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Berichte und Sachverhalte

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IW Financial Expert Survey

Second Quarter 2019

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INSTITUT DER DEUTSCHEN WIRTSCHAFT

Contents

JEL Classification:

G12 – Asset pricing
G17 – Financial forecasting

Abstract

Pessimism determines the experts' predictions for the second and third quarter of 2019 which can be inferred from the downward revisions of the experts' forecasts. All in all, more downward revisions than upward revisions can be found in the forecasts indicating that the experts have interpreted the incoming information between end of December 2018 and end of March 2019 as bad news. Part or the forecast revision for the interest rates is due to their subdued inflation and growth outlook. All experts have revised their growth outlooks for Germany and the Euro Area downwards. So were Inflation forecasts for Germany revised downwards by 12 experts and inflation outlooks for the Euro Area were revised downwards by 8 experts. The other part of the interest rate forecast revisions were due to revisions about the future part of monetary policy interest rates, which also reflect a subdued inflation and growth outlook. While no experts expect the ECB to change its monetary policy, 12 experts have revised their forecasts for the federal funds rate downwards.

Although the experts still expect the yield curve to become steeper, they expect long-term interest rates to increase less compared to the last survey. The lower interest rate forecasts are consistent with the experts' lower inflation and growth expectations. The experts expect 1.4 percent inflation in the Eurozone and a growth rate of real gross domestic product of 1.1 percent for 2019, which indicates a slowdown of economic growth and a failure of the European Central Bank (ECB) to meet its inflation target. Given that, the experts lowered their outlook for the long-term interest rate to 0.15 percent. For the short rate, the experts predict a slight downward change, since they expect the ECB's main refinancing rate to stay at 0.0 percent at least until the end of the third quarter of 2019. But the experts expect the yield of US Treasury bonds to increase from 2.39 percent to 2.70 percent by the end of the third quarter of 2019. Given the still accommodative monetary policy stance of the ECB in 2019, the experts forecast an appreciation of the Euro from 1.122 US-Dollar to 1.140 US-Dollar in the second quarter and to 1.153 US-Dollar in the third quarter of 2019.

Although some the experts revised their stock market forecasts downwards, they expect the DAX and the Stoxx index to recover by the end of the third quarter of 2019. On average, the experts predict the Stoxx index to increase from 3.101 points at the end of the first quarter of 2019 to 3.178 points at the end of the second quarter of 2019 and to 3.214 points at the end of the third quarter of 2019. This would correspond to increases of 2.5 percent and 3.6 percent since March 2019. Moreover, the experts expect the DAX to increase from 11.428 to 11.729 in the second quarter of 2019 and to 11.814 by the third quarter of 2019, which corresponds to increases by 2.6 and 3.5 percent since end of March 2019. Interesting is that the experts expect the Stoxx and the DAX to grow faster than the S&P 500, which we surveyed for the second time. For the S&P 500 the experts only expect increases by 1.5 and 2.5 percent.

In the long-term ranking, which covers the last 16 quarters, National-Bank could defend rank one, while Commerzbank and Nord/LB could defend rank two and rank three.

1 The IW Financial Expert Survey

Since the second quarter of 2017, the IW is conducting the IW Financial Expert Survey. Before that the Center for European Economic Research (ZEW) conducted this survey under the name ZEW Prognosetest.

The participating forecasters in this survey are economists of financial companies who submit their forecast to the IW on a quarterly basis. The IW calculates mean predictions and forecasting intervals and evaluates the participants' performance in making trend forecasts and point forecasts. The indicators used for the IW Financial Expert Survey are the 3-month Euribor (called "short rate"), the yield of German government bonds with 10-year maturity (called "long rate"), the Stoxx 50 Europe Index, the DAX 30 Index, the EUR-USD exchange rate, and the oil price (brent). In the first quarter of 2019 we introduced new variables to the survey. Due to the global nature of financial markets we asked the participants about their expectations on the US Treasury Yield with 10 years maturity ("US long rate") and on the S&P 500 index. Since monetary policy is an important factor, we asked the expects on their view on how the European Central Bank (ECB) and the Federal Reserve Bank will set their policy rates within the forecast horizons 3 months ahead and 6 months ahead. In addition to that we asked the experts about their inflation and growth outlook for Germany and the Eurozone.

2 Financial market forecasts

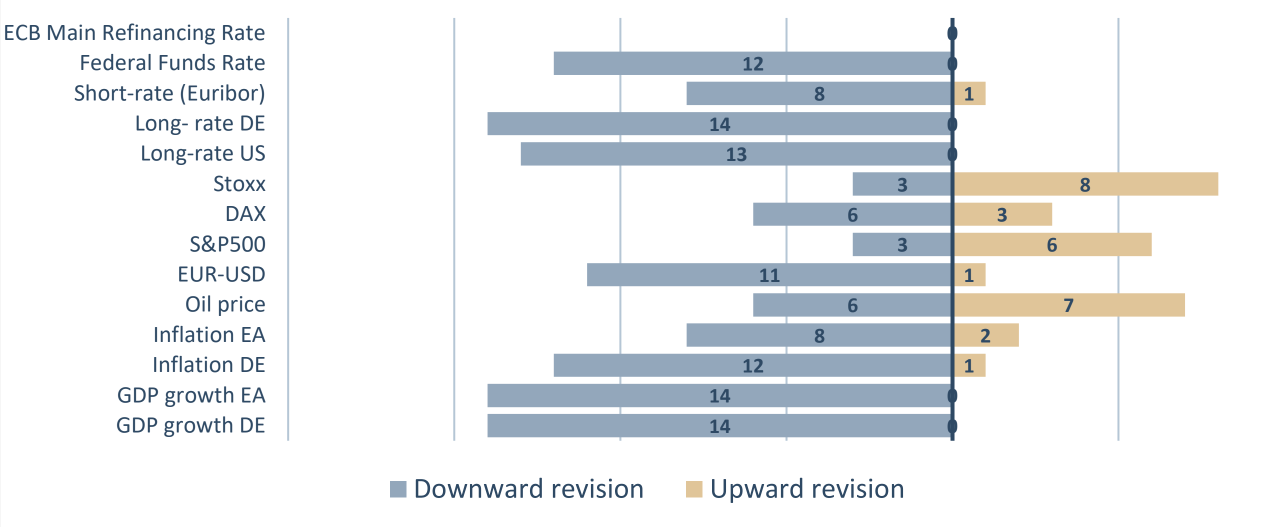
This section contains an analysis of the current financial market forecasts for the end of the second quarter of 2019 and the end of the third quarter of 2019. The individual point forecasts, which the experts submitted, were aggregated to a mean forecast. Moreover, trend forecasts were calculated from the individual point forecast and the most recent data points of the indicators.

