

Bundles | 31 March 2022

Real estate

# Europe's housing market looks set to cool

Despite uncertainty about the eurozone's economic outlook, borrowing costs are set to rise as inflation accelerates and monetary policy becomes more restrictive. Nevertheless, housing demand should still exceed supply in many regions. In this bundle, we look at what all this could mean for property markets in Germany, the Netherlands and Belgium

#### In this bundle



Real estate

# Tighter monetary policy and regulation point to slowdown in property market

The economic outlook for the eurozone has changed dramatically in just a matter of weeks. Stagflationary risks have risen sharply, prompting the European...

By Franziska Biehl, Inga Fechner and Mirjam Bani



Real estate | Germany

## Germany: the land of tenants faces scarce supply

Demand for housing in Germany is high and we expect house prices to continue to rise in 2022, albeit at a somewhat slower pace than in previous years....

By Franziska Biehl and Inga Fechner



Real estate | The Netherlands

#### Netherlands: house prices to rise more slowly in 2022

We expect house prices in the Netherlands to increase by 13.5% in 2022, but uncertainty in the housing market remains

By Mirjam Bani



Real estate | Belgium

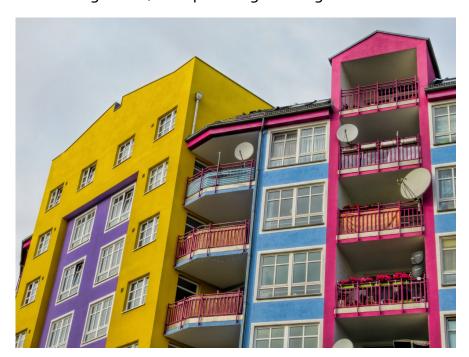
# Belgium: house price growth to moderate after strong run

We expect house price growth to moderate and think prices will rise by around 4% in 2022 as higher inflation and tighter monetary policy put upward...

Article | 31 March 2022 Real estate

# Tighter monetary policy and regulation point to slowdown in property market

The economic outlook for the eurozone has changed dramatically in just a matter of weeks. Stagflationary risks have risen sharply, prompting the European Central Bank to retain maximum flexibility. Still, monetary policy is expected to tighten, resulting in higher borrowing costs, and possibly cooling demand for residential property



A renovated row of houses in Berlin

The eurozone economy reached its pre-Covid crisis level at the end of 2021 and was set to expand further in 2022 on the back of strong investment programmes, the easing of Covid restrictions, a gradual decline in inflation and improving supply chains. However, the economic outlook for the eurozone has changed sharply with the outbreak of the war in Ukraine.

### Stagflationary risks ahead

High energy and commodity prices will weigh on both household purchasing power and corporate production costs, keeping inflation elevated for longer. Longer-lasting disruptions, a new round of delays and protracted supply shortages will hinder production, while the high level of uncertainty could lead to investment and purchasing decisions being postponed. This puts the eurozone

economy at risk of stagflation, a toxic mix of slow economic growth ("stagnation") coupled with rising prices ("inflation"). Although the statistical overhang of last year's growth alone should result in a growth rate of some 2% for the eurozone, it cannot be ruled out that the economy will contract in at least one quarter this year.

# The prospect of ECB monetary tightening has led to rising longer-term interest rates

Uncertainty about the eurozone's economic outlook has also caused the European Central Bank to retain maximum flexibility and optionality in normalising its monetary policy. Nevertheless, net asset purchases are expected to end in the third quarter and, in our view, a first rate hike before the end of the year is still possible. Consequently, longer-term interest rates have already increased and should move up further.

