# Financial lessons from the long history of housing markets



**Document status and date:**
Published: 01/01/2021

**DOI:**
10.26481/dis.20210115mk

**Document Version:**
Publisher's PDF, also known as Version of record

# Chapter 9

# Research Impact

The title and very first page of this dissertation reads "Financial Lessons from the Long History of Housing Markets." To close the circle, this final chapter aims to conclude with the lessons that can be drawn from the past and their relevance for modern society. Housing is important for many different actors in society. For households, a house is a place to live and an investment for the future: an investment in a location for renters and for owner-occupiers additionally an enormous investment in a particular asset. For investors, real estate represents the largest asset class, whose risks and returns are not yet fully understood. For policymakers, housing is important both because the status of the housing market is closely linked to the state of the macroeconomy, and because housing markets are a significant contributor to economic opportunity and inequality. My dissertation contains important lessons for each of these groups.

## 9.1 Lessons for Households

With housing rents and prices rising substantially in cities, many households feel that urban housing affordability is quickly deteriorating. Among many dimensions, the findings of Chapter 2 and Chapter 3 confirm this sentiment. In the 21$^{st}$ century, housing affordability has stagnated or worsened in nearly all of the cities studied in these chapters, as rent prices continued to increase. However, over the long-term, urban households are still in a very favorable position. On average, real rent prices today are comparable to their levels in 1900, but given the enormous improvements in wages and the reduction in income inequality, households today can afford to buy or rent much larger and better quality housing than at any time in history. This holds even in cities like Paris or London, which are often considered to be extremely expensive. So one important lesson for households is that their housing expenses have primarily increased because of rising housing quality, and not because of rising rent prices.

Yet at the same time, we cannot neglect that improvements in urban affordability and housing quality appear to have halted in recent years, in particular due to the growing popularity of cities. This is not inconsistent with the historical record, as Chapter 2 shows that increases in urban population coincided with significant increases in rental costs over time. However, over the longer-term, there might be potential ways out. First, cities responded historically to increasing population and rising housing costs with significant urban expansions. This allowed both to house more inhabitants, and to provide housing rents from rising too much, which could support further population growth. Over the long run, real housing rents have there only increased in limited amounts (Chapter 2). Nowadays, the use of strict planning regulations has often hampered housing expansion and driven up housing costs (Glaeser and Gyourko, 2018). If supply adjusts, rent price increases will level off or even reverse. Thus, household support for housing supply expansion is crucial.

There might be other reasons why households could see their cost of housing change over time. Chapter 6 shows that changes in demographic structure have robust and predictive impacts on the cost of housing, with the impact being particularly large on house prices. Throughout the long course of history, societies with a large fraction of young adults have consistently experienced large house price increases, whereas those with a large fraction of older people experienced price declines. Thus, population aging might reduce future house price growth.

Finally, Chapter 7 addresses a question that is currently very high on the household agenda: how will the coronavirus impact the housing market? Our findings suggest that epidemics exert little influence on the development of housing rents, but do result in significant but short-lived declines in house price growth.

## 9.2 Lessons for Policymakers

These lessons for households are also relevant for policymakers, who can exert much more control over the supply of housing. To a large extent, the findings of this thesis support the long-familiar adage in housing economics that housing supply matters. The lesson is simple: policymakers should make sure we build enough homes, and the current corona-crisis is not making that any less relevant (Chapter 7).

Beyond building more housing, there are also other valuable lessons to be learned. First of all, Chapter 3 shows that unregulated urban growth results in increased housing inequality. When cities grow, rental prices of cheaper housing appreciate at faster rates than those of more expensive housing. Beyond this inequality in prices, inequality in housing consumption increases as well. Thus, if markets are unregulated, urban growth will likely result in increasing inequality. Existing research has shown such inequalities might have important consequences for social mobility (Chetty and Hendren, 2018a,b).

