to each group staunchly defending their own narrow individual interest. Hence, the government began to devise a complicated, comprehensive web of unique, finely nuanced and strategically astute whole-of-society policies, conducive to identity assimilation; in other words, to engineer multi racialism.

A significant component of this policy network was indeed public housing. The HDB scheme provided the government with an opportunity to blend societal groups; to encourage them to interact, to cohabit, and ultimately to identify as Singaporeans above all else. In new settlements, the aim is to forge a sense of community with Chinese, Malays, and Indians living as neighbours along common corridors and facilities within housing blocks, eating at the same hawker centres (popular open-air food courts), shopping at the same markets, going to the same schools and community centres. In other words, regular multi-ethnic engagement in day-to-day activities. This was nation building by inclusive housing and homeownership in order to knit together a divided society, while continuing to allow the practice of individual traditions – but in direct proximity rather than in racial enclaves. Therefore, it was along the common corridors of the new HDB towns that a sense of community began to arise.

Initially, HDB rigorously allocated newly built flats to evenly distribute all ethnicities. However, as the first wave of building and rehousing slowed down and a first re-sale market grew, a trend of ethnic regrouping resurfaced. In 1989, the government pre-emptively initiated the Ethnic Integration Policy (EIP) to safeguard its approach. To this day, EIP ensures an ethnically balanced community with all HDB sales, new and re-sale flats, regulated by pre-determined quotas roughly reflecting the overall ethnic make-up of Singapore. A maximum of 84 per cent of all flats in one neighbourhood can be sold to Chinese buyers and a maximum of 87 per cent of each flat in one given block; the figures are 22 and 25 per cent for Malays, and twelve and 15 per cent for Indians and other minority groups. When the set quotas are reached, owners may only sell to buyers of the same ethnic group so as to maintain the delicate balance. This is a well thought-out policy strategy, tailored towards peculiar and indeed unique Singaporean circumstances and reflecting Singaporean history and societal needs. Enforced integration remains an important principle and the government continues to insist that public policies across the spectrum must ensure a cohesive, well integrated, and racially harmonious society.

HDB allocation also mitigates socio-economic segregation. The demographic mix encourages the broad middleclass and the less well off from all ethnicities to engage with their neighbours irrespective of their background, occupation or social status. Each neighbourhood and each estate is considered a community and a microcosm of Singapore in which neighbours can see how others are doing in life, how their career progresses, and how they educate their children.

To promote such social and ethnic interaction, each block has built-in common areas, such as the so-called "void-deck" – the ground level of each block that is intentionally left empty. Void-decks are sheltered, but at the same time open shared spaces for community activities of the estate where weddings, funerals, parties, and bazaars take place. Often, they include hawker-centres and smaller independent shops, called "mamashops". Another common feature are facilities such as playgrounds, kindergartens, fitness and medical centres. Especially hawker-centres are popular common spaces visited by patrons of all ethnicities and social-classes on a daily basis – perhaps excluding the very wealthy – and, therefore, creating opportunities for social interaction. Indeed, 85.7 per cent of residents regularly interact with neighbours of other ethnic groups.[20]

The quota allocation in combination with HDB's grant and mortgage schemes have, thus, facilitated an egalitarian housing market with almost every Singaporean citizen living in almost identically styled accommodation. Of course, the desirability of estates and towns varies depending on age, convenience, and location, and this is reflected in rental and purchase prices. The less well-off and more traditional families tend to live in the HDB heartlands, further away from the centre of the island's semicircle. Yet, HDB blocks are very common even in desirable neighbourhoods and in the city centre; since the government mandates that every area includes a predetermined number of HDB blocks. Neighbourhood management also dictates a certain individual mix of office, retail, and function buildings as well as public and private residential accommodation. The common feature of slum areas or ghettos in large cities in Southeast Asia and much of the world are non-existent in Singapore and most towns are microcosms of Singapore as a whole.

Welfare and Social Engineering

It is surprising that in a state known for its aversion to extensive social welfare, known for low income and business taxes and for attracting multi-national conglomerates, Singapore's public housing gives the impression of socio-economic egalitarianism. Government housing assistances are the main reason why Singaporeans do not necessarily require a conventional welfare and pension system. Most Singaporeans – except the very wealthy – live in the same style accommodation, have a similar retirement provision, and, most of all, Singaporeans do not amass property and/or wealth from landownership to be passed on to successive generations, creating and perpetuating a wealthy "inheritance elite". Income ceilings ensure that the very wealthy do not buy HDB flats for further wealth creation. And in theory, all Singaporeans own their accommodation at retirement, in addition to having some CPF and perhaps private savings. Especially once children have become first-time buyers and have moved into HDB flats of their own, elderly Singaporeans are encouraged to downsize, or to "right-size" as HDB calls it, or apply for special grants upon retirement to unlock some cash funds.[21]

At the same time, the government uses its absolute control over the housing market for social engineering beyond ethnic quotas. Special measures encourage what a largely socially-conservative society considers to be sound families. First-time buyers must be married in order to qualify at any time for the generous government grants that make HDB such good value. Singles can take part in the so-called Singles Scheme once they have reached 35 years of age. Divorcees face a three-year debarment during which only one party can take part in a HDB purchasing scheme, unless children under the age of 18 are involved or divorcees either immediately remarry or move in with their parents. First-time buyers are also granted additional discounts if they buy in the vicinity of their parents' HDB flat, nudging them to take care of the elderly, a task that often falls upon the state in Europe. 36.7 per cent of married couples either live with or in close proximity to their parents and 90.3 per cent of married couples and their parents visited each other at least once a month.[22] Singaporeans almost universally

support this top-down social engineering: they are mindful of the overall goal.