2.1 Upward and downward revisions

Figure 2-1 gives an overview of the changes in market sentiment derived from the submitted forecasts. This indicator measures how the experts revise their forecast when new information arrives. To this end, the differences between the forecasts for the end of June 2019 from December 2018 and the forecasts for the end of June 2019 from March 2019 were compared. In the case that the forecasters interpret the incoming economic indicators that have arrived between December 2018 and March 2019 as good news, the forecasters would have revised their forecasts for June 2019 upwards, leading to a positive difference between the forecast based on information available on December 2018 and the forecast based on information available in March 2019. If the forecasters would have interpreted the incoming data as negative for the performance of the indicator, the forecaster would have revised their predictions downwards.

Figure 2-1: Upward and downward revisions

Revisions are calculated as the differences between the forecasts for June 2019 from March 2019 and the forecasts for June 2019 from December 2018, number of forecasters with a positive difference (upward revision) or a negative difference (downward revision)



Source: Bloomberg, IW Financial Expert Survey

All in all, we find more downward revisions than upward revisions in the forecasts indicating that the experts have interpreted the incoming information between end of December 2018 and end of March 2019 as bad news. All participating experts have revised their outlook for the German long-term interest rate downwards and 13 experts have revised their expectation for the US long-term interest rate downward. Moreover, 8 forecasters expect a lower short-term interest rate as measured by the Euribor. Part or the forecast revision for the interest rates is due to their subdued inflation and growth outlook. All experts have revised their growth outlooks for Germany and the Euro Area downwards. Inflation forecasts for Germany were revised downwards by 12 experts and inflation outlooks for the Euro Area were revised downwards by 8 experts. The other part of the interest rate forecast revisions were due to revisions about the future part of monetary policy interest rates, which also reflect a subdued inflation and growth outlook. While no experts expect the ECB to change its monetary policy, 12 experts have revised their forecasts for the federal funds rate downwards.

Revisions for the stock markets were mixed. While three experts have revised their expectation for the Stoxx downwards, eight experts have become more optimistic in their outlook. For the DAX, six experts have become more pessimistic in their outlook, while three experts became more optimistic. In addition to that, for the S&P 500 three experts have revised their expectation downwards, while six experts have revised their outlook upwards.

Things are more clear for the exchange rate. The majority of the experts have interpreted the incoming information as bad news, i.e. they have revised their outlook downwards.

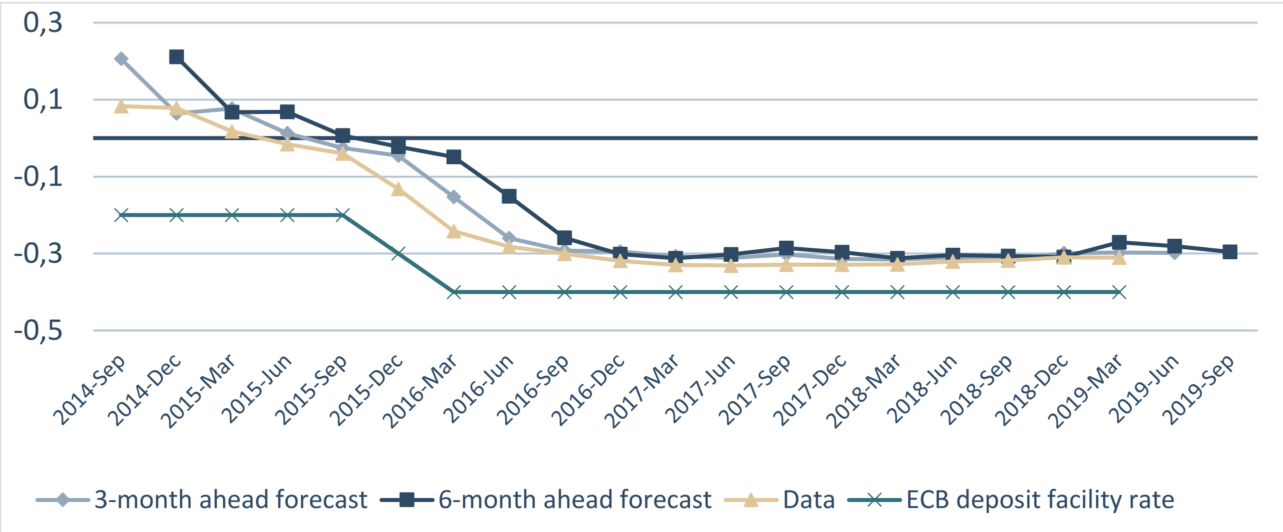
The outlook for the oil price was mixed. While six experts have revised their outlook downwards, seven have revised their expectation upwards.

2.2 Interest rates

During the period we have data on the surveyed experts, i.e. from the beginning of the sample period in the third quarter of 2014 to the end of the third quarter of 2019, the short-term interest rate was characterized by a slow downward trend from 0.08 percent to -0.32 percent at the end of the second quarter of 2017. The short rate remained from the end of the first quarter of 2017 to the end of the first quarter of 2018 at that lower floor of -0.33 percent. It only rose marginally to -0.31 percent by the end of the fourth quarter of 2018, where it stayed by now (figure 2-1). It can be seen from the data, that the short-term interest rate is highly influenced by the ECB's deposit facility rate, which acts as a lower floor to the short-term interest rate.

