Germany's real estate boom: Is this time different?

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After rapid price increases and unmistakable growth in construction activity in many cities, warnings about a real estate bubble are now emerging. Experience in the US, Spain and Ireland has shown that such bubbles can lead to an economic crisis. Germany, too, had to overcome a real estate bubble after the unification boom of the early 1990s. Much has changed since then, however. Household debt and the macroeconomic weight of the construction sector, in particular, are today lower than in past crises.

The problem with real estate

Lengthy planning and completion periods make the construction sector susceptible to speculation and misallocations from delayed reaction of demand to supply. Besides, most real estate is credit-financed. During an upturn, this can lead to a self-reinforcing cycle of rising prices and more generous lending. In a downturn, the impacts of real estate price corrections are more severe than for share prices, for example.[1]

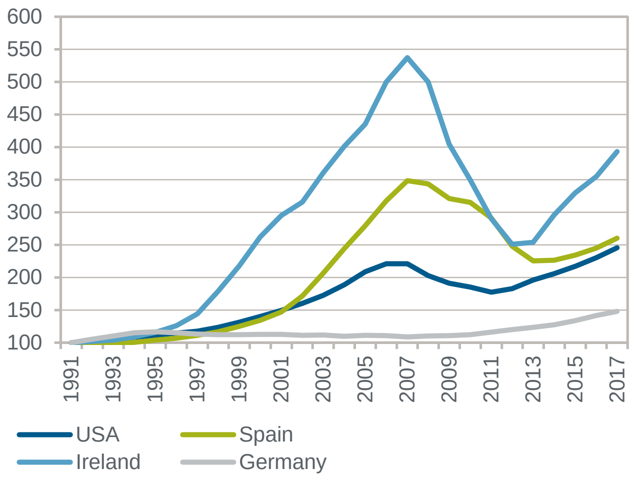
Apart from other factors, the low-interest environment that has prevailed for several years now is driving real estate valuations upward and making mortgage loans very affordable. This situation can lead to overinvestment that exceeds demand or households' debt repayment capacities. After the bubble bursts, what remains are vacant housing units, bankrupt developers and over indebted households that withhold consumption and thereby exacerbate the economic slump. Often, defaults on real estate loans also lead to financial crises, such as the global financial crisis that broke out a decade ago.[2] Oversupply in the construction sector leads to a consolidation. Workers are laid off and have to prepare to spend a lot of time looking for new jobs. Transitioning to another industry is hampered by different and usually higher skill requirements. For all these reasons it is hardly surprising that 11 from 12 real estate bubbles that have burst in the G7 countries since 1960 have led to recessions.[3]

Price setbacks are possible ...

From 2010 to the end of 2017, average prices of residential real estate in Germany rose by about 30 to 45 %.[4] Price increases in large cities were even more pronounced. The Deutsche Bundesbank now considers the housing market in the seven largest German cities to be overvalued by 15 to 30 %, while the International Monetary Fund estimates an average overvaluation of some 20 %.[5] We estimate a setback potential of 22 to 40 % for some cities but do not see a countrywide price bubble.[6] The price increase in Germany is put into perspective particularly when compared with developments in the US, Spain and Ireland prior to the respective crises (Figure 1). In relation to rent levels and, above all, disposable household incomes, housing prices in Germany are today below the long-term average.[7]

Figure 1: Price trend in international comparison

Nominal real estate prices; index: 1991=100



Source: OECD Analytical House Price Indicators

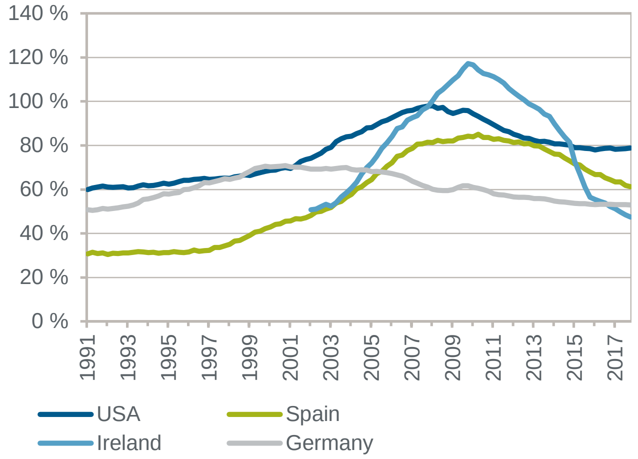
… but risks to the financial system so far are rather low

Despite rapid price increases and low interest rates, German household debt levels have hardly risen in recent years. In relation to GDP, they are actually trending downward slightly (Figure 2). This is very different from the situation in Spain, the US and, in particular, Ireland before the crisis, where borrowing levels grew much faster and debt ratios were roughly twice as high. And with respect to real estate developers' debt levels and lending standards, no alarming trends have yet been observed.[8] Today, interest risks primarily affect banks, which could run into trouble when interest rates rise quickly but are definitely better equipped to deal with them than private households.[9]

