

# Building with Policy, Building with Credit, Building with Sandstone

The Housing Sector in Jordan, 1965 - 2018

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# 1: Introduction

This report seeks to understand the history and present of the Jordanian housing sector. It uses information from publicly available statistical data, published academic work, primary sources, published journalism, and interviews.

To discuss so large a topic as the housing sector of an entire nation, I have segmented the report into an introduction, a conclusion, and nine sections, each discussing an individual element of the issue of housing in Jordan. None of these elements is fully distinct from the others. Rather, the sections should be amenable to isolated reading. They refer to one another when necessary. A historian, for example, might be primarily interested in sections 3 and 4. An urban planner might look closely at sections 6, 8, and 9.

While each of the nine sections addresses its own topic, there are themes that intertwine these sections. The most important is the reorganization of policy that took place in the mid-1990s. This policy reorganization, often referred to as “neoliberal” by its critics, led to a vastly increased role for the formal private structure in housing development, a withdrawal of the government from the direct provision of housing, and a significant increase in land speculation.

For most of the young country’s history, until the 1990s, housing production was generally a straightforward, individual affair. A young person starting their family would save or informally borrow money, obtain a plot of land, and build a house. This “owner-builder” process resulted in a sturdy, well-regulated housing stock and in a stable and healthy urban fabric. In the late 1980s, over 80% of housing was produced in this way. It was, in a way, the path to a middle-class “Jordanian Dream.” There were boom-bust cycles in the real estate market through this period, usually driven by regional events such as refugee influxes, but they did not tend to be overly speculative in nature.

Throughout the 1990s, sparked by the 1989 crash affecting the exchange rate of the Jordanian Dinar, and under heavy pressure from multilateral financial institutions such as the International Monetary Fund and the World Bank, the Jordanian government reorganized housing policy. It sought explicitly to encourage participation of the formal private sector in housing development. The government withdrew entirely from the direct production of affordable housing, strengthened the rights of landlords, and worked to collaborate more directly with elements of the private sector. The most important change in policy was the liberalization of the financial sector and the coordinated encouragement, through institutions such as the Jordanian Mortgage Refinance Corporation, of private housing finance.

Policy reorganization brought an extremely rapid increase in housing lending from 2003 until 2008. The unprecedented availability of capital contributed to a speculative boom, the most intense in the country’s history, as land was treated more like a commodity than it had been in the past. This boom and subsequent stagnation have been major factors in the current unaffordability of housing. They have been much more significant than other factors such as the Syrian refugee crisis.

Reorganization led to the ascendance of formalized private-sector housing developers. Today, more than half of all new homes in Jordan are constructed by companies - up from

approximately 2% in 1985 - and owner-builders have been pushed into the minority. Company builders are able to access the capital necessary to compete in a speculative marketplace while individuals confront high barriers to entry. Although it is certainly true that financialization increased the financial leverage available to much of the middle class, and has spurred international investment and the construction of world-class luxury developments, it is also true that many Jordanians and other residents of the country are left out from its benefits.

It is important to remember that despite the great challenges of finding affordable housing in Jordan, the enormous economic difficulties of construction, and the constant friction between government, developers, and residents, the country has truly witnessed a housing miracle.

Today's Amman is a regional hub. It is a city of shining towers, tightly packed neighborhoods, and wide expanses of boxy apartment buildings. Homelessness is rare, but overcrowding is common.

At the country's independence in 1946, Jordan had about 5% of its current population. Since then, it has weathered successive regional geopolitical crises leading to refugee influxes, and yet has constructed great cities and demonstrated remarkable flexibility in adapting to changing conditions and an expanding population. Despite great geopolitical, economic, and organizational challenges, the country has provided gradually improving housing to nearly all its residents.

## 2: Demographics

In order to better understand current housing issues in Jordan, it is important to know the context and history of this rapidly growing and highly urban nation. The population of Jordan has increased from under a million in 1960 to over ten million in 2018, with an average growth rate of 4%. As shown in figure 2, this rate of growth has been far higher than that of neighboring countries, particularly during three critical periods of immigration: the mid-1960s, early-1990s, and between 2007 and 2015. For example, in 1968, the growth rate in Jordan was 8.4%, compared to 1.8% in Lebanon, 2.6% in Egypt, and 3% in Syria. Similarly, in 1992, the Jordanian population grew by 5.5% while the population in Lebanon, Syria, and Egypt grew by less than half that (World Bank 2017).

This rapid population growth has been the result both of high (but declining) birth rates and of immigration, with the two factors bringing related but not equivalent demands on housing. Also important to housing policy is Jordan's high level of urbanization. This section is therefore divided into three parts: A Young Population, Non-Citizens in Jordan, and Urbanization.

### 2.1 : A Young Population

Jordan has a remarkably low population median age of 22 years. This is lower than the median age in Saudi Arabia (27 years), Egypt (24 years), Turkey (30 years), and Tunisia (32 years), but higher than the median age in Iraq (20 years), Palestine (19 years), and Yemen (19 years) (CIA 2018).

Fertility rates have been experiencing a decades-long decline in Jordan. In 1976, an average Jordanian woman gave birth to 7.4 children; in 2004, that number declined to 3.2 (DoS

Jordanian Mothers). This trend seems likely to continue, meaning that the country's average age will continue to increase.

Because of these demographic trends, researchers in 2009 predicted that Jordan would enter a peak "demographic opportunity" around 2030, when the ratio of working-age population to dependents (children and the elderly) reaches a peak. This period would bring unique economic opportunities, and, as such, the researchers suggested a set of policies that would make it possible to best take advantage through investments in education and the labor market (HPC 2009). Although the current Syrian refugee crisis threatens this trend (Jordan Times 2015), the government has continued to plan for it (Jordan Times 2018).

## 2.2 : Non-Citizens in Jordan

The immigration that has swelled Jordan's population since even before the formation of the modern state is in part due to guest labor, but more significantly is the result of recurring influxes of refugees from neighboring countries. Overall, 30.7% of those living in Jordan in 2015 were non-citizens (DoS 2015). In 2013, 40.3% of those living in Jordan were not born within its borders (UN 2015).

170,000 Egyptian guest workers live legally in Jordan, and it is very likely that illegal workers total several times that number - perhaps half a million altogether. A great number of these workers are forced to work and reside in the same space, or to share cramped living spaces, leading to concerns over their rights - an issue with roots in the high costs of housing (Al-Natour 2018). Furthermore, there is a significant number of women from south and east Asian countries - primarily Sri Lanka, Indonesia, and the Philippines - working as domestic workers in the upper class and elite homes of west Amman. These domestic workers total between 141,000 and 320,000 (Ababsa 2013; Tamkeen 2015). Foreign domestic workers often experience severe physical, verbal, and economic abuse at the hands of their employers.

Jordan has been challenged by influxes of refugees throughout its modern history. During the Arab-Israeli war of 1948, about 100,000 Palestinians fled to Jordan, and an additional 300,000 refugees joined them as a result of the 1967 Arab-Israeli war. Additionally, an estimated 200,000 to 400,000 Iraqi refugees moved to Jordan because of the US-led invasion of Iraq in 2003. There are currently over 1.3 million displaced Syrians in Jordan, approximately 650,000 of whom hold UNHCR refugee status (JNA 2017). About 20% of those with refugee status live in camps (Roth 2017).

Jordan's governorates differ in their concentration of non-citizens. Mafraq, bordering Syria, is the governorate with the highest percentage of non-citizens (43%). Amman is the second highest (36%), and Zarqa the third (32%).

## 2.3 : High Levels of Urbanization

The Kingdom's population is very urban, ranging from 83% to 90%, depending on the method of measurement used (HUDC 2018; CIA 2018). Jordan is more urbanized than many European countries including France (80%), and has urbanization levels comparable to other countries in the region, including Saudi Arabia (83%), Lebanon (88%), Palestine (76%), UAE (86%), and

Oman (78%) (CIA 2018). This high level of urbanization is not uncommon for countries located in arid or desert climates.

Governorates vary widely in their levels of urbanization. Amman, unsurprisingly, is the most urban (97% of those living in the Amman governorate live in urban areas), followed by Zarqa (96%), and Irbid (92%). Ma'an is the least urbanized (54%), followed by Karak (59%) (DoS 2015).

Jordan's high level of urbanization has implications for housing policy. For example, the country's centralized attempts to construct affordable housing, mostly in the 1960s and 1970s, but also including the projects of 2008, have often been implemented in areas distant from urban centers. Although in some ways this has been a noble attempt to serve historically marginalized communities, it does not address the demand for urban housing in proximity to employment and services. The low-income families that make their homes in these developments are forced to commute long distances, spending a high percentage of their time and income on transportation, thus negating many of the benefits of "affordable" housing.

### 3: History of Housing Policy

The past several decades of the history of housing in Jordan have witnessed two different regimes of policy. The period from 1970 until 1989 was defined by an active public sector that undertook significant though non-comprehensive projects of construction and funding. The other, from 1997 up to the present day, is defined by a government that has withdrawn from active housing provision and that has embraced the role of facilitating private sector development. These two regimes are bridged by a period of transition sparked by the 1989 currency and banking crisis.

These two periods overlap broadly with cycles of expansion and contraction in the real-estate sector. Political and economic history interact and feed back into one another, mutually determining the reality of housing in Jordan. For clarity of focus, this economic history is narrated separately in Section 4 and referenced here only when necessary.

#### 3.1 : Social Programs: 1965-1991:

For twenty years after Jordan's independence in 1946, the government took a hands-off approach to housing. Almost all residences were constructed under private initiative and funding, following the owner-builder model, or were otherwise constructed by UNHCR to provide for Palestinian refugees in camps. No government office, program, or ministry was concerned directly with housing. This policy slowly began to change in 1965. Public-sector programs for housing gained momentum in the 1970s and matured in the 1980s, resulting in a number of successful major programs before being almost entirely revoked in the 1990s.

The development of a strong public sector for housing has its roots in international economics. The OPEC embargo of the United States in 1973 marked the beginning of an oil boom that would fundamentally change the Jordanian economy and housing sector. Remittances by Jordanian citizens employed in the Gulf states enabled a boom in owner-builder activity and in property values (see section 4.1). With high levels of aid to the Jordanian government by oil-producing countries "the Jordanian state ballooned" (Lucas 2005) and its economy became what

some describe as a rentier-state system (Knowles 2005; Lucas 2005). Fueled by this Arab aid, the government established publicly-funded institutions to carry out housing projects. These institutions grew in funding and scale until the crash of the late 1980s.

It is important to remember that these programs were, though noteworthy, supplemental to the owner-builder model that dominated Jordanian housing at the time. The vast majority of residents found a home by saving money or borrowing from friends and family, purchasing a plot of land, and hiring a master builder. A small portion of the population benefited from government programs during this time. However, even during the heyday of the 1980s, only about 10% of housing was constructed by the public sector (MoP 1987). Commercial construction corporations, like commercial mortgage lenders, were almost entirely nonexistent during this period.

Three institutions dominated the housing sector during the era of heightened government social programs: the Housing Corporation (est. 1965), the Housing Bank (est. 1973), and the Urban Development Department (est. 1980). All three were rendered incapable of carrying out their work during the period of transition extending from 1988 to 1997.

The first of these three institutions to be formed was the Housing Corporation, a public-sector organization dedicated to constructing and financing affordable housing in Amman (Ababsa 2012). For its first five years of operation (1965-1970), the Corporation only provided loans to public-sector employees, but began constructing new units for other residents in 1970. The Corporation provided homes at affordable prices while also offering the option of long-term loans. This move to state construction of residences was a fundamental shift for Jordanian housing policy. Although the Housing Corporation's first projects were small and to some degree experimental, with the expansion of state programs throughout this period it gradually gained momentum and constructed the Abu-Nuseir housing development in 1987.

The Housing Corporation emphasized lower-middle-class developments, and it has been criticized for its failure to construct apartments that were affordable to refugees and others from the poorest classes of Jordanian society (Ababsa 2012, MoP 1987). Figures concerning the Corporation's output are somewhat disputed, but generally favorable. Ajayes (1988) states that from 1970 to 1988, the Corporation built 15,000 units in 74 housing developments for a total cost of 310 million Jordanian Dinar (JD). Al-Rajoub and Al-Moumani (undated) state that from 1970 to 1994, the Corporation built 20,000 units in 88 developments for a total cost of 200 million JD.

The Housing Bank was founded in 1973, the same year as the OPEC embargo, a landmark year for Jordanian housing. It was a jointly owned public - private bank that provided subsidized loans to low-income homebuyers and supported public housing schemes. The bank charged interest rates that were 3% lower than commercial lenders. It required a 25% down payment (10% for Urban Development Department (UDD) projects), limited loans to 7,000 JD, offered a repayment period of only 15 years, and required that mortgagees pay no more than 30% of their income to mortgage repayment (MoP 1987).

Ajayes (1988) states that from 1973 - 1988 the Housing Bank issued over 1.43 billion JD in loans and financed the construction of over 74,000 units. The Ministry of Planning (1987) states that in the five years from 1980 to 1985, it had funded 28,600 loans with 319 million JD, financing about 5,000 units. The Housing Bank was generally a force for inclusive housing policy in Jordan, and some contend that loans to low-income individuals were more available and at lower interest rates than they are today (Al-Rajoub and Al-Moumani undated; S. Abu-Dayeh 2018). The Housing Bank, however, was far from perfect: like the Housing Corporation, it may be criticized for a lack of social targeting. It often served already-privileged populations (Hassel 2017), and in fact at least 80% of those receiving finance from the Housing Bank made above the then-median monthly income of 120 JD (Struyk 1989). Furthermore, the Housing Bank would only lend for construction to those who already owned land on which to build and would in some cases preferentially lend to government employees (Struyk 1989).

1980 witnessed the establishment of UDD, undertaking a mission influenced by the theoretical work of John Turner (1976). Turner advocated the involvement of residents in the work of upgrading informal urban areas, and UDD hewed closely to that principle throughout the 1980s. UDD carried out three Urban Development Projects, UDP-1, UDP-2, and UDP-3, serving a total of over 100,000 beneficiaries. These UDPs consisted of both sites-and-services and urban upgrading programs. As detailed by Ababsa (2012), the urban upgrading programs focused on Palestinians in areas that neighbored UNHCR refugee camps, and they were characterized by the following approach:

- UDD purchased the land and re-sold it, affordably, to the residents. It thereby provided residents of previously informal areas with permanent legal title and tenure. Each family was given access to mortgage funding, repayment of which was pegged to 33% of its income (Ababsa 2012).
- The local community played a strong role in developing the programs. At least half of the construction workers were drawn from the local population, meaning that beneficiaries also received practical work opportunities and experience. Community engagement in planning attempted to tailor construction to the needs of the residents, and upgrading included the construction of community centers and women's vocational training centers.
- The UDPs aimed at full cost recovery. Upgrading and tenure accordingly was not provided free-of-charge. Residents were expected to pay mortgages. Accessible (and Shari'ah-friendly) financing was provided, and no more than 7% of owners ever defaulted on a payment (Leslie 1992).

The World Bank's Independent Evaluation Group, writing in 1996, the same year that a World Bank loan called for the privatization of the government's role in housing production (Knowles 2005), praised the UDPs. It called the project's supervision "effective and efficient" and the financing "innovative." It said that "[a]lmost uniformly, beneficiaries followed good construction practices," and that the strategy established "economically mixed but well-integrated neighborhoods" (WBIEG 1996).

Funding came from a range of sources. For example, UDP-1's East Wihdat upgrading project of 1980 to 1984 drew funding from the World Bank (31%), the Jordanian government treasury (25%), and the Housing Bank (44%). This mix shows the involvement of international lending

even in the years before the liberalization of housing policies in the 1990s, but also shows the powerful potential for cooperation between two state-sponsored national institutions - both of which lost their ability to engage in such cooperation as a result of such liberalization.

UDD was also active in providing sites-and-services developments, i.e. the sale of land that was equipped with infrastructure and ready for construction. These developments were heavily (80%) supported by the World Bank (Al-Sabban 2000), but often failed as they were weighed down by bureaucracy (Sims 2013). After the end of the National Housing Initiative, these programs have become the only type carried out by HUDC (Ababsa 2012, Asfour 2018, HUDC 2016).

Other governmental and semi-governmental organizations supplemented these three primary institutions during the 1970s and 1980s heyday of social programs. In the years from 1976 to 1980, the Jordan Valley Authority constructed 2,388 housing units, selling each for 6,200 JD. The Authority also granted a total of 2.13 million JD worth of loans. It was primarily funded by the National Treasury, though it also drew some foreign loans from USAID and the German Reconstruction Bank. The Military Housing Corporation was active from 1969 to 1987, constructing units for sale to military personnel and veterans in Dahiyat Al-Hussein, Tabarbour, Irbid, and Marj Al-Hamam. Although it remains active, it now focuses on funding personal building loans rather than on organizing construction (Al-Rajoub and Al-Moumani undated). The Universities' Housing Fund and Teachers' Housing Fund were also active during this time (Alnsour 2016).

The roles of housing cooperatives in Jordan remains poorly studied, but they contributed meaningfully to housing particularly during this period. The cooperative movement began in 1952, and became increasingly formalized in the 1960s. By 1985, they were constructing 2% of all new housing in the country (MoP 1987). Al-Rajoub and Al-Moumani (undated) report that from their establishment through 1996, housing cooperatives built a total of almost 16,000 units. In the mid- to late-1990s, the financial situation of cooperatives had become dire, and they turned to the World Bank for reform. Presently, cooperatives in Jordan operate mostly independently of the government (Polat 2010).

A prominent success and high-water mark of the era of social programs in Jordan was the Housing Corporation's 1987 completion of the Abu-Nuseir public housing project on the outskirts of Amman. Abu-Nuseir provided 6,116 housing units at a cost to the government of 74 million JD (Alnsour 2016). In keeping with the Housing Corporation's policy, priority was given to government employees (Asfour 2018). In 1999, 85% of heads of households living in Abu-Nuseir were so employed (Abu-Ghazze 1999), and in 2016 76% (Alnsour 2016). Despite its landmark reputation, Abu-Nuseir has been criticized for bureaucratic inefficiency that led to cost overruns and un-affordability (Alnsour 2016) as well as for poor regional-level planning (Tewfik 1991).

The East Wihdat upgrading program was another landmark success. Completed in 1984, it served 5,000 people as part of UDP-1 under UDD. The program "improve[d] the living conditions of residents of informal settlements by enabling them to secure land tenure and by providing them with basic infrastructure, shelter, and community facilities," and the majority of residents were able to expand upon and improve their houses. The East Wihdat upgrading



program was so successful that it won the prestigious Aga Khan Award for Architecture prize in 1992 (Leslie 1992), and it paved the way for a half-dozen similar programs throughout the 1980s.

Altogether, the 1970s and 1980s were a period of strong government-funded social programs for housing in Jordan, executed under the auspices of the Housing Corporation, the Housing Bank, UDD, and a number of smaller organizations. These programs were well-funded. Though they were sometimes poorly targeted, inefficient, and hindered by corruption, they generally resulted in real positive change for Jordanian citizens.

These projects were specific and did not affect the majority of the population. They served at most 10% of Jordanians, working only in specific individual sites throughout the Kingdom. No attempt was ever made to generalize these policies at the level of the country; rather, they remained supplemental to the owner-builder model, benefitting the refugees who happened to reside in an area served by the UDPs or government employees lucky enough to receive a loan from the Housing Bank or an opportunity to own a unit in one of the Housing Corporation projects.

Although Jordan's social programs for housing ended in the 1990s, the changes they made in the built environment were permanent. Thousands of Jordanians still happily live in Abu-Nuseir; those in East Wihdat, and their children, retain the land titles that UDD helped them acquire.

Unfortunately, even as the Jordanian government's social programs achieved notable successes in the 1980s, they were becoming increasingly unsustainable. Remittances and aid funding from the Gulf began to slow after 1983, but the government did not draw back its spending. The government remained committed to strong funding of programs, not only for housing, but across all sectors of society and the economy, even as a crash became increasingly possible (Knowles 2005). Abu-Nuseir, the largest of the housing projects, was completed only two years before the currency crisis. Jordanian leaders "followed expansionary policies based on external borrowing and running down reserves" (Harrigan 2006), and unmanageable debt forced Jordan to resort to World Bank and IMF assistance - bringing into effect the transition that radically reshaped housing policy.

The structural adjustment that accompanied international assistance throughout the 1990s changed Jordanian housing policy fundamentally. The 1991 completion of the Shallaleh North urban upgrading project in Aqaba, the last of the UDPs (Ababsa 2012), marks the end of the era of social programs. From then until now, the Jordanian government has not taken such an active role in improving housing for its citizens.

### 3.2 : Transition: 1987 - 1997

After two decades of relative stability and only gradual change in housing policy, Jordan underwent a period of rapid transition. Policies that directly and indirectly affected housing were changed at almost all levels. Professionals refer to a "restructuring" during the mid-1990s (Basbous 2018). The government withdrew from direct service provision and from financial regulation, choosing instead to facilitate a corporatized private sector with the belief that market forces would ultimately result in a better provision of housing. Most policy reform during this

period was influenced by multilateral financial institutions such as the International Monetary Fund (IMF) and the World Bank.

Much, though not all, of the changes in policy were precipitated by the economic disaster of 1988-1989. These events are described in detail in section 4.1, but a quick summary is as follows: As a result of mounting public debt in the late 1980s - made much worse by an IMF-proposed liberalization of currency exchange and interest rates - Jordan sank into crisis. The “Jordanian government implemented an IMF-sponsored economic-adjustment and austerity plan, which had violent results” (Ryan 1998). The Dinar lost half its value, the country’s second-largest bank collapsed, standards of living fell drastically, rioting engulfed many of the southern governorates, and poverty rates leaped from 3% to 14.4% of the population by the end of 1989 (Harrigan 2006). From this position of desperation, Jordan was further dependent on the IMF and World Bank for recovery and support, and that support brought with it further requirements for structural adjustment throughout the 1990s.

Housing policy reorganization materialized in three phases. Planning shifted in 1988 and 1989; public institutions for housing were cut back between 1992 and 1997; and housing financing was liberalized throughout the decade, but especially between 1995 and 1997. This was a very active period of rapid change. Policy was reformed on a wide variety of levels, but these many reformations were part of a single shift, motivated by international forces and sparked by the public debt crisis.

In order to discuss this period of transition we must summarize it and even name it. How, then, can a period of eight years of intense transition be gathered up by a single term?

Many researchers have characterized the transitions of this period as “neoliberal” (see for example Abu-Hamdi 2016; Daher 2007a; Parker 2009; Ryan and Hanshaw 2018). It can be compelling to fit Jordanian housing policy changes into a wider narrative of global neoliberalization that came to a position of dominance during the 1980s and 1990s. It is a particularly striking coincidence that the year of the Jordanian economic crisis and IMF involvement was also the year of the fall of the Berlin Wall and the introduction of the “Washington Consensus.” The histories *Europe Since 1989* (Ther 2016) and *Jordan Since 1989* (Knowles 2005) are alike in more than name.

Thorsen (2006) defines “neoliberalism” as “a loosely demarcated set of political beliefs which most prominently and prototypically include the conviction that the only legitimate purpose of the state is to safeguard individual, especially commercial, liberty, as well as strong private property rights.” Harvey (2005) provides a similar definition, though he emphasizes the role of IMF, the World Bank, and the United States in spreading neoliberalism through a “debt trap” policy with highly exploitative and destructive results across the developing world. For Asef Bayat (2012) the “neoliberal city,” “is a market-driven urbanity; it is a city shaped more by the logic of Market than the needs of its inhabitants; responding more to individual or corporate interests than public concerns. It is marked by an increasing deregulation and privatization of production, collective consumption, and urban space”

Although the neoliberal label does in many ways apply to developments in Jordan during this time, there are reasons to be cautious in its application. It is not accurate to compare the pre-1989 Jordanian state to the “embedded liberal” or social-welfare states of the advanced capitalist countries during this period, and as such it is misleading to apply the same name to post-1989 developments. “Neoliberal” is also a highly politicized term with a very negative connotation, and while we will here discuss certain criticisms of the 1989-1997 transitions, it is beyond the scope of this paper to level a sweeping judgment of the reform program. As such, while we acknowledge the relevance of the term in a comparative-political sense, we find it of limited utility in the specifically Jordanian context and will for the most part avoid its use.

If “neoliberalization” is not quite the right word for these transitions, how might we characterize them? Simple “liberalization” lies close to the mark, for in fact this period includes a number of very important de-regulations, most notably of housing finance and international investment. “Liberalization” can also mean political opening and democratization; though such shifts may or may not have taken place in Jordan simultaneously they bear little relevance to housing. “Privatization” is also tempting, as it describes the abrupt trend away from direct service provision and toward facilitation of corporate developers. Both of these terms fall short of describing reality, though, for the transformations of this period also include a growth of the Jordanian bureaucracy (especially in the Greater Amman Municipality), new regulations and taxes for builders, and a flourishing of public-private partnerships and subsidies for large developers - all of which hardly make for a “liberalized” policy regime. Accordingly, what took place in the 1990s may be adequately described as a reorganization with strong resonances of (neo)liberalization and privatization.

#### Phase 1: Shift in Planning: 1988 - 1989

The first of the phases of reorganization, preceding or coinciding with the economic crisis, was a shift in planning. The Greater Amman Comprehensive Development Plan was published in 1988, and the National Housing Strategy in 1989. The former created an institution that has played an increasingly important, though often indirect, role in housing to this day. The latter suggested, for the first time, facilitating a significant engagement of a corporate private sector in housing; it also recommended that the government withdraw from direct service provision.

For as long as there has been a Jordanian state, voices from Europe and the United States have spoken loudly on housing. Until the late 1980s, though, the effects were either indirect or limited to refugee camps, as housing construction was managed, funded, and carried out by locals. British Mandate regulations were inherited by the independent Kingdom. With the creation of UNRWA (UNRWA 1949) foreign organizations took authority over the camps inhabited by Palestinians. The British planners King and Lock, in their 1955 plan for Amman, relied on British planning ideologies to address the housing shortage of the time (N. Abu Dayeh 2004).

In the Greater Amman Comprehensive Development Plan (GACDP), developed between 1983 and its publication in 1988, these voices are also heard. The GACDP was funded by a World Bank loan and led by a British planner, John Calder, through his employment at the Lebanese firm Dar al-Handasah (N. Abu-Dayeh 2004). The plan’s publication came hand-in-hand with the 1987 amalgamation of the city of Amman with a number of surrounding towns to form the Greater Amman Municipality (GAM), the organization that was to carry it out. The 1988 plan

for Amman dedicated remarkably little attention to housing, focusing instead on issues of spatial planning and infrastructure (GAM 1988). The plan's importance for housing lies not in its policy dictations but in its reconfiguration of the bureaucratic landscape. N. Abu-Dayeh (2004) views the establishment of GAM as a "quest for 'control'," creating a powerful governmental institution with a wide reach, but also replacing local municipalities that previously competed in a counterproductive way. For example, throughout the 1980s, small municipalities surrounding Amman had each over-zoned high-income housing, hoping to attract luxury development and tax revenue. This resulted in a scarcity of D-zoned land that is appropriate for low-income development (GAM 1988). By uniting the area under a single administrative body, GAM was better prepared to address this issue.

