

IV. Cyclical patterns of residential construction

The large and frequent swings of residential construction investment have an important bearing on the business cycle. This chapter surveys the cyclical pattern of residential construction investment in the euro area and selected Member States over almost five decades. It uses a standard econometric framework to identify main drivers of residential construction in the short- and longer term. In the long run, residential construction investment is mostly driven by real per capita disposable income developments, and in some Member States also by demographic developments. In the short run residential construction activity responds positively to increasing house prices as well as falling unemployment. Following the housing boom and bust a decade ago, residential investment has bottomed out around 2015 and is now swiftly catching up with disposable incomes. Positive labour-market developments and increasing house prices should continue to underpin residential construction activity in the near term. This picture is confirmed by additional indicators of near-term developments in residential construction such as building permits and confidence in the construction sector. This suggests a positive contribution of expanding residential construction to GDP growth this year. However, residential construction growth may have peaked in some Member States where the residential construction cycle is already more advanced. ⁽¹⁸⁹⁾

IV.1. Introduction

Residential construction investment represented only about 6% of GDP in the euro area on average in 2000-2017. However, the quite pronounced ups and downs in residential construction activity are intimately linked to GDP cycles in advanced economies. E. Leamer even titled articles on US residential investment 'Housing is the business cycle' and 'Housing really is the business cycle'. ⁽¹⁹⁰⁾ The housing boom and bust as trigger of the Great Recession has reinforced the interest in understanding the cyclical mechanics of residential construction and its links to GDP.

Much of the literature on the interaction of residential construction and GDP focuses on the US, for which there is broad agreement that the residential construction cycle leads the business cycle. ⁽¹⁹¹⁾ One source of shocks to residential

investment is monetary policy, as residential construction is found to be particularly strongly impacted by monetary policy shocks. ⁽¹⁹²⁾ Shocks to residential construction activity may propagate in the economy through interlinkages with other sectors and affect GDP over and above the weight of the residential construction sector. Input-output tables for the US show for instance that the construction sector buys much more from the rest of the economy than the other way round. ⁽¹⁹³⁾ Drops in construction demand therefore swiftly spread to other sectors. House price developments are also set to affect household demand through wealth effects.

For the euro area, the evidence on a leading role for residential construction investment in the business cycle is less clear cut. Musso, Neri and Stracca (2011) ⁽¹⁹⁴⁾ find that residential construction leads the business cycle in the euro area. Álvarez and Cabrero (2010) ⁽¹⁹⁵⁾ point out that this is the case in Spain and Germany, but not

⁽¹⁸⁹⁾ This chapter was prepared by Björn Döhring. The author would like to thank João Leal for help with reviewing the literature, Andras Chabin for assistance in setting up the estimations and Reuben Borg, Jean-Charles Bricongne, Oliver Dieckmann, Laura González Cabanillas, Evelyne Hespel, Bertrand Marc, Nicolas Philipponnet and Andreas Reuter for useful comments.

⁽¹⁹⁰⁾ Leamer, E. (2008), 'Housing is the business cycle, in Housing, Housing Finance and Monetary Policy. A symposium sponsored by the Federal Reserve of Kansas City' *Revised and updated for the Encyclopedia of Finance*, 2010. Leamer, E. (2014), 'Housing really is the business cycle: What survives the lessons of 2008-09?', *Journal of Money, Credit and Banking*, supplement to Vol 47(1).

⁽¹⁹¹⁾ E.g. Leamer (2014) op. cit, Gjerstad, S. and Smith, V. (2010), 'Household expenditure cycles and economic cycles, 1920-2010', *Chapman University Economic Science Institute Working Paper*. Papers that have attempted to explain this theoretically point to interrelations of different types of capital, e.g. Fisher, J. (2007), 'Why Does Household Investment Lead Business Investment over the Business Cycle?', *Journal of Political Economy* 115(1), 141-168 as well as Davis, M. and Heathcote, J. (2005), 'Housing and

the Business Cycle', *International Economic Review* 46(3), 751-784. Kohlscheen, E., A. Mehrotra and D. Mihajek (2018), 'Residential investment and economic activity: evidence from the past five decades', *BIS Working Paper* No 726 look at a panel of OECD countries.

⁽¹⁹²⁾ Erceg, C. and Levin A., (2006), 'Optimal monetary policy with durable consumption goods', *Journal of Monetary Economics* 53(7), 1341-1359.