Figure 2-2: Point forecasts: short-term interest rate

3-Month Euribor, in percent

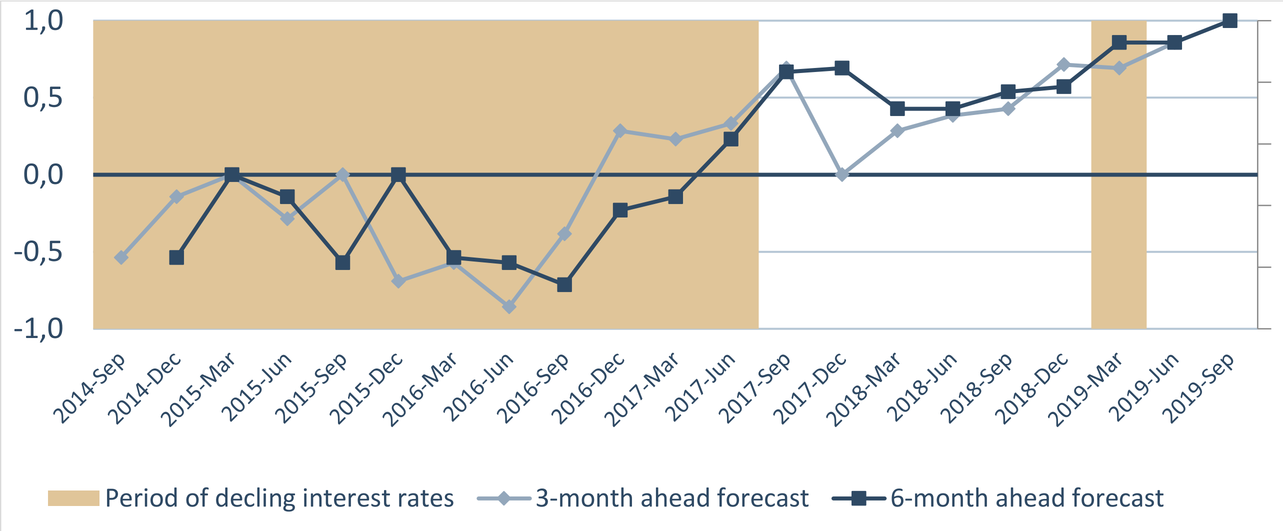


Source: Bloomberg, IW Financial Expert Survey

The figure 2-1 contains the data at the last trading day of each quarter together with the mean prediction of the experts, i.e. the average over all individual point forecasts. While the mean prediction over-predicted the short-rate for most of the time during the early years, the over-prediction became smaller over time, especially during the time, when the short-rate converged to its lower floor of -0.33 percent. One reason for the over-prediction could be that the experts experienced for the first time a low and even negative interest rate environment, which challenged their forecasting. The experts forecasting models might have contained a zero lower bound on interest rates, first, which was then lowered cautiously step-by-step, when interest rates proved to become negative. After the short-rate reached its floor of -0.33 percent, the over-prediction became smaller over time, probably because the experts' lower bound on interest rates did not need additional downward adjustments, since the ECB's deposit facility rate has remained at its floor of -0.4 percent since then. The interest rate forecasts of the short-rate seem to be very precise now. The mean forecasts for the end of the second quarter of 2019 and the end of the third quarter of 2019 are both -0.30 percent with a standard deviation of 0.01 and 0.02 percentage points (table 2-1). From the forecasts can be concluded that the experts expect a very small normalisation of short-term interest rates in line with the ECB's forward guidance on its monetary policy. That the experts rely on the ECB's forwards guidance for making predictions can be seen from their expectation of the ECB's main refinancing rate: no expert expects a change in monetary policy by the end of the survey horizon.

Figure 2-3: Trend forecasts: short-term interest rates

Diffusion index: number of respondents with positive trend predictions minus number of respondents with negative trend predictions divided by all respondents, shaded area: periods with a downward trend in the data.



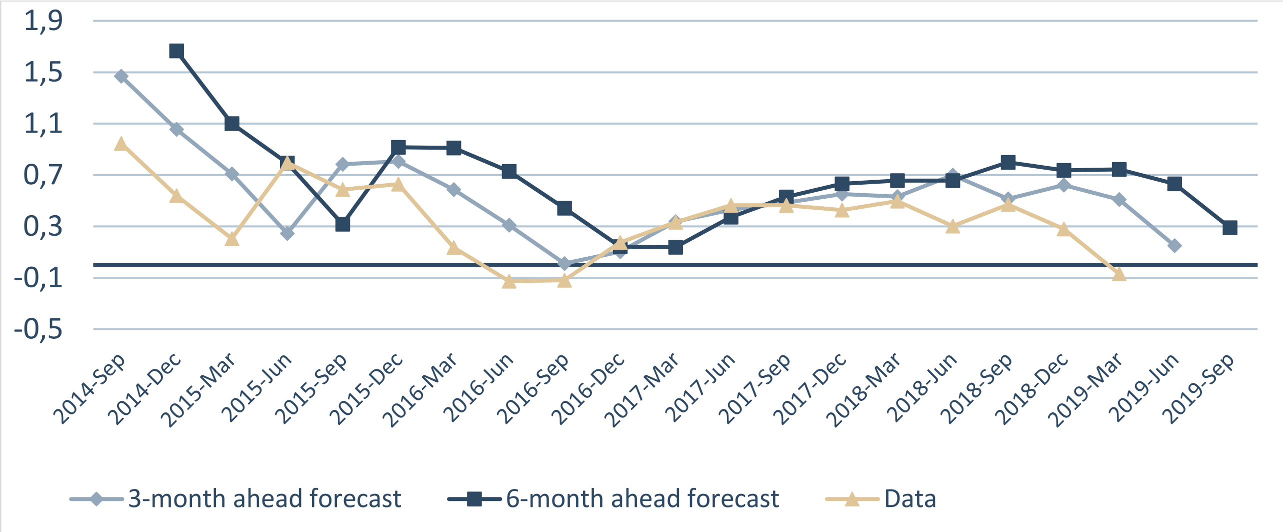
Source: Bloomberg, IW Financial Expert Survey

From the trend forecasts can be seen that trend predictions of the short-rate in an environment of negative interest rates has been more precise compared to point predictions (figure 2-2). The figure contains the trend forecasts for the next 3 and 6 months as so-called diffusion indices. These indices were calculated as the number of experts who predict a positive trend minus the number of experts who predict a negative trend divided by the number of forecasters. The diffusion indices can fluctuate between -1 and 1, with -1 indicating that all experts agree on a negative trend, 1 indicating that all experts agree on a positive trend and 0 indicating that half of the experts expect a positive trend, while the other half expects a negative trend. Predicting no change is not possible here because the data has more digits than the predictions that the experts report.

