The real estate market is key to explaining cyclical developments in the US economy. Nine of the 11 recessions experienced in the United States since the Second World War have been preceded by a significant slowdown in the housing market. Against this background, and especially bearing in mind the still-fresh memory of the role of this market in the origins of the 2008 economic and financial crisis, the real estate slowdown of late is arousing some concern. This box assesses the scale of the recent loss of momentum in the US housing market and its determinants. Its aim is to shed light on its relevance as a factor of risk for the prolongation of the US economy's current upturn.

Residential investment has in fact been slowing continuously in recent years, currently posting practically zero growth rates (Chart 1). This reduction in the contribution of housebuilding to GDP growth has been accompanied by a continuing upward path of house prices (Chart 2). There are certain demand factors behind this diminished activity in the residential market. Admittedly, the sound behaviour of the labour market, in terms of the decline in the unemployment rate to historical lows and sustained wage growth, is a powerful source of support for house purchases. But opinion-based surveys show that consumers do not think the current moment is a good one for buying a house.<sup>2</sup>

Part of the explanation lies in the consequences of monetary policy normalisation for the cost of mortgage financing. And this has been reflected in the lower pace of house sales and of the flow of new credit. As Chart 3 shows, since late 2016 the fixed interest rate on 30-year mortgages (the most usual form of financing in the US market<sup>3</sup>), has risen by more than 100 bp to around 4.5%. If price developments are added to the cost of financing, the outcome is that the housing affordability index is in its most unfavourable position since the financial crisis broke (as the blue line in the chart shows). In addition, the 2017 tax reform (the Tax Cuts and Jobs Act) has contributed to making house purchases dearer by limiting the maximum amount of tax-deductible mortgage expenses. Buyers with lower incomes or with fewer savings for the initial down payment have seen their access to the market limited as the stricter lending standards in force in the wake of the crisis have become binding for a higher proportion of potential buyers. In the case of the youngest cohort, a further factor limiting home buying possibilities is the worsening of their credit ratings as a result of the rapid rise in the outstanding balance of student debt (Chart 4).4

True, the loss of dynamism in the US residential market is essentially in response to demand-side factors. But these have been compounded by various supply-related factors. First, there

1 See Leamer, E., 2007. "Housing is the business cycle," Proceedings -Economic Policy Symposium - Jackson Hole, Federal Reserve Bank of Kansas City, pages 149-233. has recently been a notable increase in construction costs, which have coincided with the scarcity of skilled labour in the sector.<sup>5</sup> Second, tighter land use regulations have, along with building constraints, contributed to the shortage of plots available for house building and to making them dearer, particularly in areas closest to city centres.<sup>6</sup> The upshot has been the stagnation of housing starts and the slowdown in residential investment spending (see Chart 5). Moreover, the construction of new housing has tended to be concentrated in the dearest market segment, that which continues to have the highest returns.<sup>7</sup> Hence, despite the slowdown in demand, new houses placed on the market do not cover the existing demand in this segment, and the overhang of housing stock has fallen to historically low levels (see Chart 6).

Supply shortages have translated into price increases which, since 2012, have persistently outgrown household incomes (Chart 5). But, moreover, supply/demand mismatches tend to exacerbate the heterogeneity of the different market segments. This is particularly so at the regional level, which is more pronounced than in other countries, owing to the strong domestic migratory flows towards cities and, especially, towards metropolitan areas on both coasts. As a result, prices are very uneven. Some geographical areas have accumulated rises in excess of 180% since 2000, coexisting alongside others where this increase is below 25% (see Chart 7).