⁽¹⁹³⁾ Boldrin, M., Garriga, C., Peralta-Alva, A. and Sánchez J. (2013), 'Reconstructing the Great Recession', *Federal Reserve Bank of St. Louis*, Working Paper 2013-006.

⁽¹⁹⁴⁾ Musso, A., Neri, S. and Stracca, L. (2011), 'Housing, consumption and monetary policy: How different are the US and the euro area?', *Journal of Banking and Finance* 35(11), 3019-14.

⁽¹⁹⁵⁾ Álvarez, L. and Cabrero, A. (2010), 'Does housing really lead the business cycle?' *Banco de España Documentos de Trabajo*, N° 1024.

in France and Italy. Kydland, Rupert and Šustek (2016) also find no leading properties of residential investment with respect to GDP in France or Belgium.⁽¹⁹⁶⁾ Concerning the propagation of shocks to construction, the ECB (2009)⁽¹⁹⁷⁾ points to the inputs from other sectors as well as the high labour intensity in the construction sector, which implies relatively large employment effects of construction cycles. By contrast, wealth effects of house price developments do not seem to play a role in the euro area.⁽¹⁹⁸⁾ Finally, the dynamics of the housing sector and its links to overall economic activity vary across countries, reflecting structural features such as land availability, the structure and functioning of the banking sector, the tax treatment of housing and mortgages and local planning systems.⁽¹⁹⁹⁾

This chapter first examines past cycles of real residential construction investment⁽²⁰⁰⁾ in euro area Member States in terms of their frequency, amplitude and links with GDP (section 2). In section 3, a standard error-correction model is developed to identify the trend- and cyclical drivers of residential construction investment. The model is used in section 4 to analyse the residual 'investment gap' and examine the drivers of residential construction investment in recent years. The model also allows conditional forecasts for residential construction for 2018. These are cross-checked with high-frequency indicators not covered in the model. Section V.5 concludes.

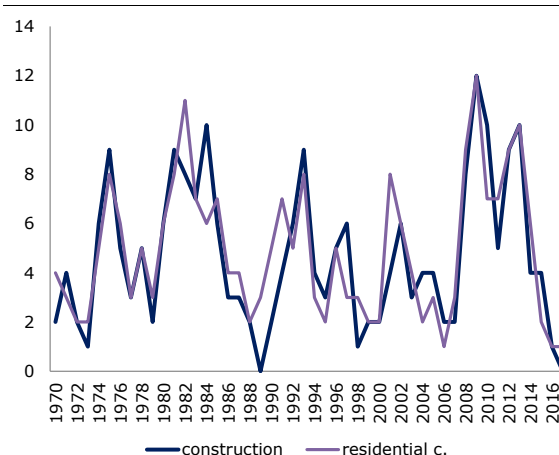
IV.2. Past residential construction cycles and GDP growth

Drops of residential construction activity are frequent and often deep. Since 1970, there have been 50 episodes of annual GDP contracting for at

least one year in the 12 euro area Member States⁽²⁰¹⁾ for which long series of annual data are available. This compares to 91 episodes of annual residential construction investment decreasing for at least one year. The standard deviation of GDP growth in these countries since 1970 is 3.0. It is 7.8 for construction investment and 11.5 for residential construction. Counted from trough to trough, the average cycle in residential construction lasts 6 years (median 5), compared to the average business cycle which lasts 11 years (median 9).

The length of the upswing in residential construction investment and the length of the subsequent downturn are positively correlated⁽²⁰²⁾, and downturns can be long-lasting. Following the excessive housing investment in the euro area in the run-up to the 2008 crisis, it took until 2014 before residential construction investment bottomed out.

Graph IV.1: Number of 12 MS with a drop in construction / residential investment



Source: AMECO, own calculations.

GDP contractions are almost always associated with a drop in residential investment ('associated' includes a few cases where the drop in residential investment is in the year before or after the contraction of GDP). The link between drops in residential construction and drops in GDP is more complex, as suggested by the larger number of contraction episodes in residential construction. Nonetheless, among the 55 episodes before the Great Recession where residential construction in a

⁽¹⁹⁶⁾ Kydland, F., Rupert, P. and Šustek, R. (2016), 'Housing Dynamics Over the Business Cycle', *International Economic Review* 57(4), 1149-1177. See also Ferrara and Vigna, O. (2009), 'Cyclical relationships between GDP and housing market in France: Facts and factors at play', *Banque de France Document de Travail*, N° 268 find the same for France and for Italy Bulligan, G. (2010), 'Housing and the Macroeconomy: The Italian Case', in: O. de Bondt et al (eds), *Housing Markets in Europe, A Macroeconomic Perspective*, Springer, Berlin, Heidelberg.