From the figure can be seen that most experts expected a declining short-rate during the time the short rate declined, but also that most experts expected a much earlier trend reversal. The expectation of a trend reversal does not show up in the mean forecasts of figure 2-1, because it averages out due to some experts expecting interest rates to decline further. While the short-rate has stopped declining in the third quarter of 2017, the experts predicted a trend reversal for the end of the last quarter in 2016. Although the mean predictions for the end of the second quarter of 2019 and the end of the third quarter of 2019 indicate that the short rate might stay near its past value, most experts are in favour of increasing interest rates. However, their point forecasts indicate that these expected increases tend to be small.

Figure 2-4: Long-term interest rate in Germany

Yield on German government bonds with a maturity of 10 years, in percent



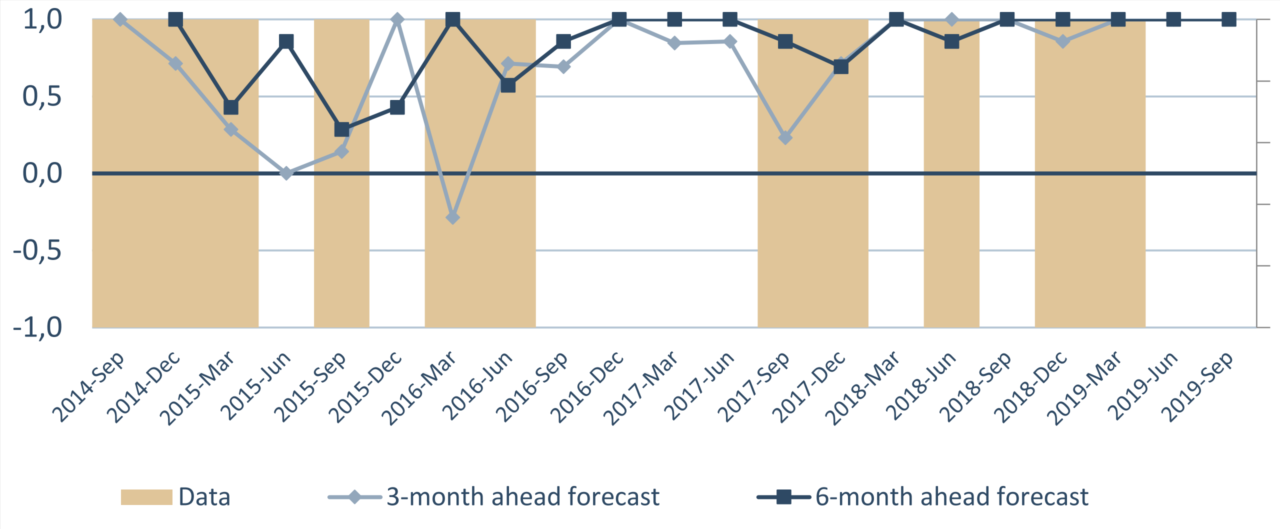
Source: Bloomberg, IW Financial Expert Survey

The long-term interest rate declined from 0.95 percent at the end of the third quarter of 2014 to -0.13 percent at the end of the second quarter in 2016. It then recovered to 0.5 percent at the end of the first quarter of 2018 and then dropped to 0.30 percent by the end of the second quarter of 2018. After an increase by the end of the third quarter of 2018 it fell to 0.28 percent at the end of the fourth quarter of 2018. The long-term interest rate for Germany became negative again during the first quarter of 2019 (figure 2-3).

The figure 2-3 also shows that forecasting the long-rate in a low interest rate environment is challenging. The experts over-predicted on average the two declines of the long-rate in the period between the third quarter of 2014 and the last quarter of 2016, while forecasts improved with the beginning of the year 2017, i.e. that forecast errors have become smaller and the over-prediction of the data has vanished. While the experts expect lower interest rates compared to the previous forecasts the standard deviations of their forecasts have increased indicating more forecast uncertainty. Although the experts have lowered their forecasts of the long-term interest rate, their three-month ahead forecasts and their six-month ahead forecasts are both higher compared to the data, indicating that the experts expect a higher long rate in 2019. Experts expect on average the long-rate to increase from currently -0.07 percent to 0.15 and 0.29 percent by the end of the second and by the end of the third quarter of 2019 with standard deviations of 0.22 and 0.36 percentage points (table 2-1).

Figure 2-5: Trend forecasts: long-term interest rates

Diffusion index: number of respondents with positive trend predictions minus number of respondents with negative trend predictions divided by all respondents, shaded area: periods with a downward trend in the data.