In 1989, Jordan adopted a new National Housing Strategy based on a draft by the Ministry of Planning (MoP 1987). The strategy considered three policy alternatives. The first, which would maintain the status quo, focused on reliance on owner-builders. The second, which advocated a strong public sector, proposed a rapid expansion of the Housing Corporation so that nearly a third of new housing would be publicly constructed. The third, which promoted a "guided private sector," also relied heavily on owner-builders, but would supplement them with private developers and UDD sites-and-services projects. The report recommended the third course of action, finding it the most efficient.

United States and World Bank interests were critical in crafting and implementing the 1989 National Housing Strategy. Though prepared by the Shelter Unit of the Ministry of Planning, the Strategy (MoP 1987) credits "assistance by" the Planning and Development Collaborative International (PADCO, a contractor for USAID), the Urban Institute (a United States-based policy research office), and USL Int'l (a "wholly-owned subsidiary of the United States League of Savings Institutions" (Gardner 1986)). It may be difficult to trace the precise influences of these organizations, but it is not difficult to appreciate their significance. These voices encouraged a more liberalized approach to housing provision, enabling the United States to take a strong role in the ensuing development. USAID later provided 35 million JD for a housing guaranty program to assist the Jordanian government in implementing the Strategy, and provided an additional 435,000 JD for training and technical assistance (PDCI 1994). A USAID report stated unequivocally that "the government's role within this evolving housing environment is to serve as the major catalyst and facilitator for the provision of housing by the private sector" (PDCI 1994).

The National Housing Strategy advocated that the government adopt the role of "guiding facilitator" for the private sector rather than remain a direct service provider of homes and subsidized loans. This decision was born in part out of the increasing difficulty of direct public-sector housing provision (Al-Homoud 2009). It was also shaped to a great extent by international political influences (Harvey 2005), particularly from the United States. This strategy continues to influence housing policy in Jordan to this day. It strengthens the private sector's influence and enables development patterns that are not obligated to serve the people whose cities they are "developing" (Daher 2007a). It is important to note that while the authors of the Strategy proposed an incrementally increased role for private developers - from 2% to 6% of new units - they did not foresee anything close to the success that such developers have enjoyed in the 21st century, coming to control over 50% of the market. Furthermore, the Strategy was not solely

concerned with privatization, but recommended a number of other reforms to housing policy, such as facilitating small unit construction, increasing the availability of construction materials, and working on infill projects in areas with municipal services. Some of these reforms continue to shape housing policy today.

#### Phase 2: Withdrawal from Social Programs: 1992 - 1997

The second phase of reorganization began in 1992, just as the Jordanian economy was beginning to recover from the financial crash of the late 1980s (see section 4.1). Between that year and 1997, almost all of the social programs for housing that had been well-funded throughout the 1970s and 1980s were cancelled. The government ceased to construct new housing developments and ceased to include housing improvements or title provisions in urban upgrading programs. The only governmental housing programs to survive this period were sites-and-services projects. This reform of programs was to a large extent in accord with the recommendations of the National Housing Strategy, the World Bank, and the IMF; and was very often funded by the latter two.

In 1992, the Housing Corporation was merged with UDD and renamed the Housing and Urban Development Corporation (HUDC), an appendage of the Ministry of Public Works and Housing (Al-Sabban 2000). This merger was a major step toward privatization and indirect housing provision. Private-sector developers were allowed to serve on the board of directors of the new HUDC, and the agency was encouraged to “level the playing field between public and private sector housing developers” (PDCI 1994). Accordingly, HUDC prioritizes private sector investment to a greater extent than its predecessor institutions, often by way of sites-and-services projects. It parcels large lots into smaller plots, rezones nonresidential land, sells government land to investors, and purchases land on behalf of developers at a reduced tax rate (Asfour 2018). Almost all public- private partnerships have been with Jordanian companies, keeping money inside the national economy (Asfour 2018). These techniques have resulted in residential construction in all regions of the country.

While facilitating private-sector investment, HUDC also took a major step away from public-sector activity. Since its creation in 1992, HUDC has had almost no direct funds for subsidizing construction, rents, or home loans (Asfour 2018). It only had funds for land purchases and infrastructure development (Ababsa 2012). In fact, in 1994, a World Bank project fully and unequivocally privatized all production activities of HUDC (Knowles 2005). As such, programs like the Housing Corporation’s project in Abu Nuseir for lower-middle-class housing have been entirely discontinued and informal urban upgrading efforts have been drastically changed to focus on service provision rather than construction and titling, leaving only the sites-and-services projects relatively unscathed.

Urban upgrading projects ceased to work on housing and shifted to infrastructure. With the formation of HUDC, not only were the construction projects of the former Housing Corporation abandoned, but the urban upgrading work of the former UDD was considerably altered and, as regards housing, hamstrung. The Urban Development Projects (UDPs) were replaced by Community Infrastructure Programs (CIPs). Like UDPs, CIPs focused on improving informal urban areas inhabited by Jordanian citizens of Palestinian refugee origin, but abandoned the focus on housing, and shifted instead to work on infrastructure provision. Beneficiaries were

provided only with infrastructure, not with construction support or with land title. Officials state that this change was because of financial difficulty. Land had become so expensive that even HUDC could not afford to purchase and re-title it, while the beneficiary communities, having all but entirely lost their savings in the crisis of 1988 - 1989, were no longer able to afford even very generous mortgages. Controversially, Ababsa (2012) argues that the change was also motivated by a post-Wadi Araba anti-integrationist policy, saying that “the government no longer wants these poor [Palestinian] refugees to settle permanently.”

### Phase 3: Housing Finance Liberalization: 1994 - 2000

The third phase of housing policy reform focused on finance, and particularly on the liberalization of mortgage provision. As Jordanian policy moved away from direct service provision, national law and policy became increasingly involved in restructuring the financial markets to encourage housing lending and private development. The role of the government as a facilitator of private capital flows and accumulation is a hallmark of the neoliberal trend in government that has spread across the world with the help of US foreign policy, World Bank lending, and IMF-enforced restructuring (Harvey 2005). In Jordan, this transformation was twofold: foreign investment was encouraged, and mortgage finance was liberalized.

While we use the term “liberalization,” these transformations were not a pure withdrawal of public-sector authority. They were rather a reorganization in Hourani’s (2014) sense, not “an emancipation of the economic from politics or culture. Instead, [new policies] simply reorganized the terms of their interpenetration.”<sup>1</sup> Over this period, we see a significant expansion of corporatized developers in the housing market with no corresponding increase in the role of owner-builders (see section 5.4). Rather, formal private developers gained market share from both the public sector and from owner-builders. This was explicitly intended by policymakers.

Financial liberalization was initiated in Jordan as early as the beginning of this period of transition with a deregulation of interest rates in 1989. At the level of the overall economy, it continued through 2002, with World Bank loans targeting a variety of sectors for reform each in turn (Knowles 2005). As regards housing finance, however, the main body of liberalization took place from 1994 until 1997 with a new Investment Promotion Law, the establishment of the Jordanian Mortgage Refinance Corporation, and the privatization of the Housing Bank.

One step toward reorganization of the housing sector came with the 1994 passage of a new Law of Owners and Tenants. This change altered a system that had been in place since 1953, when Jordan implemented a system of rent controls and tenant protection legislation that restricted landlords from raising rents or vacating tenants. The previous law had included strong tenant protections, and while the 1994 law did not yet liberalize rent control - that partially took place in 2013 - it strengthened landlords’ right to evict. According to Hourani (2014), this “dramatic reorganization of property rights [...] reorganized the internal relation between economic and political power further in favor of the landlords and the oligarchs.”

The next step, the Investment Promotion Law passed in 1995, “mandate[s] equal treatment for Jordanians and foreign investors and allows for the unrestricted transfer of capital and profits”

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<sup>1</sup> While Hourani here is referring to the new property regime of the British mandate in Jordan, he uses the same term to discuss the transition of the 1990s; in any case, the underlying theory is applicable in both cases.

(Guttman 2015). This law effectively “opened up Jordan to the global economy by lifting restrictions on foreign investments, providing protections against nationalization, allowing unhindered repatriation of profits, creating tax holidays, and removing import duties and fees” (Hanshaw & Ryan 2018). International capital, favoring investment in luxury properties (Venture 2017), serves to reinforce the gap between low- and high-income housing in Jordan. Al-Homoud (2009) found by surveying small developers that policies favoring international investment have hurt the construction of low-income housing. Tewfik (2014) comments that the current regulations on investment tend to result in large, dramatic projects “at the expense of a balanced urban fabric.”

In 1996, the World Bank extended a 16 million JD Housing Finance and Urban Sector Reform Loan to the Jordanian government, explicitly hoping to encourage private-sector activity in housing finance (Knowles 2005). The accompanying policy requirements included the establishment of the Jordan Mortgage Refinance Company (JMRC) and the privatization of the Housing Bank. International influence on JMRC remained powerful: within the next few years, USAID developed a strategic plan for JMRC as part of the American “Achievement of Market-Friendly Initiatives and Results Program” (Rhind 2002). Even after the reorganization was all but complete, the United States continued to directly fund similar initiatives (Al-Homoud 2009; Ghazal 2008).

JMRC functioned to expand competitive mortgage lending by offering refinancing of mortgage loans to banks. Its creation was part of a larger effort to open the mortgage market to commercial lenders and integrate Jordanian housing into global financial markets while providing government support for large Jordanian financial institutions. By providing cheaper financing to banks, purchasing bank loans, and selling bonds in the capital markets, JMRC has spurred mortgage lending and helped the mortgage market to grow to more than 11% of GDP. It has also pushed to make longer-term loans available (Jordan Mission 2012), but has not yet succeeded in making 30-year periods widespread. From 1997 to 2016, JMRC granted over 1.046 billion JD in loans to banks and financial institutions, and has issued 1.167 billion JD worth of bonds in capital markets (JMRC 2015).

The Jordan Loan Guarantee Corporation was established a few years earlier, in 1994, to “provide guarantees for small and medium-sized enterprises, low- and middle-income housing, and craftsmen” (Creane 2003). By guaranteeing mortgages it, like JMRC, encouraged commercial banks to be more confident in offering housing loans.

In 1997, after extended criticism for the governmental budgetary burden it posed, the Housing Bank was transformed into a comprehensive commercial bank (HBTF 2018) with the sale of the government’s share of ownership and the “cancellation of the Housing Bank law” (Al-Rajoub & Al-Moumani undated, Knowles 2005). It no longer provides affordable home loans and no longer subsidizes interest rates for low-income buyers. Interest rates for low- and middle-income families jumped from 8.5% to 14% during this period, which “deprived many families of access to necessary financing.” Not only did the quantity of housing market circulation funded by Housing Bank loans drop from 4.8 million JD to 1.3 million JD over the 1995 to 1998 period, but the total housing market circulation dropped from 13.3 million JD to 7.5 million JD over the

same period (Al-Rajoub and Al-Moumani), indicating an overall deleterious effect on the housing market at the time.

The privatization of the Housing Bank was accompanied by the institution of demand-side mortgage subsidies across the Jordanian banking sector (Hassler 2011). International economists argue that such a policy leads to better loan terms, lower interest rates, and greater affordability when compared with approaches like those undertaken until 1997 by the Housing Bank - and at a significantly lower cost to the state (Hoek-Smit 2003).

A “Housing Loan Subsidy Program” was initiated in 2000. Its ambition was to carry on some of the Housing Bank’s goals of mortgage accessibility to lower-income Jordanians, though in the now entirely privatized finance market. It subsidized interest rates on loans from commercial banks, serving 6,000 Jordanians in the years between 2000 and 2012 (Jordan Mission 2012). Again, the Jordanian government practiced reorganization rather than pure liberalization.

Even with this subsidy, the new system of policy has also been criticized for inaccessibility. Mortgages are often unavailable to those left out of the formal economy (see section 8.1).

There are alternative policies practiced in the Arab world. A financial program in Morocco called FOGARIM guarantees housing loans to people within a certain low-income range. Although the default rate is relatively high, the program has successfully opened access to the housing sector to the third of the Moroccan population employed informally (Tagma 2016). It was “more effective than the subsidy program, reaching out to a larger population, including people with informal or irregular income and slum dwellers, and costing less to the Government for each citizen that has benefited” (Tagma 2016). Such a program has been discussed in Jordan as a way of sharing more widely the potential brought to the country by the boom in mortgage lending. The implementation of such a program was the first of many recommendations given by an HUDC policy study (HUDC 2011).

For an in-depth discussion of the effects of these policies on the mortgage market, see section 7.2. To summarize that section, we find that the quality of today’s mortgage finance is comparable to that of the late 1980s. Interest rates were a few percentage points lower in the 1980s than today, and repayment periods were about half as long. Mortgages are considerably more available today than thirty years ago, and most Jordanians are both more required and more able to use formalized finance when purchasing a house. While it is unclear whether or not this policy reorganization has actually made homeownership more attainable for Jordanians, it is certain that it has increased the role of formalized housing finance in Jordanian society.

At the level of the national economy, reorganization continued with the ascension of King Abdullah II to the throne in 1999 and the subsequent entry of Jordan to the World Trade Organization, which paved the way for free trade agreements with the United States and the European Union (Khawaja 2015; Parker 2009). As regards housing policy, though, all of the major changes were in place after mortgage finance was commercialized in 1997 by which point “the capital market was fully and completely liberalized” (Harrigan 2006).



### 3.3 : Reorganization Manifest: 1997 - 2018

Since 1997, Jordan has witnessed only minor shifts in housing policy. These shifts have represented a continued commitment to the reorganized system. We see during this period no lack of activity, but rather activity that reflects reorganized policy.

The public and private sectors interweave in ways that have become deeply rooted. This has taken place in four ways: First, by way of legal changes to policy; second, by way of the growth and success of formal private developers; third, by way of increasing reliance on international organizations, especially non-governmental organizations (NGOs); and, fourth, by way of the failure of the 2008 “Year of Housing” initiative.

#### Policy Entrenchment

The most important change in policy - though itself minor compared to the changes of the 1990s - was the liberalization of rental law through the 2013 Landlord and Tenant Law no. 14. It was an elaboration of the 1994 law and another move away from the strong tenant protections that had been put into place in 1953. Under the new law, rental contracts signed since 2000 have been completely liberalized. For rental contracts signed before 2000, landlords may now raise rents according to specified rates every five years (Ammon News 2013).

This landlord-tenant policy change was ambivalently received. Critics of the new law argued that unfair evictions might become commonplace. Bayat (2012), writing a year before its implementation, might have lumped it in with what he describes as a “neoliberal” trend across the Middle East of “the removal of rent control [that] has brought scores of vulnerable households (in particular newly wedded and young families) under the command of land markets.” Jordanian landlords and developers, meanwhile, welcomed these new regulations. Some commentators argued that they would in fact provide more affordability in the rental market. These liberalizations, they said, would bring more rental units to the market both by making new development more dependably profitable in the long run, and by encouraging the (expatriated, for example) owner of a vacant unit to rent it temporarily. It is difficult to distinguish the effects that this new policy has had on rental prices from simultaneous economic phenomena, but we do observe that rental prices went up in general during the period after the passage of the law (see section 4.3).

#### Dominance of the Formal Private Sector

The growth of private housing companies since the turn of the millennium also indicates the depth of the reorganization. Perhaps this depth is best shown by the fact that the corporate private sector, responsible for only 2% of new housing in 1985, is responsible for over half of new housing today. This growth far exceeds the expectations of the National Housing Strategy.

These private developers have come to undertake projects across a wide spectrum. They range from collaboration with HUDC on sites-and-services projects at the low end to middle-class mid-rise neighborhoods of apartment buildings, to glimmering skyscrapers and gated communities for the wealthy.

A number of large-scale high-end urban projects indicate the extent of the new order. A theme of these projects is what Abu-Hamdi (2016) refers to as “an inversion of the planning practice of

eminent domain.” The government - mostly the Greater Amman Municipality - seizes land, either from public ownership or private landowners, and rather than using it directly, provides it to private developer-investors. Government bodies justify such processes through rhetoric claiming that such investments will benefit the city as a whole (see section 8.3). The most notable of these projects are the Jordan Gate Towers and the Abdali Project. Such projects show that the state has not relinquished power or ceased to act directly. The seizure of land is direct. Rather, they show that the state operates through and with certain private institutions and not others. The formal government is but one of several elements in the assemblage of governance.

Abdali, in particular, has been controversial on a variety of fronts. Its development company has been given a wide variety of tax breaks and incentives, as well as buying the land at below-market prices, advantages that were not supported by Jordanians in a poll (Mango 2015). Some commentators accuse the development of spurring gentrification: Although construction of the Abdali Project has increased the prices and rents of nearby parcels, it may not actually have increased profits for the older businesses operating in them because those businesses cater to the neighborhood’s traditional demographic. This may be resulting in displacement (Hanshaw and Ryan 2018). Hourani (2014) discussed the Abdali project as the result of a complex web of national and international factors, focusing particularly on the Lebanese and Gulf interests that dominate the project’s funding. For him, it is symbolic of the oft-illiberal outcomes of the reorganization of the 1990s: “If anything, the center of gravity has shifted upward from the nation-state to the regional scale as more powerful networks of capitalists, working within and alongside a variety of regional states and with far more petrodollars at their disposal, reformat the production of space in Amman” (Hourani 2014).

#### Reliance on NGOs

Extending the logic of ‘liberalization’, the Jordanian polity has even moved toward reliance on the private and NGO sector for the kind of urban upgrading work that 2008 carried out by HUDC (through UDPs and CDPs) before 2008. The government has encouraged NGOs and “Corporate Social Responsibility” programs to intervene where the state no longer does. For example, Aramex established the NGO Ruwwad, the director of which “emphasizes a commitment to bypassing municipal authorities in the pursuit of community development,” turning instead to “corporate sponsorship for community projects” (Parker 2009). Indeed, for Bayat (2012), “[t]he NGO sector in essence mediates an orderly transition to marketization and commodification,” enabling the state to shirk what he sees as its responsibility while contributing to “ethnic or religious divides” or “privatization from the back-door.” Still, these NGOs do improve daily life for many Jordanians. Ruwwad and similar organizations have been praised by the community for providing scholarships and promoting community service (Joucka 2015).

International NGOs have entered the Jordanian housing sector in the recent responses of various groups, particularly the Norwegian Refugee Council and UN Habitat, to the Syrian refugee crisis. These NGOs join the assemblage, and indeed their links to the local and international, as well as to the public and private, are multifarious (see section 10.3).

#### The Year of Housing

To say that the era of social programs ended in 1991 is not to say that direct housing provision entirely ended. There have been three noteworthy state-sponsored programs that have addressed

social housing needs over the past twenty years, but none have succeeded in any meaningful way. The programs of the Ministry of Social Development, though noble in intention and pragmatic in application, pale in comparison to the size of the issue. The sites-and-services work overseen by the Housing and Urban Development Corporation, limited by funding, is also limited by embracing an approach fully compatible with post-reorganization political rhetoric. The National Housing Initiative, by far the boldest of the three, was also the most outright in its failure; it proves that 1980s-style social housing construction is not only politically unfavorable but has become impracticable under the reorganized system.

Starting in 2002, the Ministry of Social Development began to provide a very small amount of housing support for the poor, elderly, and others in dire need (MSD 2018). It provides direct cash transfers for low income families to rent, buy, and renovate their homes, usually providing funds for people to build on land they already own. The Ministry also funds construction of a small number of subsidized units for individuals and families in need. In the sixteen years since the launch of its housing support program, however, it has helped only 1,700 families (Jordan Times 2018a) - a tiny fraction of those in need of housing support. The Ministry receives over 1,000 applications per year, all from families making less than 200 JD / month, and is able to fulfill only about 100 / year (Arifat 2018). The Ministry of Social Development does not expect that its programs will change significantly in the coming years (Arifat 2018, Sharida 2018).

The Housing and Urban Development Corporation, the inheritor institution to the Urban Development Department and the Housing Corporation, has since the 1990s been extremely limited in its role. The organization once responsible for Abu-Nuseir and the East Wihdat Upgrading Project now takes no active role in construction. Rather, it is limited to sites-and-services projects (discussed in section 3.2) that conform to the post-reorganization (neo)liberal rhetoric positioning the public sector as a facilitator and guide to the private. Further, it completes only hundreds of these sites per year (HUDC 2016). Like the Ministry of Social Development, HUDC is little more than a bit player in the drama of Jordanian housing.

Funding is a major issue for these institutions: The General Budget Department's List of Capital Projects for the Years 2017-2019 dedicates 450,000 JD per year to "Housing for poor families." The same document grants 350,000 JD per year to "Furnishings for the Prime Ministry building and the hospitality building and other works" [sic] (GBD 2017).

Motivated by the rising unaffordability of housing (see section 4.3), King Abdullah II in 2008 turned the royal eye to the issue. He initiated a program referred to as the National Housing Initiative, the Year of Housing, and the "A Decent Home for a Decent Living" initiative (King Abdullah II 2008). This initiative, organized through HUDC, aimed to provide 100,000 affordable homes over five years. It was the only project since 1992 that engaged HUDC directly in housing construction. The project, however, faced financing challenges, and its implementation was mired in charges of corruption (Obeidat 2013). Specifically, Ababsa (2012) states that "the minister of public works allowed one of his private companies to control the construction," leading sale prices to double. Like the Abdali Project, the National Housing Initiative was neither purely public nor purely private, but was formed by the complex interplay of a number of parties. We see here further evidence that housing in Jordan has not been purely

liberalized,” and “suggests not a liberation of market rationality from politics and culture, but again, a reorganization of the terms of their fusion” (Hourani 2014).

The royal initiative was abandoned after 8,504 units were completed at a cost of 400 million JD (at a cost of 47,000 JD per unit delivered) (Maraya News 2016). These units are still being sold (HUDC 2016). Moreover, many of them were constructed at a considerable distance from urban centers and far from job opportunities (Jalouqa 2015; Maraya News 2016). For example, a total of 3,900 units were constructed in the four sites of Dyar, Abu Alanda, Mostanada, and Princess Iman 5, at the extreme outskirts of Amman. Less than half of these units had been sold by 2013, though 61% of those residents described themselves as “satisfied” by the project (Ishaqat 2015).

The 2008 National Initiative may be compared statistically to the 1987 Abu-Nuseir housing project, a comparison in which the latter is found to have been at least twice as efficient in terms of 2008-equivalent JD spent by the government per unit constructed (original calculations).

	1987: Abu-Nuseir	2008: Housing Initiative
GDP (Billion JD)	9.4	30.8
Population (Millions, approx.)	3	6
Units Built	6116	8504
Average Household Size (approx.)	6.7	5.4
People Housed (approx.)	41,000	46,000
Cost in Million JD	74	400
Cost in Million 2008 JD <sup>2</sup>	229	400
Percentage of Population Served	0.14%	0.077%
Cost / Unit (JD at the time)	12,100	47,000
Cost / Unit (2008 JD) <sup>3</sup>	37,400	47,000
Percentage of GDP Spent	0.79%	1.30%
Percentage of Population Served / Percentage of GDP Spent <sup>4</sup>	0.17	0.059

The National Housing Initiative’s failure was, almost coincidentally, the final nail in the coffin for the long-suffering social programs of HUDC. To support the initiative, the department of HUDC responsible for urban upgrading programs (CIPs) was shuttered (Ababsa 2012; HUDC 2016).

<sup>2</sup> Conversion calculated with the World Bank Consumer Price Index data, available online at <https://data.worldbank.org/indicator/FP.CPI.TOTL?locations=JO>.

<sup>3</sup> The exact sizes of units vary, and statistics are imprecise, but as average family sizes were smaller in 2008 than in 1987, we may assume that the National Housing Initiative apartments are smaller than those of Abu-Nuseir.

<sup>4</sup> This statistic is unusual, but allows for context-independent comparisons of publicly-funded housing projects. It is a measure of efficiency, and higher numbers represent projects that serve more people for less (relative) national spending. For example, the infamous 1954 Pruitt-Igoe project in St. Louis, USA, which had to be destroyed in the mid-1970s as it became uninhabitable, scores 0.082 (author’s calculations). Of course, this measure ignores many other attributes of a project’s quality.

Most commentators' responses to the initiative's cancellation reflect the dominant belief that housing construction should be the province of the private sector. Voices like the opinion writer Fahd al-Fanek (2013) and the architect Mohammad Jawad (Maraya News 2016) attributed the initiative's failure to its public-sector nature, the former arguing: "When employees of the government take on the role of businessmen and investors, the results will naturally be disastrous" (al-Fanek 2013, original translation).

Although the success of Abu-Nuseir and other projects of the 1980s prove that the results of social projects are not always "disastrous," perhaps the commentators are correct that since 1989 the state has become incapable of executing such initiatives successfully. The National Housing Initiative indicates that publicly managed housing projects are impracticable under the current system. Nonetheless, the need for improved housing accessibility today is at least as dire as it was when King Abdullah II set out to undertake the National Housing Initiative, and it seems that neither the public nor the formal private sector are capable today of satisfying the national demand for affordable housing.

Without another significant reorganization of policy, it seems unlikely that the housing market will substantially improve. A reorganization of policy does not necessarily require a return to the policies in place before 1989. In fact, such a reversion would now be impossible. Instead, it could mean striking another kind of balance between the public and private sectors, through programs like housing loan guarantees or increased densities. It could also mean a new balance that would empower other groups such as informal or smaller developers or workers' cooperatives.

Jordan has only witnessed two major housing policy regimes over the past several decades; other approaches have yet to be tried.

## 4: The Real Estate and Housing Market

### 4.1 : Boom, Crash, Recovery 1973 - 2003

For a quarter-century after its independence, almost all housing construction in Jordan followed an owner-builder model (see section 5.4), except for refugee camps under the authority of UNRWA. The state took almost no role in supporting finance, and the real estate market was financialized only to a very limited extent. Activity was slow. The situation changed irreversibly in 1973 with the OPEC embargo of the United States and the subsequent skyrocketing in oil prices: crude oil more than doubled in price in two years (McMahon 2017). 28% of Jordan's domestic labor force moved to the Gulf to work in the booming oil-based economies, sending remittances home. The national economy boomed, with up to a quarter of the GNP coming from remittances and up to a third from Arab aid (Razzaz 1993). Growth averaged 7.9% annually from 1972 to 1982, one of the highest rates in the world (Harrigan 2006). Fortunes did not only flow into Jordan from remittances, but also from "an exceptionally high level of Arab aid" (Harrigan 2006), which enabled the government to begin funding new social development programs - including some dedicated to housing (section 3.1). As the state expanded, poverty dropped: "The number of poor Jordanians declined from 24% in 1980 to less than 3% in 1987. Inequality of income [...] also improved" (Harrigan 2006).

A smaller but sharp rise in real estate values was related to the arrival in Amman of displaced people from Lebanon after the beginning of that country's civil war in 1975. A number of the wealthier individuals among these newcomers settled in west Amman, building expensive villas.