⁽¹⁹⁷⁾ ECB *Monthly Bulletin*, May 2009, box 6.

⁽¹⁹⁸⁾ Balta, N. and Ruscher, E. (2011), 'Household savings and mortgage decisions: the role of the "down-payment channel" in the euro area', *European Economy*, Economic Papers 455.

⁽¹⁹⁹⁾ ECB (2003): *Structural factors in the EU housing markets*, Frankfurt.

⁽²⁰⁰⁾ This differs from studies that look at housing cycles in terms of house prices, e.g. Philipponnet and Turrini (2017), Bracke (2013). As we study the link to real GDP, focussing on volumes seems appropriate.

⁽²⁰¹⁾ i.e. BE, DE, IE, EL, ES, FR, IT, LU, NL, AT, PT and FI.

⁽²⁰²⁾ This feature is also present in house prices. Cf. Bracke, p. (2013), 'How long do housing cycles last? A duration analysis for 19 OECD countries', *Journal of Housing Economics* 22, 213-230.

Member State dropped by at least 5%, half are associated with a drop in GDP and almost all others with a substantial slowdown compared to previous years' GDP growth rates. In 2008-2009, housing investment dropped by more than 5% in all examined Member States except Austria, and GDP dropped across these countries in 2009.

Graph IV.1 depicts the number of Member States (among the 12) in which residential construction contracted in a given year. It points to fairly synchronised housing downturns in 1975, 1982, 1993 and 2001. In 2009, residential construction investment contracted in all 12 Member States, followed by another widespread contraction during the sovereign debt crisis.

Quarterly growth of residential construction in the euro area since 1995 appears to be coincident with GDP growth rather than leading it (Table IV.1). Residential construction is leading employment, which is considered a lagging variable with respect to GDP. In line with the findings by Álvarez and Cabrero (2010) (203), building permits lead residential construction as well as GDP by two to four quarters, reflecting the time lapse between the authorisation to start building and the registration of the actual construction activity in national accounts. This makes building permits useful for forecasting short-term fluctuations in residential construction and possibly also GDP. Neither the construction confidence indicator from DG ECFIN's business surveys nor its forward-looking components (order books and construction expectations) appear to be leading indicators of residential construction growth.

Table IV.1: **Correlations in quarterly growth rates**

target	indicator	leads					
		t-5	t-4	t-3	t-2	t-1	t
GDP	RC	0.09	0.26	0.31	0.40	0.40	0.63
	permits	0.24	0.40	0.39	0.40	0.36	0.31
E	RC	0.22	0.39	0.23	0.26	0.17	0.24
RC	conf	0.15	0.26	0.27	0.34	0.41	0.45
	exp	0.12	0.26	0.25	0.23	0.34	0.42
	permits	0.30	0.42	0.30	0.48	0.30	0.38

RC: residential construction; E: employment; conf: constr. confidence; exp: constr. expectations

Source: AMECO, Eurostat, BCS and own calculations.

IV.3. Drivers of residential construction investment

In view of the large swings in residential investment and their influence on GDP, there is an obvious interest in understanding the drivers of residential construction.

Housing is special in several respects. A house is both an asset and a consumption good; its use value depreciates slowly; compared to financial assets its sale is costly, but it can easily be used as collateral. Moreover, housing markets are subject to a number of regulations and policy incentives. In already densely populated areas, the supply of land is limited and its use often tightly regulated, which may make housing supply inelastic and amplify price swings. Tax deductibility of mortgages is used in some Member States to foster home ownership. Piazzesi and Schneider (2016) (204) survey the literature that deals with the specificities of housing and provide a comprehensive approach to modelling households' demand for housing and housing supply.

The present chapter focuses on a limited set of drivers of residential investment in an error-correction framework, broadly following Carnot et al (2011). (205) It includes demographic developments, disposable income and real interest rates as main determinants of housing demand in the long run. The real interest rate is included in the long-run relation as it affects households' intertemporal decisions between (housing) investment and consumption. Over a shorter time horizon, house prices are considered as (the expectation of) higher prices increase the value of a house as an asset as well as the supply of houses. The cost of mortgage credit also affects affordability, as most households have to incur debt to acquire a house. (206) Moreover, the unemployment rate is considered as a proxy of the uncertainty of households' income streams.