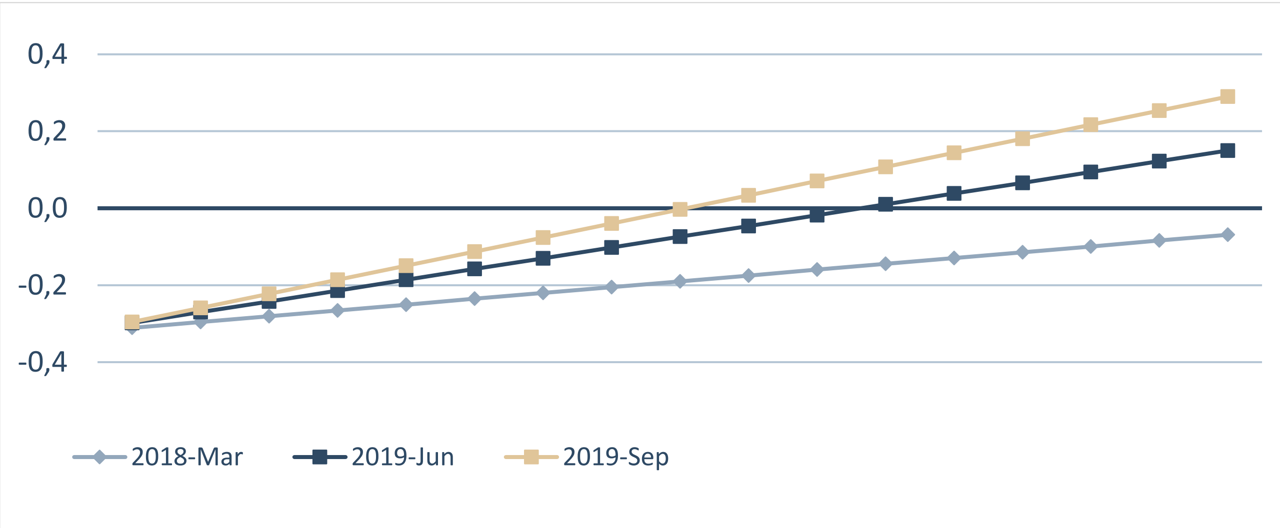


Source: Bloomberg, IW Financial Expert Survey

The majority of experts was optimistic most of the time when it came to predicting the trend in the long-rate in Germany, while the pessimists were in the minority (figure 2-4). During the periods of declining yields, most experts expected a positive trend for the next 3 and 6 months. While most experts erred on the direction of the long-rate during the periods of declining yields, they were very accurate during the periods of increasing yields. Currently, forecasters have become pessimistic again. For both forecasting horizons, a significant fraction of the forecasters expects declining long-term interest rates.

Figure 2-6: Estimated yield curve

Interest rates from 3-month maturity to 10-year maturity, linearly interpolated



Source: Bloomberg, IW Financial Expert Survey

Figure 2-5 contains the prediction of the yield curve, for which yields between 3-month maturity and 10-year maturity were interpolated linearly. From the figure can be seen, that the experts predict the yield curve to become steeper. While they predict the short end of the yield curve say at the current level of -0.3 percent, they predict the long end to increase by 0.36 percentage points to up to 0.29 percent by the end of the third quarter of 2019. The expectation of a steeper yield curve is consistent with the expectation of normalizing interest rates. However, most experts have revised their interest rate expectations downwards.

New to the survey is the US long rate, i.e. the yield of US Treasury bonds with 10 year maturity, which was surveyed for the second time. The experts no longer expect the US yields to increase by more than the yields on German government bonds with the same maturity. Instead they predict the interest rate in Germany to increase by 0.22 percentage points and the interest rate in the US by 0.28 percentage points by the end of the first half of 2019. By the end of the third quarter of 2019 the experts expect the yield on US treasuries to increase by 0.36 percentage points to 0.30 percent, while they expect the yield on German bunds will to increase only by 0.23 percentage points to 0.30 percent (table 2-1). In comparison to the Financial Expert Survey from the first quarter of 2019, the experts are more pessimistic in their interest rate outlook.

Table 2-1: Summary statistics: interest rates

End of survey: December 28 2018, 14 respondents for the short rate and the long rate

	Short rate	Long rate	US Long rate	Short rate	Long rate	US Long rate
March 28, 2019 value	-0.31	-0.07	2.39	-0.31	-0.07	2.39
	3-month-ahead forecast			6-month-ahead forecast		
Mean Forecast	-0.30	0.15	2.67	-0.30	0.30	2.70
Change in perc. points	0.01	0.22	0.28	0.02	0.36	0.31
Standard deviation	0.03	0.09	0.15	0.03	0.12	0.14
Lowest forecast	-0.33	0.00	2.40	-0.31	0.10	2.45
Highest forecast	-0.20	0.30	2.95	-0.20	0.51	2.95

Source: Bloomberg, IW Financial Expert Survey

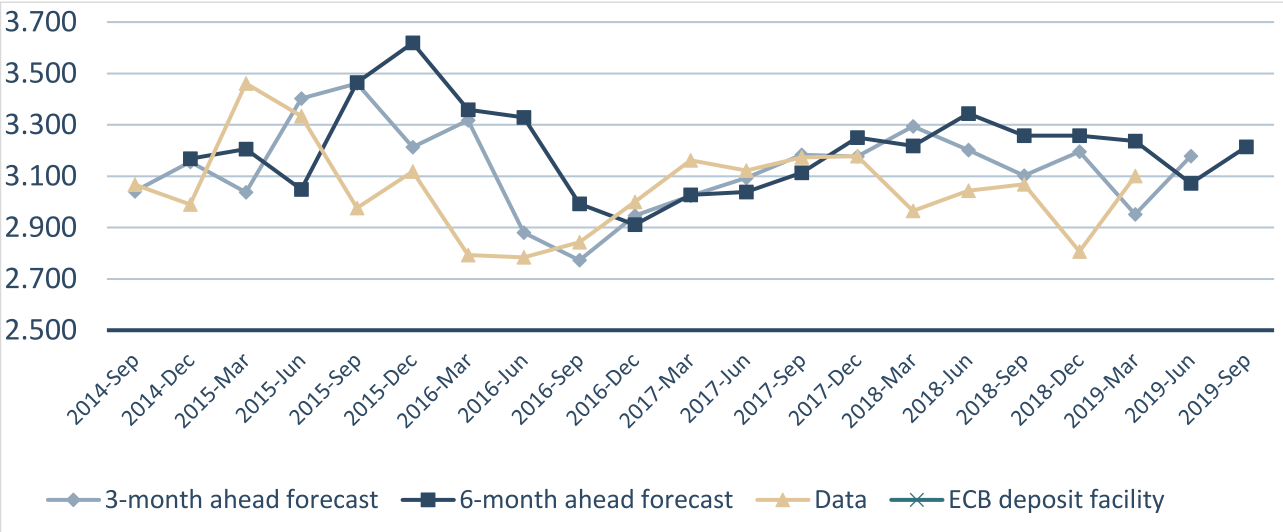
2.3 Stock Market Performance

The Stoxx index trended upward from the end of the third quarter of 2014 to the first quarter of 2015 from 3,067 to 3,461 points, after which it declined until the end of the first quarter of