As a lesson learned from the financial crisis, banks' risk-bearing capacity was also reinforced by higher capital requirements. Macroprudential instruments were also made available in order to prevent excessive lending. If it identifies any threat to financial stability in the future, the German Financial Supervisory Authority is authorised to set an upper limit to the amount of new loans granted in relation to real estate value. It may also require a minimum repayment within a specific period of time. What is controversial is whether it would also be necessary to limit debt levels or debt service payments in relation to income.[10]

Figure 2: Household debt levels

As a percentage of GDP



Source: BIS

... and the construction sector is not excessively bloated

Construction activity has picked up noticeably in Germany since the beginning of the decade, with the business climate in the construction sector reaching a record level in July 2018. By international standards, however, the construction sector has nonetheless not grown to excessive proportions. The share of residential construction investment in GDP (Figure 3) has grown since the financial crisis and, at probably 6 % in 2018, is just above the long-term average of 23 comparable OECD countries.[11] But at the height of the real estate bubbles in Spain and Ireland, after a much sharper increase in construction activity there, that share was roughly twice as high. During the unification boom of the early 1990s, residential construction also had significantly more weight. The same applies to construction overall. Today, construction investment of the state and enterprises combined makes up one tenth of Germany's GDP, while in Ireland and Spain a full one fifth of GDP depended on it.

The construction sector in Germany does not currently pose any economic risks to the labour market in Germany either. Since the middle of the past decade, employment in construction has grown at the same rate as the workforce, so that its share has stabilised at about 5.5 % (Figure 4). This is below the average for comparable OECD countries and only around half the peak values recorded in Spain or Ireland. Both economies grappled with an enormous rise in unemployment after the bubble burst. In all three crisis-affected states, jobs lost in construction directly accounted for 70 to 80 % of job losses (Table).

Table: Job losses after real estate bubbles

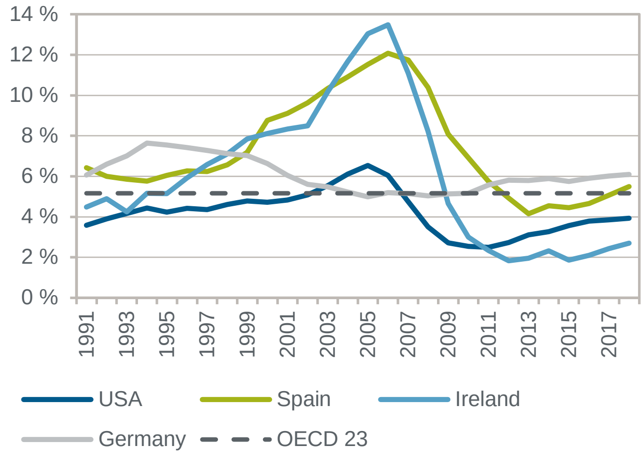
	Unemployment rate		Job losses in construction in thousands	Share in job losses overall
	2005–2007	2010–2013		
United States	4.8	8.9	2,574	73 %
Spain	8.6	22.0	1,198	80 %
Ireland	4.8	15.2	136	76 %

Note: Job losses = average employment in construction in 2010–2013 vs. 2005–2007.

Source: AMECO

Figure 3: Residential construction investment

As a percentage of GDP

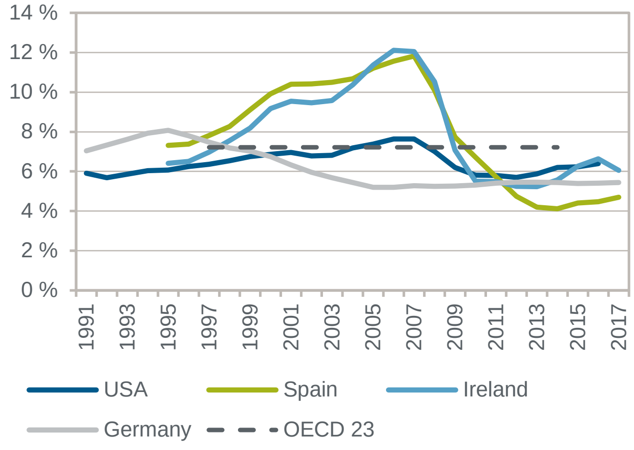


Note: Residential construction investment comprises both new buildings and renovations.