This boom had an unprecedented effect on the housing market. A great deal of the remittances sent to Jordan were invested immediately in land. Prices rose by up to ten times in the fifteen years from 1970 to 1985. The growing disparity between the means of lower income groups and land and housing prices led to increased spatial segregation in the city" (Razzaz 1993): the divide between east and west Amman solidified as Abdoun was constructed (Wallace 1986). Even this boom, though, took place almost entirely under a non-financialized, non-corporate framework. Most individuals were buying land with their savings or with informal loans, as the financial infrastructure necessary for mortgage provision was still in its infancy. Although many of those who invested in land left it unproductively empty (Al-Asad 2007) or benefited from what were effectively government infrastructure subsidies for speculation (Hourani 2014), others built. Some Jordanians were certainly left out of the boom: what mortgages could be found were difficult to access for those employed in the private sector, and some minority groups, like non-citizens, did not greatly benefit. Land prices, though relatively affordable, were still above the reach of many. Nonetheless, Jordan achieved and maintained high rates of homeownership.

The boom, however, did not last forever. The international price of crude oil began to fall in 1983, leading to a decline in remittances and aid. In the late 1980s, Jordan faced increasing levels of public debt as aid from the Gulf states slowed and the government insisted on maintaining the generous public spending and expansionary economic policy that high GNP and aid had permitted. By 1988, the debt became overwhelming, and Jordan began to seek IMF and World Bank support. As a precondition for their support, these institutions insisted on currency exchange liberalization. Acquiescing in October of 1988, the Jordanian government abandoned the fixed exchange rate between the Dinar and the United States Dollar, and the Dinar was allowed to float in value. Over the next four months the Dinar lost a third of its worth, and over the next year, a full half of its value. Living costs rose by over 25%, poverty returned to as much as 19.8% of the population, and riots erupted in Karak, Ma'an, and Tafileh (Awad 2017). There was a "consensus among observers that the exacerbation of the country's economic ailments had largely been the result of misguided IMF policy 'recommendations'" (Awad 2017).

Nonetheless, Jordan continued to follow these recommendations, and throughout the 1990s was a "model student" of the IMF school of liberalization (see section 3.2). "The country's poor suffered the most from the implementation of the austerity-heavy, neoliberal policies prescribed by [the IMF and the World Bank, and] austerity measures primarily brought about the weakening of social protection mechanisms" (Awad 2017). This led to further economic stratification of society, continuing a trend that had already been underway in the 1970s.

The reorganization of the country's political and economic systems and the governing connections between them took much of the 1990s. This reorganization included financial liberalization, the government's retreat from direct service provision, and a rise in public-private partnerships. The consequences of this housing policy adjustment (which are provided in sections 3.2 and 3.3) were significant for the market.

From 1992 to 1995, the Jordanian economy enjoyed a high rate of growth, fueled in large part by the influx of about 300,000 Jordanian citizens, many of whom were of Palestinian origin, from Kuwait as a result of the First Gulf War. This influx was more important than IMF-sponsored policy change (Awad 2017; Harrigan 2006), as the population invested heavily in construction (Harrigan 2006; Van Hear 1995). As 80% of the “returnees” moved to the Amman-Zarqa area, “real estate prices jumped more than 200 percent in the one year following the war” (Razzaz 1993) - a rate faster than even the most dizzying ascents of the 1970s boom. It may well be the case that this investment was facilitated by the new finance-friendly regulations, which enabled investment to take on a slightly more speculative character, but the boom was not fundamentally commodity-speculative, nor did it fundamentally stem from the new policy.

In 1995, the boom wore off, and the economy entered a recession lasting through the turn of the millennium. At the end of the decade, the country had little to show for its ten years of IMF-supervised reform: “real GDP per capita in 1999 was nearly 25% below that of 1984, and only 8% higher than in the crisis year of 1991” (Harrigan 2006).

From 1970 through the turn of the millennium, the Jordanian housing market underwent several boom-and-bust cycles. The booms of the 1970s and early-1980s were not speculative in nature, and that of the early 1990s was only partially speculative. Land was not highly commoditized during this period, and though it was seen as a long-term investment, it was generally not exchanged rapidly. In large part, this lack of speculative investment was due to a lack of finance to support it: private Jordanian financial institutions did not offer mortgage programs and international finance did not usually operate in the Jordanian market. As finance-friendly policies instituted in the 1990s began to show fruit in the early 2000s, the shape of the Jordanian real estate market changed drastically.

#### 4.2 : A Reorganized Boom: 2003 - 2011

In 2003, Iraqis, some wealthy, fled their invaded homeland and found refuge in Amman, bringing demand for housing, an injection of capital, and a desire to invest in real estate. Jordan had witnessed several very similar influxes previously, but this one brought fundamentally different effects because of the presence of liberalized financial markets. Mortgage financing was increasing rapidly in availability (see section 7.2). Private wealth, whether Iraqi or Jordanian, was used to leverage capital and trade real estate as a commodity. As Hourani (2014) explains:

A decade of liberalization had not produced the promised prosperity. Rather than breaking the dependence of the regime on external flows of rent, liberalization produced an expansion of that dependence [...] It did, however, create the conditions for another massive wave of speculative real estate development, a wave that began to crest with the U.S. war on Iraq. With wealthy Iraqis flooding the country, Amman again expanded westward, and real estate boomed.

This boom led to jumps of up to 400% in some parts of the Amman real estate market (Speetjens 2012). The real-estate market continued to expand through 2008.

The implications of this boom in light of the slow, if present, rise in real per-capita GDP is clear. It became increasingly difficult for wage-earners to afford land, contributing to a sharp decline in owner-builder housing construction around the turn of the millennium. Private corporatized housing developers, which had previously undertaken no more than 2% of the total construction of new residences, by 2001 constructed 20%, and have today reached over 50% (see section 5.4). Apartments spread across Amman and other Jordanian cities. These developers took advantage of financing for land and for construction - increasingly available after 1997 - that could not be accessed by many owner-builders.

Speculation exploded in Amman in the mid-2000s and peaked in 2008. Madanat (2010) refers to the period from 2005 to 2008 as a “bubble,” adding that:

Land prices increased dramatically, especially in the Amman region. Speculation raised land prices in some places by up to 10 times or more: often, the same parcel of land would be bought and sold several times in a short period [...] Many people made considerable profits, but there was no increase in national wealth or gross national product.

It is this rapid buying and selling that fundamentally distinguishes the 2005 - 2008 boom from those that preceded it.

The primary cause of this speculative business was the explosion in mortgage availability that preceded and coincided with the period of most intense speculation (Speetjens 2012). Because the rise in mortgage availability can be traced directly to IMF-sponsored policy reform during the mid-1990s (see sections 3.2, 7.3), we can see the speculative boom and bust as a direct, though delayed, result of that policy reform.

Madanat (2010) describes other factors that contributed to the speculative nature of the boom, including increasing internationalization - also a result of mid-1990s policy reorganization - as well as the collusion of government officials.

The global financial crisis of 2008 hit Jordan less hard than it hit the United States or the countries of the Gulf (Abu Orabi 2016), but its ripples were nonetheless felt, particularly in the real-estate sector where it brought an end to a period of energetic speculation. Land values dropped by an average of 10 - 15% (GPG 2009), though the effects varied geographically: drops as much as 60% were seen in west Amman, and up to 80% on the city's outskirts (Speetjens 2012). Renters also felt the effects as rent prices dropped by an average of 15% over the next twelve months (GPG 2009). Though numbers as high as 80% may sound enormous, many of these properties had multiplied in value several times in the preceding years, and consequently lost less value than they had gained. The end of boom did not mark a return to pre-boom conditions; rather, it represented a leveling-off of speculation. It was not a bust, but a case of stagnation. The market did recover, and the trading volume in 2011 again reached the level of 2008, but momentum had been lost.

It is difficult to discuss the post-2011 Jordanian housing market in a historical sense. From our vantage point writing in 2018, we lack the distance that is necessary for clarity. Nonetheless, in



the next two sections, we will attempt to understand the market of the present and the recent past. We will look first, in section 4.3, at recent changes in the cost of housing to the consumer and then, in section 4.4, at the types of demand that characterize the housing market today. It is also difficult to discuss recent Jordanian history without talking about the Syrian refugee crisis; that topic is handled in greater depth in section 10.2.

### 4.3 : Increasing Unaffordability: 2011 - 2018

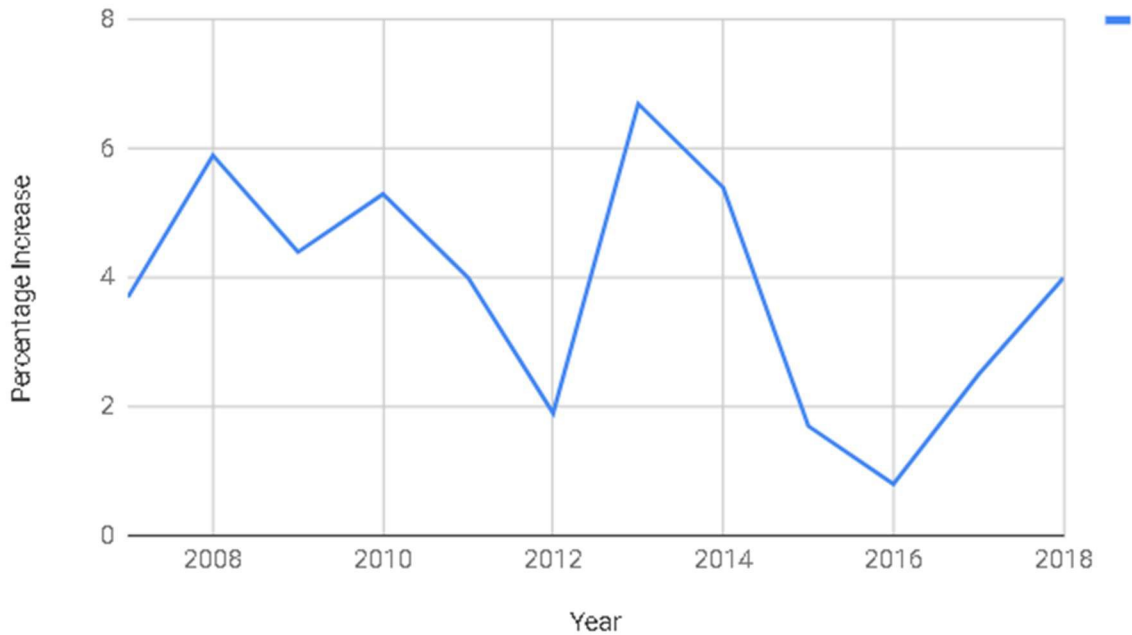
Over the past decade, the real estate market in Jordan has stagnated. Housing prices in Jordan have gradually increased, in some places to the point of becoming unaffordable to those of low and moderate income. This is shown unanimously by three different statistical measurements. The first is simply the price of rent. The second, the Consumer Price Index, measures the cost of housing to the consumer. The third, the proportion of income spent on housing, shows how Jordanians of various income groups are burdened by housing costs.

Although the Department of Statistics does not collect information on home sale values, it collects information on rental prices, which are also a powerful indicator of general housing affordability, partly because lower-income people are more likely to be renters. Between 2004 and 2015, renting became somewhat more common while the affordability of rental housing in Jordan decreased. In 2004, 78% of rentals cost less than 100 JD per month; in 2015, only 19% of units did. In 2004, 92% of rentals cost less than 150 JD per month; in 2015, only 50% did (DoS 2004; DoS 2015).

Changes in housing prices can be measured by the Consumer Price Index (CPI) of housing. A CPI is a statistical measurement of price inflation that evaluates the cost of a good or service relative to its historical cost. Data for the CPI of housing in Jordan was first made available in 2006 (TE 2018), and shows a consistent yearly increase since that time. The rate of increase has ranged from 1% to 7%, but has always been positive. It has also been faster, though only marginally, than the overall increase in CPI (HUDC 2018; TE 2018).

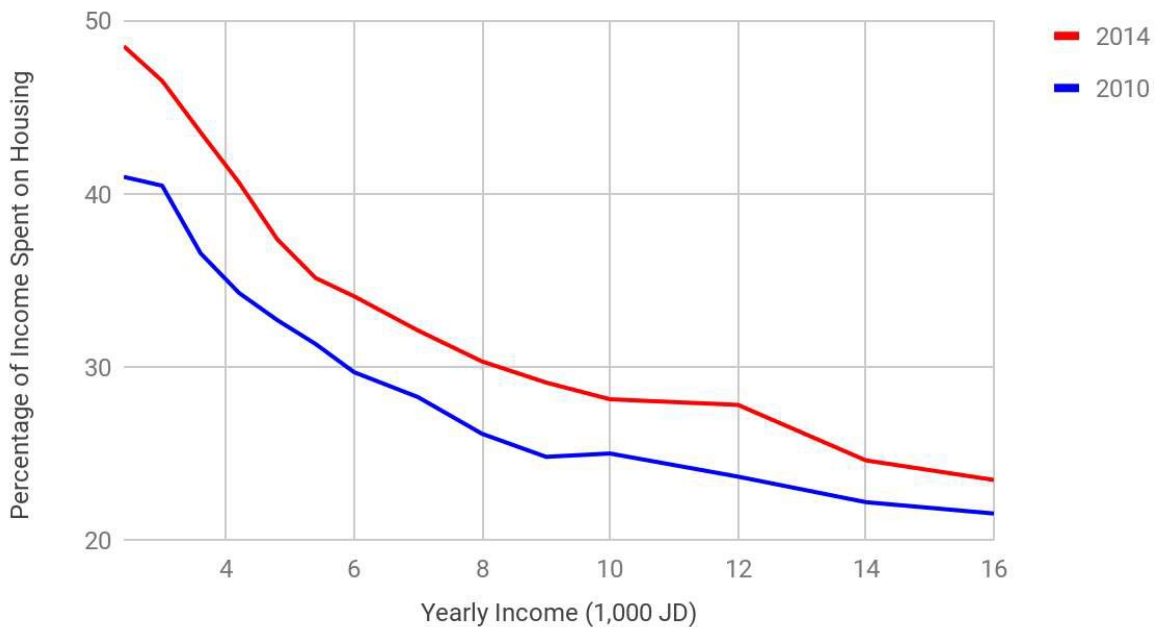
This measurement does not show an acceleration of the CPI increase in response to the regional 2011 uprisings and subsequent refugee migrations to Jordan. This provides a strong argument for the conclusion that the Syrian refugee crisis did not have a significant impact on the cost of housing in Jordan.

### CPI-Housing Yearly Rate of Increase



Another important metric of housing affordability is the percentage of household income spent on housing. 25 - 30% is often seen as a reasonable standard internationally, although no individual ratio is appropriate to all contexts. In 2010, the proportion of income spent on rent ranged from 40% for Jordanians at the lowest income level (those making less than 1,800 JD per year), to 21% for those at the second-highest level (12 - 14,000 JD per year). Between 2010 and 2014, this percentage increased for Jordanians of all income levels, reaching 48.5% for the poorest Jordanians and 23.5% for the wealthiest (DoS 2010; DoS 2014). Jordanians of all income groups spent a higher proportion of their income on housing in 2014 than in 2010, but for the lowest income groups the proportion increased more. Although the entire country suffers from a housing shortage, the poorest have suffered the most.

Increase in Household Spending on Housing by Income Level, 2010-2014



#### 4.4 : Types of Demand: The Market in 2018

In order to understand the housing market, one must understand demand. To do so clearly requires a distinction between three types of demand. The first, called “need,” refers to “the number of households that do not have access to accommodation that meets certain normative standards” (Heath 2014). It is a measure of the number of people who lack appropriate housing, regardless of their ability to pay market rates for it. The second, “market-occupancy demand,” effectively measures the level of desire for housing by those who are willing and able to pay market rates in order to live in the housing. It is measured, though indirectly, by market trading volume, or the total value of the real estate that changed hands in a given year. Lastly, “speculation,” is demand by investors purchasing property in order to benefit from appreciation in its value rather than for the sake of residence. Speculation can be approximated by looking at the trends in real estate values.

Upon analysis of the available data, we conclude that the current state of the Jordanian housing market is one of very high and increasing need, low and possibly decreasing market activity, and mid-to-high, though relatively stable, speculation.

##### Housing Need

Jordan exhibits high levels of housing need. There has been a continuous shortfall in the production of residential units, particularly at the lower end of the housing market. According to HUDC, between 2004 and 2011, an average of 28,600 units were built each year, but the need for units was over 32,000 (Delmendo 2017). These numbers have only grown: Jordan requires 45,000 new units per year (of which 14,000 are for low-income households) (Alnsour 2016), but investment in new construction supplies only between 36,000 and 40,000 (Khraisat 2015). Jordan suffers from a shortfall of at least 5,000 housing units per year, and this number does not take Syrian refugees into consideration. In calculations that do include refugees, the UNHCR

(2018) states that housing need reached a peak in 2014, at 65,000 units per year, and has since fallen to 45,000 units per year.

Jordan is not the only country in the world suffering from a housing shortage; in fact, it is arguably in a better situation than U.S. states like California, which has been under-building by 90,000 units per year for the past thirty years (LAO 2015). California's population is four times the size of Jordan's, but its housing shortage is ten times as large.

As the issue of affordability remains unaddressed, though, the housing gap is only growing. Jordan's population is increasing rapidly, and the construction of new residential units is not keeping pace. If this situation does not change, unfulfilled need will become more and more intense, and increasing numbers of those living in Jordan will be forced into overcrowded and unhealthful conditions.

#### Market-occupancy demand

Even as property values have increased in the first two decades of this century (section 4.3), the market has slowed. Fewer Jordanians are purchasing homes for occupancy, and fewer new homes are being constructed. This trend is reflected in declining residential mobility (section 9.4) and in rising rentership (section 8.1).

Total property trading dropped by 14% in 2017 (Ghazal 2018a; HUDC 2018). Construction has declined by 30% between 2015 and 2017 (HUDC 2018). The Oxford Business Group reports that "demand" has stagnated or decreased, depending on location (OBG 2018). The downward trend in residential demand is not limited to the past few years: in 2004, 5.7 residences were constructed per 1,000 persons; by 2016, that ratio decreased to 3.4 (HUDC 2018). Unfortunately, yearly statistics between 2004 and 2016 are unavailable, and so we cannot say when the decline took place, though the downturn of 2008 may have played a role.

As the need for affordable housing continues to increase, it is clear that the limiting factor is supply rather than demand. Supply has been curtailed by land prices and by difficulty of construction. Land prices have increased mostly in the speculative jump of 2003 - 2008 with newly available commercial financing after the reorganization of policy (section 3.2), but have continued to increase since. Construction has become more difficult because of material costs (section 5.1), policy and taxation (section 5.2), zoning (section 5.3) and the increasing prevalence of corporatized developers at the expense of more efficient owner-builders (section 5.4).

The only size category of apartments not to see a major decline in sales from 2015 to 2017 was the largest, apartments bigger than 150m<sup>2</sup>. In contrast, apartments smaller than 120m<sup>2</sup> showed the largest decline in sales (HUDC 2018). This supports the tentative interpretation of a growing gap between the poor, who are unable to afford even a small apartment, and the wealthy, who are able to continue buying and selling large residences and thereby raising property values.

#### Speculation

Speculative demand has increased. One major indicator of this is the price of land, which rose by 66% in the past ten years (Al-Ra'i 2017). It is also visible in the glittering towers rising around Amman, built through both domestic and international funds (Daher 2007). Speculation is not

currently as intense as it was during the 2005 - 2008 period, and prices are not rising as rapidly. Speculation, however, has not disappeared. It seems to be the case that investors are not currently placing large new investments in land, but they also are not withdrawing from real estate. They are, for the most part, not buying or selling; rather, they are holding titles to underdeveloped properties in the hope that values will again rise. As a result, the real estate trading market has stagnated, maintaining high property values without either incentivising development or opening up the market.

A major factor that led to the current situation is the increased commoditization of real estate sparked by policy reorganization in the 1990s (sections 3.2 and 7.2). By enabling the rise of large private Jordanian financial institutions, these new policies helped facilitate the liquidity and credit facilities necessary for large-scale commoditized investment in land. Such speculative investment had not previously been possible for lack of funds to fuel it. This type of investment accelerated rapidly during the “massive wave of speculative real-estate development” (Hourani 2014), also called the “bubble” (Madanat 2010) from 2003 to 2008.

Another policy that encourages speculation is the lack of a “white land” tax (section 5.2). Unlike most other countries, undeveloped land is barely taxed, and therefore can be held indefinitely by speculators at very little cost, contributing to the commoditization of land and preventing it from being used for housing.

The Jordan Gate Towers are an iconic symbol of stagnation. Begun in 2004 as a public-private partnership (section 3.3), the towers were under construction throughout the speculative boom. Construction halted around 2010, and the towers have since then sat mostly untouched - too valuable for anything but luxury but no longer “hot” enough for development (Abu-Hamdi 2016).

Some contend that foreign purchases of land, also enabled by reorganization of policy through the Investment Promotion Law of 1995, have driven up the price of housing (Madanat 2010; Obeidat 2013). For example, in 2016, Iraqis invested 31.7 million JD in residential real estate, and Saudis invested 30.5 JD million (Jordan Times 2017). These numbers, though, pale in comparison to the overall size of the sector. Foreign investment represents only about 1% of the total value of real estate exchanged in Jordan (DoS 2015). S. M. Abu-Dayeh (2018) states that foreign investment “has no big influence” on the housing market in Jordan. We conclude that this investment only contributes to unaffordability when it is overly speculative in nature, and further that it is minor compared to the contributions of Jordanian citizens.

How is it possible that residential market activity and the satisfaction of residential demand have decreased even as both need and speculative demand have grown? What are the causes of these trends? We may begin to understand the current Jordanian housing market by noting that high housing need does not necessarily translate to high residential demand. If the cheapest available housing is expensive enough that the poorest cannot afford it, then the number of people in that class will have little effect on residential demand. Furthermore, high speculative demand, by elevating prices of land and construction, may cause an increase in prices across the market.

## 5: Construction

A strong housing sector not only provides shelter, but it also contributes to the economy and provides jobs and economic development through construction. The capability of the construction sector determines not only housing availability in the present, but for decades in the future as the housing stock remains in use. As such, construction policy is particularly critical to the long-term future of the nation. The current obstacles facing the Jordanian construction sector are a major reason for the unaffordability of low-income housing.

Jordan's construction sector enjoys strong financial lending, a well-educated workforce, local supplies of building materials, particularly concrete and stone, and clearly defined government policies relating to zoning and planning. It suffers from over-regulation and high labor and material costs. It is expected to grow rapidly (OBG 2018), and residential construction will represent three-quarters of that growth (El Hanandeh 2015).

This section of the report is divided into four parts. The first part, Economics, discusses construction's role in the Jordanian economy, examining financing, materials, and labor. The second part, Politics, takes up the interactions between government and the construction sector, arguing that the latter suffers from over-regulation and the lack of housing or construction subsidies. The third part, Zoning, describes the land on which construction is undertaken. The final part, Alternatives: History and Future, describes how construction has developed in Jordan and proposes possibilities for the future.

### 5.1 : Economics

The role of the construction sector in the national economy has grown, and the government has ambitions for it to become one of the core sectors of the Jordanian, and even the regional, economy, though it suffers from rising costs (OGB 2018).

The Jordanian construction sector has grown significantly over time. In 2004, it contributed around 280 million JD to the Jordanian economy. By 2017, that number had increased to around 530 million JD (DoS 2017). The share of the construction sector in the Jordanian GDP has remained relatively constant. This share increased from 4.0% to 4.8% from 2004 to 2010, dropping back to 4.4% in 2015 (HUDC 2016). In fact, the contribution of this sector to GDP varies much more widely by season than by year, recently ranging from close to 100 million JD in the first quarter (January - March) of each year to nearly 160 million JD in the third quarter (July - September) (DoS 2015).

The number of permits granted annually for new housing units in the Kingdom has decreased recently. Although permits for 35,057 new units were issued in 2004, only 23,624 were issued in 2017 (HUDC 2018), meaning that significantly fewer new units are being constructed even as Jordan's population continues to grow.

In general, the Jordanian construction sector has grown in stride with the overall economy of the Kingdom. The financing of loans for construction projects, however, has increased much more rapidly than the actual growth in construction projects themselves. This financing has also increased more rapidly than general cross-sector credit. Credit facilities provided to the construction sector have increased from 953 million JD in 2004 to 6,588 million JD in 2017 -

corresponding to an increase from 15% to 26.7% of total credit facilities provided across all sectors of the Jordanian economy (HUDC 2018). This increase in credit availability is not equally shared among construction and real-estate development companies: small, local developers, who tend to be most responsive to their context and thus effective at delivering small affordable infill development, find it much harder than large corporations to obtain credit (Al-Homoud 2009).

Jordan enjoys ample domestic supply of some of the natural resources used in construction, especially stone, including both decorative marble and aggregates used for concrete. Its local industries are capable of processing these resources (OBG 2018). The materials used in housing construction have increased in price lately, which has negatively affected housing affordability. A 70% increase in the prices of cement and steel from 2005 to 2015 caused significant increases in housing prices (OBG 2015). The closures of the land borders with Iraq and Syria have also resulted in price increases for construction materials. Moreover, the government in February of 2017 raised sales taxes on certain steel products used in construction to 16%, which resulted in an increase in construction expenses (OBG 2018). Increases in energy costs over the past two decades have also raised overall construction costs (Obeidat 2013). Moreover, the price of cement is 40 - 70% higher in Jordan than in neighboring countries (Al-Ra'i 2014). S. H. Abu Dayeh (2018), a board member of the Jordan Housing Developers Association (JHDA), contends that collusion on the part of Jordan's six cement factories is responsible for this.

Possibly because of changes in prices, trends of material usage in housing construction have changed between 2004 and 2015. Cut stone (*hajar nadhif*) and reinforced concrete (*ismint musallah*) have increased significantly in usage, while the proportion of homes made from cement brickstone (*tub isminti*) has fallen from 60% to 40% (HUDC 2018).

Labor prices have also increased, making profitable construction more difficult. The minimum monthly wage was raised in February of 2017 from 190 JD to 220 JD (OBG 2018). Over 10% of the construction industry uses informal labor, meaning that, in practice, wages are probably often below this minimum wage (OBG 2018).

Construction is an overwhelmingly male-dominated field, with the sector employing a 14:1 ratio of men to women (HUDC 2018). As women differ significantly from men in their residential needs (Moser 1992), this imbalance implies that the built environment is being constructed in a way that favors men while also disproportionately providing them with salaried employment.

## 5.2 : Politics

The Jordanian housing sector is closely regulated by the government. This has resulted in a low level of informal settlements by the standards of the region (DoS 2016, Sims 2013), as well as regulations that ensure structural safety and the quality provision of utilities. These regulations have also reached an onerous level from the perspective of developers and construction firms (Delmendo 2017), and are widely seen by developers and researchers as standing in the way of new construction, particularly for small builders (Al-Homoud 2009). A Jordanian housing project must undergo seventeen different official procedures for complete authorization (Delmendo 2017). Many regulations may be considered obsolete (Al-Ra'i 2014).

Unlike many other countries, developers of low-income housing receive more taxation than subsidy. It seems that the Jordanian government shows no interest in any large-scale facilitation of affordability. In fact, the Director of Studies and Quality Management at JHDA stated unequivocally “I do not see that the government accords any importance to this issue” (Basbous 2018).