2016 to 2,792 points. After that, it increased to 3,161 points by the end the first quarter of 2017. Since then, the Stoxx index moved sideways with a drop at the end of the first quarter of 2018 to 2,965 points. It recovered by the end of the second quarter 2018 but dropped at the end of the fourth quarter of 2018 to 2,807 points. Within the first quarter of 2019, the Stoxx index recovered to 3,101 points. Forecasts also recovered. On average, the forecasters expect higher stock prices than today (figure 2-6). They predict the Stoxx index to move to 3,178 points at the end of the second quarter of 2019 and to 3,214 points at the end of the third quarter of 2019.

Figure 2-7: Point forecasts: Stoxx 50 Europe

Index

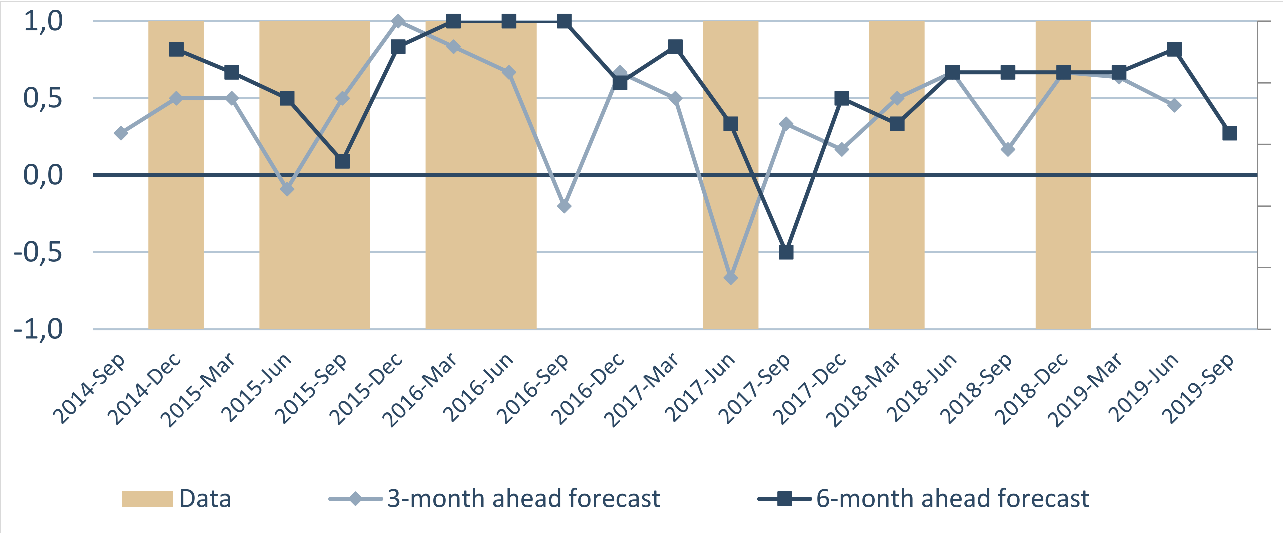


Source: Bloomberg, IW Financial Expert Survey

The DAX index increased from 9,474 points at the end of the third quarter of 2014 to 12,086 points at the first quarter of 2015, after which it dropped until the end of the second quarter of 2016 to 9,612 points. After that, the DAX experienced a long upward trend until the end of the year 2017 at which it quoted 12,917 points. In the first quarter of 2018, the DAX has dropped to 12,096 points, but it recovered by the end of the second quarter of 2018 to 13,306 points. It then dropped in the third and the fourth quarter of 2018 to 10,788 points at the end of the year. Like the Stoxx index did the DAX experience a drop in the fourth quarter of 2018. Although the expectations for the second and the third quarter of 2019 dropped, the experts expect the DAX to recover from the slump (figure 2-8). The experts expect the DAX to increase from 11.428 to 11.729 in the second quarter of 2019 and to 11.814 in the third quarter of 2019. This corresponds to increases by 2.6 and 3.4 percent. Interesting is that the experts expect the Stoxx and the DAX to grow faster than the S&P 500, which we surveyed for the second time. For the S&P 500 the experts only expect increases by 1.5 and 2.5 percent.

Figure 2-8: Trend forecasts: Stoxx Europe Index

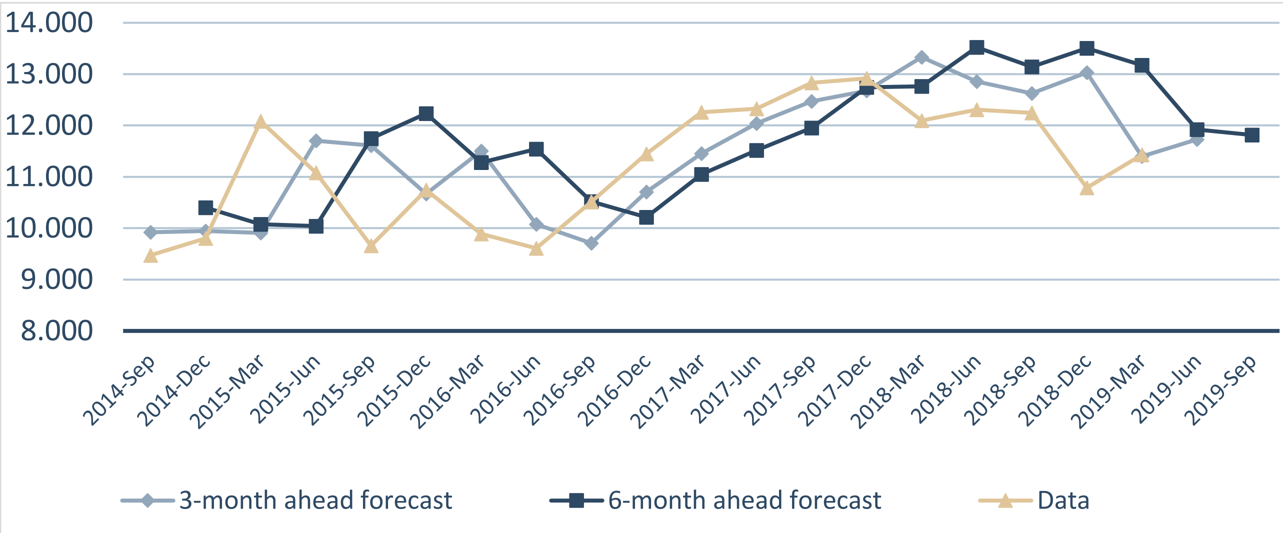
Diffusion index: number of respondents with positive trend predictions minus number of respondents with negative trend predictions divided by all respondents, shaded area: periods with a downward trend in the data.



