BIL IMMO*index*

Overview of the Luxembourg housing market November 2017



Together for you

Editorial

Against a backdrop of massive change in the fundamentals of Luxembourg's housing market, BIL first presented its new property market index in October 2015. We are now on the fifth publication and the BIL IMMO *index* has become an essential instrument not just for real estate professionals but also for individuals seeking a home or interested in buy-to-let.

This edition of the BIL IMMO *index* includes data up to the second quarter of 2017 and reveals a slight increase in the barometer, from 1.80 at 31 December 2016 to 1.82 at 30 June 2017. At first glance, the BIL IMMO *index* seems relatively stable. However, this is not the case in every region of Luxembourg, as you will see.

I would like to thank you for your ongoing support and hope that you enjoy reading our fifth edition of the BIL IMMO *index*, which provides a detailed view of the housing market. Our specialists on the Real Estate Desk are on hand to discuss the matter further during a meeting.

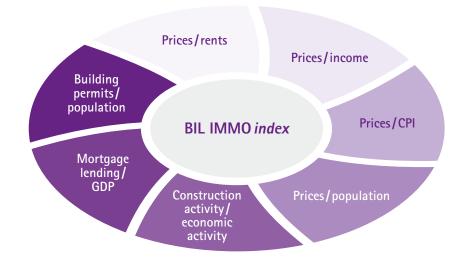
Marcel Leyers Chief of Corporate & Institutional Banking

Banque Internationale à Luxembourg société anonyme



Our methodology

The BIL IMMO *index* is an initiative of BIL in collaboration with PwC. It is the weighted average of seven indicators. Each indicator charts the changes in a particular aspect of the housing market in Luxembourg.



The table below describes the selected indicators and explains the extent to which they are relevant in measuring the housing market situation.

1	Ratio of house prices to rents	This affects the decision of whether to buy or rent.
2	Ratio of house prices to income	This shows the affordability of buying a home, based on household income.
3	Ratio of house prices to the consumer price index (CPI)	This shows the real appreciation of house prices.
4	Ratio of house prices to population	This compares price changes to population changes to measure the extent to which house price inflation reflects demographic trends.
5	Ratio of construction activity to economic activity	This shows the weight of the construction industry in the economy as a whole.
6	Ratio of mortgage lending to gross domestic product (GDP)	This shows changes in the amount of mortgage lending relative to economic growth.
7	Ratio of building permits to population growth	This shows the extent to which the change in the number of homes is linked to demographic trends.

Each ratio is built from data published by recognised statistics offices (STATEC, BCL, IMF, etc.) over the period 1980 to the second quarter of 2017. Missing data has been estimated through linear extrapolation.

The table below lists the necessary data and sources.

Dat	a collected	Sources
Α	House prices	Bank for International Settlements (BIS) and STATEC
В	Rent	STATEC
С	Income	OECD
D	Consumer Price Index (CPI)	STATEC
Ε	Population	STATEC
F	Construction activity and economic activity	STATEC
G	Mortgages	BCL
Н	Gross Domestic Product (GDP)	IMF, STATEC
I	Building permits	STATEC

The weighting of each indicator results from an analysis of each main component. This method is used to weight each indicator in a way that best reflects the seven ratios' variability through a single index. To do this, each ratio has been standardised and trend-adjusted, such that the index produced by analysing each main component is centred around zero.

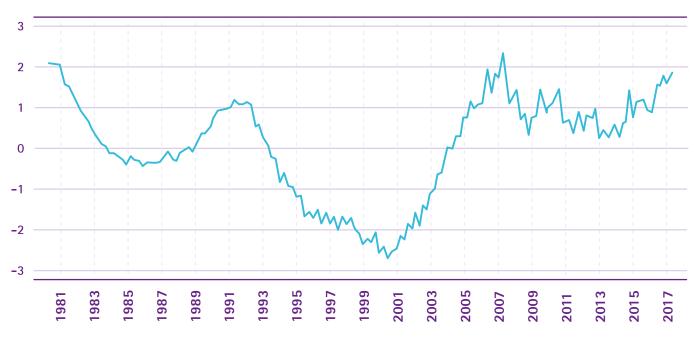
Variations in the index summarise variations in the seven ratios. Given that all of the ratios have been constructed uniformly, a reduction in the index would tend to suggest a slacker market, whereas an increase would be interpreted as showing a more buoyant market. Extreme values in the range reflect very low probabilities.