### Key numbers

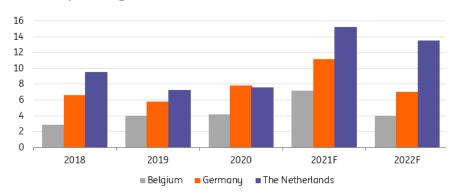
	Germany	Netherlands	Belgium
House price growth over the period 3Q2016-3Q2021	Total: 44.5%	Total: 59.0%	Total: 24.1%
	Existing dwellings: 46.5%	Existing dwellings: 62.7%	Existing dwellings: 24.4%
	New dwellings: 33.6%	New dwellings: 58.5%	New dwellings: 23.3%
Income growth 2015-2020	15%	19%	17%
Total number of households as of 01/01/2021	40.5 million	8,043,443	5,024,851
Expected growth of number of households in the next five years	1%	5%	3.2%
% of owner-occupied homes % of tenants at market price % of tenants at reduced price or free	50.4% 43.3% 6.3%	57.0% 10.0% 33.0%	71.1% 19.5% 9.4%
Evolution of strictness of regulation	More strict	More strict	Slightly more strict

House price growth is measured using the house price index from Eurostat. Note that this
index makes an adjustment for quality changes over time. To measure income, we use
gross disposable income (source: Eurostat). Number of households and expected growth of
number of households for Belgium, Germany and the Netherlands are from het Federaal
Planbureau, the German Federal Statistical Office and Centraal Bureau voor de Statistiek,
respectively. Data on market structure in Belgium and Germany is from Eurostat and from
Centraal Bureau voor de Statistiek and Capital Value for The Netherlands.

# What do the economic developments mean for the real estate market?

Tighter monetary policy is accompanied by higher borrowing costs, adding to lower household purchasing power, already constrained by inflation. In addition, housing market regulation is getting tighter, arguing in favour of some cooling of real estate markets. Nevertheless, housing demand should still exceed supply in many regions. We examine developments in the real estate markets in the Netherlands, Belgium and Germany.

# House price growth in the eurozone



\* Actual price increases in 2021 for the Netherlands, no forecast.

Source: Eurostat, ING forecasts

#### **Author**

#### Franziska Biehl

Senior Economist, Germany <a href="mailto:Franziska.Marie.Biehl@ing.de">Franziska.Marie.Biehl@ing.de</a>

#### Inga Fechner

Senior Economist, Germany, Global Trade <a href="mailto:inga.fechner@ing.de">inga.fechner@ing.de</a>

#### Mirjam Bani

Sector Economist, Commercial Real Estate & Public Sector (Netherlands) <a href="mirjam.bani@ing.com">mirjam.bani@ing.com</a>

Bundles | 31 March 2022

Real estate | Germany

# Germany: the land of tenants faces scarce supply

Demand for housing in Germany is high and we expect house prices to continue to rise in 2022, albeit at a somewhat slower pace than in previous years. Stagnating supply, high material and construction costs and the fight against climate change will continue to drive up house prices in the coming years, after a 12.2% increase in the fourth quarter of 2021



Source: Shutterstock

### Lowest home ownership rate in the EU

The home ownership rate in Germany was 50.4% in 2020, marking the lowest ownership rate in the European Union. Of all inhabitants, 56% were living in a flat, while 44% were living in a house. However, strong regional differences exist: in cities, only 24% were living in a house, while in rural areas the share was 63%.

### High prices and low interest rates keep demand going

In the fourth quarter of 2021, house prices increased 12.2% year-on-year and between 2015 and 2020 house prices rose by a staggering 39%. As prices and lending for residential real estate are very strong, the Federal Financial Supervisory Authority (BaFin) has announced an increase in capital requirements for lending institutions as of February 2023.

Rents have also risen, but only by some 7% over the past five years, according to the OECD's Rent

Price Index, which explains why the price-to-rent ratio has risen significantly over the same period. Due to the house price increases, owning a property in Germany seems to be less affordable than renting one. Since 2010, the affordability of buying real estate has fallen continuously. Although German households' real gross disposable income per capita rose by roughly 15% over the past five years and interest rates have been at historically low levels, this has not been enough to offset the sharp rise in prices. In addition to regulatory factors and high incidental purchase costs, this might explain why the ownership rate in Germany has hardly increased over the last year and at only around 50%, is the lowest in the European Union.