(204) Piazzesi, M. and Schneider, M. (2016): Housing and macroeconomics, Handbook of Macroeconomics, Vol. 2B, pp. 1547-1640 (ch. 19).

(205) Carnot, N., Koen, V. and Tissot, B. (2011), Economic forecasting and policy, Springer.

(206) Due to limited data availability, the monetary side of the model is somewhat underdeveloped. Ideally one would consider mortgage rates rather than bond yields, possibly for various maturities depending on the mortgage structures prevailing in different countries.

(203) Op. cit.

The data set includes real residential construction investment (RC), real disposable income per capita (RDIPC - nominal disposable income per capita deflated with the private consumption deflator), population (POP), the real interest rate (R – the 10 year bond yield deflated with the GDP deflator), the unemployment rate (U) and real house prices (HPI – deflated with the deflator of private consumption). Except the house price index, which is taken from the database constructed by Philipponnet and Turrini (2017) ⁽²⁰⁷⁾, all data are extracted from the AMECO database for 1960 to 2017, for the euro area and its six largest Member States. Some data series for Germany prior to 1992 had to be extrapolated on the basis of west-German data ⁽²⁰⁸⁾. A dummy variable with value 1 from 1992 on and zero before was therefore added to the long-run estimations for Germany and the euro area to cater for any instability in the coefficients introduced by reunification. The estimated coefficients below are however similar whether the dummy is included or not. Other variables like mortgage levels and rates (from the ECB), or high-frequency data such as building permits (Eurostat) are only available for more recent periods and not for all countries. These are introduced in the section on the near-term outlook.

possible. Only the relationship with the higher adjusted R^2 is shown and possible other variants are used as robustness check. The panel estimation presented in the fourth column is based on the six largest euro area Member States (unweighted). It uses country fixed effects and White cross-section standard errors. The reunification dummy is not statistically significant on top of the country fixed effects.

Before estimating the error-correction model (ECM), a simple autoregressive (AR(1)) model is estimated as benchmark for the euro area (first column of Table IV.2). Turning to the ECM, the series that are candidates for the long-run relationship are first tested for unit roots and cointegration. Systematically, residential construction, population and real disposable incomes are integrated of order one. The real interest rate is found to have a unit root in most but not all cases. The variables for which the Johansen test suggests cointegration are included in a first estimation of the long-run relationship. Variables that are not statistically significant are then excluded and cointegration tested again for the remaining ones. The estimated long-run relationships are presented in the upper panel of Table IV.2. In some cases, several variants are

⁽²⁰⁷⁾ Philipponnet, N. and Turrini, A. (2017), 'Assessing House Price Dynamics in the EU', *Directorate-General Economic and Financial Affairs European Economy Discussion Paper* 048.

⁽²⁰⁸⁾ Indices for RC and RDIPC built from growth rates for west Germany (1960-1992) and reunified Germany 1992 onwards. There is no consumption deflator for west Germany in AMECO. Therefore, pre-1992 RDIPC was deflated with CPI. POP exists for entire DE since 1960. R is the combination of west DE and reunified DE (East DE wasn't a market economy).

Table IV.2: Estimation outcomes

	euro area				Member States					
	AR(1)	short	full	panel	DE	FR	IT	ES	NL	BE
	1978-2007	sample	sample	1974-2016						
long run										
c				1.4***						
RDIPC		0.97***	0.97***	0.68***	0.31***	0.61***	1.01***	0.98***		1.00***
POP					0.62***	0.42***			0.97***	
r						-0.02***		-0.03***		
dummy 92		0.12***	0.08***		0.18***					
short run										
dRC lag1	0.56***	0.27*	0.40***	0.33***	0.42***	0.03	0.36*	0.30*	0.48***	0.20
dRDIPC				0.32*						
dRDIPC lag 1		-0.48*	-0.60**	-0.47***						
dU		-1.64**	-1.52***	-1.39***		-1.93**		-1.31**		-2.92*
dHPI		0.59***	0.67***	0.36***	0.46	0.38***	0.32*	0.30*	0.43***	1.03***
dPOP				1.23						
l-r res		-0.40	-0.24	-0.14	-0.21	-0.03	-0.15	-0.12	-0.24	-0.28
<i>obs</i>	30	30	39	258	43	43	31	38	43	43
<i>adj. R²</i>	0.14	0.62	0.65	0.50	0.32	0.52	0.51	0.63	0.58	0.56
<i>DW</i>	1.89	1.96	1.82	1.97	1.90	1.69	2.21	2.26	1.80	2.14

(1) Statistical significance at 1% (***) , 2%(**) and 5% (*) level (not shown for the error-correction term because of its non-standard distribution).