- If the index is close to -3, it means that the change in several indicators is more negative than has been observed historically. The market can then be considered to be "in crisis".
- If the index is close to +3, it means that the increase in several ratios has been much greater than their historical trends. The market can then be considered to be "overheated".

BIL IMMO index between 1980 and the second quarter of 2017

The BIL IMMO *index* provides an overview of the Luxembourg housing market, based on changes in the price of homes for sale and for rent, as well as factors underlying supply and demand.

The change in the BIL IMMO *index* over the 1980 to the second quarter of 2017 period is represented below. This was discussed in the first edition of the BIL IMMO *index*, which you can find in the Documentation section of www.bil.com.

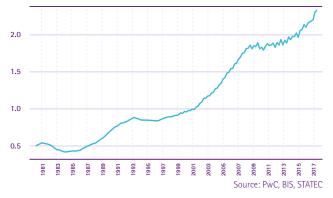


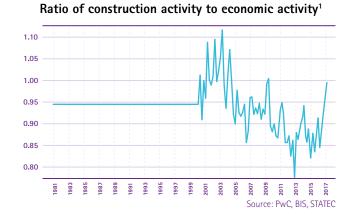
Changes in the BIL IMMO index from 1980 to the second quarter of 2017

Source: PwC Market Research Centre

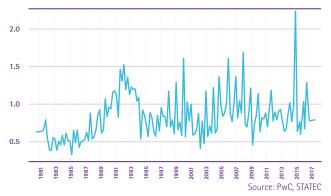
Ratio of house prices to rents 2.0 1.5 1.0 0.5 Source: PwC, BIS, STATEC Ratio of house prices to the CPI

Over the 1980 to the second quarter of 2017 period, the seven ratios that make up the index varied as follows:





Ratio of building permits to population

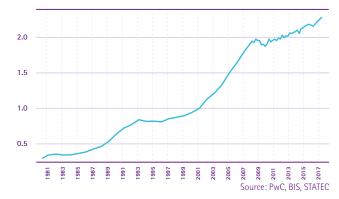


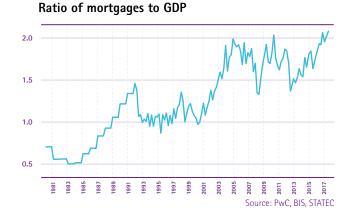
¹ This graph starts in 2000 as construction data was not available before then.

Ratio of house prices to income

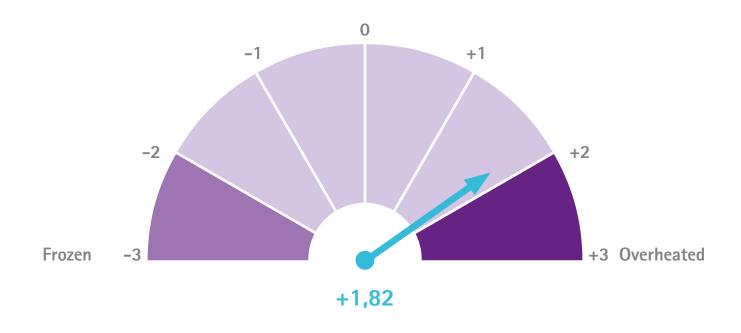


Ratio of house prices to population





Recent change in the index



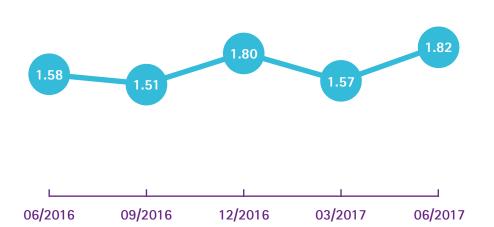
The BIL IMMO *index* stood at +1.82 in the second quarter of 2017.