Taxation is a major obstacle to construction. 20 - 30% of all the money spent by developers in any project to construct new homes is taken up by taxes and fees (Ghazal 2018c). This means that any new housing, whether high- or low-end, is currently up to 30% more expensive than it would be in a less-regulated market. Ownership transfer fees are particularly high. Currently, taxation of housing ownership transfer lies at 9%, the highest in the region. Developers have called for a decrease of this tax, a move that could facilitate individual homeownership, but that could also increase the commoditization of real estate (Jordan Times 2017a).

Building height restrictions are a commonly discussed issue. Under current zoning regulations, the height of residential buildings in most areas in the country is limited to four stories above the highest street bordering a given plot. In order to spur more residential development, policy makers are debating new regulations that would allow developers to build higher, constructing more residential units on the same land (Al-Ra’i Center for Studies 2007). Kamal Awamleh, former president of the Jordan Housing Developers Association, encourages such a policy change, stating that it could cause housing prices in West Amman to fall by at least 10 - 15%. Without adequate planning for public transportation, however, it would also cause unsustainable automobile traffic congestion (Obeidat 2013; Venture 2015).

Development in Amman is slowed by a large number of undeveloped vacant lots. Many families invested in land during one of Jordan’s numerous economic booms (see section 4), and have since held the empty land as an investment. Ammanis are able to hold empty land as an investment because of the lack of a “white land tax,” meaning a tax on undeveloped land. Such policies are common internationally, and in 2015, Saudi Arabia passed a 2.5% “white tax law” on vacant residential and commercial land located in highly populated areas (Morgan 2015). The intention of the law was to spur housing construction and address the nation’s housing shortage. Policy makers in Jordan are currently considering a similar law. There, however, are concerns that because vacant land in Jordan is often inherited and owned by multiple family members, the law may be difficult - though all the more necessary - to implement (Madanat 2010). From an academic perspective, Tarawneh (2015) sees a high potential for development of vacant and / or brownfield sites in Amman - a type of development that does not necessarily require the extension of municipal services. She proposes a typology of such sites in the Amman context, arguing that “establishing a set of definitions for Amman’s brownfields is necessary towards using them and recognizing their various potentials.”

The size of housing units is a controversial topic. Smaller units are often more affordable for low- and middle-income families, but larger units bring greater property values and are less likely to be seen as slum-like. For several years, the government was supporting the construction of smaller units. Until 2017, apartments smaller than 150m<sup>2</sup> were exempted from registration fees on the first 120m<sup>2</sup> of the property. In effect, this provision facilitated the housing sector in



general, while particularly supporting the construction of smaller, more affordable units. The exemption was lifted in November of 2017. Developers have called for its reinstatement and for its extension to include larger units (Jordan Times 2017a; Al-Rai 2016).

In May of 2018, the government took the opposite approach. A bylaw was implemented requiring all new housing units to have an area of at least 110m<sup>2</sup> (1,184ft<sup>2</sup>) in zones B, C, and D, and 130m<sup>2</sup> (1,399ft<sup>2</sup>) in zone A (Ghazal 2018b). These minimum sizes are significantly larger than the sizes demanded by most of the population of Jordan, particularly at the low end of the income scale. According to Zuhair Omari, president of JHDA, the “bulk of the demand is for apartments of 90 and 80m<sup>2</sup>” (Ghazal 2018a, b). Note that many attempts to provide affordable housing in Jordan, whether historically (Al-Rajoub and Al-Moumani) or in response to the Syrian crisis (El Sioufi 2016), have made use of housing units as small as 65m<sup>2</sup>. In fact, in the National Housing Strategy in the late 1980s, areas of 50 - 80m<sup>2</sup> were considered “target” areas (MoP 1987), and families at the time were larger than they are today. JHDA protested the law stridently (Saraya News 2018). The political fight is still playing out at the time of writing this report, and it is difficult to predict the outcome, but it is also very difficult to imagine how the private sector will be able to provide affordable small housing units if such regulations remain in place.

Moreover, the government does not subsidize the housing construction industry. With the exception of very specific programs, like the abortive 2008 “Decent Home for A Decent Living” project, the minor activities of the Ministry of Social Development, and the very limited sites-and-services programs of HUDC (see section 3.3), developers are not given direct incentives to construct low-income or affordable housing. This failure has been criticized by voices including academics (Al-Homoud 2009) and the president of the Economic and Social Council (Obeidat 2013). It stands in contrast to many international policies. For example, in the United States, private developers are given tax-credit subsidies averaging nine billion dollars per year for the construction of housing that meets certain affordability thresholds (Keightley 2018).

### 5.3 : Zoning

Amman’s zoning system is simple. Residential areas are divided into four types, A through D. Zone E also exists, but is only present in refugee camps and surrounding areas (Ababsa 2012). These types are defined by minimum allowable plot sizes, a maximum percentage of the plot that can be built on, and minimum allowable setbacks from the edges of the plot. In Amman, A and B zones, which are more amenable to upscale housing, are found in the western parts of the city; C and D are much more common in the central and eastern parts of the city (Potter 2007).

<u>Zone</u>	<u>Minimum Plot Size</u>	<u>Maximum Land Coverage</u>	<u>Minimum Front Setback</u>
A	900m <sup>2</sup>	39%	5m
B	750m <sup>2</sup>	45%	4m
C	400m <sup>2</sup>	51%	3m
D	200m <sup>2</sup>	55%	2.5m

(Potter 2007)

It is easiest to build affordable housing in D-zoned areas, but planners in municipalities across the country prefer to locate A and B zones in their cities in order to more easily provide services and because those areas attract more affluent residents. As such, the scarcity of D-zoned land, particularly in west Amman, is a major obstacle for developers of affordable housing (Asfour 2018; Al-Homoud 2009). Some argue that even D-zoned land plots can be “too large to be affordable to low-income groups” (Ababsa 2012). S. H. Abu Dayeh, board member at JHDA, argues that by artificially limiting the supply of buildable land, Amman’s system of zoning has contributed to increases in land prices that make affordability more difficult (S. Abu Dayeh 2018). Furthermore, the way in which much D-zoned land lies on the fringes of the city means that even if affordable housing is built in it, the low-income families living there will be forced to expend much of their income on transportation.

These issues with zoning have been present throughout the country’s history. In 1985, for example, 90% of residential plots in Amman were either A- or B-zoned, restraining the production of affordable housing to a small minority of the city’s land (Hourani 2014). The creation of the Greater Amman Municipality in 1987 was intended, in part, to prevent surrounding small jurisdictions from up-zoning land and thereby contributing to speculative increases in price (N. Abu-Dayyeh 2004).

#### 5.4 : Alternatives: History and Future

Most new construction of conventional housing units in Amman in the past decade has been in the form of apartments (DoS 2004; DoS 2015). This does not necessarily mean that such construction is the most efficient way of providing new housing units, but indicates that it is the most practical under the current scheme. This section will discuss alternatives as they were practiced historically and as they may yet be approached.

Housing construction in Jordan has changed significantly in the past thirty years. Sims (1990) discusses in fascinating depth the role of the owner-builder in constructing Jordan’s houses. In the 1980s, between 77% and 86% of all new housing built in the country was funded individually, by owner-builders. This phenomenon was relatively constant across regions and between cities and the countryside, but was most common in D-zoned areas. Owner-builders, generally men of the middle class, were usually self-financed and were not professionals in construction practices. They worked closely with traditional master-builders (*mu'allimun*) who have limited financial resources and formal training, but whose assets lay in their experience and their social networks.

These owner-builders and master-builders almost exclusively constructed housing categorized as the dar (plural: dur). Despite the relative economic “informality” of the construction itself, the resulting houses were almost always permitted, inspected, and signed by an architect and by the Jordan Engineers Association, and up to code. These houses should not themselves be called informal. Furthermore, this method of construction was highly efficient: “the owner-builder was found to be able to build for at least 30% less than private developers,” and government-run construction was even costlier than the latter (Sims 1990).

If owner-builders were so important to residential construction in the 1980s, what is their role today? Though statistics on this subject are less available now than they were thirty years ago, one critical piece of evidence supports the conclusion that they constitute a much smaller portion of the country’s housing sector than they did then: the decline in the number of dur. The number of housing units classified as dur has decreased not only relatively, but absolutely, from 1994 to 2015 (DoS 1994; DoS 2004; DoS 2015). Given owner-builders almost exclusively construct dur, this seems to indicate that owner-builders have been replaced by companies (the public sector withdrew almost entirely from housing construction over the same period). Furthermore, the average number of units per housing permit granted has increased from 2.7 to 4.1 over the past fourteen years (HUDC 2018), indicating an increase in the role of companies. Though the conclusion that the role of owner-builders has decreased is speculative, based on the available quantitative data, experts agree with that conclusion. May Asfour, Director of Housing Policy at HUDC, says that owner-builders are still present in Jordan but in a “much-reduced role” (Asfour 2018). S. M. Abu-Dayeh similarly states that owner-builders are now responsible for less than half of housing construction in the Kingdom, but almost all construction outside of Amman. In contrast, the number of housing investment companies has exploded from dozens in the 1990s to over 3,000 today (S. Abu-Dayeh 2018).

Adel Basbous (2018) argues that the decline in owner-builders is primarily due to increases in land prices, combined with finance liberalization (see sections 6.2 and 10.2.2), which has resulted in an environment that is more favorable to larger companies.

We can summarize figures from HUDC (2018), from Sims’ research (1990) and that of Al-Homoud (2009), from the Ministry of Planning’s National Housing Strategy (MoP 1987), and from interviews with officials at JHDC (S. Abu-Dayeh 2018; Basbous 2018; Halaseh 2018) and estimate – roughly - the following breakdown of the sources of new housing in Jordan:

Source	1985	2001	2018
Owner-Builders	86%	~80%	<50%
Private Sector (Investors, Companies)	2%	~20%	>50%
Public Sector (HC, UDD, other)	10%	2%	~0.2%
Worker’s Cooperatives	2%	N/A	N/A

What, then, have been the effects of this decrease in owner-building? With increasing formality of the funding and construction processes comes increasing openness to wealth extraction by the state and by the capitalist class. Owner-builders were only lightly taxed, and often avoided paying taxes. Taxes and fees now raise the price of housing by 20 - 30% (Ghazal 2018b). Sims (1990) suggested that “perhaps the best policy toward the owner-builder housing process is simply to leave it alone.” S. Abu-Dayeh suggests that this policy was followed for less than ten years before a shift favoring corporate investment took place (S. Abu-Dayeh 2018, see chapter 10.2). If the owner-builder and his fiscal efficiency is to see a revival in the context of today’s

housing bubble, policy must explicitly facilitate his path by easing small-scale financing and lightening the regulatory and tax burden on small construction.

Land accounts for a very significant portion of the costs of new home construction: 35 - 40% in Zarqa and Irbid, and 60% in Amman (Al-Homoud 2009; Obeidat 2013). This portion has increased over the past twenty years (OBG 2018). Note that the latter figure for Amman was 40% in 1987 (MoP 1987). Opening new land to residential development is also particularly costly as the extension of infrastructure services to new plots can be prohibitively expensive (OBG 2018) As such, it is particularly financially feasible to pursue construction that does not involve the purchase of land, a possibility that will be described below.

It is a traditional housing practice for families living in the type of housing known as the dar to gradually construct additional stories, with each story comprising a separate unit, to either rent for revenue or to accommodate other household members of their extended family (Alnsour 2011). Construction of these additional units is particularly efficient because the cost of land is already paid. They are accordingly generally 30% cheaper than new construction per unit overall. The sector has at least partially realized this advantage, and in 2014 there were 1,300 permits granted for extensions, slightly more than 10% of the number granted for new construction (Dubel and Hassler 2016). Facilitatory regulation, possibly including the loosening of height restrictions, would encourage this cost-effective type of construction.

Repairing old buildings is even cheaper than adding extensions. Although costs range widely, repairing an uninhabited unit may be 80% cheaper than constructing a new one (Dubel and Hassler 2016). These approaches - repair, expansion, and the completion of unfinished construction - were engaged very effectively in the Norwegian Refugee Council's "Integrated Shelter" program in Jordan (NRC 2015).

## 5.5 : Environmentally Friendly Construction

Jordanian builders and policymakers are increasingly aware of the need for environmental sustainability in construction, particularly after the energy crisis of 2008 - 2009. Jordan is not unique in appreciating the importance of this subject, but it is perhaps even more urgent in this country than in others due to Jordan's reliance on energy imports and its high levels of water scarcity (El Hanandeh 2015). Although the past decade has witnessed a range of technocratic efforts to promote sustainable construction through standardization, this standardization has not been enforced and so has not led to widespread change. Furthermore, research suggests that traditional low-cost construction practices may in fact be the most environmentally friendly of all.

A variety of protocols and references have been proposed to guide new construction toward sustainability, though to this date these protocols have been ineffective in bringing about any widespread change in construction techniques. The first system proposed for a specifically Jordanian context was SABA, developed through teamwork between an academic and a government official in 2008. SABA uses a well-informed seven-dimensional analysis to enable detailed discussion of the environmental friendliness of construction practices (Ali and Nsairat 2008); it seems not to have gained much traction yet among developers, builders, or policymakers. In 2013, the Ministry of Public Works and Housing published the Jordan Green

Building Guide, a set of standards and guidelines for builders. That guide had no legal requirements nor incentives associated with it until 2015, when an incentive scheme was launched that permitted developers an increase in allowable floor-area ratio (FAR) if they complied with the published guidelines. Even with those incentives, however, and as of August 2018, only a single building in compliance with the guidelines was under development and no units had been completed (Zawaydeh 2018). The Jordan Green Building Council, an NGO founded in 2009, and a member of the worldwide group of Green Building Councils, has also published guidelines for environmentally-friendly construction, though these seem to be little more than a user-friendly combination of the Jordan Green Building Guide and the international standards put forth by LEED, and they lack any kind of legal or economic authority (JGBC 2017).

In addition to Jordan-specific standards like SABA and the Jordan Green Building Guide, developers might also choose to follow international green building standards. These standards, like LEED (Leadership in Energy and Environmental Design) and EDGE (Excellence in Design for Greater Efficiencies), have generally been developed in the United States, and are not necessarily appropriate to Jordan's overall environment. These standards carry no official authority in Jordan, but they do carry a heavy weight of global recognition and status. Only a handful of LEED-certified buildings have been completed in the Kingdom, and they tend to be high-prestige flagship locations like embassies or corporate headquarters (JGBC 2017). Although such buildings do indeed mark a transition to increased respect for sustainability, it is very far from clear that these construction standards have any applicability to the kind of workaday residential building that represents the bulk of Jordan's construction industry. In fact, EDGE certification can easily cost 10,000 USD (IFC undated), putting it out of reach for most small- and medium-sized builders, and thus rendering it all but irrelevant.

The Jordan Green Building Council has recently published an in-depth advisory handbook focused on the environmentally-friendly construction of affordable housing (JGBC 2018). This handbook does not claim to be a protocol or standard, but rather a useful reference for builders considering sustainability in their practices. It is published in Arabic, and includes technical information and legible diagrams that are as applicable to single-family owner-builders as they are to large corporate developers. The handbook points out that environmentalism in construction can be achieved by small builders providing affordable housing.

El Hanandeh (2015) chose a different approach. Rather than proposing new standards to change construction practices, he assessed the environmental friendliness of several established Jordanian homebuilding methods. He evaluated buildings, not only on the basis of the environmental effects of their operation, heating, and cooling, but on the basis of the effects associated with the full lifespan of the house from construction to demolition. El Hanandeh found that the simplest, most basic construction type (walls made of a single layer of hollow concrete block without insulation or limestone cladding) was in fact the most environmentally friendly option<sup>5</sup>. This may come as a surprise to those who, following standards like LEED, insist that

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<sup>5</sup> This "economic" building method had the lowest effects on climate change, particulate matter formation, terrestrial acidification, and total-energy resource. The "typical limestone" method had the lowest effects on human toxicity and water depletion. The "insulated economic" and "luxury" methods had the lowest heating and cooling energy requirements (El Hanandeh 2015).

insulation is key for green building. It should call into question the wisdom of assuming that “green building” is synonymous with high-tech construction.

Ultimately, as both El Hanandeh and the Jordan Green Building Council seem to agree, the most sustainable and equitable methods will tend to be the simplest. There is certainly a role for wise regulation, and perhaps that role should be larger than it is currently. Ultimately, though, Jordan will be best served by traditional construction techniques, executed by small builders with local expertise, using local rather than imported materials, and guided by a commitment to both economy and ecology.

## 6: Housing Stock

The majority of real estate circulation in any country is old buildings, not new ones. This section of the report deals with the existing housing stock found in Jordan, and consists of two parts. The first part, Overview, summarizes certain aspects of Jordan’s housing stock including its age and categorization. The second, Vacancies, discusses the unusually high vacancy rate of residential buildings.

### 6.1 : Overview

Jordan’s existing buildings are its greatest resource in meeting the demand for housing. In 2015, there were 776,118 residential buildings in the country, of which 748,194 are characterized as conventional and formal. Most of these buildings were made of cement, concrete, or cut stone, rising between one and four floors. Most are also connected to public water and sewage networks, and practically all are connected to the electrical grid. These buildings contain 2,250,490 housing units, though 432,291 of them are vacant.

Jordan enjoys a young housing stock - approximately 50% of the country’s housing units are less than twenty years old, and approximately 20% are less than five years old (DoS, 2016). In fact, throughout a history characterized by rapid growth, Jordan has often been in such a situation (MoP 1987). These numbers may be compared to the United States, where the median age of buildings is approximately 35 years - in fact, the U.S. state that most closely resembles Jordan is Nevada, the state with the youngest housing stock, at a median building age of 19 years (Miller 2014). Even Nevada does not share the very large share of housing constructed in Jordan during the past five years. Since newer buildings are generally cheaper to maintain, this will continue to benefit the Kingdom for years into the future. This advantage is not shared by Jordan’s neighbors. In Egypt, for example, the average building is 38 years old (USAID 2008).

Jordan’s Department of Statistics recognizes three categories of residential building: the house (*dar*, plural: *dur*), the apartment building (*‘imara*, plural: *‘imarat*), and the villa (*filla*, plural: *filal*). The *dar* is a traditional housing type, generally found in the tightly packed older neighborhoods of Jordan’s cities. A *dar* most often contains only a single housing unit, generally inhabited by a single family. In about a quarter of cases, such houses may contain up to four units, generally accommodated by the construction of additional stories above the original one- or two-story house. The vast majority of recent construction has been in the form of apartments, which generally contain between two and five housing units, but in some cases well over ten (DoS 2015). Villas are the rarest category of housing, representing luxurious single-family residences.

These three types of residential building are not equally distributed geographically within Jordan, nor even within Amman. The number of dur in most of Amman's neighborhoods is less than 12% of the total, although some neighborhoods consist mostly of dur. The neighborhoods with the highest proportion of dur—meaning such housing exceeds 70% of total housing units - are those surrounding the Al-Hussein and Al-Wihdat Palestinian refugee camps as well as the neighborhoods located at the northern, eastern, and southern fringes of the city. Meanwhile, villas / filal are disproportionately concentrated in the elite districts of Abdoun and Dabouq (Ababsa 2013).

In 1994, these three types of housing existed in relative balance, as the Kingdom contained about 270,000 units in dur, 370,000 units in apartment buildings / 'imarat, and 9,000 villas / filal. Over the following twenty years, almost no new dur or villas / filal were constructed. In fact, the number of dur decreased to 220,000 (though it would be premature to draw any specific conclusions from this figure without further study). Over the same period, the number of housing units in apartment buildings / 'imarat quadrupled to 1,514,637. Currently, 84% of Jordan's population lives in apartments / 'imarat (DoS 1994, DoS 2004, DoS 2015).

## 6.2 : Vacancies

In what seems to be a contradiction, Jordan is suffering from a shortage of housing while an unusually large number of units sit empty. Of the Kingdom's 2,282,283 conventional housing units, 18.5% (422,519) are classified by the DoS as "vacant." This classification is the statistic we will use to discuss vacancy, noting that it does not include buildings that are under construction or classified as "closed." At the average occupancy rate of 5.2 persons/dwelling, Jordan's 422,519 vacant units represent a housing stock large enough to house well over two million individuals.

Not everyone agrees that vacancies are so prevalent. W. Halaseh (2018) and S. M. Abu-Dayeh (2018) claim that the number is much lower, and that only perhaps 35,000 apartments are sitting empty. These individuals, however, are representatives of the Jordanian Housing Developers' Association, and may have been speaking only of empty apartments owned by member companies of their organization.

The vacancy rate in Jordan's urban areas is slightly higher than in rural ones, 18.7% to 16.5%. Though this may be unusual in comparison to more-developed economies, where rural vacancy rates are often twice as high as urban ones, it is not unusual when Jordan is compared to countries like Mexico or Egypt, in which the urban and rural vacancy rates are much more similar (OECD 2017, BEO 2016). Remember, too, that Jordan is a country in which 90% of the population lives in urban areas.

Vacancy rates vary widely by governorate. The highest vacancy rates are in Aqaba (24%) and Amman (23%). The lowest vacancies rates are in Mafrq (11%) and Karak (12.4%). At the governorate level, these rates show no correlation with urbanization rates, the percentage of expatriated Jordanians, or the percentage of non-Jordanian residents. This variance by governorate has increased since 2004: vacancy rates have increased in Amman (by 3.2%) and Aqaba (by 2.8%), as well as Tafileh (by 1.4%), and have stagnated or decreased in the rest of the

country. Vacancy rates at the level of the country have increased only slightly since 2004 (DoS 2015).

Raymond Struyk (1988) explored the phenomenon of high housing vacancy rates in Jordan, which were at 11% during the time of his study. He explained those rates according to three distinct and independent elements contributing to the high rates:

1. Units, mostly in rural areas, that had aged past usability and that had been abandoned as residences. Such structures were often converted to storage facilities, but were still listed as housing units in the census figures.
2. Speculative housing construction resulting in units not yet sold or rented. These were generally on the high end of the housing market in all regions.
3. Vacant housing units owned by Jordanians living abroad.

Struyk explained the first element as an accident of definition—many of these “units” are not in fact fit for habitation, and should have been indexed under a different category.

The second element, representing about half of vacancies in Amman in 1986 (though much less in other governorates), appeared to be a natural result of housing construction. Furthermore, Struyk found that in Jordan in 1986, almost 90% of new construction was sold or rented within a year. He concluded that Amman’s housing market was not overly speculative and that absorption rates were reasonable (Struyk 1988).

Regarding the final group, Struyk found that of those vacant units not for sale or rent, most were set aside for expatriated Jordanians working outside the country. Struyk argued that this category of vacant units represented 20 - 25% of all vacant units in 1986. The National Housing Strategy of 1987 stated that it represented up to 57% of all vacant units (Tewfik 1991; MoP 1987). Other commentators writing more recently argue that Jordanian expatriates are a main cause of high vacancy rates (Madanat 2010). Struyk concentrated on this factor in his analysis, suggesting that policy could effectively disincentivize the practice of allowing a unit to sit empty in anticipation of an individual’s eventual return. If those units could be more easily rented, that would benefit those seeking rental housing by adding supply to the market while providing a source of income to the family owning the building. Struyk argued that many families choose not to rent their vacant units for fear that, under Jordan’s strong tenant protection laws, they would not be able to terminate the lease upon the expatriate worker’s return. As such, he recommended a legal measure permitting a landowner returning from abroad to evict their tenants for the sake of their personal habitation. His recommendation was, in some ways, finally satisfied by the 2000 Liberalization of Rent Law (Ammon News 2013), but the full effects of this liberalization have yet to be studied.

Some might argue that, due to the liberalization of financing, speculative building may now be a greater issue than it was in the 1980s. One billion JD worth of housing was built between 2015 and the spring of 2018 and has not yet been sold (Ghazal 2018a). We calculate that this unsold



housing represents (very roughly) 97,000 housing units.<sup>6</sup> This represents about a quarter of total vacancies, or almost 5% of all housing in Jordan.

We also should note that Jordan’s residential vacancy rate of 18.5%, while undoubtedly high, is not extremely unusual internationally.

<u>Country</u>	<u>Estimated Residential Vacancy Rate</u>	<u>Year</u>
Germany	5%	2017
France	8%	2017
USA	12.5%	2018
Mexico	14%	2017
Palestine (West Bank only)	16%	2015
China	18%	2015
Jordan (1979)	15%	1979
Jordan (1986)	11%	1986
Jordan (1994)	20%	1994
Jordan (2004)	18.3%	2004
Jordan (2015)	18.5%	2015
Egypt	27.5%	2008

(DoS 1994; DoS 2004; DoS 2015; USCB 2018; OECD 2017; Huang 2015; BEO 2016; Abdel Razeq 2015; note that these numbers may not include informal construction.)

## 7: Finance

The housing component of Jordan’s finance industry has been characterized predominantly by a very rapid increase in formal housing lending over recent years, growing twenty times in just over a decade (HUDC 2018). This section of the report, which deals with the role of finance in Jordanian housing, is divided into three parts. The first, Status of Housing Finance, overviews the structure of the market. The second, Lending Increase, discusses the factors that led to the rise in lending and its various effects. Finally, Financial Sector Stability, assesses the risks posed

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<sup>6</sup> Given that the average rental value of a housing unit is 172 JD monthly (DoS 2015), and assuming an average price-to-rent ratio of 5, we may, albeit extremely roughly, calculate that the average housing unit is worth 10,320 JD, and therefore that 1 billion JD is worth approximately 97,000 housing units.

to and by Jordan's housing-finance sector, concluding that the government's current prudential measures are appropriate.

## 7.1 : Status

Financing for a home purchase in Jordan generally comes from one of three sources: Individual financing from savings or sale of possessions; informal financing from family members, social networks, or employers; or formal financing from banks (Al-Homoud 2009). While formal financing has become the most important of these, it has not yet become the only option. As late as 2016, researchers indicated that some types of housing funding were still being provided outside the formal financial system, such as employer and family loans (Dubel and Hassler 2016).

Private mortgages in Jordan are generally offered at rates exceeding 7% (Bank of Jordan 2018), while HUDC offers government financing at 10% (Al-Homoud 2009). Note that these private rates are lower than in 2003, when they ranged from 8 - 10%, and compare them also to the United States, where rates tend to be between 4 - 5% (Bank of America 2018). S. M. Abu Dayeh of JHDA argues that several aspects of the Jordanian mortgage market make it difficult for lower- and middle- class Jordanians to access housing finance: the high interest rates; the short time span of loans, which are granted for fifteen or twenty year periods; regulations preventing the sale of a house along with its mortgage; and the un-inheritability of mortgages. Abu Dayeh contrasted the current situation to that before the privatization of the Housing Bank in 1997, when government- supported loans with rates of 4 - 5% were available to Jordanians across socioeconomic classes (S. Abu-Dayeh 2018; see also Struyk 1989).

Mortgages in Jordan are provided by both Islamic and commercial banks, the former being for-profit institutions that manage money in accordance with the religious principles of Shari'ah - most notably those related to prohibitions on speculation and on taking interest. The percentage of mortgages issued by Islamic banks doubled from 21% of all mortgages in 2004 to 44% in 2015, before beginning to decline down to 37% in 2017 (HUDC 2018). Jordan may have the largest Shari'ah-compliant mortgage market share in the region (Dubel and Hassler 2016).