Overall, the trend is towards demand for more living space per capita and smaller households and this trend is likely to continue over the next five years, according to the German Federal Statistical Office. According to the spring report of the Central Real Estate Committee, new accommodation has been mainly concentrated on small attic apartments. What's more, we expect overall demand for housing to remain high. Building permits have been exceeding completions for years now and the imbalance between supply and demand is currently exacerbated by supply drying up. Between 2016 and 2020 alone, excess demand of some 350,000 apartments has built up. From November 2020 until November 2021, the construction of some 400,000 dwellings was permitted. Due to low construction activity and high building costs in 2021, the number of completions in 2021 might have been lower than in 2020, when some 306,000 dwellings were completed, adding pressure to excess demand. The federal government plans to build 400,000 homes annually, of which 100,000 will be publicly subsidised, though it remains to be seen how successful this plan will be.

# Regulation and other trends will influence housing supply and demand

In regions where the market is tight, the German rental market is subject to regulation. The conversion of rental apartments into owner-occupied apartments requires state governmental approval. The "rent brake", which has been in place since 2015, allows landlords to raise rents by only 10% above the local market level. However, new buildings and extensively renovated apartments are excluded. To prevent speculation with building land, plots of land must in some cases be built on within two to three years and/or held for 10 years.

One trend that will also have an impact on the German real estate market in the future is the green transition. The German government is strongly promoting energy-efficient housing, since some 16% of all greenhouse gas emissions in Germany come from the building sector. Recent plans to become less dependent on Russian oil and gas could accelerate the green transition in housing. The "Immediate Action Program 2022" will provide an additional five billion euros to promote energy-efficient building refurbishment and new buildings, including social housing. However, political support could also become a hurdle. Although housing construction is to be promoted in tight markets and support is also available for increasing efficiency, there is a risk of high bureaucratisation and regulatory hurdles. This could slow down the momentum in residential construction. The German government wants to make approval processes easier, more digital and less bureaucratic, but it remains to be seen whether these plans can be implemented quickly enough.

# Outlook: Germany's residential real estate market is set to continue performing well

Despite heightened uncertainty, Germany's residential real estate market is set to continue performing well. Demand for housing is high and we expect house prices to continue to rise in 2022, albeit at a somewhat slower pace than in the previous years. Both the mismatch between supply and demand, currently fuelled by stagnating supply, as well as high material and construction costs and the fight against climate change, for which energy-efficient housing plays a major role, will continue to drive house prices up in the coming years.

#### **Author**

#### Franziska Biehl

Senior Economist, Germany <u>Franziska.Marie.Biehl@ing.de</u>

#### Inga Fechner

Senior Economist, Germany, Global Trade <a href="mailto:inqa.fechner@inq.de">inqa.fechner@inq.de</a>

# Netherlands: house prices to rise more slowly in 2022

We expect house prices in the Netherlands to increase by 13.5% in 2022, but uncertainty in the housing market remains



House prices in the Netherlands increased by 15.2% on average in 2021

## Looking back: acceleration of house price increases in 2021

House prices in the Netherlands increased by 15.2% on average in 2021, far exceeding the rise in 2020 (+7.8%). The following drivers contributed to last year's house price increases:

- Homebuying budgets increased in 2021, firstly driven by an expansion of lending standards
  for dual earners in 2021. This increased their maximum borrowing capacity by
  approximately 2-3%. Positive income growth of 2.2% in 2021 also increased homebuying
  budgets. Finally, interest rates remained low and even decreased further by 10-20 basis
  points.
- A one-time exemption from the 2% transfer tax for homebuyers younger than 35 years old was introduced at the beginning of 2021. This structurally increased the purchasing power of first-time buyers, who account for more than 33% of all home sales on average.
- Extra savings accrued during the Covid-19 pandemic (lockdown measures reduced household spending options) enabled homebuyers to make higher bids.