The index had been at 1.80 in the fourth quarter of 2016, mainly due to the steady rise in property prices and boom in mortgage lending. 2017 has so far seen the index dip a little in the first quarter (to 1.57), then rebound to 1.82, just above its level from the end of 2016. This pattern can be explained by the following:

- Property prices rose by 6.2% between the second quarter of 2016 and the second quarter of 2017. It is worth noting that prices for existing apartments appreciated 8.5% year-on-year, while existing house prices gained 6.8%. All properties combined, new-build prices were up 3.8% over one year, climbing at a much slower pace than existing home prices, which rose by 7.5%.
- The ratio of home prices to rents therefore also increased significantly, as the indicator used for rents edged up just 1.1% year-on-year. There was a lull in the first quarter, followed by a brisk acceleration in the ratio during the second quarter of 2017 when rents were left trailing.
- At 1.9% y/y in the second quarter of 2017, inflation is very close to the European Central Bank's target for the Eurozone. However, real growth in house prices remains strong, pushing our ratio of home prices to the consumer price index even higher. After falling at the start of 2017, it picked up sharply in the second quarter of 2017 when inflation became negative (-0.6%).
- The index is largely tracking the marked acceleration in construction activity, which has been enjoying a rare boom since the third quarter of 2016 despite the usual winter slowdown. The value added to the sector thus grew by 13.7% y/y in the second quarter of 2017, compared with GDP growth of 3.5%. The gross value added to the construction industry could therefore beat its recent record of EUR 2.5 billion in 2016. And after rising non-stop for several months, the STATEC confidence indicator for the sector is reaching unprecedented levels for both activity and order books.

- The ratio of mortgages to GDP bounced back strongly in the second quarter of 2017 after a calmer first quarter. It is even approaching the exceptional level seen at the end of 2016. This reflects a 13.8% increase in the volume of mortgages in H1 2017 relative to H1 2016. At EUR 1.96 billion, mortgage issuance again came close to the EUR 2 billion mark. 2017 therefore looks as if it will be a record year for residential mortgage issuance, above the level of EUR 7.13 billion in 2016.
- The rise in the index is limited by an 8.4% drop in the number of building permits awarded during the first half of 2017 (2,287 permits, compared with 2,497 in H1 2016).

Overall, the BIL IMMO index, which had more than doubled when last published, confirmed its end-2016 level. The first half of 2017 brought a sharp increase in the volume of mortgages (+13.8%) and construction activity (+11.3%), as well as greater divergence between existing and new house-price inflation rates. Caution about a slight and temporary overheating of the index is still needed if the number of building permits rises significantly and mortgage issuance hits a new high. On the other hand, Luxembourg's sound economic health is reassuring: GDP growth in 2017 should stay close to 3% and annual inflation remains at 1.9%. Economic recovery in the euro zone is also continuing. Reassured by euro zone growth but sceptical about its drivers, on 26 October 2017 the ECB announced that it will start to halve its guantitative easing in January 2018, but did not say when the programme would end completely. The ECB is keeping the option of increasing the amount of QE if the outlook were to darken, and has also refused to put a date on a future rate hike. The prudence shown confirms that the monetary tightening process will be a long one, which has clear implications for mortgage lending in Luxembourg. In this context, price moderation would only happen if there was a rebalancing of supply and demand: the sharp rise in the number of building permits in recent years has resulted in more new homes being completed now, which already seems to have slowed existing house-price inflation, as the STATEC index confirms. Indeed, while the current strength of the construction sector may push our index up in the near term, it will probably limit price growth in certain regions and segments over the medium term. Observatoire de l'Habitat data shows that small apartments and large houses are the properties whose value increased the most over a year, whereas large apartments dropped in value. The conclusion to be drawn is that there is no immediate risk of a price correction, but signs of price moderation are appearing locally and in particular segments after trending steeply upwards for years. The BIL IMMO index will therefore have to be monitored closely over the coming months.



BIL IMMO index from the second quarter of 2016 to the second quarter of 2017

Regional analysis

Methodology

Due to a lack of specifically regional data, the regional analysis is based on a cross-analysis of the following variables:

- Demography: population and demographic growth
- Asking prices for houses and apartments for sale
- Asking rent for houses and apartments to let

The sources used are STATEC for demographic data, and Observatoire de l'Habitat for asking prices and rents.

Other regional factors such as economic strength, the number of listings and the number of residential buildings completed can also be taken into consideration if such data is available.