## 7.2 : Rapid Increase in Lending 2003 - 2008

A number of factors came together over the past two decades that have led to an enormous increase in mortgage lending throughout Jordanian society - an increase of 21 times in only thirteen years in absolute numbers (HUDC 2018). This increase sprung from the reorganization of the housing finance sector in 1995 - 1997 (see section 3.2). From 1997 until the first years of this millennium, the private banking sector developed the financial infrastructure and competitive environment necessary for large-scale housing finance. Perhaps sparked by the influx of Iraqi capital in 2003, Jordan witnessed an extremely rapid increase in the size of the mortgage market from 2003 to 2008. Since 2008, the market has continued to increase, but has remained more in line with the growth in GDP and general credit facilities.

Personal mortgage financing was pioneered in Jordan in 1973 with the creation of the Housing Bank, a public shareholding limited company (HBTF 2018) that helped middle-class Jordanians buy homes. In the 1970s, 80s, and early 90s, commercial banks rarely entered the mortgage market, lacking the expertise and funding to compete with the Housing Bank's government-

supported rates. As such, the country did not develop a private-sector capacity for housing lending. Until the liberalization of housing finance in the 1990s, the private mortgage market in Jordan was limited (Struyk 1989) and was thus ripe for reform and expansion (Al-Homoud 2009). In terms of lending capacity, there was “nowhere to go but up.”

The reform of the Jordanian mortgage market was carried out through a series of governmental reorganizations in the late 1990s (see section 3.2). Two events stand out as particularly important. The first was the formation of the Jordanian Mortgage Refinance Company (JMRC) in 1996 - 1997. The second was the sale of the government’s equity in the Housing Bank as it was converted to a fully commercial bank, also in 1997. These structural changes enabled private commercial banks to compete in the mortgage sector.

At the same time as these reorganizations came into effect, and as part of the same overarching policy (Knowles, 2005), the Jordanian economy also became much more credit-friendly across all sectors. Total credit facilities in Jordan increased from 7 to 23 billion JD from 2005 to 2016, a factor of 3.3. Thus, some portion of the increase in housing lending may be understood simply as part of the nationwide increase in credit availability (CBJ 2016).

The final factor that paved the way for the increase in mortgage lending was the increasing un-affordability of property. As property became more expensive due to rising land and construction prices, as well as falling wages (power purchasing parity) since 2008 (World Bank 2018), it became more necessary for young Jordanian families to rely on formal loans to fill the gap between savings and housing prices. Land prices rose together with population growth and the return of expatriated Jordanians from the Gulf (from 2004 to 2015, the percentage of Jordanians working outside of Jordan decreased from 0.6% to 0.4% of the total population) (DoS 2004; DoS 2015). Such changes created a new demand for mortgages.

These four factors taken together - a limited market in the late 1990s, liberalizing reforms of the mortgage market, increasing credit facilities, and housing un-affordability (itself in part a result of the availability of debt) - resulted in a rapid and massive increase in housing lending.

In the late 1990s and early 2000s, the commercial banks that had previously been unable to compete in mortgage provision began to enter the sector, and in competition with one another. Lending, from a consumer’s perspective, became more available: “A loan process that used to take three months is now completed in less than three weeks” (World Bank 2003). The maturities of loans provided by the private sector increased, doubling to reach periods of fifteen years by 2003, although maturities of that length had been provided by the Housing Bank before its privatization (World Bank 2003; Al-Rajoub and Al-Moumani undated). Loans could now be repaid over longer periods, reducing monthly payments and making them more accessible.

In this newly competitive atmosphere, lending grew at a rapid pace. In the 1990s, the total value of mortgages granted in Jordan reached around five million in 1995, but decreased to under two million after the privatization of the Housing Bank in 1997 (Al-Rajoub and Al-Moumani undated). By 2004, housing lending totaled 189 million JD (HUDC 2018). The early-to-mid 2000s witnessed the most rapid period of growth in housing lending in the country’s history:

mortgage provision more than tripled in a year, and by 2005 reached 700 million JD (CBJ 2016). It has continued to climb since, reaching 4.1 billion JD in 2017 (HUDC 2018; CBJ 2016).

Mortgage refinancing has also grown rapidly. Total mortgage refinancing increased from 28 million JD in 2004 to 214 million JD in 2017 (JMRC 2013; JMRC 2017).

The period of disproportionately rapid growth ended in 2008. Until that point, the ratio of housing lending to GDP rose continuously, from approximately 0.7% in 1995 to 8.2% in 2007. In 2008, though, the ratio of housing lending to GDP dipped to 7.3%, and fluctuated by only fractions of a percentage point before again beginning to climb in 2015, reaching 10.5% in 2017. The ratio of housing lending to overall credit facilities also rose rapidly from 1998 to 2008, leveling off at approximately 22%, and has not again begun to rise. This is to say that, while lending has continued to increase since 2008, it has only increased as fast as the overall economy (CBJ 2016).

There are a number of factors that can help explain this deceleration. Most importantly, in response to the global financial crises, financing became somewhat more difficult to obtain (see section 7.3). Speculation also slowed, reducing demand for loans (see section 4.4), although that may have been in part because of the drop in availability. The market may also have simply reached capacity for housing lending.

This enormous change in mortgage availability had important implications for the housing market. It is clear that the years of the greatest rise in mortgage availability coincide with, or slightly precede, the years of greatest rise in property values, approximately 2005 - 2008. This relationship is complicated as the two statistics are determined by many factors and interact in many ways. It is generally agreed, however, that increased housing credit availability tends to result in rising real estate prices (Jiang 2018; Segal 2017; Sutton 2017; Tsatsaronis 2004). “A declining interest rate environment, which keeps servicing costs of ever larger mortgages within the household budget limits imposed by current income, typically boosts the demand for residential real estate” (Tsatsaronis 2004). We observe a major increase in mortgage lending over the past twenty years as well as a rapid rise in property values during the same period, though particularly from 2003 to 2008. Given that the former (both in principle and in international experience) causes the latter, it is reasonable to conclude that increasing mortgage availability in Jordan - prompted by policy reorganization encouraged by the IMF and the World Bank - led to rising land values.<sup>7</sup>

Interest rates, which had been as low as 5% in the 1980s under the Housing Bank (S. Abu-Dayeh 2018), rose to as high as 15% immediately after the period of reorganization in the late 1990s (Al-Rajoub and Al-Moumani undated; Hoek-Smit 2008). After a period of adjustment as private banks began to flourish and cause a rapid rise in mortgage finance from 2003 - 2008, interest rates have again fallen to as low as 7% (Bank of Jordan 2018) - a figure that is still slightly higher than that associated with loans offered in the 1980s.

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<sup>7</sup> Although the quantity of housing finance in Jordan has increased dramatically since policy reorganization, it is unclear whether the quality of finance is superior to what it was in the 1980s.

Mortgage maturities, meaning the lengths of time given to borrowers to repay their loans, have increased since the 1980s. al-Ahli Bank, for example, offers repayment periods of up to 25 years (al-Ahli Bank 2018) compared to the 15-year periods that were offered by the Housing Bank before its privatization in the late 1990s (Al-Rajoub and Al-Moumani undated). These longer periods ease the burden on borrowers.

Terms of application for mortgages have become more flexible, and a higher percentage of Jordanian society is able to apply now than could in the past, when finance was often only available to workers in the public sector.

The rate of formal finance use for home purchase was approximately 22% in the late 1980s (Struyk 1989), meaning that about 22% of Jordanians who made home purchases used formal finance for those purchases. Although we are unable to provide the same statistic for the present day, we do know that the total mortgage market in 2017 was actually larger than the total real estate market (HUDC 2018), indicating that most real estate transactions in the country likely rely on loans.

Increasing mortgage availability and increasing homebuyer reliance on mortgages also affected the situation of property tenure in Jordan. Individuals often ceased to own their residences outright, as they often had under the owner-builder model, and began to inhabit homes that were legally owned by banks (see section 8.3).

The increase in lending over the past twenty years has not been spread evenly across Jordanian society. Mortgages are generally entirely unavailable to those who are not formally employed or those who lack income documentation. This category includes at least a third of Jordanians, and a much larger fraction of Syrians and guest laborers (Dubel and Hassler 2016). Furthermore, public-sector employees - who are typically of East-Bank ancestry - are generally given financially preferential treatment over private-sector employees and the self-employed when applying for mortgages (ibid.). As the property boom of the mid-2000s made mortgages more necessary, it also increased the divide in opportunity between those who could and could not procure loans.

A sharp rise in the scale of Jordanian housing finance from 2003 to 2008 followed the reorganization of policy in the 1990s. While this rise unequivocally made finance more accessible, it coincided with - and probably contributed to - a steep rise in land values. Rising land values, themselves prompted largely by the reorganization of the 1990s (section 4), have made mortgages more necessary. A recently married government-employed Jordanian in 1985 could very likely purchase a house without needing formal finance. A similar individual in 2015 would almost certainly require it.

It is unclear whether the policy reorganization of the 1990s and subsequent rise in housing finance has made housing easier or better for the Jordanian people. Homeownership has declined (section 8.1) and costs have risen (section 4.3). It is impossible to reverse time and see whether the policy regime of the 1980s would have been more capable of handling the problems of the 21st century. It is also impossible, having reviewed the effects of those policies on the real estate

market, to claim with any certainty that the effects of policy reorganization have benefitted average Jordanians.

### 7.3 : Stability

Ten years after the global financial crisis of 2008, the real estate sector everywhere remains in the spotlight because of the general economic risks it carries. Rapid increases in indebtedness, like those seen during recent years in Jordan, were also a key feature of U.S. economy before the 2008 financial crisis. The ratio of household debt to GDP in that country increased from 70% to nearly 100% between 2000 and 2008. The crisis accordingly was related to the fact that many Americans took on housing debts that would be nearly impossible for them to repay.

Although Jordan was not as drastically affected by the crash as many other parts of the world - possibly in part because “Islamic finance as a whole was more resilient than conventional financial sectors to the [2008] global financial crisis” (Hassler 2011; see also Matar 2017) - the crisis was still felt. Land values dropped up to 80% (Speetjens 2012), speculation slowed considerably (see section 4.2), and rents dropped by an average of 15% (GPG 2009).

Several parties have attempted to assess the stability of the Jordanian housing sector (as well as real estate more generally), and have concluded that Jordan is relatively stable in this regard, but that close financial monitoring must be maintained.

The journalist Speetjens (2012) notes that housing loans have become more difficult to obtain after 2008 than before the crash. According to him, this reduces speculative purchases and creates a “buyer’s market.”

The IMF, in its study of the Jordanian financial industry in general, has concluded that the Central Bank of Jordan has taken an appropriate position in terms of prudential measures regarding housing lending. It has implemented a ceiling on direct credit to real estate of 20% of a bank’s local deposits, and designates mortgage loans with a loan-to-value (LTV) ratio of over 80 for those with a high risk weight. Nonetheless, loan-to-value ratios have continued to climb since 2005, with more commercial banks beginning to offer loans with LTVs of 90 or even 100. The IMF does not currently perceive this as a threat to stability, but urges continued close monitoring and the tightening of credit when necessary (IMF 2017). Although IMF concluded that the rapid increase in housing lending “does not appear to have contributed to an undue increase in housing prices” (IMF 2017), others have expressed anxiety regarding the potential for over-speculation.

The World Bank similarly concluded in a region-wide study that Jordan is relatively well-protected by financial prudential measures. This study also pointed out the relative isolation that Jordan enjoys from the international market, particularly the very volatile Dubai market, which protects it from international market collapses (Hassler 2011).

The Central Bank of Jordan itself echoed the conclusions of these two institutions, arguing that “banks need to be cautious and thoroughly monitor the evolution of these risks when deciding to expand loans to the household sector in particular and real estate sector in general” (CBJ 2014). They did not make any policy suggestions to improve stability beyond the regulations already in effect, and concluded that across all sectors, “Jordan has a solid and sound banking system that is

generally capable of withstanding shocks and high risks due to the banks' high levels of capital and comfortable levels of liquidity and profitability" (CBJ 2016).

## 8: Legal Infrastructure and Tenure

Tenure is the legal means by which residents occupy their homes, whether as homeowners, renters, or in some other way. In Jordan, tenure law is largely inherited from Ottoman and British regimes (Madanat 2010). This legal structure, at the level of the individual and of society, determines much of the function and patterns of housing.

In Jordan, about 63% of residents own their homes, 21% rent, and the remainder occupy their homes by other means (see below). We will expand upon these figures in the first part of this section, Homeownership, and discuss the implications of contemporary mortgage-based tenure on the rights of residents. Jordan is among the countries in the Middle East with the most highly-formalized land system, as we explore in the second part, Formality. We then move to examine the presence and enforcement of laws that protect property rights in the final part, Property Rights.

### 8.1 : Homeownership

Homeownership is often pursued as a policy goal, but it is unclear whether high homeownership rates actually convey the positive social effects that are often ascribed to them. Although homeownership sometimes provides a vessel for household wealth accumulation, at other times, modern financing structures and the illiquidity of a house as an investment mean that this may not be the case.

HUDC cites a decline in homeownership from 73.3% owner-occupancy in 2004 to 65.2% in 2015 (HUDC 2016), and the Department of Statistics indicates a reduction from 66.1% to 62.6% over the same period (DoS 2015; DoS 2004). Of course, this decrease is relative rather than absolute, and so does not necessarily represent homeowners being converted to renters, but may rather represent new households, whether immigrants or newlyweds, choosing or being forced to rent rather than buy.

Internationally, Jordan still has a relatively high homeownership rate. Regionally, it is significantly higher than Egypt (44%) (USAID 2008), Morocco (46%) (Al-Hawari 2018) and Saudi Arabia (50%) (Arab News 2018), and slightly higher than Turkey (60%) (TE 2015) and Tunisia (67%) (Al-Hawari 2018), though lower than the West Bank (84%) (Ma'an 2011). It is higher than some European countries like Germany (52%) (TE 2016), but lower than others like Spain (78%) (TE 2016). It is remarkably similar to the United States, where homeownership declined from a 2008 high of 69% to the current 2018 level of 64% (FRED 2018).

Not all residential tenure in Jordan is homeownership or rental. In 2004, 7.2% of households resided in a housing unit owned by a relative, though that ratio had declined to 2.4% by 2015. Note that this decline cannot be fully explained by Jordan's population growth from 5.3 to 9.2 million over the same period. Rather, it represents a decline in the absolute number of Jordanians living with this tenure status: a decline of approximately 100,000 residents. Also, from 2004 to 2015, the Kingdom has seen a decrease from 2.2% to 1.8% of housing units being occupied in

exchange for work, and an increase from 0.5% to 0.9% of housing units being occupied for free (DoS 2004; DoS 2015).

The different types of housing stock in Jordan are often associated with different types of tenure. Most notably, apartments are rented at a significantly higher rate than dur. While 87% of dur are owner-occupied, owner-occupation rates are only 59% for apartments.

Homeownership rates also vary by geography and demographic within Jordan. Jerash has the highest homeownership rate of any governorate at 77%, while Aqaba has the lowest at 47%, and Amman the second-lowest at 55%. Syrian refugees in Jordan report a homeownership rate of 1.2% (UNHCR 2018).

Although Jordan has a strong history of homeownership, before the 21st century that ownership was generally of houses built in the owner-builder pattern (see section 5.4), and funded by savings, informal lending, or through public institutions like the Housing Bank. In the mid-2000s, quickly rising property values were accompanied by an explosion in mortgage lending: housing loans to individuals increased by a factor of twenty from 2004 to 2017 (see section 7.2).

Many see this increase in lending as a positive change, a sign of financial-sector development facilitating middle-class Jordanian ownership of housing. In reality, however, the issue is more complicated: homeownership has fallen even as lending has risen, and the increasing necessity of lending has problematic implications.

Because of the rise in lending, the indebtedness of individual Jordanians has increased. In 2016 alone, individual indebtedness throughout the Kingdom increased by 13% to make a total of 9.7 billion JD, or, six times greater than overall economic growth during that year. Approximately half of this debt was from housing loans (Al-Dabisiyah 2017; see also IMF 2017). Total household debt as a percentage of the Jordanian GDP reached 35% by 2017 (IMF 2017), which is comparable to figures from the United States in the late 1950s (where this statistic currently lies near 80%) (TE 2018). It is also more than twice the current level in Saudi Arabia.

An occupant owing a mortgage debt to a bank does not fully own their residence, and is much more vulnerable than a homeowner who acquired their house in a more traditional manner. Foreclosure is a very real threat in Jordan, where banks foreclose on six thousand Jordanian residential properties each year (Al-Dabisiyah 2017). Fortunately, however, it can be difficult for a bank to act upon its perceived “right” to foreclose on a property, often due to what Hassel (2017) describes (albeit without statistical evidence) as “a cultural reluctance to buy the foreclosed house of another family.” It is also important to remember that, despite this increase in mortgage provision, the rate of homeownership in Jordan has decreased over the past two decades (see section 7.1).

## 8.2 : Informality

The definition of ‘informality’ in settlements and housing is often debated, with various groups using different technical definitions (H3 2015). Sims (2013) defines informal development as “processes that contravene urban land use plans, subdivision regulations and / or building permit regimes.” This can mean construction that is one or more, but not necessarily all, of the



following: unplanned, unregistered, untenured, and uninspected by central authorities. Jordan's UNRWA camps for Palestinian refugees, for example, "do not constitute informal areas legally or administratively [but] are informal areas from a structural or morphological point of view" (Ababsa 2012).

Jordan has a long history of challenges to formality in housing, represented by East Bank Bedouin groups squatting on public land and by Palestinian refugees coming in large numbers after the Arab-Israeli wars of 1948 and 1967. The Jordanian state has responded differently to these two populations (Ababsa 2012,;Razzaz 1993).

Non-conventionally constructed housing (e.g. tents, barracks ...) has decreased dramatically over the past decades, and the vast majority of Jordanians now live in conventional homes with land titles. In fact, the number of households residing in tents has decreased from 9,607 to 3,857 in the ten years (DoS 2004; DoS 2015). As of 2015, non-conventional housing made up just 4% of residential buildings in the nation, most of which has been located in the more rural areas of the country. Madaba and Zarqa have the highest percentage of non-conventional units (19 and 22% respectively). This is primarily due to the presence of large Syrian refugee camps in both governorates. On the scale of decades, Jordan has developed very quickly in this regard: less than seventy years ago, the 1952 census indicated that 29% of Amman's population lived in tents and 8% in caves (Abu-Dayyeh, 2004).

According to a 2006 HUDC study, only 100,000 people in the entire country lived in informal settlements, though Myriam Ababsa argues that this is because "what counts as an informal settlement has been very narrowly defined" (Ababsa 2012). It seems, though, that no matter how the terms are defined, housing in Jordan is significantly more formalized than in nearby countries like Syria (Goulden 2011) and Egypt (Khalifa 2015) where as much as half of the population inhabits informal areas.

### 8.3 : Property Rights

Jordanian land titling is remarkably well-developed, particularly in comparison to other regional economies (Hassler 2011). This has the doubly positive effect of streamlining real estate transactions and of facilitating educated policymaking. Although the legal scheme admirably includes non-citizens, is gender-inclusive, and provides protections for the poor, it does not always succeed in protecting these groups in practice. This legal framework can also be disruptive of traditional rural landholding schemes.

Under Jordan's 1994 Landlords and Tenants Law, the right to enter into a housing contract is extended to any individual, including refugees. Thus, according to the law, refugees, even those without citizenship, are able to benefit from the same contractual protections as Jordanian citizens (Goyes 2017). In practice, however, about 8% of Syrian refugees fear eviction, and 37% lack formal lease agreements (UNHCR 2018).

One measure of the property rights afforded to residents of Jordan is the scope of their protections from the government - that is from abuse of eminent domain. Jordanian law nominally provides strong protections to landowners. Accordingly, only a quarter of any given property may be expropriated (the so-called "legal quarter," or, *al-rub' al-qanuni*).

These laws, however, may not protect the poor from municipal building projects. For example, in order “to free building land along Wadi Abdoun [downhill from the Abdoun district], 160 families were evicted and poorly compensated” (Ababsa 2012; Ababsa 2013). Moreover, in the words of Abu-Hamdi (2016), in the Wadi Abdoun case and at least two others, the Greater Amman Municipality employed an “inversion of the planning practice of eminent domain.” In both the construction of the Jordan Gate Towers and the Abdali project, private land was claimed from citizens by a public agency before being turned over to another private group for the sake of development (Hanshaw and Ryan 2018; Parker 2009).

When discussing housing provision to low-income people, it is necessary to discuss not only prices, but also the legal and social mechanisms of acquisition and the provision and protection of property rights. A study by the Housing and Land Rights Network (HLRN) concluded that Jordanian law does indeed provide reasonably strong property rights to the poor on paper. It also found that, in practice, it can be difficult for impoverished families to understand, much less defend in court, their property rights. Individuals may have trouble proving ownership. They may also be vulnerable, due to a lack of knowledge of the legal system, to exploitation or social pressure (HLRN undated).

The Jordanian legal system also often fails to protect the land rights of women. As Ababsa notes:

Property ownership is a male domain in Jordan, where women are dependent on men for housing. A patriarchal pattern of power dominates both inheritance and property. While the inheritance rights of women are formally enshrined [...] female heirs continue to face social pressure to renounce their rights in favor of male heirs.

Ababsa explains how women are forced to renounce their property rights through social pressure as well as legal trickery wherein actors take advantage of their lack of knowledge around land value (see also Sidorova 2017). As land is often one of the greatest vessels for wealth and investment, the denial of women’s property rights is a primary manner through which their disenfranchisement is structurally maintained (World Bank 2016).

## 9: Residential Practices

In order to understand housing in Jordan, it is necessary not only to investigate the housing infrastructure - that is, the housing stock - but also the ways in which homes are inhabited. Cultural traditions and innovations, economic pressures, material conditions, policy, and urban planning all influence demand for housing in general and in specific types of housing. It is therefore important to understand the relationships between policy and dwelling practices.

We draw on two quantitative measures gathered by Jordan’s Department of Statistics that provide useful insight into dwelling practices: duration of residence and household size. Other than these measures, we examine housing through qualitative data in order to present a more intimate picture of how housing is experienced in Jordan.

### 9.1 : Household Size

Household size is the number of individuals inhabiting a given housing unit. Over the past 35 years (1979 - 2015), the average number of persons per household in the Kingdom has decreased

by 28%, from 6.7 to 4.8 (DoS 1994; DoS 2004; DoS 2015, DoS Jordanian Mothers, original calculations). This figure varies only marginally between urban Amman (5.3 persons / unit) and the rural regions of the country (5.2 persons / unit) (DoS 2015).

The decrease in household size - a trend that is likely to continue - indicates that the demand for housing units will increase in Jordan even if the population remains constant. Of course, the population will most likely continue to grow rather rapidly, compounding this effect. This decrease also means that demand for smaller apartments, affordable and amenable to small families or even individuals, will continue to increase. The government should not continue to base housing policy on the assumption that large families are prevalent. Accordingly, the imposition of the May 1, 2018 bylaw preventing the construction of apartments smaller than 110m<sup>2</sup> seems counterproductive in light of recent trends regarding household size (see section 5.2).

It is worth noting that the decrease in average household size in Jordan coincides with a steep decline in fertility rates over the past several decades. Between 1976 and 2004, fertility rates decreased from 7.4 children per woman to 3.2 (DoS Jordanian Mothers). There is also evidence that the decline in fertility rates stalled from 1998 through at least 2012 (Cetorelli 2012). This decrease reinforces the prediction that household size will continue to shrink.

International data indicates a clear positive trend negatively linking women's educational attainment and fertility rates. This trend, however, is context-specific and the relative importance of various causal mechanisms is unclear (Kim 2016). Jordan may in some senses be an outlier in this matter (UNDP 2005), and it is critical to recognize that the merits of women's education in Jordan go far beyond its effects on fertility rates. As Adely (2012) notes in her ethnographic study on women in Jordan's public education system:

The visions of what education could provide these young women were not necessarily in accordance with a global narrative about women's development through education. Nevertheless, families connected many of their aspirations for a better future for their children to the promise of education [...] they were concerned that their daughters have the power to care for themselves and their families.

What else may we learn from these figures of 5.2 persons / unit, or 4.8 persons / household? These figures are relatively high according to the international average, but low or average when compared regionally. European nations are generally in the range of 2 to 3 persons per household (UN 2017) while Middle Eastern nations range from 4 to 8.

Country	Average Household Size	% Female Head of Household	% of Households with children under 15	% of Households with both Children under 15 and adults over 60	% of Households with Children under 15 for which both parents are present
U.S.A. (2010)	2.6	47	29	2	69
Netherlands (2011)	2.3	52	22	0	86
China (2000 - 2010)	3.1	15	57	12	84
Turkey (2003)	4.1	12	56	8	94
Egypt (2014)	4.1	13	63	7	94
Lebanon (2004)	4.3				
Jordan (2012 - 2015)	4.8	13	65	6	94
Palestine (2007)	5.9	10	71	7	95
Saudi Arabia (2010)	5.6				
Burundi (2010)	4.8	27	81	10	70
India (2009 - 11)	4.8	12	63	14	89
Guatemala (2014)	4.8	25	74	14	70

(United Nations 2017)

## 9.2 : Female Heads of Household

Like many Arab countries, relatively few households in Jordan are headed by women. But it is important to remember that some are, and that these households have unique housing needs. Worldwide, female-headed households often fail to gain the same tangible benefits from low-income housing projects that male-headed households do, in part because of women being excluded from decision-making (Moser, 1992). For example, in Jordan the construction of large housing units with multiple bedrooms disproportionately benefits male-headed households; an average male-headed household has 5.0 members while an average female-headed household has 3.4 (DoS 2015, original calculations).

A full third of Syrian refugee families residing in Jordan are female headed. These women suffer from economic discrimination (less than 2% of work permits given to Syrian refugees went to

women in 2016), and from housing difficulties such as poor quality and the threat of eviction (UNHCR 2018).

### 9.3 : Overcrowding

As the number of persons / unit has declined, so has the rate of overcrowding. In 2016, an average of 1.4 people shared each bedroom, compared to 1.7 in 2004 (HUDC 2016). This situation is clearly much better than in the 1980s, when over 40% of Jordanians were living four or more to a room (WBIEG 1996). The situation may be improving, but the problem is nonetheless present. In an interview, the director of policy at HUDC stated that the country's housing shortage is a "hidden problem," because while homelessness may not be visible on the streets, in low-income populations multiple families often share a single housing unit. She went on to state that HUDC makes use of overcrowding statistics to direct their efforts geographically, choosing to serve the regions of the country that suffer the most from overcrowding (Asfour 2018).

Syrian refugees live in extremely overcrowded communities, with an average of 3.4 persons / bedroom (NRC 2015).

### 9.4 : Residential Mobility

The average occupancy duration has increased across the Kingdom. In 2014 the average Jordanian family had occupied their current residence for about thirteen years as opposed to eleven years in 2004. This implies that residential mobility has decreased and that households are moving less frequently than they once did. In this section, we will first examine the Jordanian statistics themselves, comparing them both domestically and internationally, and then proceed to discuss possible causes and effects of the decrease in residential mobility.