(2) The euro area panel includes the 6 largest Member States unweighted.

Source: AMECO, own calculations

The short-run relationship links the annual growth rate of residential investment to the rate of change in the long-run determinants, the lagged residual of the long-run relationship and additional explanatory factors. These include house price inflation⁽²⁰⁹⁾, the change of the unemployment rate, and population growth. Results are presented in the lower panel of Table IV.2.

For the majority of countries as well as the euro area, real per capita disposable income is identified as a major driver of housing investment in the longer run, sometimes, but not systematically in conjunction with demographic developments. The real interest rate is picked up as a long-run driver of housing investment only in a few cases.

House price inflation is positively and quite robustly linked to housing investment, in other words, housing investment slows down when house prices decelerate or fall, in line with the findings by Kohlscheen et al (2018).⁽²¹⁰⁾ Income uncertainty proxied by the change in the unemployment rate also affects the residential

construction cycle. Improvements in the labour market appear to make households more confident to undertake a major investment and take out a mortgage. Short-term population developments are not generally found to impact the residential construction cycle.

Considering the volatility of residential construction, the fit of the estimated ECMs (adjusted R² at 0.5 or more in most cases) appears reasonable, except for Germany, where it remains close to 0.3.

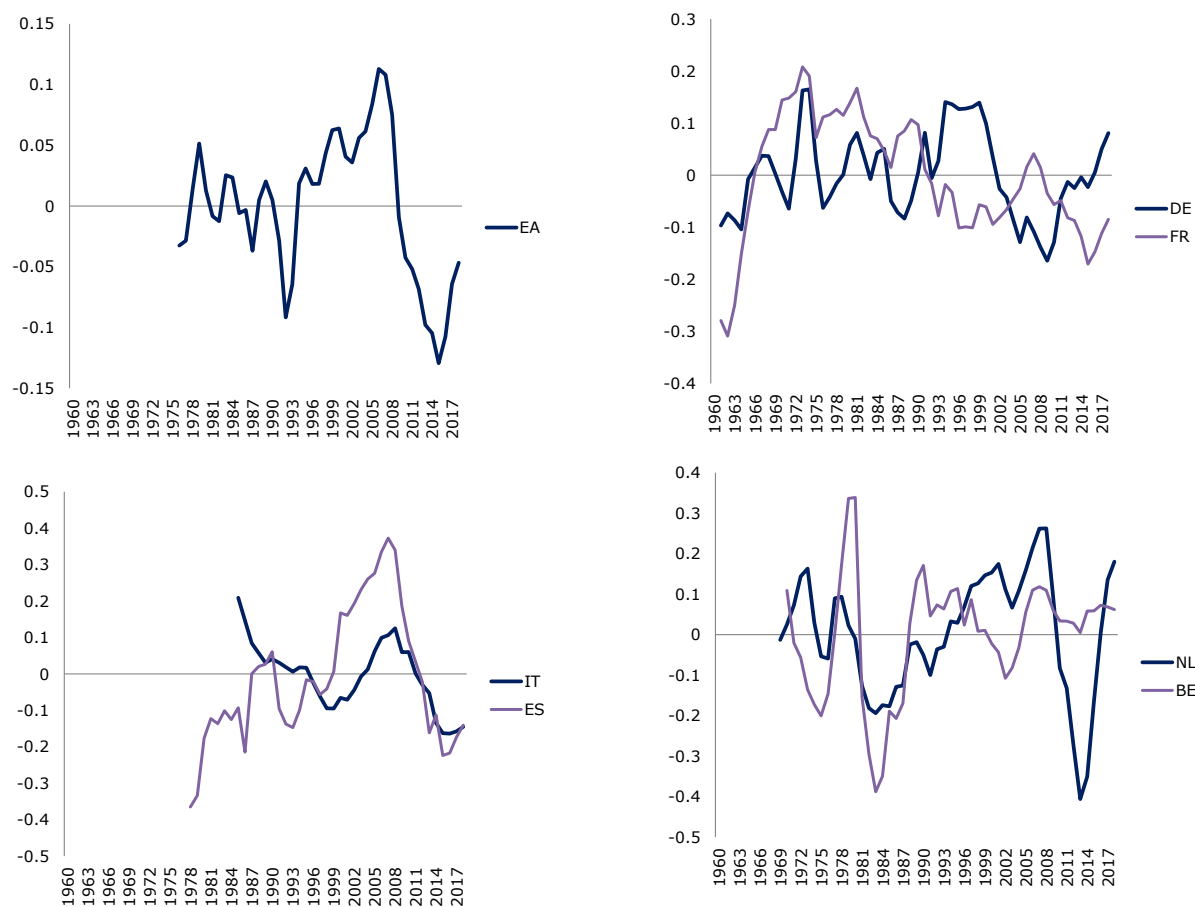
The autoregressive benchmark and the ECM in the second column are estimated over the period 1978-2007 in order to perform out-of-sample year-ahead forecasts. As the change of the unemployment rate and the change of real house prices enter the model contemporaneously, this forecast is conditional. It uses the unemployment projection from the Commission's Spring European Economic Forecast of the same year and a naïve projection of house price increases at previous year's rate. This forecast is compared to a naïve projection of the growth of residential construction investment and the AR(1) benchmark.