A second issue that is currently very high on the policy agenda is the regulation of investors in the housing market. Investors are increasingly buying real estate, but the causes and consequences of this behavior have not yet been documented. One channel that is often highlighted in these debates, but not yet identified, is the role of reach for yield motives among investors. Chapter 5 shows that in periods with exogenously low interest rates, wealthy investors increasingly reach for yield in real estate, and likely also in other assets. There are three policy-relevant lessons to be drawn from this finding. First, reach for yield behavior is not restricted to institutions but also prevalent among individual investors investing for themselves. Reach for yield behavior becomes increasingly prominent among investors for whom capital is an important source of total income, in particular if this income is strongly exposed to fluctuations in yields. This suggests that reaching for yield results from individual preferences, rather than from misalignment between the incentives in the financial industry and the preferences of the investors whose money they manage. It also implies that limiting competitive pressures in industry may not eradicate search for yield behavior. Second, my findings indicate that reach for yield behavior might amplify cycles in asset prices and housing prices specifically. Since housing market volatility might have significant implications for the aggregate economy, as highlighted during the recent crisis, monetary policymakers might need to consider reach for yield motives in setting interest rates. Third, because reaching for yield drives up house prices, and is particularly prominent among wealthy investors, it increases housing wealth inequality. During a reach-for-yield boom, investors increasingly purchase the property from less wealthy investors. These changes in the distribution of housing wealth might have important consequences for future wealth inequality and dynamics within cities.

A final policy-relevant lesson is that housing booms and busts are of all times. For as long as we have written history, crisis and boom periods have occurred, and it would be hard to believe that we can entirely prevent a future crisis from happening. After the recent financial crisis, policymakers have put significant emphasis on restricting the expansion of mortgage credit, which played an important role in the spread of the 2007-2008 financial crisis. Chapter 5 shows that such measures are not a sufficient condition to prevent future crises from happening: $17^{\text{th}}$-$18^{\text{th}}$ century Amsterdam experienced several major housing crises, despite having a negligible market for private credit. The important lesson here is that a credit boom is not a necessary condition for a housing boom (and bust).

## 9.3 Lessons for Investors

This thesis contains important lessons for investors, particularly for investors that have long-term horizons such as pension funds and sovereign wealth funds, but also for individuals that try to support their income with housing market investments.

One lesson important for each of these groups is the realization that all real housing returns over the long term accumulate from rental cash flows rather than capital gains (Chapters 2 and 4). Also, in nominal terms, capital gains only form a small fraction of total returns. Of course, capital gains move substantially over the short-term due to changes in interest rates and expectations of future rental growth, but over the long-term, these changes are of minor relevance.

The importance of rental cash flows for housing returns also implies that it is of crucial importance that investors make sensible assessments of their growth over the long-term. Most evidence on long-term rental- or house price growth typically comes from cities that have been very successful in the past. However, Chapter 2 shows that looking at such cities only will induce a 'survivorship bias' in return estimates since cities do not keep growing forever, and some even reduce in importance over time. This is particularly important for the future as urbanization is expected to slow down. The evidence in Chapter 2 shows that cities without substantial growth have not experienced any long-term real rental growth. This might be a more realistic prediction for the future.

The importance of rents might be even higher for long-term investors that hold concentrated real estate portfolios. The typical investor in the housing market owns only one or just a few properties, implying significant exposure to idiosyncratic risks. Chapter 4 shows that idiosyncratic risk is the main component of total risk for holding periods of up to twenty years, while reducing gradually in importance over time. At the same time, the rental yield at the time of purchase is an essential predictor of the total return over the holding period. Thus, property investors should look carefully at their yields at purchase, and compare them to the yields in the market, in order to avoid losing significant amounts of money.

Finally, Chapter 6 documents there are substantial predictive components in housing markets due to changes in the demographic structure of populations. Investors could benefit from these predictive changes by purchasing rental properties before a large cohort of young adults enters the market. This could earn these investors both higher rents and significant short-term capital gains.