Source: AMECO

Figure 4: Employment in construction

As a share of the workforce

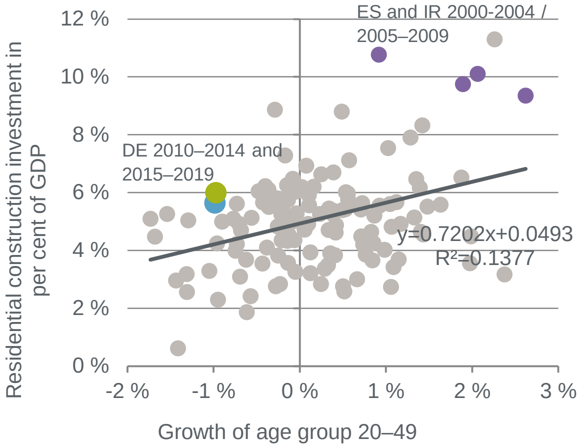


Source: AMECO

Demographics are also important

The current extent of construction investment could be problematic given the demographic trend in Germany. Despite net immigration of around 3.6 million people and the resulting population growth in this decade, the age group of 20 to 49-year-olds is shrinking by roughly 1 % each year over the same period, according to the UN population estimate.[12] But since this age group accounts for the bulk of newly established households, demand for construction and the economic weight of residential construction should also turn out lower than if the population in this age group were growing.[13] A simple regression with data from comparable OECD countries (Figure 5) confirms a positive correlation between the two parameters.[14] In Germany, residential construction investment is currently just under two percentage points higher than would be expected on the basis of relevant population growth. This in itself points to a moderate consolidation of residential construction, especially since the group of 20 to 49-year-olds will also continue to shrink in the more distant future, according to the UN's mean projection results.

Figure 5: Population growth and construction investment



Note: Data points show five-year average values of 22 OECD countries during the period 1990–2019. Residential construction investment comprises both new buildings and renovations. Population growth according to the UN's mean scenario.

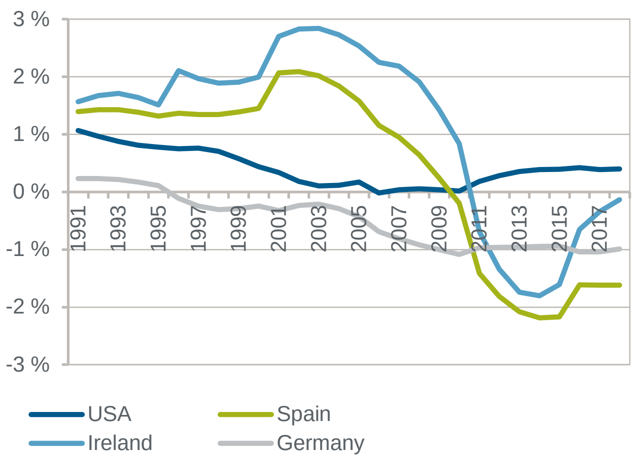
Source: AMECO und UN World Population Prospects 2017

Apart from the original housing stock, however, this analysis does not consider other social developments such as population shifts from the countryside to the cities. The trend towards smaller households also increases per-capita space consumption. On the basis of current shortages, various estimates put medium-term new housing requirements at roughly 350,000 to 400,000 units per year.[15] Keeping up with this demand is difficult, particularly because of the scarcity of available building sites and the construction skills shortage.[16] At the same time, too many single-family houses tend to be built in rural regions.[17]

What is doubtful is whether the trends that are currently creating the backlog in the cities will fuel new construction in the long term as well. For example, the increased share of double income households has probably accentuated the importance of living close to the workplace and thus contributed to urbanisation. But the labour market participation of women is already above the OECD average. It is also conceivable that innovations such as driverless vehicles may slow the need for new construction in cities. Yet the technological ease of working from home and the possibility of maintaining social networks through the Internet has not been able to curb the rural exodus as well.

Migration trends are also difficult to predict. The experience of Spain, in particular, shows that volatile migration flows can bolster a construction boom. From 1998 to 2008, labour migration to that country led to very high population growth of about 1.5 to 2 % per year. The group of 20 to 49-year-olds, which is important for construction activity, also grew at a similarly fast pace (Figures 5 and 6). While this fuelled demand for housing, some of the migrants were also attracted specifically by the prospect of working in the construction sector with relatively low qualification requirements. According to an empirical study, roughly half the construction activity during that period can be attributed to the effect of migration.[18] Later, after the outbreak of the real estate crisis, unemployment among migrants was particularly high. The flow of migration eventually reversed, taking some pressure from the labour market but increasing oversupply in the real estate market.[19]

Figure 6: Growth of the age group of 20 to 49-year-olds



Source: UN World Population Prospects 2017

Conclusion

There is still no end in sight for Germany's construction boom. Locally exaggerated real estate prices are possible but even if a price bubble were to burst it would currently not lead to severe macroeconomic problems. Unlike in past real estate bubbles, household debt is currently at a low level. Residential construction investment has grown only moderately and the share of employment in construction is below the OECD average. In comparison to Spain before the crisis, for example, there are no signs that huge numbers of young people are rushing into the German construction sector. Rather, the construction trade is actually affected by a skills shortage. In order to meet current demand for construction, employers are using labour migration to a large extent but significantly less – in proportion to the overall population – than in Spain or Ireland before the crisis. In the longer term, Germany's population is set to continue declining. So in order to prevent town centres from becoming depopulated, support measures in rural regions should focus on modernising existing real estate. ■

[1] Jordà, Ò., Schularick, M. and Taylor, A. M. (2015): 'Leveraged bubbles,' Journal of Monetary Economics, vol. 76: 1–20.