### Looking ahead in 2022: more subdued house price increases

Higher interest rates and thus mortgage rates (which increased by more than 50 basis points on average in the first quarter of 2022), lower investor demand, and less positive sentiment in both the economy and housing market will slow the increase in house prices this year. In our base case, house prices increase by 13.5% on average in 2022, with more than half of the increase due to carry-over effects, while the number of transactions of existing homes will decline by about 15% to 190,000 (2020: 225,000). However, uncertainty in the housing market is currently higher than normal. The Ukraine war, Covid-19 developments, and the rise in interest rates are all difficult to predict but will be decisive for the housing market in the coming months. To illustrate: a 1%-point increase in mortgage rates lowers homebuying budgets by about 5-10% in order to maintain equal mortgage payments.

### Mainly owner-occupied and regulated rental properties

The Dutch housing market consists of 4.5 million owner-occupied homes (57% of the housing stock), and 3.4 million rental properties (43%). The distinction between the regulated ('social housing') and the unregulated rental segment is important. About 76% of the rental housing stock in the Netherlands is regulated, meaning that landlords are forced by law to apply rents below market rates. The dominance of the owner-occupied and social housing segments is a natural result of subsidies, such as the interest paid on mortgages being deducted from income for owner-occupiers, and rent allowances for households in social homes. Subsidies are absent for unregulated homes.

### Regulation puts returns under pressure

Recent regulatory changes have lowered expected returns on rental homes in both the regulated and unregulated segments.

- The increase in the transfer tax from 2% to 8% in January 2021 has affected both private and institutional investors (a further increase to 9% is due in 2023).
- A maximum rental price increase of 1% plus inflation in the previous year (3.3% in 2022) has been implemented for existing contracts in the unregulated segment last year, which is intended to reduce the increases in rental costs for sitting tenants. Previous <a href="ING research">ING research</a> however showed the effect on expected returns of this cap seems to be limited. First of all, the limit is not aimed at the current rent levels but rather the annual rent increase for sitting tenants. Secondly, the annual average rent increase for sitting private sector tenants in the Netherlands has almost always been below inflation plus 1% since 2012, even without the current limit.
- Private investors this year have been banned from buying owner-occupied homes with a property value of up to a certain value in some major cities (so-called "opkoopbescherming"), including Amsterdam, Rotterdam, The Hague and Utrecht. The purpose is to improve the position of first-time buyers relative to private investors in the housing market.

Looking ahead, future expected regulation could significantly lower expected returns.

• Planned rent control is estimated to reduce the rental price of 40,000 regulated and unregulated rental properties (1% of total rental housing stock). The number of rental properties affected will be higher in major cities like Amsterdam. The regulation means that

the maximal rental price of a home is now calculated based on a points system, including a home's property value ("WOZ value"). The vast increase in house prices since 2013 has increased the share of these "WOZ-points" over time and has increased the shift of rental homes from the regulated to the unregulated segment - as under the current system, rental homes allowed to rent out at more than €763,47 this year are unregulated. In order to break this pattern, planned regulation will limit the share of these "WOZ-points" to 33% of all points. This will reduce the maximum rental price of about 23,100 regulated properties that would have shifted to the unregulated segment under the current rules and means that 14,800 unregulated properties will be pushed back to the regulated segment.

For private investors, there is also the **announced reform of the capital gains tax in the Netherlands in 2025**, which is likely to lead to higher taxation of rental returns. The current system based on fictitious returns is structurally underestimating the returns on rental homes. This will lower the demand from private investors as net returns will come down compared to alternative investment opportunities.