The statistics describing the duration of occupancy can be broken down by criteria including region and housing type, and the results of some of these breakdowns are presented below. Several conclusions may be drawn from this data, both domestically in comparison to other aspects of housing in Jordan, and internationally in comparison to similar statistics elsewhere.

Residential durations in rural areas are higher than in urban ones, which is a common pattern internationally. Furthermore, residential durations are higher among households in dur than among households in apartments. In fact, from 2004 to 2015, households in dur have decreased in mobility to a greater extent than households in apartments.

Jordan has a relatively high rate of residential mobility, at least when compared to European nations. Only about 20% of urban Europeans move in a given five-year period, compared to nearly 40% of Ammanis. In fact, Jordan most closely resembles the United States, as 34% of Americans moved during the five-year period from 2010 to 2015 (Ihrke and Faber 2012; USCB 2017). It also resembles Nordic European countries like Denmark or Sweden (Eurostat, 2016). Regionally, Jordanians are significantly more mobile than Egyptians, 19% of whom move in a five-year period. This is likely due to the predominance of rent-controlled apartments in the Egyptian housing market (USAID 2008).

It is important to note that Syrian refugees in Jordan move house at a high rate, with a full 40% of refugees reporting a move within the past year. Only slightly more (41%) reported moving in

the past three years (UNHCR 2018). This may imply that, while it is difficult for Syrian refugees to find housing that is stable for at least one year, housing that is stable for one year will tend to be stable for at least three.

	2004: Average residence duration	2014: Average residence duration		
Kingdom	11 years	13 years		
Amman (Urban)	10 years	12 years		
Kingdom (Rural)	13 years	15 years		
Dur	13 years	15 years		
Apartments	11 years	12 years		
	2004: Portion Moving in Last Five Years	2004: Portion Moving per Year	2014: Portion Moving in Last Five Years	2014: Portion Moving per Year
Kingdom	38%	10%	36%	4%
Amman (Urban)	43%	13%	38%	5%
Kingdom (Rural)	31%	7%	27%	2%
Dur	30%	7%	23%	1%
Apartments	40%	11%	38%	4%
				2018: Portion Moving per Year
Syrian Refugees				40%

(Numbers based on DoS 2004; DoS 2014, original calculations; all figures are estimates. Only conventional housing is included.)

Residential mobility is a theoretically fraught topic that is subject to a variety of interpretations. To understand the causes of this trend, we will rely on the theories of Rossi (1955) and Coulter et al (2016). Both sources rely on “life course” models, emphasizing the importance of understanding mobility by examining changes over the life of the individual.

For Rossi, “moves are processes to adjust the ‘mismatch’ between housing needs and actual housing consumption” (see also Huang and Deng 2006; Nowok et al. 2013). In other words, residential mobility is a form of matchmaking between household characteristics, which determine demand, and market characteristics, which determine supply. Households move in order to regain equilibrium between needs and consumption, generally in response to events that alter one side of that balance such as childbirth, changes in employment, or a market crash. Coulter builds on Rossi’s theorization, arguing that increased attention should be given to social relationships between individuals as well as relationships between individuals and institutions. He emphasizes the importance of family bonds such as those that enable children to move back in with their parents during times of economic hardship. Such a focus on social relationships will be all the more important to understanding residential mobility in Jordan.

In the tradition of these researchers, we can interpret the decline in residential mobility as a sign of changes on the side of individuals, on the side of the market, or (most likely) both.

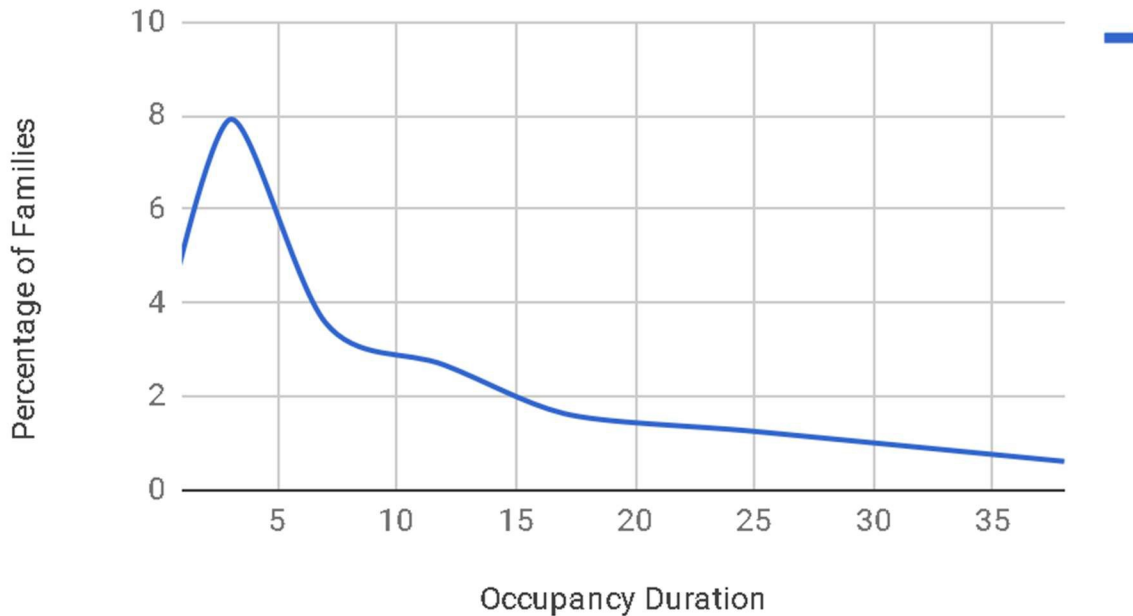
On the side of individuals, we might interpret the decline in Jordanian residential mobility as a sign that the Jordanian life-course is changing in ways that reduce the number of events prompting moves. This interpretation is consistent with the decline in fertility rates, equivalent to a decline in birth events that may cause families to move. Ultimately, though, and in order to fully understand the meaning of residential mobility in the Jordanian context, carrying out an in-depth qualitative exploration of the Jordanian life-course as it relates to housing will be necessary. Some first stabs at such an exploration might include an ethnography of moving in Jordan, listing various causes for moves and the life events that accompany them, broken down by social groups and types of move. Such an ethnography might also explore the assumption that Jordanian families often seek to buy a “house-for-life” (Al-Homoud 2009).

On the side of the market, we might interpret the decline in residential mobility as a sign that housing is changing in ways that hinder movement for families who might otherwise choose to move. This interpretation is consistent with the decline in housing affordability.

It is likely that both changes in the Jordanian life-course and in the national housing market are responsible for this decline in residential mobility. In order to predict the effects of the decline, however, it is important to study the matter further and to determine the extent to which each aspect is responsible. If, for example, the market is the primary cause, then we may expect residential mobility to again increase if housing becomes more affordable. If the cause is more cultural the effect may be more permanent.

Residential mobility arguably has important effects on social psychology and on public health (Dong et al. 2005; Morris 2018; Oishi 2010; Schug 2009), but exploring those effects is beyond the scope of this report.

## 2014 Occupancy Durations



### 9.5 : Independent Young Adults

It is the social norm in Jordan for young people to live with their parents until marriage. There has been some indication in recent years that this has begun to change for some Jordanians. This subject has not been studied in great detail, and statistics describing young people living away from their families are not readily available.

Although young people of all genders have begun to live away from their families in Amman, perhaps the only research to directly address this topic has been that of Adely (2016) in her study of young single women who move to Amman for employment. She describes this trend as a “phenomena [sic] clearly on the rise,” and identifies a number of its features. These women often move to the capital after completing their bachelor’s degrees. They tend to be employed in technical fields in the private sector. They remain closely connected to their families, generally having moved with their parents’ blessings. Their financial relationships with their parents are varied, however, with some young women sending money home regularly, and others receiving it from their parents (Adely 2016).

For housing, these young women living in Amman tend to have two choices: dormitories such those located near universities and commonly used by students, or shared apartments. Dormitories tend to be costly, and as such, young women have begun to share apartments more often. These shared apartments are usually gender-segregated and exhibit high rates of occupant turnover. If this phenomenon of young people sharing apartments is, as it seems, a growing practice, then it should be reflected by policies that facilitate the construction of appropriate housing.



The average age at first marriage for Jordanian women increased from 21.4 to 25.6 between 1979 and 2004. (DoS, Jordanian Mothers). It is difficult to make direct correlations between this statistic and housing policy, but if women are starting families several years after university graduation, it may imply an increased demand for bachelor(ette)-affordable housing, whether shared or as studio apartments.

## 9.6 : Social Interaction in Residential Settings

For decades, researchers have understood the power of the built environment to shape social life in cities (Gehl 2011; Whyte 1980). This power can be culturally specific, and only once has it been seriously studied in a Jordanian residential context. Abu-Ghazze (1999) explored the relationship between housing layout and social interaction in the public housing project of Abu-Nuseir. Abu-Ghazze's study found that several factors tended to facilitate casual interaction and the growth of friendships between neighbors. His conclusions remain relevant to this day.

Easy access and “flow” between the inside of a housing unit and the street-level outside space strongly correlates with social activity. Visual as well as physical access matters. People living on the ground floors of apartment buildings had twice as many friends in their block as those living on the upper floors of the same buildings. Easy access facilitated casual social interaction:

Around low residential buildings with direct access to the outdoors [...] there is no need for people to make many decisions and preparation to go out. It is just easy to ‘pop out’ to see what is going on, drink a cup of coffee out on the doorsteps, and so on (Abu- Ghazze 1999).

The arrangement of open space is more important than its quantity. Wide open un-designed spaces, though they might meet a planning office's quota for green space in a given project, are “lost” and “indefensible” (Newman 1972; Trancik 1986). In Abu-Nuseir, they feel like a “no-man's-land.” However, spaces that are smaller, more private, and cozier find much greater social use. As Abu-Ghazze states, “Respondents in Abu-Nuseir expressed a desire for and a delight in smaller areas that had an intimate enclosure and some landscaping.” A smaller space where things happen is much better than a large one where they don't.

These results provide instruction to any architects designing large-scale housing developments, whether in the public or private sectors, and to planners laying out neighborhoods and zoning regulations even without direct control over architectural form. Amman's traditional neighborhoods—the hills immediately surrounding downtown—boast an urban fabric conducive to social interaction for many of the same reasons that Abu-Ghazze emphasized in Abu-Nuseir: low houses with small, private open spaces and a gradual “flow” of access to wider public areas. These types of urban fabric, however, have been progressively lost in the city's more recent neighborhoods, built since the 1960s and 70s.

Abu-Hamdi (2016) criticizes the Abu-Nuseir development for its imposition, through urban design, of a new and unfamiliar way of socializing. She connects the design of Abu-Nuseir to international ideals for modern architecture, and describes it as ill-fitted to its social context: “While Abu Nuseir also attempted to foster a sense of community through the grouping of homes and the provision of open spaces, this was not community built around kinship.” Rather,

according to Abu-Hamdi, “the new homogenized housing system dismantled [traditional] social complexity.” Ultimately, Abu-Hamdi goes so far as to conclude that “The physical construction of a modern way of life in Abu Nuseir was an attempt to untangle powerful tribal networks that, too often, stood in the way of state growth and planning control.”

Khawaja (2015) examines the housing complexes of the 1970s and 80s (such as Abu-Nuseir) and the 2008 National Housing Initiative, comparing them to the gated communities of the 2000s and 2010s. She finds that the housing complexes provide public spaces that are “publicly accessible, open, and uncontrolled.” She argues that the gated communities in contrast meet none of those conditions and thus “suppress the public’s potential from exploring and living the quality of life in those spaces” (Khawaja 2015).

## 10: Housing of Syrian Refugees

There are now over 1.3 million Syrians living in Jordan, well over 10% of the country’s total population. About half of them have been recognized by the UNHCR as refugees, and approximately 20% of those recognized refugees are living in camps. This population forms a unique group, with its own demands from and effects on the Jordanian housing sector.

### 10.1 : Residential Experience and Needs

The vast majority of Syrians living in Jordan, about half of whom are officially refugees, reside in “urban host communities,” particularly in the governorates of Amman, Irbid, Mafraq, and Zarqa (UNHCR 2018). Many of them suffer from inadequate housing conditions, particularly those in refugee camps.

The status of refugees in Jordan is legally temporary, with the expectation that they will eventually return to their country of origin. The Syrian Civil War has continued for eight years, however, and a return to stability does not appear to be close at hand. As a result, camps like Za’atari, which were originally constructed to provide temporary accommodation, have become increasingly permanent. Za’atari has become Jordan’s fourth-largest city. The quality of housing in these camps is often unfit for permanent habitation (Oxfam undated). Syrians in Jordan occupy buildings with an average of 3.4 people per bedroom, compared to an average of 1.3 among the Jordanian population (NRC 2015). Syrians live on extremely limited means, with an average household income of 176 JD/month. Furthermore, “the overall housing conditions of refugees are deteriorating” (UNHCR 2018).

Jordan has a history of watching refugee camps gradually become permanent settlements, as is the case with the Palestinian camps constructed in the 50s and 70s that now blend into the broader urban fabric of the cities in which they are located.

An estimated 40% of Syrians refugees who work in Jordan work in construction (OBG 2018). Investment in housing construction, whether targeted to Syrians or not, is likely to provide work for the refugee population while also addressing Jordan’s housing shortage discussed earlier.

These refugees, like the millions of Palestinian, Iraqi, Sudanese, and Yemeni refugees before them, came to Jordan hoping to eventually return home. While that hope should not be

abandoned, we must acknowledge the likely possibility that many Syrians stay in Jordan for the long-term. As such, their housing needs have become the responsibility of the Jordanian society that they have joined. However, the Jordanian government has shown no signs that they intend to provide the infrastructure necessary to make Za'atari and the other camps more sustainable, habitable, and permanent places to live. A failure to provide long-term sustainable housing today will redound to Jordan's discredit years from now when the housing demand remains unfulfilled. Although some aid organizations have admirably provided cash aid for housing, this is not a sustainable solution. As Kelberer (2015) remarks:

[n]ew construction [as opposed to cash grants] would provide jobs for low-income residents, both locals and refugees. And if and when Syrian refugees leave Jordan's cities, the new and improved housing would remain, to the mutual benefit of Jordanian renters and landlords, a model of what humanitarian scholars term 'development aid,' as opposed to the emergency aid of the cash grants.

UNHCR (2018) agrees, suggesting that "national and international humanitarian actors [c]omplement multipurpose cash assistance with interventions that ensure essential housing outcomes such as security of tenure."

The Norwegian Refugee Council states (2015), as a policy recommendation, that:

[h]umanitarian and development actors should prioritise shelter responses in host communities. Given the scale of shelter needs and that it has become a key source of tension within host communities, actors should ensure that they take into account the market effects of interventions and work with local communities to ensure outreach and programming that facilitates social cohesion [...] The international community should continue to support activities that improve access to adequate housing through increasing the available housing stock [...] [and] benefit Syrian refugees and Jordanians alike.

## 10.2 : Effects on the Housing Market

Many Jordanians and foreigners identify Syrian refugees as a key cause for rising housing prices. Although they may have played some role in housing inflation, particularly between 2011 and 2014, the migration of Syrian refugees should not be considered a primary determinant of housing unaffordability: houses were unaffordable before Syrians arrived.

Starting in 2011, the increase in housing prices has been greatest in the northern regions of the Kingdom, and some say that this "could point to housing demand from Syrian refugees as the main driver behind real estate inflation" (IMF 2017). Ali et al (2014), writing for the Jordan-based publication *7iber*, claim that an influx of Syrians to Jordanian cities has driven up the price of housing for all who live in the Kingdom, particularly for those at the lowest income brackets. In Mafrq in 2014, rent had increased threefold since the beginning of the Syrian crisis (Ali 2014). Guttman (2015) does not disagree with the conclusion that the Syrian Civil War has contributed to rent prices, but argues that "the increase isn't directly from Syrians, but from aid workers."<sup>8</sup>

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<sup>8</sup> There is also strong evidence that Syrian refugees in Turkey had no meaningful effect on housing prices over the last decade (Balkan and Tumen 2016).

It is not unprecedented that a refugee influx would raise housing prices in Jordan. In the wake of the US's 2003 invasion of Iraq, price increases of up to 400% were noted in some of Amman's neighborhoods (Mango 2014). A key difference, however, was that many of the Iraqi refugees were of the urban middle and upper classes, and resettled in west Amman neighborhoods such as those in the vicinity of Wasfi Al-Tal (Gardens) Street. These refugees therefore had less of an effect on affordability at the low end of the market.

It is difficult to deny that the influx of Syrians had some influence on housing prices in Jordan, particularly during the first phase of the refugee crisis in 2011 - 2014 and in the northern governorates. By 2018, the resulting increase in prices had slowed. Errighi and Griesse (2016) report that housing inflation in Jordan peaked at 6.5 - 8% in early 2013, but receded to 5% by the end of that year, and to 1.5% by 2015. UNHCR (2018) tells the same story in slightly different figures, saying that housing inflation peaked in 2014 at 6.8%, and dropped to 2.5% by 2016. CPI figures (see TE 2018, also pt. 3 of this report, UNHCR 2018) indicate that housing prices in Jordan increased at the same speed, if not faster, during the years before the Syrian Civil War than during the years following its outbreak. In other words, the Jordanian housing market was already suffering from rising un-affordability, and the refugee crisis did not significantly worsen the situation.

Not only has the rate of housing inflation slowed, but rent prices paid by Syrians in the northern governorates have declined in real terms since 2015. Prices in the central and southern governorates have remained constant (UNHCR 2018).

A recent paper by the Economic Research Forum found that "housing conditions of Jordanians are slightly negatively affected on average by the crisis." The authors found that poorer Jordanian households suffered a more meaningful negative impact. They found that wealthier households actually "experience[d] an improvement in their housing outcomes in response to the share of refugees" (Al-Hawarin 2018).

For these reasons, many researchers agree that the role of Syrians in raising the prices of housing has been exaggerated in the Jordanian national discourse (Al-Hawarin 2018; UNHCR 2018).

### 10.3 : International Aid Programs

In the wake of the refugee crisis, there has been a dire need for shelter for Syrian refugees in urban areas. Much of the direct response to this need has been by international aid organizations, most notably the Norwegian Refugee Council (NRC) and UN Habitat. These organizations do not directly fund construction, choosing instead to cooperate with the local private sector. The Jordanian government explicitly encourages this approach: The first official Jordan Response Plan to the Syrian refugee crisis stated that "Private sector funded solutions will be sought to construct adequate and affordable housing units in host communities, thereby supporting Jordanian developers, local commercial banks and the credit capacity of Jordanian families" (JRP 2014). Some direct funding is also provided, including cash for rent assistance for over 20,000 individuals (JRP 2018), but no direct funding is provided for housing construction.

The reliance of the Jordanian government on international programs to serve refugees is not a new phenomenon: such has been the case since the establishment of UNRWA after the first Palestinian refugee crisis in 1948, and certainly remains the case after (neo)liberalization in the 1990s sapped the Jordanian government's will and ability to undertake housing programs.

The private-sector-cooperation programs of NRC and UN Habitat, while minor compared to the extent of the crisis, have enjoyed a limited kind of success. This section of the report will describe two of the most important of these programs, examining the lessons that might be learned from Jordan's experience with them.

In 2014, an initiative by NRC used a catalytic amount of direct funding to facilitate the completion of new housing specifically for Syrian refugees in urban areas. "Shelter assistance is mostly provided through NRC paying a contribution to Jordanian landlords to enable them to complete partly built properties, in return for leasing the property rent free to a Syrian refugee family for up to 18 months" (NRC 2015b). In one year, this program resulted in the provision of 4,000 housing units of reasonable quality, thus assisting Syrian families and Jordanian landlords across the northern governorates. This program found success by strategically working to access an existing, but unused, resource: unfinished construction.

An independent academic review of the initiative by Goyes et al. (2017) emphasized five major ways in which it benefitted both refugees and the local population, ways that perhaps other institutions or governments could learn from:

1. Quality of housing: NRC ensured that builders met habitability guidelines.
2. Tenure security and affordability: NRC facilitated landlord-tenant relationships and provided support in case of eviction threats.
3. Access to services: All construction was required to be within two kilometers of basic services, ensuring refugee access to services and combating urban sprawl.
4. Local economic support: Incremental construction is closely tied to local economies, helping provide employment and creating economic demand.
5. Urban densification: By encouraging vertical expansion of single-story buildings, the program contributed to sustainable urban form.

The review, however, also emphasized that the program failed to provide a variety of housing typologies, and noted a particular lack of small units. The vast majority of units constructed had at least four bedrooms. The authors suggested that design interventions could help homeowners build subdivisions and offer small units to meet the existing nature of the demand for housing (Goyes et al. 2017).

Meanwhile, UN Habitat has organized a project to mobilize the local private sector by facilitating standardized, efficient, and modular housing. The project, by the name of the Jordan Affordable Housing Program (JAHP), is a

predominantly private-sector funded solution that will deliver houses to lower-middle income Jordanians without the use of subsidies. It combines the credit capacity of

Jordanian families interested to make an incremental investment in property, financing from local commercial and Islamic banks and the available resources of Jordanian developers and their construction capacity (UN Habitat undated).

Using seed funding from the governments of Switzerland and Denmark and from UNHCR (El Sioufi 2016), JAHP makes use of housing designs primarily by local architecture firms. The program aims to raise 450 million JD, entirely from the local private sector, for the construction of 30,000 housing units. These units are expected to sell for 15,000 - 16,000 JD each, and be affordable to families making less than 500 JD / month on mortgage terms amenable to local conventional and Islamic banks. In order to be affordable, these units will have to be unusually small, starting at 65m<sup>2</sup> with a modular design that enables easy expansion horizontally or vertically. Note that modular housing design in the Jordanian context was proposed as early as 1987 (MoP 1987). “According to UN Habitat surveys, more than 70 per cent of all households said they would find small, 65m<sup>2</sup> houses acceptable, particularly if they were affordable and extendable” (Obeidat 2015). Although Phase 1 of the Jordan Affordable Housing Program was completed successfully, “the local team has been dismantled” and there is no indication that a second phase will be undertaken (El-Sioufi 2018), though the reasons for this halt are unclear.

The relative success of the NRC and UN Habitat programs invites a straightforward conclusion regarding the potential of similar programs in the future. While the NRC initiative concerning incomplete, uninhabited buildings in the northern governorates may have picked the lowest-hanging fruit, high vacancy rates throughout the Kingdom indicate that much still remains on the tree. Similarly, though the UN Habitat program remains incomplete, phase 1 seems to have indicated that the proposal is technically and humanistically sound - though it may now require some negotiation with Jordanian authorities concerning the May 2018 law that sets a 110m<sup>2</sup> minimum for new units. Either of these two approaches, or a similar one, could still be implemented, whether by the Jordanian government, a municipality, an international organization, or even the private sector.

## 11: Conclusion and acknowledgements

Throughout the nearly 18-month process of preparing this report, the thing I have most come to respect is the mind-boggling scale of the issue involved. A comprehensive report describing housing in an entire country is a preposterously ambitious project, especially for a researcher with no formal training in economics. I can only hope to have done some kind of justice to the scale of the topic, to provide some useful resources to others, and to offer a few last comments.

Various sections of this report touch on the advantages of owner-builders. Small builders are more cost-effective (section 5.4) and more environmentally friendly (section 5.5) than larger companies. They are more in-touch with local conditions, and know better how to utilize not only limited financial resources, but also urban space (section 9.6). They keep money in the Jordanian economy and more confidently undertake the kind of small projects, like adding or repairing inhabitable floors, that represent the best return-on-investment in construction (section 5.4). The government has in the past supported family homeownership through urban upgrading programs that worked with small builders (section 3.1), and these programs were highly successful and won international recognition. Today, too, international aid and development efforts have seen that small local builders represent great potential in providing housing to

refugees (section 9.3). Elsewhere in the world, owner-builders and small developers are increasingly seen as powerful tools to construct high-quality affordable housing, as attested by the Strong Towns and Incremental Development movements in the United States. As Jordan continues to grow rapidly into the 21st century, traditional means of construction may also hold great promise for the future.

The changes made to policy in the 1990s cannot and should not be reversed. While it is at times tempting to long for an era of strong social programs and widespread owner-builder development, that era is forever gone and, in its own way, was just as flawed as the present one.

Further reorganization is as inevitable as it is necessary. That reorganization may come next year or next decade; it may be subtle and gradual, or it may be immediate, but at some point, it will come. When it comes, it will not be reducible to the policies and the theoretical languages of today. Rather, it will call upon new methodologies, new organizations, new structures, and new tools. A mere thirty years ago, formal housing developers built only one new housing unit out of every fifty. Today, they build most. We cannot predict who will build housing thirty years from now, only that change will somehow come.

Had there been time to add another section to this report, it would have been about transportation. Mobility and land use are inextricably linked, and changes to one will affect the other. Amman in particular is witnessing deep shifts in transportation practices as the Bus Rapid Transit system is under construction and as car ownership rates continue to rise rapidly. Transportation costs are high, nearly as high as housing costs for many Jordanian households (DoS 2017), and those costs seem only likely to rise as Amman sprawls and neighborhoods are built with car-centric designs. Many researchers discussing affordability have begun to measure the sum of housing and transportation expenses, and to seek to minimize that value, an approach that may be more productive than the housing-centric view I have taken in this report.