Forecast errors are substantial for any of the techniques. Nonetheless, the ECM has the lowest

⁽²⁰⁹⁾ The level of house prices could also be considered a driver of residential construction in the long run. However, no cointegration relationship is found between the two.

⁽²¹⁰⁾ Op. cit.

Graph IV.2: Residuals of long-run regression



Source: AMECO, own calculations

Root Mean Squared Error at 4.0 against 4.2 for the AR(1) and 4.8 for the naïve forecast.

IV.4. Model-based prospects for residential construction

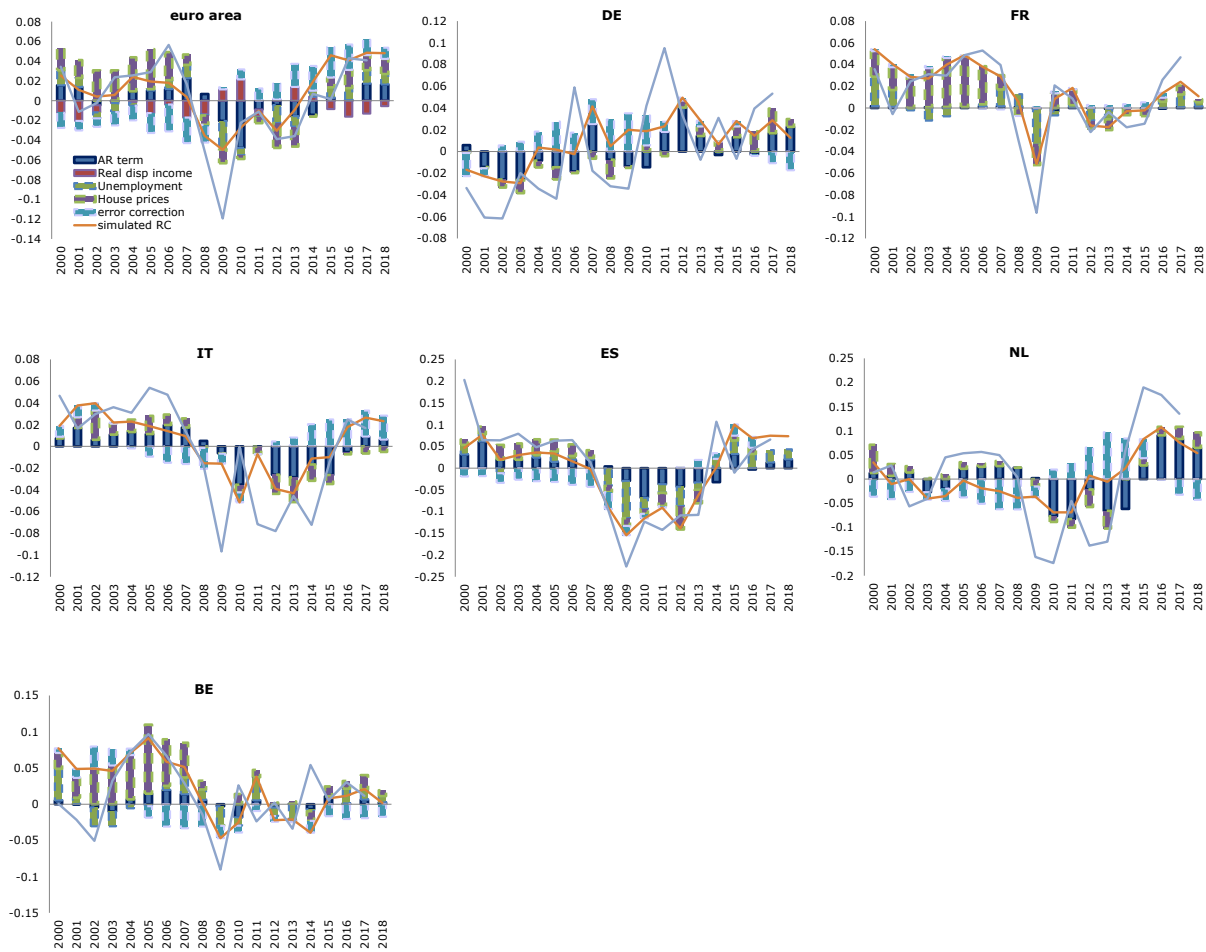
In view of the forecast errors, point estimates of residential construction growth should not be over-interpreted. However, the model is useful insofar as it points to the likely structural and cyclical drivers of residential construction developments at a given point in time.