#### Author

#### Mirjam Bani

Sector Economist, Commercial Real Estate & Public Sector (Netherlands) mirjam.bani@ing.com

Article | 31 March 2022

Real estate | Belgium

# Belgium: house price growth to moderate after strong run

We expect house price growth to moderate and think prices will rise by around 4% in 2022 as higher inflation and tighter monetary policy put upward pressure on mortgage rates. But as Belgians overall have a firm belief in the stability of the housing market, the probability of a strong price correction is limited



The market square in the centre of Bruges

## Belgium's market structure: owner-occupied

Home ownership in Belgium sits at more than 70%, while about 20% of households rent at market prices and just under 10% rent at reduced prices. This situation is quite stable and has been the case for at least 20 years.

The rental market is mainly occupied by private and small investors. In recent years, however, it seems that larger private investors and institutional investors have been gaining more traction.

# A strong market during the pandemic

Activity in the housing market recovered fast after the first lockdown in 2020 and the number of transactions in the first three quarters of 2021 was higher than in the three previous years (data for the fourth quarter are not yet published). The strong activity applied to all segments (houses,

detached properties and apartments) and all regions (Flanders, Wallonia, and Brussels Capital Region).

Price growth was strong and accelerated during the pandemic. In 2020, Eurostat recorded a 4.2% increase in house prices and in 2021 we expect about 7% growth (data for the fourth quarter are not yet published). Even though price growth accelerated and was strong in Belgium during the last two years, it is in line with the eurozone average.

Macroeconomic factors, such as lower interest rates and income support during the pandemic can partly explain the strong growth figures. We also note that the preferences of Belgians seem to have changed in the last two years. An ING survey shows that Belgians find having a larger home (both indoors and outdoors) more important today than before the pandemic. The same holds true for the quality of the home, including energy efficiency. As people find a home more important, it is normal that they also want to pay more for it.

Additionally, the so-called FOMO effect (Fear Of Missing Out) probably also played a role in the strong price growth. As Belgians saw prices grow quickly, they may have wanted to act fast or risk paying even higher prices in the future. This mechanism also puts upward pressure on prices.

#### Overvaluation rose

According to the National Bank of Belgium, the overvaluation of residential real estate increased from 14% in 2020 to 21% in 2021. This is the second increase in a row. In 2020, the overvaluation doubled compared to 2019. The National Bank of Belgium already has a number of macroprudential policies in place to cool down the market, including limits on loan-to-value ratios for banks. We acknowledge the increased risk but also feel that the house price overvaluation is nuanced. Due to the change in preferences, the willingness to pay has gone up. However, the model of the National Bank of Belgium doesn't capture this change in preferences and perceives the corresponding price increases as a simple overvaluation. The National Bank also acknowledges that the growing scarcity of building plots might be a reason not to take the overvaluation estimate at face value. Residential real estate prices might be on the expensive side, but probably not overvalued by 21%.

## Outlook: House price growth will moderate

We expect house price growth to moderate and think prices will rise by around 4% in 2022.

Higher inflation and tighter monetary policy will put upward pressure on mortgage rates. The war in Ukraine could also lead to an increase in the risk premium set by banks. Note that a 1% increase in the mortgage rate lowers the borrowing capacity by about 9% (for a fixed-rate annuity mortgage with a maturity of 20 years). Since the beginning of the year, the average mortgage rate has already gone up by more than 50 basis points, implying 4.5% less borrowing capacity.

So higher mortgage rates put downward pressure on prices but we still think prices will grow. Indeed, we continue to expect the Belgian economy to grow in 2022, even though the war in Ukraine has reduced our growth forecast. We currently expect that the economy will grow by 2.5% in 2022, which should support income growth. On top of that, the system of automatic wage indexation protects wages from inflation.

In Flanders, there was also an adjustment to the system of registration rights. People who buy a home to live in themselves now face a 3% registration tax instead of 6%. People who buy a second home or another home to rent out now face a 12% tax instead of 10%. As such, regulation for investors seems to be getting slightly more restrictive.

In the medium term, the number of households is forecast to increase in the next decade, which should support demand and to some extent, prices. Belgians overall have a firm belief in the stability of the housing market, which in general reduces the chances of a strong price correction. Even during the financial crisis, when house prices crashed in several European countries, Belgian house prices only saw a minor correction.