Source: Bloomberg, IW Financial Expert Survey

Figure 2-9: DAX 30 Index

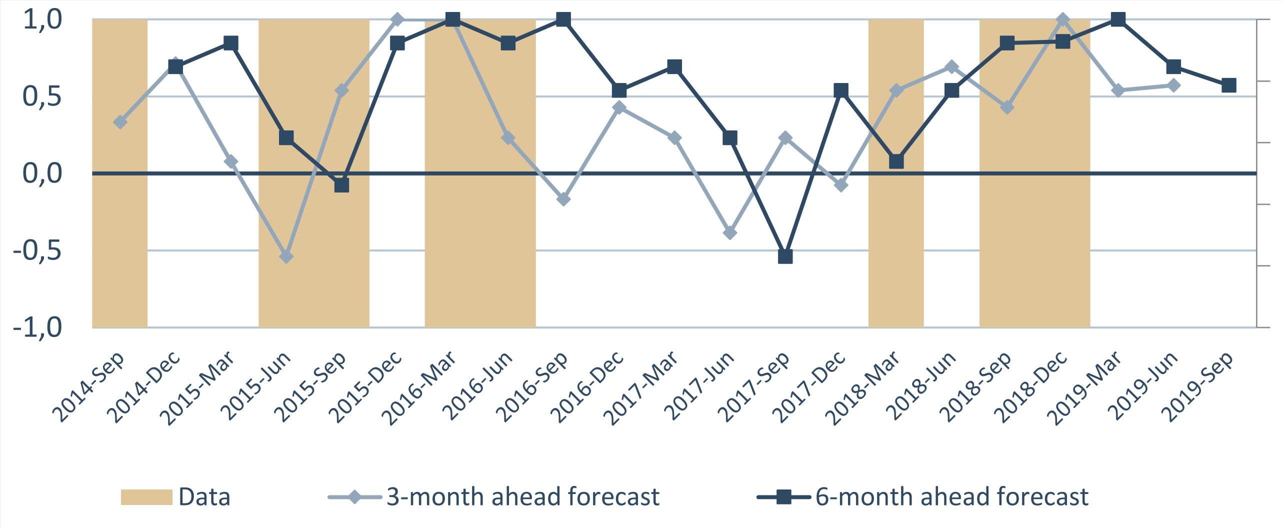
Index



Source: Bloomberg, IW Financial Expert Survey

Figure 2-10: Trend forecasts: DAX 30

Diffusion index: number of respondents with positive trend predictions minus number of respondents with negative trend predictions divided by all respondents, shaded area: periods with a downward trend in the data.



Source: Bloomberg, IW Financial Expert Survey

Table 2-2: Summary statistics: stock market indices

End of survey: Dec 28 2017, 13 respondents for the Stoxx 50 and 14 respondents for the DAX 30

	Stoxx 50	DAX 30	S&P 500	Stoxx 50	DAX 30	S&P 500
December 28 2018 value	3,101	11,428	2,815	3.101	11,428	2,815
	3-month-ahead forecast			6-month-ahead forecast		
Mean Forecast	3,178	11,729	2,858	3,214	11,814	2,885
Change in per-cent	2.5	2.6	1.5	3.6	3.4	2.5
Standard devia-tion	156	513	94	188	489	133
Lowest forecast	2,900	10,600	2,650	2,900	10,800	2,650
Highest forecast	3,450	12,700	3,075	3,500	13,000	3,175

Source: Bloomberg, IW Financial Expert Survey

In 2015 and in the first half of 2016 experts over-predicted the growth of the DAX on average. However, forecast errors became smaller during the positive trend growth, which the DAX experienced since then. However, the experts under-predicted the positive trend growth (figure 2-8). At the end of the first as well as the second quarter of 2018, the experts over-predicted the trend growth again.

The over-prediction of the DAX also shows up in the trend forecasts. Here, most of the experts expected increasing stock prices in times, in which the DAX declined, e.g. in 2016. After that, more and more experts became pessimistic and under-predicted the growth of the DAX, e.g in the year 2017 (figure 2-9). The larger number of pessimists is one reason, why the mean forecast was below the DAX index during the time of the positive trend growth in 2016 and 2017. From the figure can be inferred that the experts became more pessimistic in that the number of experts who predict declining stock prices have increased. But, all in all, the majority of experts have an optimistic growth outlook.

2.4 Foreign Exchange

The EUR-USD exchange rate declined from 1.26 USD per one Euro at the end of the third quarter of 2014 to 1.08 USD per one Euro at the end of the first quarter of 2015. It then moved more or less sideways until the end of the third quarter of 2016. The EUR-USD exchange rate then dropped at the end of the year 2016 to 1.05 USD per one Euro, while it increase to 1.23 USD per one Euro at the end of the first quarter of 2018.