In 2017, residential construction in the euro area expanded at a rate of 4.2%. Graph IV.2 plots the residuals of the long-run regression extended on the basis of data from the spring forecast. For the euro area, it points to a decreasing gap between the current level of residential investment and the level implied by real disposable income, which is its main long-run determinant in the euro area. The residual graph clearly displays housing overinvestment in the decade preceding the crisis

followed by a sharp and protracted drop with a trough in 2015. By 2017, residential construction was well on the recovery path. The remaining difference between the actual level of residential construction investment and the level implied by disposable income points to continued impetus behind residential construction in the euro area in the medium term. In 2017, residential construction gaps, i.e. the level of residential construction investment relative to its long-term drivers identified in section V.3., were most pronounced in Spain and Italy, and to a lesser extent France. In the Netherlands residential construction has already moved back well above the level implied by demographics. For Germany and Belgium, the current level of residential construction investment is also higher than suggested by its long-run drivers.

Graph IV.3 illustrates the contributions of the different drivers of residential construction investment. For the euro area, the falling unemployment rate has contributed positively since

Graph IV.3: Model-based contributions to residential construction growth



Source: AMECO, own calculations

2014. Since 2015, house price inflation is also contributing positively to residential construction. Moreover, the error-correction model attempts to close the gap with the long-term relation, pushing the projected growth of residential investment higher.

At the level of Member States, falling unemployment is also identified as a positive contributor in recent years for France, Spain and Belgium. House price increases have underpinned recent residential construction in all countries under review except Italy. For Germany, the Netherlands and Belgium, the model suggests a dampening impact of the long-term relationship through the error correction term.

For 2018, the graph shows a conditional model projection. It is based on the change in the unemployment rate from the Commission's Spring 2018 forecast and the assumption that house prices

in 2018 as a whole evolve like in the first quarter, for which data are already available from Eurostat (nominal HPI deflated with the consumption deflator from the spring forecast). For the euro area, the combination of a remaining residential investment gap, falling unemployment and increasing house prices points to continued robust growth of residential construction investment. Also for Italy and Spain, the identified drivers of residential construction points to continued growth. For the other Member States under review, the main medium-term and short-term drivers of residential investment suggest some growth moderation. ⁽²¹⁾

It should however be recalled that the forecasting errors of the model are quite substantial, inter alia because residential construction is much more

⁽²¹⁾ Note that these model-based projections are not necessarily identical with those that enter the Commission's forecasts.

volatile than most of the explanatory variables. It is therefore useful to cross-checked the drivers of residential construction identifies by the model with other data.⁽²¹²⁾ These include higher-frequency data many of which could not be included in the model for lack of long time series.