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## 12. Bibliography

### English References:

- Ababsa, Myriam. 2012. "Public Policies Toward Informal Settlements in Jordan (1965 - 2010)." In *Popular Housing and Urban Land Tenure in the Middle East: Case Studies from Egypt, Syria, Jordan, Lebanon, and Turkey*. Edited by Myriam Ababsa, Eric Denis, and Baudouin Dupret. Cairo: American University in Cairo Press, pp. 259 - 82.
- \_\_\_\_\_ (ed.) 2013. *Atlas of Jordan: History, Territories and Society*. Beirut: Institut Français Du Proche-Orient.
- Abu Ajayes, Jamal. 1988. "Jordan's Housing Finance Institutions." *Housing Finance International*. Available at [http://www.housingfinance.org/uploads/Publicationsmanager/8811\\_Jor.pdf](http://www.housingfinance.org/uploads/Publicationsmanager/8811_Jor.pdf)
- Abu-Dayyeh, Nabil I. 2004. "Persisting Vision: Plans for a Modern Arab Capital, Amman, 1955 - 2002." *Planning Perspectives* (19:1): 79 - 110.
- Abu Dayeh, Salaheddin M. 2018. Personal interview by D. Taylor Reich at the Jordan Housing Developers Association, Amman. In Arabic; all translations by the author.
- Abu-Ghazze, Tawfiq M. 1999. "Housing Layout, Social Interaction, and the Place of Contact in Abu-Nuseir, Jordan." *Journal of Environmental Psychology* (19:1): 41-73. doi:10.1006/jevp.1998.0106.
- Abu-Hamdi, Eliana. 2016. "Bureaucratizing the City: Moderated Tribalism, Regime Security, and Urban Transformation in Amman, Jordan." *Traditional Dwellings and Settlements Review* (27:2): 23 - 37. Available at [http://iaste.berkeley.edu/iaste/wp-content/uploads/2012/09/2017/02/Abu-Hamdi\\_27.2\\_TDSR.pdf](http://iaste.berkeley.edu/iaste/wp-content/uploads/2012/09/2017/02/Abu-Hamdi_27.2_TDSR.pdf)
- Abdel Razeq, Omar. 2015. *Housing Market in Palestine: Supply, Demand, and Prices*. Jerusalem / Ramallah: Palestine Economic Policy Research Institute. Available at <http://www.mas.ps/files/server/20152104110543-1.pdf>
- Abdullah II, King of Jordan. 2008. "Speech of His Majesty King Abdullah II on the Occasion of the Launch of the National Housing Initiative." Available at <https://kingabdullah.jo/en/speeches/occasion-launch-national-housing-initiative>
- Adely, Fida. 2012. *Gendered Paradoxes: Educating Jordanian Women in Nation, Faith, and Progress*. Chicago: University of Chicago Press.
- \_\_\_\_\_. 2016. "Internal Migration of Women for Work in Jordan." *7iber*. Available at <https://www.7iber.com/society/internal-migration-of-women-for-work-in-jordan/>
- Albawaba. 2012. "Amended Landlord and Tenant Law Keeps Rents Stable in Jordan." Available at <https://www.albawaba.com/business/pr/amended-landlord-and-tenant-law-keeps-rents-stable-jordan-419767>
- Al-Ahli Bank. 2018. "Housing Loan." Available at <https://ahli.com/en/jordan/personal/product/housing-loan>



- Ali, Doa et al. 2014. "A Town's Sudden Growth: Jordanians and Syrians Share the Poverty of Mafrq." *7iber*. Available at <http://www.7iber.com/2014/08/a-towns-sudden-growth/>
- Ali, H. H. and S. F. Al Nsairat. 2009. "Developing a Green building Assessment tool for Developing Countries - Case of Jordan." *Building and Environment* (44:5): 1053 - 1064. doi:10.1016/j.buildenv.2008.07.015
- Alnsour, Jamal Ahmad. 2011. "Illegal Housing in Jordan." *Jordan Journal of Social Sciences* (4:3): 339 - 54.
- \_\_\_\_\_. 2016. "Affordability of Low Income Housing in Amman, Jordan." *Jordan Journal of Economic Sciences* (3:1): 65 - 79. doi:10.12816/0029857.
- Andrews, Dan and Aida Caldera Sánchez. 2011. "The Evolution of Homeownership Rates in Selected OECD Countries: Demographic and Public Policy Influences." *OECD Journal: Economic Studies* 1: 207 - 43. Available at [https://read.oecd-ilibrary.org/economics/the-evolution-of-homeownership-rates-in-selected-oecd-countries-demographic-and-public-policy-influences\\_eo\\_studies-2011-5kg0vswqpmg2#page1](https://read.oecd-ilibrary.org/economics/the-evolution-of-homeownership-rates-in-selected-oecd-countries-demographic-and-public-policy-influences_eo_studies-2011-5kg0vswqpmg2#page1). doi:10.1787/eco\_studies-2011-5kg0vswqpmg2.
- Arab News. 2018. *Nearly 50% of Citizens Own Houses in Saudi Arabia*. Available at <http://www.arabnews.co/node/1233301/saudi-arabia>
- Arifat, Ala'a. 2018. Personal interview by D. Taylor Reich at the Ministry of Housing and Social Development, Amman. In Arabic; all translations by the author.
- Al-Asad, Mohammad. 2007. "Zoning." *Urban Crossroads*. Center for the Study of the Built Environment. Available at [www.csbe.org/zoning](http://www.csbe.org/zoning)
- Asfour, May. 2018. Personal interview by David Taylor Reich at the Corporation for Housing and Urban Development, Amman. In Arabic; all translations by the author.
- Awad, Ahmad M. 2017. *The International Monetary Fund and World Bank Intervention in Jordan: A Misguided Approach to Economic Reform*. Beirut: Arab NGO Network for Development. Available at <http://www.annd.org/data/file/files/IMF-JORDAN-PolicyBrief.pdf>
- Balkan, Binnur, and Semih Tumen. 2016. "Immigration and Prices: Quasi-Experimental Evidence from Syrian Refugees in Turkey." *Journal of Population Economics* (29:3): 657 - 86. doi:10.1007/s00148-016-0583-2.
- Basbous, Adel I. 2018. Personal interview by D. Taylor Reich at the Jordan Housing Developers Association, Amman. In Arabic; all translations by the author.
- Bank of America. 2018. *Mortgage Rates*. Available at <https://www.bankofamerica.com/mortgage/mortgage-rates/>
- Bank of Jordan. 2018. *Mortgage Loans*. Available at <http://www.bankofjordan.com/page/mortgage-loans>

- Bayat, Asef. 2012. "Politics in the City-Inside-Out." *City and Society* (24:2): 110 – 128. Available at <https://doi.org/10.1111/j.1548-744X.2012.01071.x>
- The Built Environment Observatory (BEO). 2016. *Statistics of Vacant Units in Egypt*. Available at [http://marsadomran.info/en/facts\\_budgets/2016/11/507/](http://marsadomran.info/en/facts_budgets/2016/11/507/)
- Central Bank of Jordan (CBJ). 2016. *Financial Stability Report 2016*. Available at <http://www.cbj.gov.jo/EchoBusV3.0/SystemAssets/PDFs/EN/FINANCIAL%20STABILITY%20REPORT%202016.pdf>
- \_\_\_\_\_. 2014. *Financial Stability Report 2014*. Available at <http://www.cbj.gov.jo/EchoBusV3.0/SystemAssets/PDFs/EN/FINANCIAL%20STABILITY%20REPORT%202014.pdf>
- CIA: Central Intelligence Agency. Undated. *The World Factbook*. Available at <https://www.cia.gov/library/publications/the-world-factbook/>
- Cetorelli, Valeria, and Tiziana Leone. 2012. "Is Fertility Stalling in Jordan?" *Demographic Research* 26: 293 - 318. Available at <http://www.jstor.org/stable/26349900>
- Cortright, Joe. 2017. "The 0.1 Percent Solution: Inclusionary Zoning's Fatal Scale Problem." *City Observatory*. Available at <http://cityobservatory.org/the-0-1-percent-solution-inclusionary-zonings-fatal-scale-problem/>
- Coulter, Rory, Maarten van Ham, and Allan M. Findlay (Coulter et al.). 2015. "Re-Thinking Residential Mobility: Linking Lives through Time and Space." *Progress in Human Geography* (40:3): 352 - 74. doi:10.1177/0309132515575417
- Creane, Susan, Rishi Goyal, A. Mushfiq Mobarak, and Randa Sab. 2003. *Financial Development in the Middle East and North Africa*. Washington, DC: International Monetary Fund. Available at <http://www.imf.org/external/pubs/ft/med/2003/eng/creane/>
- Daher, Rami. 2007. "The New Cities Landlords: The Transnational Capitalist Class," in *Amman: Neoliberal Urban Management*. Amman: Diwan Publications. Available at [https://www.academia.edu/9225898/AMMAN\\_NEOLIBERAL\\_URBAN\\_MANAGEMENT\\_Edited\\_by\\_Rami\\_Farouk\\_Daher\\_DIWAN\\_Series\\_Edited\\_by\\_Philipp\\_Misselwitz\\_and\\_Can\\_Altay\\_IABR\\_2009](https://www.academia.edu/9225898/AMMAN_NEOLIBERAL_URBAN_MANAGEMENT_Edited_by_Rami_Farouk_Daher_DIWAN_Series_Edited_by_Philipp_Misselwitz_and_Can_Altay_IABR_2009)
- \_\_\_\_\_. 2007a. "Discursive Mapping of Landscapes of Neoliberalism in Amman." *Amman: Neoliberal Urban Management*. Amman: Diwan Publications. Available at [https://www.academia.edu/9225898/AMMAN\\_NEOLIBERAL\\_URBAN\\_MANAGEMENT\\_Edited\\_by\\_Rami\\_Farouk\\_Daher\\_DIWAN\\_Series\\_Edited\\_by\\_Philipp\\_Misselwitz\\_and\\_Can\\_Altay\\_IABR\\_2009](https://www.academia.edu/9225898/AMMAN_NEOLIBERAL_URBAN_MANAGEMENT_Edited_by_Rami_Farouk_Daher_DIWAN_Series_Edited_by_Philipp_Misselwitz_and_Can_Altay_IABR_2009)
- Deleuze, Gilles and Félix Guattari. 1987. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press.
- Delmendo, Lalaine C. 2017 "Jordan's Property Prices Stable, despite Weak Demand." *Global Property Guide*.
- Department of Statistics (DoS). 2017. *Household Income and Expenditure Survey*. Available at [http://www.DoS.gov.jo/DoS\\_home\\_e/main/linked-html/household/2017/G4/Table6G4\\_Jor.pdf](http://www.DoS.gov.jo/DoS_home_e/main/linked-html/household/2017/G4/Table6G4_Jor.pdf)

- \_\_\_\_\_. 2015 *General Results of Census 2015*. Available at [http://www.DoS.gov.jo/DoS\\_home\\_e/main/population/census2015/list\\_tables.htm](http://www.DoS.gov.jo/DoS_home_e/main/population/census2015/list_tables.htm)
- \_\_\_\_\_. 2004 *General Results of Census 2004*. Available at [http://www.DoS.gov.jo/DoS\\_home\\_e/main/population/census2004/list\\_tables.htm](http://www.DoS.gov.jo/DoS_home_e/main/population/census2004/list_tables.htm)
- \_\_\_\_\_. 1994. *Population and Housing 1994*. Available at [http://DoSweb.DoS.gov.jo/censuses/population\\_housing/census1994/](http://DoSweb.DoS.gov.jo/censuses/population_housing/census1994/)
- \_\_\_\_\_. Undated. *Jordanian Mothers, Facts and Figures*. Available at [http://www.DoS.gov.jo/DoS\\_home\\_e/mother.htm](http://www.DoS.gov.jo/DoS_home_e/mother.htm)
- Dong, Maxia, Robert F. Anda, Vincent J. Felitti, David F. Williamson, Shanta R. Dube, David W. Brown, and Wayne H. Giles (Dong et al.). 2005. "Childhood Residential Mobility and Multiple Health Risks during Adolescence and Adulthood: The Hidden Role of Adverse Childhood Experiences." *Archives of Pediatrics & Adolescent Medicine* (159:12): 1104 - 10. doi:10.1001/archpedi.159.12.1104.
- Dübel, Hans-Joachim, and Olivier Hassler. 2016. *SANAD Housing Finance Study: Housing Finance in the Middle East and North Africa*. Finpol Consulting. Available at [http://www.finpolconsult.de/mediapool/16/169624/data/Housing\\_Finance/Middle\\_East/SANAD\\_Fund\\_for\\_MSME\\_Housing\\_Finance\\_in\\_the\\_MENA\\_Region.pdf](http://www.finpolconsult.de/mediapool/16/169624/data/Housing_Finance/Middle_East/SANAD_Fund_for_MSME_Housing_Finance_in_the_MENA_Region.pdf)
- The Economist. 2018. *Why Arab States Have Lots of Expensive Villas*. Available at <https://www.economist.com/middle-east-and-africa/2018/06/14/why-arab-states-have-lots-of-expensive-villas>
- Errighi, Lorenza, and Jörn Griesse. 2016. *The Syrian Refugee Crisis: Labour Market Implications in Jordan and Lebanon*. European Commission Directorate-General for Economic and Financial Affairs. Discussion Paper 029. Available at [https://ec.europa.eu/info/sites/info/files/dp029\\_en.pdf](https://ec.europa.eu/info/sites/info/files/dp029_en.pdf)
- Eurostat. 2016. *Urban Europe - Statistics on Cities, Towns, and Suburbs*. Publications Office of the European Union. Available at <http://ec.europa.eu/eurostat/en/web/products-statistical-books/-/KS-01-16-691>. doi:10.2785/91120
- Gandolfo, Luisa. 2012. *Palestinians in Jordan: The Politics of Identity*. London: I. B. Tauris, Library of Modern Middle East Studies.
- Gardner, Donald. 1986. *The Analysis of Multipurpose National Housing Authorities*. Operations Policy Staff, The World Bank. Available at <http://documents.worldbank.org/curated/en/856701468172786269/text/UDD94000The0an0ose0national0housing.txt>
- General Budget Department (GBD). 2017. *List of Capital Projects for the Years 2017 - 2019*. Available at <http://www.gbd.gov.jo/Uploads/Files/gbd/law-ministry/2017/en/4.pdf>
- Gehl, Jan. 1987. *Life Between Buildings: Using Public Space*. New York: Van Nostrand Reinhold.

Ghazal, Mohammad. 2008. "OPIC Extends \$250m in Financing for Housing Initiative." *Global Communities*. Available at <https://www.globalcommunities.org/node/28850>

\_\_\_\_\_. 2018a. "Unsold Apartments Since 2015 Valued at JD1b." *The Jordan Times*. Available at <http://www.jordantimes.com/news/local/unsold-apartments-2015-valued-jd1b>

\_\_\_\_\_. 2018b. "No License for New Buildings Issued Since Recent Building Bylaw went into Effect." *The Jordan Times*. Available at <http://www.jordantimes.com/news/local/no-licence-new-buildings-issued-recent-building-bylaw-went-effect%E2%80%99>

\_\_\_\_\_. 2018c. "Kingdom Suffers from Lack of Affordable Housing, Excess in Luxurious Homes." *The Jordan Times*. Available at <http://jordantimes.com/news/local/kingdom-suffers-lack-affordable-housing-excess-luxurious-homes>

Global Property Guide (GPG). 2009. *Jordan Housing Market Remains Fragile*. Available at <https://www.globalpropertyguide.com/Middle-East/Jordan/Price-History-Archive/jordan-housing-market-remains-fragile-369>

\_\_\_\_\_. 2017. *Jordan: Gross Rental Yields Good at 6.5% to 9%*. Global Property Guide. Available at <https://www.globalpropertyguide.com/Middle-East/Jordan/Rental-Yields>

Goyes, Francis, Sera Tolgay, and Valeria Vidal (Goyes et al.). 2017. *Refugees, Incremental Housing, and Shelter in the 21st Century*. Massachusetts Institute of Technology Incremental Housing Project. Available at <http://web.mit.edu/incrementalhousing/articlesPhotographs/pdfs/refugeesincrement.pdf>

Greater Amman Municipality (GAM) with Dar al-Handasah Consultants. 1988. *The Greater Amman Comprehensive Development Plan Report 5*.

Guttman, Amy. 2015. "The Property Case for Amman." *Gulf News Focus*. Available at <http://gulfnews.com/gn-focus/special-reports/property/the-property-case-for-amman-1.1610491>

Halaseh, William. 2018. Personal interview by David Taylor Reich at the Jordan Housing Developers Association, Amman. In Arabic; all translations by the author.

El Hanandeh, A. 2015. Environmental Assessment of Popular Single-Family House Construction Alternatives in Jordan. *Building and Environment* 92: 192 - 199.

Hanshaw, Ross and Brennan Ryan. 2018. "Killing the City: Neoliberal Organization and Social Belonging in a New Amman." *IMES Capstone Paper Series*, George Washington University. Available at <https://cpb-us-e1.wpmucdn.com/blogs.gwu.edu/dist/6/1613/files/2018/11/Killing-the-City-Final-2a4x59f.pdf>

Harrigan, Jane, Hamed El-Said, and Chengang Wang. 2006. "The IMF and the World Bank in Jordan: A Case of Over Optimism and Elusive Growth." *Review of International Organizations* 1: 263 - 292. Doi: 10.1007/s11558-006-9490-8.

Harvey, David. 2005. *A Brief History of Neoliberalism*. New York: Oxford University Press.

- Hassler, Olivier. 2011, *Housing and Real Estate Finance in Middle East and North Africa Countries*. Washington, DC: The World Bank.
- Al-Hawarin, Ibrahim, Ragui Assad, and Elsayed Ahmed (Al-Hawarin et al.). 2018. *Migration Shocks and Housing: Evidence from the Syrian Refugee Crisis in Jordan*. Economic Research Forum, Working Paper 1213.
- Heath, Sarah. 2014. *Housing Demand and Need (England)*. House of Commons Library. Available at [http://www.legco.gov.hk/general/english/library/stay\\_informed\\_overseas\\_policy\\_updates/housing\\_demand\\_and\\_need.pdf](http://www.legco.gov.hk/general/english/library/stay_informed_overseas_policy_updates/housing_demand_and_need.pdf)
- Higher Population Council (HPC). 2009. *The Demographic Opportunity*. Available at <https://jordankmportal.com/resources/the-demographic-opportunity-in-jordan-2009>
- Hoek-Smit, Marja C. and Douglas B. Diamond. 2003. *The Design and Implementation of Subsidies for Housing Finance*. Prepared for the World Bank Seminar on Housing Finance.
- Hoek-Smit, Marja C. 2008. *Subsidizing Housing Finance for the Poor*. Wharton School, University of Pennsylvania, Development Initiatives Group. Available at [http://www.housingfinanceforthe poor.com/data/images/dig%20subsidy%20paper%2020-08\\_edited%20rw\\_changes%20accepted%20to%20%20post.pdf](http://www.housingfinanceforthe poor.com/data/images/dig%20subsidy%20paper%2020-08_edited%20rw_changes%20accepted%20to%20%20post.pdf)
- Al-Homoud, Majd, et al. 2009. "The Low-Income Housing Market in Jordan." *International Journal of Housing Markets and Analysis* (2:3): 233 – 252.
- Hourani, Najib B. 2014. "Urbanism and Neoliberal Order: The Development and Redevelopment of Amman" *Journal of Urban Affairs* (36:sup2): 634 – 649. doi: [10.1111/juaf.12092](https://doi.org/10.1111/juaf.12092).
- Housing Bank for Trade and Finance (HBTF). 2018. *About the Housing Bank for Trade and Finance*. Available at <https://www.hbtf.com/en/AboutUs>
- Housing and Land Rights Network (HLRN). Undated. *Property Rights in Jordan*. Housing and Land Rights Network. Available at <http://www.hlrn.org/img/documents/property%20rights%20english.pdf>
- Huang, Haizhou. 2015. *Discussion on China's Housing Market: What we know? What we don't*. Presentation at the International Monetary Fund's International Symposium on Housing and Financial Stability in China. Available at [https://www.imf.org/external/np/seminars/eng/2015/HousingChina/pdf/Session2\\_HHuang.pdf](https://www.imf.org/external/np/seminars/eng/2015/HousingChina/pdf/Session2_HHuang.pdf)
- Ihrke, David K and Carol S. Faber. 2012. *Geographical Mobility: 2005 to 2010*. United States Census Bureau. Report # P20-567. Available at <https://www.census.gov/library/publications/2012/demo/p20-567.html>
- International Finance Corporation (IFC), World Bank Group. Undated. *Green Buildings Market Intelligence Jordan Country Profile*. Available at <https://www.edgebuildings.com/wp-content/uploads/2017/09/Jordan-Green-Building-Market-Intelligence-EXPORT.pdf>
- International Labor Office. 2013. *Decent work country profile: Hashemite Kingdom of Jordan*. Available at [www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms\\_232764.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---integration/documents/publication/wcms_232764.pdf)

Index Mundi. 2018. *Jordan Demographics Profile 2018*. Available at [https://www.indexmundi.com/jordan/demographics\\_profile.html](https://www.indexmundi.com/jordan/demographics_profile.html)

International Monetary Fund (IMF). 2017. *Jordan: Selected Issues*.

Ishaqat, Hind. 2015. "Using Aerial Photography for the Study of Housing Projects in Jordan." In *Transformation of the urban character of Arab Cities since the late last century*. Conference Proceedings, German Jordanian University. Edited by M. Aboutorabi and B. Zalloom.

Jalouqa, Kamal. 2015. "Amman, from Village to Metropolis." In *Transformation of the urban character of Arab Cities since the late last century*. Conference Proceedings, German Jordanian University. Edited by M. Aboutorabi and B. Zalloom.

Jiang, Yongsheng et al. 2018. "Effects of Bank Lending on Urban Housing Prices for Sustainable Development: A Panel Analysis of Chinese Cities." *Sustainability* (10:3). Available at [https://www.researchgate.net/publication/323465802\\_Effects\\_of\\_Bank\\_Lending\\_on\\_Urban\\_Housing\\_Prices\\_for\\_Sustainable\\_Development\\_A\\_Panel\\_Analysis\\_of\\_Chinese\\_Cities](https://www.researchgate.net/publication/323465802_Effects_of_Bank_Lending_on_Urban_Housing_Prices_for_Sustainable_Development_A_Panel_Analysis_of_Chinese_Cities). doi:10.3390/su10030642

Jordan Green Building Council (JGBC). 2017. *Your Guide to Green Building in Jordan: Green Building Informative Booklet*. Available at <http://jordangbc.org/media-center-publications/jordan-gbc-publications/>

Jordan Mission: The Permanent Mission of the Hashemite Kingdom of Jordan to the United Nations Office in Geneva. 2012. *Questionnaire on Housing Finance Policies and Programs*. Office of the High Commissioner for Human Rights. Available at <https://www.ohchr.org/Documents/Issues/Housing/Housingfinancing/Jordan.pdf>

Jordan Mortgage Refinance Company (JMRC). 2013. *CEO Message*.

\_\_\_\_\_. 2013a. *Statement of Financial Position*.

Jordan News Agency (JNA). 2015. *PM Chairs 1st Public-Private Partnership Council Meeting*. Available at [http://petra.gov.jo/Public\\_News/Nws\\_NewsDetails.aspx?Site\\_Id=1&lang=2&NewsID=195941](http://petra.gov.jo/Public_News/Nws_NewsDetails.aspx?Site_Id=1&lang=2&NewsID=195941)

\_\_\_\_\_. 2017. *Jordan Reached its Maximum Capacity Due to Syrian Refugees Crisis, says PM*. Available at [http://www.petra.gov.jo/Public\\_News/Nws\\_NewsDetails.aspx?lang=2&site\\_id=1&NewsID=296480&CatID=13](http://www.petra.gov.jo/Public_News/Nws_NewsDetails.aspx?lang=2&site_id=1&NewsID=296480&CatID=13)

The Jordan Times. 2015. *Syrian refugee influx threatening demographic opportunity*. Available at <http://www.jordantimes.com/news/local/syrian-refugee-influx-threatening-demographic-opportunity%E2%80%99>

\_\_\_\_\_. 2017. *Real estate trading reaches JD1.5b in Q1 2017*. Available at <http://jordantimes.com/news/business/real-estate-trading-reaches-jd15b-q1-2017>

\_\_\_\_\_. 2017a. *Recovery of housing sector hinges on gov't's support — stakeholders*. Available at <http://jordantimes.com/news/local/recovery-housing-sector-hinges-gov%E2%80%99t%E2%80%99s-support-%E2%80%94stakeholders>

- \_\_\_\_\_. 2018. *Jordan launches media strategy to invest in 'upcoming demographic window'*. Available at <http://www.jordantimes.com/news/local/jordan-launches-media-strategy-invest-upcoming-demographic-window%E2%80%99>
- \_\_\_\_\_. 2018a. *Social Development Ministry Presents Housing Units to 35 Families*. Available at <http://www.jordantimes.com/news/local/social-development-ministry-presents-housing-units-35-families>
- Joucka, Hind. 2015. "NGO Ruwwad Al Tanmeya Marks 10 Years of Community Empowerment in Jabal Al Natheef." *The Jordan Times*. Available at <http://www.jordantimes.com/news/local/ngo-ruwwad-al-tanmeya-marks-10-years-community-empowerment-jabal-al-natheef>
- Keightley, Mark P. 2018. *An Introduction to the Low-Income Housing Tax Credit*. Congressional Research Service. Available at <https://fas.org/sgp/crs/misc/RS22389.pdf>
- Kelberer, Vicky. 2015. "Seeking Shelter in Jordan's Cities." *Middle East Research and Information Project*. Available at [https://www.merip.org/mero/mero110515#\\_2](https://www.merip.org/mero/mero110515#_2)
- Khawaja, Hadeel. 2015. "Public Spaces under Threat: Scenes from Amman." *Planning and Sustainability: Urban and Regional Planning*. Master's Thesis, Ecole Polytechnique De L'Universite Francois Rabelais De Tours.
- Kim, Jungho. 2016. "Female Education and its Impact on Fertility." IZA World of Labor. Available at <https://wol.iza.org/uploads/articles/228/pdfs/female-education-and-its-impact-on-fertility.pdf>
- Knowles, Warwick. 2005. *Jordan Since 1989: A Study in Political Economy*. Library of Modern Middle East Studies. London: Bloomsbury Academic Press.
- Legislative Analyst's Office (LAO). 2015. *California's High Housing Costs: Causes and Consequences*. Available at <http://www.lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.pdf>
- Leslie, Jolyon. 1992. "1992 Technical Review Summary: 844.JOR East Wahdat Upgrading Program." Aga Khan Award for Architecture. Available at <http://www.akdn.org/sites/akdn/files/media/documents/AKAA%20press%20kits/1992%20AKAA/East%20Wahdat%20-%20Jordan.pdf>
- Lucas, Russell E. 2005. *Institutions and the Politics of Survival in Jordan: Domestic Responses to External Challenges, 1988 - 2001*. Albany: State University of New York Press.
- Ma'an News Agency. 2011. "PCBS: 84% of Palestinians are homeowners." Available at <http://www.maannews.com/Content.aspx?id=375503>
- Madanat, H. 2010. "Land Tenure in Jordan." *Land Tenure Journal* (1:1).
- Mango, Tamam. 2014. *The Impact of Real Estate Construction and Holding Companies: A Case Study of Beirut's Solidere and Amman's Abdali*. Ph.D. dissertation, University of Exeter.