#### **Author**

#### Amrita Naik Nimbalkar

Junior Economist, Global Macro amrita.naik.nimbalkar@ing.com

#### **Mateusz Sutowicz**

Senior Economist, Poland mateusz.sutowicz@ing.pl

#### Alissa Lefebre

Economist <u>alissa.lefebre@ing.com</u>

#### Deepali Bhargava

Regional Head of Research, Asia-Pacific <u>Deepali.Bhargava@ing.com</u>

#### **Ruben Dewitte**

Economist +32495364780 ruben.dewitte@ing.com

#### Kinga Havasi

Economic research trainee kinga.havasi@ing.com

#### Marten van Garderen

Consumer Economist, Netherlands marten.van.garderen@ing.com

#### **David Havrlant**

Chief Economist, Czech Republic 420 770 321 486 david.havrlant@ing.com

#### **Sander Burgers**

# Senior Economist, Dutch Housing sander.burgers@ing.com

#### Lynn Song

Chief Economist, Greater China <a href="mailto:lynn.song@asia.ing.com">lynn.song@asia.ing.com</a>

#### Michiel Tukker

Senior European Rates Strategist michiel.tukker@ing.com

#### Michal Rubaszek

Senior Economist, Poland michal.rubaszek@ing.pl

#### This is a test author

#### Stefan Posea

Economist, Romania <a href="mailto:tiberiu-stefan.posea@ing.com">tiberiu-stefan.posea@ing.com</a>

#### Marine Leleux

Sector Strategist, Financials marine.leleux2@ing.com

#### Jesse Norcross

Senior Sector Strategist, Real Estate jesse.norcross@ing.com

#### Teise Stellema

Research Assistant, Energy Transition teise.stellema@ing.com

#### Diederik Stadig

Sector Economist, TMT & Healthcare diederik.stadig@ing.com

#### Diogo Gouveia

Sector Economist diogo.duarte.vieira.de.gouveia@ing.com

#### Marine Leleux

Sector Strategist, Financials marine.leleux2@ing.com

#### Ewa Manthey

Commodities Strategist

#### ewa.manthey@ing.com

#### **ING Analysts**

#### James Wilson

EM Sovereign Strategist James.wilson@ing.com

#### Sophie Smith

Digital Editor sophie.smith@ing.com

#### Frantisek Taborsky

EMEA FX & FI Strategist frantisek.taborsky@ing.com

#### **Adam Antoniak**

Senior Economist, Poland adam.antoniak@ing.pl

#### Min Joo Kang

Senior Economist, South Korea and Japan min.joo.kang@asia.ing.com

#### Coco Zhang

ESG Research coco.zhang@ing.com

#### Jan Frederik Slijkerman

Senior Sector Strategist, TMT jan.frederik.slijkerman@ing.com

#### Katinka Jongkind

Senior Economist, Services and Leisure <u>Katinka.Jongkind@ing.com</u>

#### Marina Le Blanc

Sector Strategist, Financials Marina.Le.Blanc@ing.com

#### Samuel Abettan

Junior Economist <a href="mailto:samuel.abettan@ing.com">samuel.abettan@ing.com</a>

#### Franziska Biehl

Senior Economist, Germany <u>Franziska.Marie.Biehl@ing.de</u>

#### Rebecca Byrne

Senior Editor and Supervisory Analyst <a href="mailto:rebecca.byrne@ing.com">rebecca.byrne@ing.com</a>

#### Mirjam Bani

Sector Economist, Commercial Real Estate & Public Sector (Netherlands) mirjam.bani@ing.com

#### Timothy Rahill

Credit Strategist timothy.rahill@ing.com

#### Leszek Kasek

Senior Economist, Poland <a href="mailto:leszek.kasek@ing.pl">leszek.kasek@ing.pl</a>