The regional analysis below is based on demographic data at 1 January 2017, and on asking prices up to the second quarter of 2017, as well as recent changes therein. The price trend in each region is compared with the national trend, and this is checked against demographic growth. Risk levels are weighted from 1 to 5, to be interpreted as follows:

Level 1: negligible risk of short-term price contraction

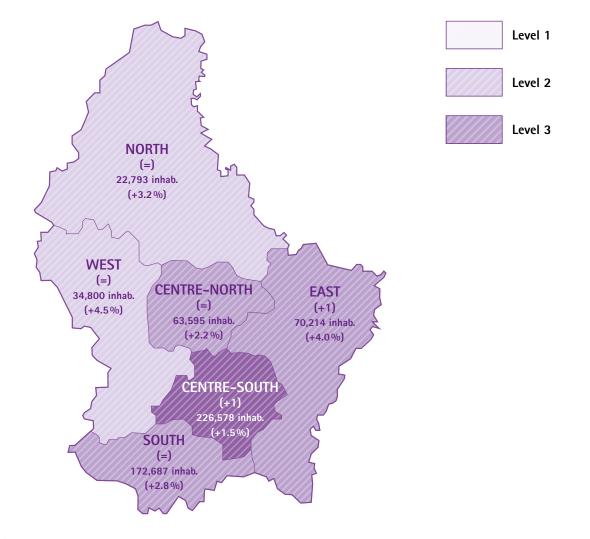
- Level 2: low risk of short-term price contraction
- Level 3: moderate risk of price contraction

Level 4: medium risk of price contraction Level 5: high risk of price contraction

Level 4

Level 5

On the scale proposed, if we exclude the Centre-South region, the risks are low to moderate in the immediate term, but there has been a second consecutive increase in the East region.



NORTH | Level 2

The North (around 22,800 inhabitants) is the least populated region in the country, but its population grew in 2016 (+3.2%), exceeding the national average (+2.5%). This region has the lowest asking prices for houses, and the size of the market is very limited: the number of listings of houses for sale accounts for 7% of the country's total, while the percentage is just 3% for apartments. Despite demographic growth, the gap between prices seems to have widened for houses: whereas prices were 24% below the national average in the second quarter of 2016, the difference had stretched to 29% by the second quarter of 2017. The asking prices for houses are up 3.6% y/y. For apartments, asking prices rose by 1.6%, while rents rebounded by 4.9% over the same period. The recent trend for asking prices explains why the risk level remains at 2.

CENTRE-NORTH | Level 3

The Centre-North (around 63,600 inhabitants) remains quite a sparsely populated region with demographic growth (+2.2%) slightly below the national rate (+2.5%). Between the second quarter of 2016 and the second quarter of 2017, asking prices for houses outstripped those of apartments, with respective increases of 8.9% and 3.7%. On the rental market, asking rents dropped by 2.9% for apartments, but bounced back 7.2% for houses over the same period. In volume terms, the proportion of for-sale listings in the national total remains 15% for houses and 9% for apartments. House-price inflation is below the national average, justifying the decision to keep the risk level at 3.

WEST | Level 2

The West region (34,800 inhabitants) may be quite sparsely populated, but its demographic growth of 4.5% in 2016 far exceeded the national average. The asking prices for houses and apartments remain among the lowest on the market. Moreover, the price catch-up seen in 2016 was not repeated in H1 2017. Price rises have been fairly contained: +1.6% for houses and +5.7% for apartments. The former were therefore 22% lower than the national average in the second quarter of 2017, whereas they had been 16% lower in the second quarter of 2016. However, apartment prices are 27% below the national level, having previously been 29% lower. In volume terms, the region accounted for just 13% and 7% of listings of houses and apartments for sale, a situation more or less unchanged since 2015. On the rental market, quoted rents for apartments increased by 5.9% but are still 28% below the national average. The rise in asking prices and rents can be attributed to uneven demographic growth. The risk level for the West region is thus held at 2.