- Matar, Ali. 2017. "Evaluating the Performance of Islamic and Commercial Banks in Jordan: A Comparative Study." *Jordan Journal of Economic Sciences* (4:1). Available at <https://journals.ju.edu.jo/JJES/article/view/15152/7262>
- McMahon, Tim. 2017. "Historical Crude Oil Prices (Table)." *InflationData.com*. Available at [https://inflationdata.com/Inflation/Inflation\\_Rate/Historical\\_Oil\\_Prices\\_Table.asp](https://inflationdata.com/Inflation/Inflation_Rate/Historical_Oil_Prices_Table.asp)
- Miller, Josh. 2014. "The Age of the Housing Stock by State." *National Association of Home Builders*. Available at <http://eyeonhousing.org/2014/02/the-age-of-the-housing-stock-by-state/>
- Mixed Migration Platform. 2017. *Briefing Paper #7: Precarious Living*. Available at [http://mixedmigrationplatform.org/wp-content/uploads/2017/08/MMP-Briefing-Paper\\_Access\\_Housing.pdf](http://mixedmigrationplatform.org/wp-content/uploads/2017/08/MMP-Briefing-Paper_Access_Housing.pdf)
- Ministry of Planning and International Cooperation (MoP). 1987. *National Housing Strategy Draft Final Report (Executive Summary)*.
- \_\_\_\_\_. 2012. *Jordan Microfinance Market Study*. Available at <http://www.mop.gov.jo/echobusv3.0/SystemAssets/24092014/Jordan%20Microfinance%20Market%20Study%202012.pdf>
- \_\_\_\_\_. 2014. *Jordan Response Plan for the Syria Crisis*. Available at <http://www.jo.undp.org/content/dam/jordan/docs/Publications/JRP+Final+Draft+2014.12.17.pdf>
- \_\_\_\_\_. 2018. *Jordan Response Plan 2018-2020*. Available at <http://www.jo.undp.org/content/dam/jordan/docs/Publications/JRP+Final+Draft+2014.12.17.pdf>
- Mock, Brentin. 2016. "Inclusionary Zoning Does Not Drive Up Housing Costs." *CityLab*. Available at <https://www.citylab.com/equity/2016/06/what-we-know-about-inclusionary-zoning-thus-far/485072/>
- Morgan, James. 2015. "Saudi Arabia approves 2.5% 'white land tax'." *Construction Week Online*. Available at <http://www.constructionweekonline.com/article-36521-saudi-arabia-approves-25-white-land-tax/>
- Morris, Tim, David Manley, and Clive E. Sabel. 2018. "Residential Mobility: Towards Progress in Mobility Health Research." *Progress in Human Geography*, (42:1): 112 - 133. Available at <https://journals.sagepub.com/doi/full/10.1177/0309132516649454>
- Moser, Caroline O. N. 1992. "Housing" in *Gender and Development: A Practical Guide*. Edited by Lise Ostergard. London: Routledge.
- Al-Natour, Ezzaldeen. 2018. "Where do the Egyptian workers live in Jordan?" *Ethical Journalism Network*. Available at <https://ethicaljournalismnetwork.org/egyptian-workers-jordan>
- Newman, Oscar. 1972. *Defensible Space: People and Design in the Violent City*. London: Macmillan.



- Norwegian Refugee Council (NRC). 2015. *In Search of a Home: Access to Adequate Housing in Jordan*. Available at <https://www.nrc.no/globalassets/pdf/reports/in-search-of-a-home.pdf>
- \_\_\_\_\_. 2015a. *Final Report: Integrated Urban Shelter and Information Counselling and Legal Assistance Programme*. Available at <https://www.nrc.no/globalassets/pdf/evaluations/evaluation---shelter-icla-urban-programme-in-jordan.pdf>
- Nowok, Beata, et al. 2011. "Does Migration Make You Happy? A Longitudinal Study of Internal Migration and Subjective Well-Being." Institute for the Study of Labor / Forschungsinstitut zur Zukunft der Arbeit, Discussion paper #6140. Available at <http://ftp.iza.org/dp6140.pdf>
- Numbeo. 2018. *Property Prices in Amman, Jordan*. Available at <https://www.numbeo.com/property-investment/in/Amman>
- Obeidat, Omar. 2013. "Unaffordable housing for majority of Jordanians a 'ticking bomb' - experts." *Jordan Vista*. Available at <http://vista.sahafi.jo/art.php?id=0a6b604c76aca057124ca0874d316354aa26a0e3>
- \_\_\_\_\_. 2015. "Proposed housing project could provide 30,000 homes for lower income families." *The Jordan Times*. Available at <http://www.jordantimes.com/news/local/proposed-housing-project-could-provide-30000-homes-lower-income-families%E2%80%99>
- Organization for Economic Cooperation and Development (OECD). 2017. *HMI.1 Housing Stock and Construction*. Available at <https://www.oecd.org/els/family/HM1-1-Housing-stock-and-construction.pdf>
- Oxfam. Undated. *Life in Za'atari refugee camp, Jordan's fourth biggest city*. Available at <https://oxf.am/2FKOfm>
- Oxford Business Group (OBG). 2015. *The Report: Jordan 2015*.
- \_\_\_\_\_. 2016. *The Report: Jordan 2016*.
- \_\_\_\_\_. 2018. *The Report: Jordan 2018*.
- Parker, Christopher. 2009. "Tunnel-Bypasses and Minarets of Capitalism: Amman as Neoliberal Assemblage." *Political Geography* 28: 110 - 120. [doi.org/10.1016/j.polgeo.2008.12.004](https://doi.org/10.1016/j.polgeo.2008.12.004)
- Planning and Development Collaboration International (PDCI). 1994. "Interim Evaluation Report Jordan 278-HG-004". Prepared for the United States Agency for International Development. Available at [http://pdf.usaid.gov/pdf\\_docs/PDABK193.pdf](http://pdf.usaid.gov/pdf_docs/PDABK193.pdf)
- Polat, Huseyin. 2010. "Cooperatives in the Arab World: Reaffirming their validity for local and regional development." Available at [http://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/meetingdocument/wcms\\_210753.pdf](http://www.ilo.org/wcmsp5/groups/public/---arabstates/---ro-beirut/documents/meetingdocument/wcms_210753.pdf)
- Potter, Robert B., Khadija Darmame, Nasim Barham, and Stephen Nortcliff. 2007. "An Introduction to the Urban Geography of Amman, Jordan." The University of Reading Geographical Paper No. 182. Available at [https://www.reading.ac.uk/web/files/geographyandenvironmentalscience/GP182\\_Amman\\_RBP\\_9Aug07.pdf](https://www.reading.ac.uk/web/files/geographyandenvironmentalscience/GP182_Amman_RBP_9Aug07.pdf)

- Razzaz, Omar. 1993. "Contested Space: Urban Settlement around Amman." *Middle East Report*, no. 181: 10 - 14. Available at <https://www.jstor.org/stable/3013015?seq=1>
- Rhind, Nicole, and Suha Shouqar. 2002. "Jordan Mortgage Refinance Corporation Company Overview". Capital Markets Component, Task No. 607, Contract No. 278-C-00-02-00201-00. Chemonics International Inc.
- Roth, Hanna, et al. 2017. "A Mapping of Social Protection and Humanitarian Assistance Programs in Jordan." *Overseas Development Institute: Working Paper 501*. Available at <https://www.odi.org/sites/odi.org.uk/files/resource-documents/11280.pdf>
- Ryan, Curtis R. 1998. "Peace, Bread, and Riots: Jordan and the International Monetary Fund." *Middle East Policy Council* (6:2). Available at [https://libres.uncg.edu/ir/asu/f/Ryan\\_C\\_1998\\_Peace.pdf](https://libres.uncg.edu/ir/asu/f/Ryan_C_1998_Peace.pdf)
- Al-Sabban, Ribhi. 2000. "The Implementation of a Low-Income Housing Plan in Jordan." *International Construction Management*. Available at <http://www.hdm.lth.se/fileadmin/hdm/alumni/papers/icm2000/ICM2000-09.pdf>
- Schug, Joanna, Masaki Yuki, Hikori Horikawa, and Kosuke Takemura. 2009. "Similarity attraction and actually selecting similar others: How cross-societal differences in relational mobility affect interpersonal similarity in Japan and the USA." *Asian Journal of Social Psychology* 12: 95 – 103. doi: [10.1111/j.1467-839X.2009.01277.x](https://doi.org/10.1111/j.1467-839X.2009.01277.x)
- Segal, Troy. 2017. "How Interest Rates affect Property Values." *Investopedia.com*. Available at <https://www.investopedia.com/articles/mortgages-real-estate/08/interest-rates-affect-property-values.asp>
- Sharida, Asam. 2018. Personal interview by D. Taylor Reich at the Jordan Housing Developers Association, Amman. In Arabic; all translations by the author.
- Sidorova, Milota. 2017. "Woman's Rights to the City. Amman in Context." Interview with Myriam Ababsa. *Women Public Space Prague*. Available at <http://www.wpsprague.com/blog/2017/2/24/womens-right-to-the-city-amman-in-context-myriam-ababsa>
- Sims, David. 1990. "Owner-Builder Housing in Jordan." *Habitat International* (14:1). [doi.org/10.1016/0197-3975\(90\)90020-2](https://doi.org/10.1016/0197-3975(90)90020-2)
- \_\_\_\_\_. 2013. "The Arab Housing Paradox." *The Cairo Review*. Available at [https://www.thecaireview.com/wp-content/uploads/2014/12/CR11\\_Sims.pdf](https://www.thecaireview.com/wp-content/uploads/2014/12/CR11_Sims.pdf)
- El-Sioufi, Mohamed et al. 2016. *Final Evaluation of the UN-Habitat Jordan Affordable Housing Programme*. Available at <https://unhabitat.org/books/final-evaluation-of-the-un-habitat-jordan-affordable-housing-programme-phase-1-november-2016/>
- \_\_\_\_\_. 2018. Personal Communication.
- Speetjens, P. 2012. "A skyline of skeleton towers." *The Executive*. Available at <http://www.executive-magazine.com/real-estate-and-development/A-skyline-of-skeleton-towers/4999>

- Struyk, Raymond J., 1988. "Understanding High Housing Vacancy Rates in a Developing Country: Jordan." *The Journal of Developing Areas* (22:3): 373 - 380. Available at [https://www.researchgate.net/publication/314829001\\_The\\_Role\\_of\\_Housing\\_Finance\\_in\\_Mexico's\\_Vacancy\\_Crisis](https://www.researchgate.net/publication/314829001_The_Role_of_Housing_Finance_in_Mexico's_Vacancy_Crisis)
- \_\_\_\_\_. 1989. "Who Gets Formal Housing Finance in Jordan?" *Review of Urban and Regional Development Studies* (1:1): 23 - 36. [doi.org/10.1111/j.1467-940X.1989.tb00002.x](https://doi.org/10.1111/j.1467-940X.1989.tb00002.x)
- Sutton, Gregory, Dubravko Mihajek, and Agne Subelyte. 2017. "Interest rates and house prices in the United States and around the world." *Bank for International Settlements*. Available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3052374](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3052374)
- Tabbaa, Yasmeeen. 2008. *Assessing the Middle Class in Jordan*. Amman: Economic and Social Council. Available at [http://www.mop.gov.jo/echobusv3.0/SystemAssets/pdf/Reports/Assessing\\_the\\_Middle\\_Class\\_in\\_Jordan\\_\(2008\).pdf](http://www.mop.gov.jo/echobusv3.0/SystemAssets/pdf/Reports/Assessing_the_Middle_Class_in_Jordan_(2008).pdf)
- Tagma, Mounia, 2016. "Case Study 1 | The FOGARIM: A Housing Loan Guarantee for the Informally Employed." *Centre for Affordable Housing Finance in Africa*. Available at <http://housingfinanceafrica.org/documents/the-fogarim-a-housing-loan-guarantee-for-the-informally-employed/>
- Tamkeen: Tamkeen Fields for Aid. 2005. *Invisible Women: The Working and Living Conditions of Irregular Migrant Domestic Workers in Jordan*. Available at <http://humantraffickingsearch.org/wp-content/uploads/2017/08/Invisible-Women-English-.pdf>
- Tarawneh, Deyala. 2015. "Brownfield Landscapes of Amman: Defining Typologies of Unnamed Terrains." In *Transformation of the urban character of Arab Cities since the late last century*. Conference Proceedings, German Jordanian University. Edited by M. Aboutorabi and B. Zalloom.
- Tewfik, Megdy. 1991. "Application of New Town Concepts in Developing Countries: The Case of Abu Nuseir, Jordan." *Ekeistics* 58: 346/347.
- Tewfik, Megdy and Alia'a Amr. 2014. "Arbitrary Land Use Policy in Jordan between Legal Brand and Property Control." *European International Journal of Science and Technology* (3:9). Available at [https://tutcris.tut.fi/portal/en/publications/arbitrary-land-use-policy-in-jordan-between-legal-brand-and-property-control\(7dfc1729-5203-4ed5-9735-29aac1f46bbe\)/export.html](https://tutcris.tut.fi/portal/en/publications/arbitrary-land-use-policy-in-jordan-between-legal-brand-and-property-control(7dfc1729-5203-4ed5-9735-29aac1f46bbe)/export.html)
- Ther, Philipp, and Charlotte Hughes-Kreutzmüller. 2016. *Europe since 1989: A History*. Princeton, NJ: Princeton University Press.
- Thorsen, Dag Einar, and Lie Amund. 2006. *What is Neoliberalism?* Oslo: University of Oslo.
- Trading Economics (TE; website). Undated. Available at <http://www.tradingeconomics.com>
- Trancik, Roger. 1986. *Finding Lost Space: Theories of Urban Design*. New York: Van Nostrand Reinhold.
- Tsatsaronis, Kostas, and Haibin Zhu. 2004. "What drives housing price dynamics: cross-country evidence." *Bank for International Settlements*. Available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1968425](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1968425)

Turner, John F. C. *Housing by People: Towards Autonomy in Building Environments*. New York: Pantheon Books, 1976.

United Nations. 2017. *World Population Prospects*. Available at <https://esa.un.org/unpd/wpp/Download/Standard/Population/>

\_\_\_\_\_. 2017. Household Size and Composition Around the World. Available at [https://www.un.org/en/development/desa/population/publications/pdf/ageing/household\\_size\\_and\\_composition\\_around\\_the\\_world\\_2017\\_data\\_booklet.pdf](https://www.un.org/en/development/desa/population/publications/pdf/ageing/household_size_and_composition_around_the_world_2017_data_booklet.pdf)

United Nations Development Programme. 2005. The Arab Human Development Report 2005. Available at [https://hdr.undp.org/sites/default/files/rbas\\_ahdr2005\\_en.pdf](https://hdr.undp.org/sites/default/files/rbas_ahdr2005_en.pdf)

United Nations Habitat (UN Habitat). Undated. "Jordan Affordable Housing." Available at <https://unhabitat.org/jordan/jordan-housing-and-slum-upgrading/>

United Nations Habitat III. 2015. *Habitat III Issue Papers: 22 - Informal Settlements*. United Nations Conference on Housing and Sustainable Urban Development. Available at [https://www.unhabitat.org/wp-content/uploads/2015/04/Habitat-III-Issue-Paper-22\\_Informal-Settlements.pdf](https://www.unhabitat.org/wp-content/uploads/2015/04/Habitat-III-Issue-Paper-22_Informal-Settlements.pdf)

United Nations High Council on Refugees (UNHCR). 2018. *Assessment of the Jordanian Marketplace*. Available at <https://data2.unhcr.org/fr/documents/download/61728>

United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA). 1949. *General Assembly Resolution 302: 302 (IV) Assistance to Palestine Refugees*. Available at <https://www.unrwa.org/content/general-assembly-resolution-302>

United States Agency for International Development (USAID). 2008. *Housing Study for Urban Egypt*. Available at [https://pdf.usaid.gov/pdf\\_docs/PNADY276.pdf](https://pdf.usaid.gov/pdf_docs/PNADY276.pdf)

United States Census Bureau (USCB). 2017. *Geographical Mobility: 2010 to 2015*. Available at <https://www.census.gov/data/tables/2015/demo/geographic-mobility/cps-2015-5yr.html>

\_\_\_\_\_. 2018. *Quarterly Residential Vacancies and Homeownership, First Quarter 2018*. Available at <https://www.census.gov/housing/hvs/files/currenthvspress.pdf>

\_\_\_\_\_. 2018a. *Homeownership Rate for the United States [RHORUSQ156N]*. Federal Reserve Bank of St. Louis. Available at <https://fred.stlouisfed.org/series/RHORUSQ156N>

Van Hear, Nicholas. 1995. "The Impact of the Involuntary Mass 'Return' to Jordan in the Wake of the Gulf Crisis." *The International Migration Review* (29:2): 352 - 374.

[doi.org/10.1177/019791839502900202](https://doi.org/10.1177/019791839502900202)

Venture Magazine. 2015. *Low Rise to High Rise?* Available at <http://www.venturemagazine.me/2015/01/low-rise-high-rise/>

\_\_\_\_\_. 2017. *Taking Luxury to a New Level*. Available at <http://www.venturemagazine.me/2017/11/campbell-gray-living/>

Wallace, Charles P. 1986. "Jordan's Boomtown: Amman: Fast Growth but a Bleak Image." *Los Angeles Times*. Available at [http://articles.latimes.com/1986-10-18/news/mn-6165\\_1\\_amman/2](http://articles.latimes.com/1986-10-18/news/mn-6165_1_amman/2)

Whyte, William. 1980. *The Social Life of Small Urban Spaces*. New York: Project for Public Spaces Press.

World Bank. 2003. *Jordan: Making Home Ownership*. Available at <http://documents.worldbank.org/curated/en/909411467999343324/pdf/91963-BRI-2003Nov3-Jordan-Making-Home-Ownership-Accessible-Box-385351B-PUBLIC.pdf>

\_\_\_\_\_. 2016. *Rules on Paper, Rules in Practice (Ch. 5)*. Available at <http://documents.worldbank.org/curated/en/917681467281259880/pdf/106712-PUB-P143004-PUBLIC.pdf>

\_\_\_\_\_. 2017. *Population Growth (% Annual)*. Available at <https://data.worldbank.org/indicator/SP.POP.GROW?locations=JO>

\_\_\_\_\_. 2018. *Jordan GDP per capita PPP*. Available at <https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD?locations=JO>

World Bank Independent Evaluation Group (WBIEG). 1996. *Creating Mixed-Income Communities in Jordan*. World Bank Precip #127. Available at <http://lnweb90.worldbank.org/oed/oeddoelib.nsf/24cc3bb1f94ae11c85256808006a0046/8d42c536a269ec8e852567f5005d8db9?OpenDocument>

Zawaydeh, Samer. 2018. "Green Building Rating System in Jordan." *EcoMENA.org*. Available at <https://www.ecomena.org/green-building-jordan/>

## Arabic References:

خريسات، محمد عاكف. ٢٠١٥. "٥٠٠ دينار فرق سعر "متر الشقق" بين عمان الشرقية والغربية." الغد.

Khraisat, Mohammad Akef. 2015. "Five-Hundred Dinar Difference in the Meter Price of Apartments in East and West Amman." *Al-Ghad*.

Available at <http://alghad.com/articles/873712-500-الشرقية-الغربية-بين-عمان-الشرقية-والغربية>

دائرة الإحصاءات العامة. ٢٠١٧. مسح نفقات ودخل الأسرة.

Department of Statistics (DoS). 2017. *Household Income and Expenditure Survey*.

Available at [http://www.DoS.gov.jo/DoS\\_home\\_e/main/linked-html/household/2017/G4/Table6G4\\_Jor.pdf](http://www.DoS.gov.jo/DoS_home_e/main/linked-html/household/2017/G4/Table6G4_Jor.pdf)

ديبسية، زيد. ٢٠١٧. "أزمة رهن عقاري تهدد الأردن: المصارف تحجز على ٦ آلاف شقة." العربي الجديد.

Al-Dabisiyah, Oman Zeid. 2017. "A Mortgage Crisis Threatens Jordan: Financiers Claim Six Thousand Apartments. *Al-Arabi Al-Jadid*.

Available at <https://www.alaraby.co.uk/economy/2017/8/24/%D8%A3%D8%B2%D9%85%D8%A9-%D8%B1%D9%87%D9%86-%D8%B9%D9%82%D8%A7%D8%B1%D9%8A-%D8%AA%D9%87%D8%AF%D8%AF-%D8%A7%D9%84%D8%A3%D8%B1%D8%AF%D9%86-1>

الرأي. ٢٠١٣. "الأردن بدأ الخصخصة عام ١٩٩٨ في إطار خطة لإعادة هيكلة الإقتصاد."

Al-Ra'i. 2013. "Jordan Began the Privatization Program in 2013 in the Frame of the Economic Restructuring Plan."

Available at <http://alrai.com/article/563304.html>

..... ٢٠١٤. "أرباح شركات الإسكان تسبب ارتفاعاً فاحشاً في أسعار الشقق."

..... 2014. "The Profits of Housing Companies Caused an Outrageous Rise in Apartment Prices." Available at <http://alrai.com/article/683943.html>

..... ٢٠١٦. "مجلس الوزراء: تمديد اعفاء رسوم تسجيل الشقق."

..... 2016. "Cabinet: Extended Exemption of Registration Fees for Apartments."

Available at <http://alrai.com/article/1028786>

..... ٢٠١٧. "العقار بين مطرقة الأسعار وسندان الإجراءات وتراجع قدرات الطبقة الوسطى."

..... 2017. "Real Estate Between the Hammer of Prices and the Anvil of Procedures and the Decline of the Capabilities of the Middle Class."

Available at <http://alrai.com/article/10397617>

الرجوب، عبد المجيد؛ وخالد عارف المومني. بدون تاريخ. السياسة الإسكانية الحالية في الأردن ودورها في الحصول على المسكن الميسر.

Al-Rajoub, Abd Al-Majeed, and Khalid 'Aarif Al-Moumani. Undated.

*The Current Housing Policy in Jordan and its Role in the Achievement of Accessible Residence.*

سرايا نيوز. ٢٠١٨. "بالصور ... مستثمرو قطاع الإسكان يبدأون توكفاً عن العمل."

Saraya News. 2018. "In Pictures... Investors in the Housing Sector Begin a Strike on Work."

Available at <https://www.sarayanews.com/article/483546>

طلب، أحمد. ٢٠١٧. "الفقاعة العقارية في الأردن ... هل اقتربت من الانفجار؟" ساسة يوست.

Talab, Ahmad. 2017. "The Housing Bubble in Jordan ... Is It Close to Bursting?". *Sasapost*.

Available at <https://www.sasapost.com/jordan-economy-real-estate-bubble/>

عمون نيوز. ٢٠١٨. "نسبة زيادة الأجرور في المالكين والمستأجرين"

Ammon News. 2013. Rental Rate Raise for Landlords and Tenants.

Available at <http://www.ammonnews.net/article/173352>

الفانك، فهد. ٢٠١٣. "لماذا فشل سكن كريم؟" الرأي.

Al-Fanek, Fahed. 2013. "Why Decent Housing Failed." *Al-Ra'i*.

Available at <http://alrai.com/article/564834.html>

المجلس الأردني للأبنية الخضراء. ٢٠١٨. دليل ارشادي: السكن الأخضر الميسر.

Jordan Green Building Council (JGBC). 2018. *Advisory Guide: Green Affordable Housing*.

Available at <http://jordangbc.org/media-center-publications/jordan-gbc-publications/>

مرايا نيوز. ٢٠١٦. "فشل تطبيق مبادرة "سكن كريم لعيش كريم".

Maraya News. 2016. "Failure of the Implementation of the 'Decent Housing for a Decent Living' Initiative."

Available at <http://marayanews.com/%D8%A7%D9%84%D9%85%D8%A7%D9%86%D8%B4%D9%8A%D8%AA/476176/>

مركز الرأي للدراسات. ٢٠٠٧. الإستثمار العقاري في الأردن.

Al-Ra'i Center for Studies. 2007. *Real Estate Investment in Jordan*.

Available at [http://www.alraicenter.com/User\\_Site/Site/View\\_Article.asp?type=2&ID=278#](http://www.alraicenter.com/User_Site/Site/View_Article.asp?type=2&ID=278#)

المؤسسة العامة للإسكان والتطوير الحضري. ٢٠١١. دراسة برنامج دعم التمويل الإسكاني لذوي الدخل المتدني.

Housing and Urban Development Corporation (HUDC). 2011. *Study of a Program to Support Low-Income Housing Funding*.

Available at

<http://hudc.gov.jo/EchoBusV3.0/SystemAssets/PDFs/AR/HousingPolicies/%D8%AF%D8%B9%D9%85%20%D8%A7%D9%84%D8%AA%D9%85%D9%88%D9%8A%D9%84%20%D8%A7%D9%84%D8%A7%D8%B3%D9%83%D8%A7%D9%86%D9%8A%202011.pdf>

..... ٢٠١٦. الكتاب السنوي.

..... 2016. *Annual Report 2016*.

Available at [http://www.hudc.gov.jo/EchoBusV3.0/SystemAssets/%D8%A7%D9%84%D8%A7%D8%B3%D8%AA%D8%B1%D8%A7%D8%AA%D9%8A%D8%AC%D9%8A%D8%A9%202017/%D8%A7%D9%84%D8%AE%D8%B7%D8%A9%20%D8%A7%D9%84%D8%A7%D8%B3%D8%AA%D8%B1%D8%A7%D8%AA%D9%8A%D8%AC%D9%8A%D9%87%20%D9%84%D9%84%D9%85%D8%A4%D8%B3%D8%B3%D8%A9%20\(2016-%202019\)%20%D8%A7%D9%84%D9%85%D8%AD%D8%AF%D8%AB%D8%A9.pdf](http://www.hudc.gov.jo/EchoBusV3.0/SystemAssets/%D8%A7%D9%84%D8%A7%D8%B3%D8%AA%D8%B1%D8%A7%D8%AA%D9%8A%D8%AC%D9%8A%D8%A9%202017/%D8%A7%D9%84%D8%AE%D8%B7%D8%A9%20%D8%A7%D9%84%D8%A7%D8%B3%D8%AA%D8%B1%D8%A7%D8%AA%D9%8A%D8%AC%D9%8A%D9%87%20%D9%84%D9%84%D9%85%D8%A4%D8%B3%D8%B3%D8%A9%20(2016-%202019)%20%D8%A7%D9%84%D9%85%D8%AD%D8%AF%D8%AB%D8%A9.pdf)

..... ٢٠١٧. الخطة الإستراتيجية للمؤسسة.

..... 2017. *The Strategic Plan for the Corporation*.

Available at

[http://www.hudc.gov.jo/EchoBusV3.0/SystemAssets/%D8%A7%D9%84%D8%A7%D8%B3%D8%AA%D8%B1%D8%A7%D8%AA%D9%8A%D8%AC%D9%8A%D8%A9%202017/%D8%A7%D9%84%D8%AE%D8%B7%D8%A9%20%D8%A7%D9%84%D8%A7%D8%B3%D8%AA%D8%B1%D8%A7%D8%AA%D9%8A%D8%AC%D9%8A%D9%87%20%D9%84%D9%84%D9%85%D8%A4%D8%B3%D8%B3%D8%A9%20\(2016-%202019\)%20%D8%A7%D9%84%D9%85%D8%AD%D8%AF%D8%AB%D8%A9.pdf](http://www.hudc.gov.jo/EchoBusV3.0/SystemAssets/%D8%A7%D9%84%D8%A7%D8%B3%D8%AA%D8%B1%D8%A7%D8%AA%D9%8A%D8%AC%D9%8A%D8%A9%202017/%D8%A7%D9%84%D8%AE%D8%B7%D8%A9%20%D8%A7%D9%84%D8%A7%D8%B3%D8%AA%D8%B1%D8%A7%D8%AA%D9%8A%D8%AC%D9%8A%D9%87%20%D9%84%D9%84%D9%85%D8%A4%D8%B3%D8%B3%D8%A9%20(2016-%202019)%20%D8%A7%D9%84%D9%85%D8%AD%D8%AF%D8%AB%D8%A9.pdf)

..... ٢٠١٨. المؤشرات الحضريّة.

..... 2018. *Urban Indicators*.

Available at

<http://www.hudc.gov.jo/EchoBusV3.0/SystemAssets/%D8%A7%D9%84%D8%B3%D9%8A%D8%A7%D8%B3%D8%A7%D8%AA/%D9%85%D8%A4%D8%B4%D8%B1%D8%A7%D8%AA%201-4-2018.pdf>