#### Oleksiy Soroka, CFA

Senior High Yield Credit Strategist oleksiy.soroka@ing.com

#### **Antoine Bouvet**

Head of European Rates Strategy antoine.bouvet@ing.com

#### Jeroen van den Broek

Global Head of Sector Research jeroen.van.den.broek@ing.com

#### Edse Dantuma

Senior Sector Economist, Industry and Healthcare <a href="mailto:edse.dantuma@ing.com">edse.dantuma@ing.com</a>

#### Francesco Pesole

FX Strategist <a href="mailto:francesco.pesole@ing.com">francesco.pesole@ing.com</a>

#### Rico Luman

Senior Sector Economist, Transport and Logistics Rico.Luman@ing.com

#### Jurjen Witteveen

Sector Economist jurjen.witteveen@ing.com

#### **Dmitry Dolgin**

Chief Economist, CIS dmitry.dolgin@inq.de

#### Nicholas Mapa

Senior Economist, Philippines nicholas.antonio.mapa@asia.ing.com

#### **Egor Fedorov**

Senior Credit Analyst <a href="mailto:eqor.fedorov@ing.com">eqor.fedorov@ing.com</a>

#### Sebastian Franke

Consumer Economist sebastian.franke@ing.de

#### Gerben Hieminga

Senior Sector Economist, Energy gerben.hieminga@ing.com

#### Nadège Tillier

Head of Corporates Sector Strategy <a href="mailto:nadege.tillier@ing.com">nadege.tillier@ing.com</a>

#### Charlotte de Montpellier

Senior Economist, France and Switzerland <a href="mailto:charlotte.de.montpellier@inq.com">charlotte.de.montpellier@inq.com</a>

#### Laura Straeter

Behavioural Scientist +31(0)611172684 laura.Straeter@ing.com

#### Valentin Tataru

Chief Economist, Romania valentin.tataru@ing.com

#### James Smith

Developed Markets Economist, UK <u>james.smith@ing.com</u>

#### Suvi Platerink Kosonen

Senior Sector Strategist, Financials <a href="mailto:suvi.platerink-kosonen@ing.com">suvi.platerink-kosonen@ing.com</a>

#### Thijs Geijer

Senior Sector Economist, Food & Agri <a href="mailto:thijs.geijer@ing.com">thijs.geijer@ing.com</a>

#### Maurice van Sante

Senior Economist Construction & Team Lead Sectors maurice.van.sante@ing.com

#### **Marcel Klok**

Senior Economist, Netherlands marcel.klok@ing.com

#### Piotr Poplawski

Senior Economist, Poland piotr.poplawski@ing.pl

#### Paolo Pizzoli

Senior Economist, Italy, Greece paolo.pizzoli@ing.com

#### Marieke Blom

Chief Economist and Global Head of Research marieke.blom@ing.com

#### **Raoul Leering**

Senior Macro Economist raoul.leering@ing.com

#### Maarten Leen

Head of Global IFRS9 ME Scenarios maarten.leen@ing.com

#### Maureen Schuller

Head of Financials Sector Strategy <u>Maureen.Schuller@ing.com</u>

#### Warren Patterson

Head of Commodities Strategy <u>Warren.Patterson@asia.ing.com</u>

#### Rafal Benecki

Chief Economist, Poland rafal.benecki@ing.pl

#### Philippe Ledent

Senior Economist, Belgium, Luxembourg <a href="mailto:philippe.ledent@ing.com">philippe.ledent@ing.com</a>

#### Peter Virovacz

Senior Economist, Hungary <a href="mailto:peter.virovacz@ing.com">peter.virovacz@ing.com</a>

#### Inga Fechner

Senior Economist, Germany, Global Trade <a href="mailto:inqa.fechner@inq.de">inqa.fechner@inq.de</a>