[2] Reinhart, C. and Rogoff, K. (2009): 'This Time Is Different: Eight Centuries of Financial Folly', Princeton University Press; and Jordà, Ò., Schularick, M. and Taylor, A. M. (2015): 'Betting the house', Journal of International Economics, Elsevier, vol. 96: 2–18.

[3] Cf. Capital Economics (2018): 'What causes recessions?', 27 March 2018.

[4] Cf. Bundesbank (2018): **Indikatorensystem zum deutschen Wohnimmobilienmarkt** (*Indicator system for the German residential housing market* - our title translation, in German only).

[5] Cf. Bundesbank (2017): 'Housing prices in Germany in 2017', Monthly Report February 2018; and IMF (2018): 'Germany – Staff Report for the 2018 Article IV consultation'.

[6] Cf. Müller, M. (2017): **Germany is approving enough new residential units – they just need to be built**, Focus on Economics No. 188, KfW Research (our title translation, in German only).

[7] Cf. OECD Analytical House Price Indicators.

[8] Cf. Müller, M. (2017): **Germany is approving enough new residential units – they just need to be built**, Focus on Economics No. 188, KfW Research (our title translation, in German only)..

[9] Cf. Dombret, A. (2017): 'Immobilienmärkte und mikroprudenzielle Aufsicht (*Real estate markets and microprudential policy in Europe – our title translation)'*, lecture at the 39th symposium of the Institute for Banking and Financial History (in German only).

[10] Cf. Financial Stability Committee (2018): 'Fünfter Bericht an den Deutschen Bundestag zur Finanzstabilität in Deutschland' (*Fifth report to the German Bundestag on financial stability in Germany* – our title translation, in German); and Lerbs, O. and Voigtländer, M. (2017): 'Ist eine makroprudenzielle Regulierung des deutschen Hypothekenmarktes geboten?' (*Is there a need for macroprudential regulation of the German mortgage market?* – our title translation, in German only), ZEW Discussion Paper No. 17-029.

[11] Residential construction investments in the AMECO database comprise both new construction and renovation investments if they raise the real estate value.

[12] Population data broken down by age from the German Federal Statistical Office is available only up to 2016. These data are more volatile compared with the UN population statistics. The population decline in the year 2011 is overdrawn while the increase from the refugee intake in 2015 is higher and thus more realistic. For the multi-year period that is relevant here, however, the deviations mutually offset each other. The shrinking of the population group of 20 to 49-year-olds from the mid-2000s onwards is mainly the result of the large baby boomer cohorts of the 1950s and 1960s leaving this age group.

[13] Economists of the Banque de France identified the growth of the population group of 20 to 49-year-olds as the main determinant of residential construction investment on the basis of multivariate econometric methods and a panel of 20 OECD countries. Other age groups, in turn, have no significant influence: Cf. Monnet E. and Wolf, C. (2016): 'Demographic Cycle, Migration and Housing Investment: a Causal Examination', Banque de France, Working paper No. 591.

[14] The influence of population growth is significant at the 5 % level (p value: 0.039).

[15] Cf. Müller, M. (2017): **Germany is approving enough new residential units – they just need to be built**, Focus on Economics No. 188, KfW Research (our title translation, in German only)..

[16] Cf. Müller, M. (2018): **Skills shortages in the construction sector are increasingly hampering residential construction**, Focus on Economics No. 221, KfW Research (our title translation, in German only).

[17] Cf. ibid. and Deschermeier et al. (2017): 'Wohnungsmangel in den Städten, Leerstand auf dem Land' (*Housing shortages in the cities, vacancies in the countryside'* – our title translation, in German only), IW-Kurzberichte No. 44, 2017.

[18] Gonzalez, L. und F. Ortega (2013), 'Immigration and Housing Booms: Evidence from Spain', Journal of Regional Science, vol. 53: 37–59.

[19] Campos, A. (2016): 'The migratory phenomenon in Spain: from immigration to emigration?', Caixa Bank Research, October 2016; und Marti Romero, J. (2015): 'The remarkable case of Spanish immigration', Bruegel Blog Post, December 2015.