CENTRE-SOUTH | Level 4

The Centre-South region (around 227,000 inhabitants) saw its demographic growth run out of steam after exceeding the national average for several years: population growth dropped from 3% in 2015 to 1.5% in 2016 due to a degree of saturation. This region remains the core of the property market, producing 58% and 62% of listings for houses and apartments to let, 38% of listings for apartments for sale, and 25% of listings for houses for sale in the second quarter of 2017. Asking prices are still the highest in the country for both rentals and sales. However, a major divergence is appearing: the asking prices for apartments for sale stagnated (+0.3% over one year), but in the case of houses they surged (+11.6% over one year). On the rental market, asking rents fell for houses (-2.5%) but rose for apartments (+4.7%) at a pace exceeding the national average (+2.9%). As houses in this region being a rare commodity, their prices are climbing, especially in Luxembourg City (+23.1% y/y). The risk of contraction, which has already materialised for houses to let, is therefore greater for apartments for sale, the prices of which seem to be peaking after soaring for a number of years. The risk level has therefore been raised to 4. Price moderation in certain segments could give way to a slight contraction over the longer term.

EAST | Level 3

The East region (around 70,000 inhabitants) saw its demographic growth more than double from 1.9% in 2015 to 4.0% in 2016. This region represents an ever-greater portion of the Luxembourg property market, with around 15% of house listings and 6% of apartment listings. Although historically below the national average, prices are catching up quickly. House prices were up 15.7% over one year and are now 2% above the national average (versus -3% a year ago). Apartment prices gained 11.4% over a year, far outstripping the national trend, and are just 7% below the national average (compared with -14% a year earlier). House rents are rocketing (+19.1% over one year): whereas they had been particularly attractive (-30% in the second quarter of 2016) relative to the national average, they are becoming comparatively less so (-19% in the second quarter of 2017). Apartment rents climbed 3.8% over one year but are still relatively attractive, and went from -23% to -22% of the national average. Given the trend for sales prices, and despite sustained demographic growth, the risk of property prices contracting has risen again and has now reached level 3.

SOUTH | Level 3

The South (around 173,000 inhabitants) is the second most populated region of the country and its demographic growth increased from 2% in 2015 to 2.8% in 2016. If we compare the selling prices of houses and apartments, the former are 14% below the national average and the latter 21% lower. The asking prices for houses for sale and rent are thus increasing significantly, up 8.2% and 6.2% y/y respectively in the second quarter of 2017. In terms of volume, the proportion of listings of homes for sale in the region is stable (24% of houses and 37% of apartments), but for rental properties it has fallen: from 13% to 11% for houses and from 23% to 21% for apartments. If we look at apartments, the rise in asking prices was limited to around 3.5% y/y in the second quarter of 2017, while rents edged up just 1.1% over the same period. The upward trend in house prices and rents can partly be explained by the acceleration in the region's demographic growth, as well as a degree of economic renewal, which is encouraging many families to move into the region. House-price inflation may be sustained but it is below the national average, so the risk level is held at 3.

Data should be looked at cautiously as the sale prices and rents are those asked for, not necessarily those paid2. Furthermore, the Luxembourg property market shows significant variation from one quarter to the next.

Contact details

Are you looking to buy a main home or invest in rental property?

Call into one of our branches to find out about our various financing solutions, or contact us on +352 4590-3000 or at contact@bil.com

Are you a property developer or a specialist with a real estate project?

Our specialised Real Estate, Corporate & Institutional Banking service is on hand.

Gilles Prim Head of Real Estate

(+352) 4590-3835 gilles.prim@bil.com Hakim El Boazzati Corporate Relationship manager (+352) 4590-2472 hakim.elboazzati@bil.com Kevin Pinto Grou Corporate Relationship manager (+352) 4590-4786

kevin.pintogrou@bil.com



PricewaterhouseCoopers, Société cooperative 2, rue Gerhard Mercator L-2182 Luxembourg info@lu.pwc.com (+352) 49 48 48-1



Banque Internationale à Luxembourg SA 69, route d'Esch • L-2953 Luxembourg RCS Luxembourg B-6307 T: (+352) 4590-1 • F: (+352) 4590-2010 contact@bil.com • www.bil.com



This presentation and its content are provided for information purposes only and do not constitute a sales offer or an invitation to make investments. All of the information contained in this document is given on the date hereof and may be amended without notice. No part of this document may be copied or duplicated in any form whatsoever or redistributed without the prior written consent of Banque Internationale à Luxembourg.