#### **Dimitry Fleming**

Senior Data Analyst, Netherlands <u>Dimitry.Fleming@ing.com</u>

#### Ciprian Dascalu

Chief Economist, Romania +40 31 406 8990 <u>ciprian.dascalu@ing.com</u>

#### **Muhammet Mercan**

Chief Economist, Turkey muhammet.mercan@ingbank.com.tr

#### Iris Pang

Chief Economist, Greater China iris.pang@asia.ing.com

#### Sophie Freeman

Writer, Group Research +44 20 7767 6209 Sophie.Freeman@uk.ing.com

#### Padhraic Garvey, CFA

Regional Head of Research, Americas padhraic.garvey@ing.com

#### James Knightley

Chief International Economist, US <u>james.knightley@ing.com</u>

#### **Tim Condon**

Asia Chief Economist +65 6232-6020

#### Martin van Vliet

Senior Interest Rate Strategist +31 20 563 8801 martin.van.vliet@ing.com

#### Karol Pogorzelski

Senior Economist, Poland Karol.Pogorzelski@ing.pl

#### Carsten Brzeski

Global Head of Macro carsten.brzeski@ing.de

#### Viraj Patel

Foreign Exchange Strategist +44 20 7767 6405 <u>viraj.patel@ing.com</u>

#### **Owen Thomas**

Global Head of Editorial Content +44 (0) 207 767 5331 owen.thomas@ing.com

#### Bert Colijn

Chief Economist, Netherlands bert.colijn@ing.com

#### Peter Vanden Houte

Chief Economist, Belgium, Luxembourg, Eurozone <a href="mailto:peter.vandenhoute@ing.com">peter.vandenhoute@ing.com</a>

#### Benjamin Schroeder

Senior Rates Strategist benjamin.schroder@ing.com

#### **Chris Turner**

Global Head of Markets and Regional Head of Research for UK & CEE <a href="mailto:chris.turner@ing.com">chris.turner@ing.com</a>

#### Gustavo Rangel

Chief Economist, LATAM +1 646 424 6464 gustavo.rangel@ing.com

#### Carlo Cocuzzo

Economist, Digital Finance +44 20 7767 5306 carlo.cocuzzo@ing.com

#### Disclaimer

This publication has been prepared by the Economic and Financial Analysis Division of ING Bank N.V. ("ING") solely for information purposes without regard to any particular user's investment objectives, financial situation, or means. ING forms part of ING Group (being for this purpose ING Group N.V. and its subsidiary and affiliated companies). The information in the publication is not an investment recommendation and it is not investment, legal or tax advice or an offer or solicitation to purchase or sell any financial instrument. Reasonable care has been taken to ensure that this publication is not untrue or misleading when published, but ING does not represent that it is accurate or complete. ING does not accept any liability for any direct, indirect or consequential loss arising from any use of this publication. Unless otherwise stated, any views, forecasts, or estimates are solely those of the author(s), as of the date of the publication and are subject to change without notice.

The distribution of this publication may be restricted by law or regulation in different jurisdictions and persons into whose possession this publication comes should inform themselves about, and observe, such restrictions.

Copyright and database rights protection exists in this report and it may not be reproduced, distributed or published by any person for any purpose without the prior express consent of ING. All rights are reserved. ING Bank N.V. is authorised by the Dutch Central Bank and supervised by the European Central Bank (ECB), the Dutch Central Bank (DNB) and the Dutch Authority for the Financial Markets (AFM). ING Bank N.V. is incorporated in the Netherlands (Trade Register no. 33031431 Amsterdam). In the United Kingdom this information is approved and/or communicated by ING Bank N.V., London Branch. ING Bank N.V., London Branch is authorised by the Prudential Regulation Authority and is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. ING Bank N.V., London branch is registered in England (Registration number BR000341) at 8-10 Moorgate, London EC2 6DA. For US Investors: Any person wishing to discuss this report or effect transactions in any security discussed herein should contact ING Financial Markets LLC, which is a member of the NYSE, FINRA and SIPC and part of ING, and which has accepted responsibility for the distribution of this report in the United States under applicable requirements.

Additional information is available on request. For more information about ING Group, please visit www.ing.com.