Conclusion: Urban and Social Planning – A Holistic, Whole-of-Government Approach

HDB is perhaps the world's most comprehensive and fascinating public housing policy. The "Singapore miracle" allowed an underdeveloped Singapore, ripe with ethnic tensions and social inequality, to become one of the world's safest, cleanest, and most developed countries. Against the odds, Singapore leapfrogged the rest of the region and most of the developed world within a few decades. Credit goes to the government's remarkable political skill and its ability for long-term planning to ensure enduring societal progress, aided by effective implementation by a competent, reliable public sector that is second to none.

Public housing is central to the "Singapore miracle".
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This article has tried to demonstrate how central public housing is to this "Singapore miracle", an essential part of its holistic whole-of-government approach to manifold challenges following independence. Public housing in Singapore is a multi-dimensional policy scheme that simultaneously addresses the significant political and societal challenges surrounding severe space limitations, ethnical segregation and conflict, national loyalty and belonging. HDB addresses social welfare and social dynamics, enforces ethnic integration, aids ethno-religious harmony, and meets the basic material and social needs of Singaporeans.

Top-down urban planning further ensures a safe, clean, and functional environment without socio-economic enclaves. It is also one of the main reasons for the longevity of the PAP. Voters reward a government that successfully addresses real basic needs, and housing in a megacity is certainly one of those. But it is also true that the government uses its prerogative to reward a loyal public and knows that home ownership encourages a risk-averse electorate, neither interested nor daring enough to attempt political change. But far from being cynical here, there can be no doubt of the, by all means, genuine support for the PAP in general and for public housing in particular.

Where is HDB Headed?

In the medium-term, planned developments for completion are "smart", incorporating up-to-date digitalisation, and are "green", including ever more green space with the dual function of increasing wellbeing and having practical use, e.g. water reservoirs. New towns will also test so-called "first- and last-mile" automatic driving that allows citizens to use self-driving shuttlebuses.

Over the long-term, HDB could take a step back and refocus its "social mission" and the incentive schemes in order to adapt to changing circumstances. An increase in inter-ethnic and

Microcosm: The interaction with the neighbours is welcomed and thus considered in the planning of the respective building complexes. Source: © Tim Chong, Reuters.

transnational marriages gives rise to a more diverse population. Young adults are forced to live at home until they marry or turn 35, although an increasing number tends to rent for an intermediate period at high costs. And while taking care of one's elderly parents is laudably encouraged, homosexual individuals, divorcees, and younger single parents are structurally disadvantaged. Very few Singaporeans navigate around government provisions by either permanently renting or buying on the limited private housing market. Aside from the fact that this makes little financial sense – even well-earning Singaporeans often do not have the financial means to do so –, competing with wealthy expats who do not pay into the CPF and whose companies often subsidise their high rent in private houses or condominiums, ruins the market.

A Model for the Rest?

Singaporean governance capacity is impressive. Yet, the underlying principles of all Singaporean public policy, housing and otherwise, are unique to Singapore, and those advocating replication ought to be mindful of the particular circumstances. Before asking what the developed and less developed world may have to learn from the Singaporean model, one ought to ask whether one is willing to accept the unintended consequences of such centralised, top-down governance. Are interested countries willing and able to exert absolute control over land use and urban development, and are they willing to accept a certain degree of curtailment on individual freedoms and a centralised property and wealth redistribution in otherwise capitalist free-trade economies? And most of all, are governments ready and capable of galvanising their public behind perhaps incongruous means to further societal ends? Singapore is ready and capable, and this works for Singapore and for Singaporeans. But can it be transferred to different cultures?

Singaporean attempts to prevent ethnic segregation and inter-cultural/religious tensions, for instance, are laudable causes and bring to mind the "racial-ghetto" discourse in what is still a significantly less multicultural society in Western Europe. However, while appropriate and accepted in Singapore, top-down allocation of flats according to ethnic affiliation is unthinkable in most European societies that prioritise minimal interference in individual freedom of choice. A further example is the enactment of the LAA, which bestowed the government with vast powers over all Singaporean land. A political act of authoritative empowerment that is by and large unquestioned by Singaporeans, yet almost unthinkable in countries that place a higher premium on the individual citizens' rights.

So what can be learnt from Singapore? Effective town planning, government-controlled maintenance of estates and well-maintained recreation facilities, and the high premium on greenery and the holistic sustainability approach are essentially questions pertaining to the allocation of public funds and governance subsidiarity; certainly not a prerogative of semi-democratic single-party systems. However, the underlying principles of HDB cannot be replicated in the European context. The intention of this article was not to promote the Singaporean model of public housing as exemplary, but to show how something as profane as public housing can explain much of a nation's political and societal fabric; how the HDB scheme is perfectly in-sync with Singaporean society.

There is no doubt that HDB is a Singaporean success story. The city-state faced manifold challenges, but the HDB scheme has done its bit to implement the vision of Singapore's remarkable LKY. Yet, one ought to resist the temptation to mistake a particular success for universal success; HDB may solve Singapore's problems, but it cannot solve Europe's.

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