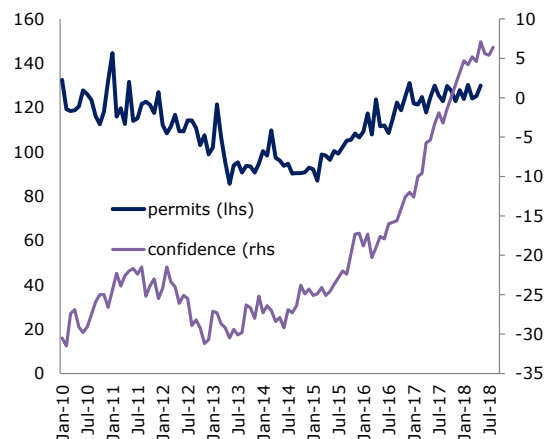
Confidence in the construction sector⁽²¹³⁾ is high, having picked up sharply since 2014. At 6.4 points in August 2018, construction confidence stands 1½ standard deviations above its long-term average since 1985. Business managers in construction also indicate a backlog of orders slightly above average and a strong flow of incoming orders. Confidence in the construction sector is above its long-term average in all Member States discussed here. In Germany and the Netherlands, as well as in the euro area as a whole, construction confidence reached record highs in recent months.

Building permits lead residential construction growth by about two quarters, due to the time it takes for construction to proceed and be recorded in national accounts. Monthly and even quarterly indices of building permits are however quite volatile. In the first five months of this year, the number of residential building permits in the euro area increased at an average annual rate of 4%, which is slower than in 2017 (7%) and 2016 (17%) pointing to a moderation of residential construction activity. The latest available data point to accelerating delivery of permits in Belgium and Spain and a moderation in Germany, France, Italy and the Netherlands.

Financing conditions are ample. Market participants do not expect the ECB to hike policy interest rates before 2019. The ECB's latest Bank Lending Survey⁽²¹⁴⁾ points to easing lending conditions for mortgages in the second quarter of 2018. Banks expected further easing in the third quarter. Mortgage credit (nominal) expanded at annual rates around 3% the first half of 2018. Household debt as a share of GDP has fallen only slightly in the euro area as a whole since the onset of the crisis, but it was reduced substantially in the countries where households had the highest

leverage. As house prices have bottomed out in 2013 and GDP growth has accelerated, acute deleveraging pressures have receded. The Bank Lending Survey reports firming mortgage credit demand in the second quarter of 2018 and expectations of increasing demand also in the third quarter.

Graph IV.4: **Construction confidence and building permits, euro area**



Source: Eurostat

Overall, high-frequency data also point to a continuation of robust growth in residential construction, which is in line with the model-based analysis of growth drivers.

IV.5. Conclusion

Swings in residential construction investment are frequent and large. GDP recessions are systematically associated with contractions of residential investment. The link from drops in housing investment to GDP is however more complex: between 1970 and the early 2000s, when residential construction in a Member State contracted by 5% or more, GDP dropped in about half of the cases and slowed down in most other cases. During the Great Recession, GDP and housing investment dropped in all 12 Member States examined. There is evidence of construction investment leading the business cycle in the US. On this side of the Atlantic that seems to be the case for some Member States, but not for the euro area aggregate. Even though residential construction investment seems contemporaneous to GDP in the euro area, building permits are a leading indicator for both.

⁽²¹²⁾ Cf. also ECB Economic Bulletin May 2016, Box 6.

⁽²¹³⁾ Residential construction represents about half of overall construction activity.

⁽²¹⁴⁾ See ECB (2018), "The euro area bank lending survey. Second quarter of 2018" at <https://www.ecb.europa.eu/stats/pdf/ecb.blssurvey2018q2.en.pdf?7776aed1b5334351b742031c1d7ef08fb>

A standard error-correction framework is used to model drivers of residential construction investment in the long- and short run in line with the literature. Real disposable income and to a lesser extent population growth and the real interest rate can be identified as drivers of residential investment trends. This long-run relationship points to a quickly narrowing investment gap in residential construction.

In the shorter run, the unemployment rate and house prices are additional drivers of residential investment. This general pattern is rather similar across Member States.

The medium-term and short-term drivers of residential construction investment identified in the modelling exercise point to continued growth of residential construction in the euro area. This picture is confirmed when higher-frequency indicators are taken into account. GDP growth in most of the euro area is thus set to benefit from the demand related to residential construction. At the level of the largest Member States, positions in the residential construction cycle differ, and this is reflected in the conditional model projections for residential construction growth this year.