Looking ahead, the prospect of the recent downturn in the residential market leading to a sharp correction, such as that in the wake of the financial crisis, appears limited. This is because there are marked differences between the current situation of the residential market and that of the previous cycle. Firstly, at least at the national level, the rates of construction of new houses and of household formation are aligned, denoting that, unlike the previous cycle, the dynamics of the residential sector are underpinned by fundamentals and are, therefore, more sustainable. Secondly, the adjustment of the sector following the crisis has meant that its weight in US GDP is much less compared with the previous cycle. That restricts the scale of the impact of any downturn in activity in this sector on the rest of the economy. Specifically, the weight of residential investment in GDP currently stands below 4%, somewhat down on the historical average (of 4.6% since 1951), and clearly below the high of 6.7% attained at the height of the previous real estate cycle. Thirdly, household debt is now much more moderate. Compared with the pre-crisis high, the total and mortgage debt of households as a percentage of their disposable income has respectively fallen by around 30 pp to 102% and 59% (Chart 4). Moreover, the sector's aggregate balance sheet has been significantly restructured during the lengthy expansion and mortgage debt is now concentrated in those groups of households with less credit risk (Chart 8). Finally, the financial regulation

<sup>2</sup> As indicated in the University of Michigan house buying conditions index.

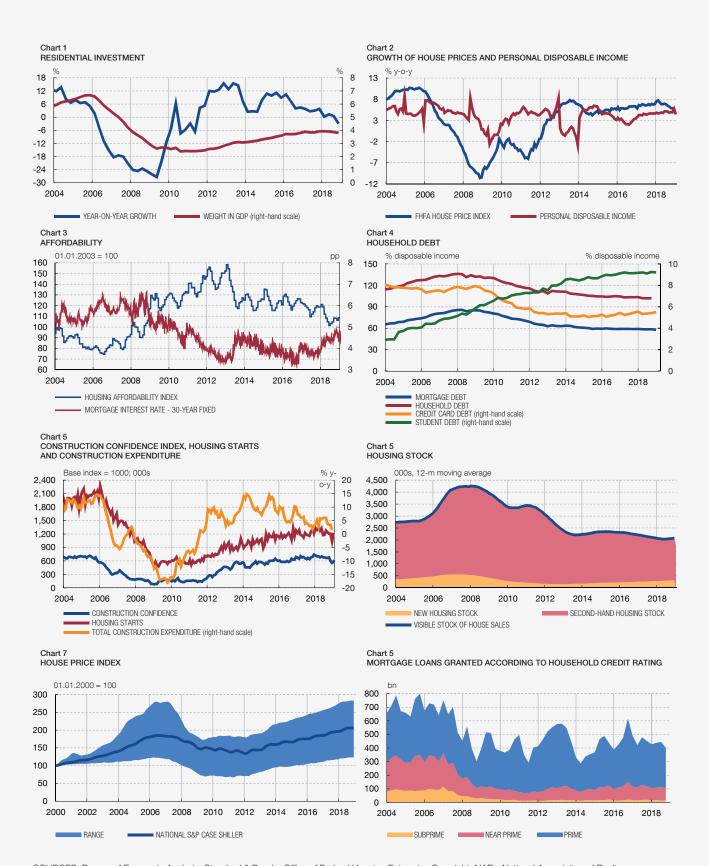
<sup>3</sup> American Bankers Association, "24th Annual ABA Residential Real Estate Survey Report", March 2017.

<sup>4</sup> Federal Reserve, "Consumer & Community Context", January 2019.

<sup>5</sup> See the latest editions of the Federal Reserve's Beige Book.

<sup>6</sup> See Brookings Institution, "The Goldilocks problem of housing supply: too little, too much, or just right?".

<sup>7</sup> See Urban Land Institute and PWC, "Emerging Trends in Real Estate 2019".



SOURCES: Bureau of Economic Analysis, Standard & Poor's, Office of Federal Housing Enterprise Oversight, NAR - National Association of Realtors, Bloomberg, Federal Reserve, Federal Reserve Bank of New York, U.S. Census Bureau, University of Michigan and MBA - Mortage Bankers Association of America.

changes introduced after the crisis have tightened the requirements on mortgage loan collateral and on the financial derivatives created from such mortgages. That has mitigated the risks to national and global financial stability of a correction in the US housing sector.<sup>8</sup>

8 Federal Reserve, "Financial Stability Report", November 2018.

In sum, the housing market is significant for the US economy as a whole. Its possible implications for financial stability, along with the habitual difficulty of anticipating potentially sharp changes in the real estate cycle, warrant the growing attention and ongoing monitoring of conditions in this market by analysts and official institutions.