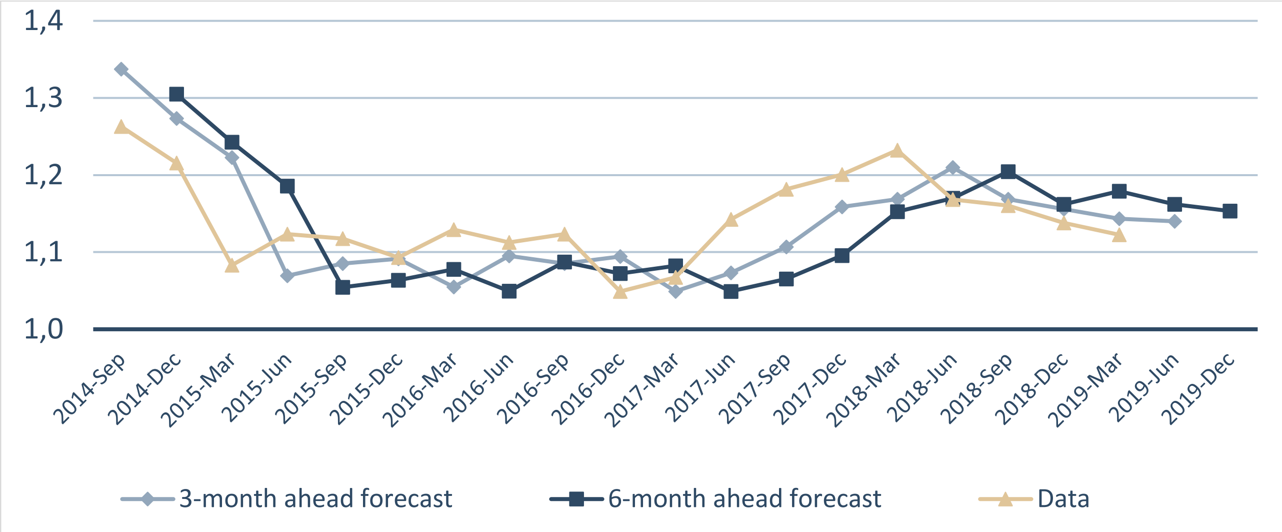
The experts over-predicted the exchange rate between the end of 2014 and the end of the first half of 2015. In fact, the exchange rate declined faster than expected by the experts. In the years 2015 to 2017, when the exchange rate moved more or less sideways, the forecasts converged. However, from the end of the second half of 2017 the exchange rate increased faster than predicted by the experts leading to an under-prediction of the mean forecasts (figure 2-10).

The Euro lost value in the year 2018. By the end of the year is depreciated to 1.14 USD per one Euro. This depreciation has continued with a decline to 1.12 USD by the end of the first quarter of 2019 (figure 2-10). However, the experts predict the Euro to appreciate to 1.14 USD (+1.6 percent) by the end of the second quarter of 2019 and to 1.15 USD (+2.7 percent) by the end of the third quarter of 2019 (table 2-11).

From the trend forecasts can be seen that the majority of experts expected a declining exchange rate for most of the time. Since the beginning of the year 2019, most experts expect an appreciation in the second and third quarter of 2019 (figure 2-11).

Figure 2-11: Point forecasts: EUR-USD exchange rate

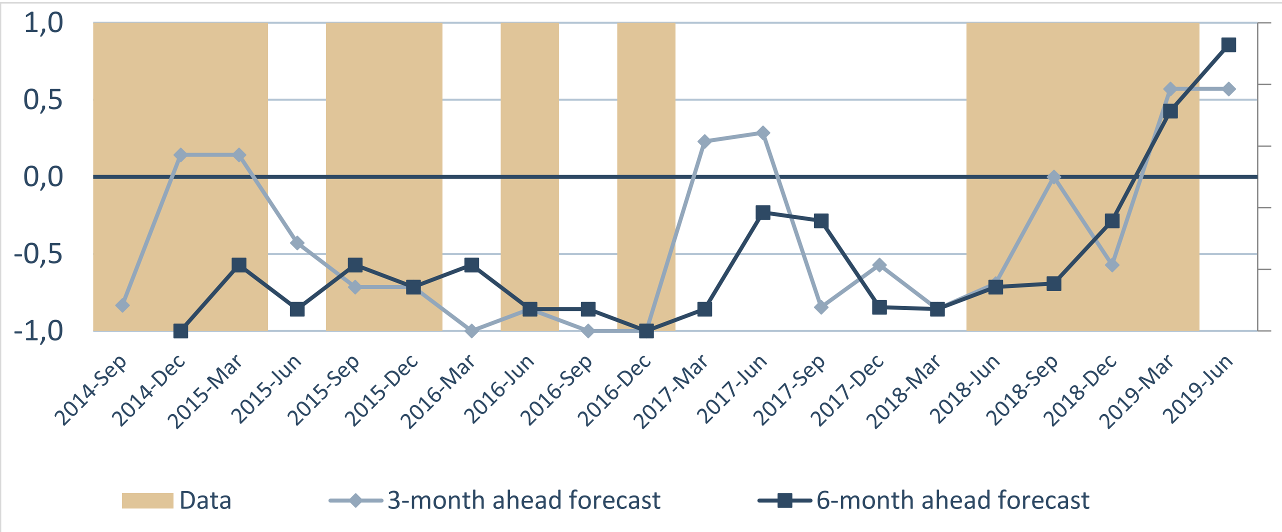
US Dollars per 1 Euro



Source: Bloomberg, IW Financial Expert Survey

Figure 2-12: Trend forecasts: EUR-USD exchange rate

Diffusion index: number of respondents with positive trend predictions minus number of respondents with negative trend predictions divided by all respondents, shaded area: periods with a downward trend in the data.



Source: Bloomberg, IW Financial Expert Survey

Table 2-3: Summary statistics: foreign exchange

End of survey: Dec 28 2018, 15 respondents, in US Dollars per 1 Euro

	EUR-USD	EUR-USD
December 28 2018 value	1.122	1.122
	3-month-ahead forecast	**6-month-ahead forecast**
Mean Forecast	1.140	1.153
Change in percent	1.6	2.7
Standard deviation	0.025	0.030
Lowest forecast	1.100	1.110
Highest forecast	1.200	1.220

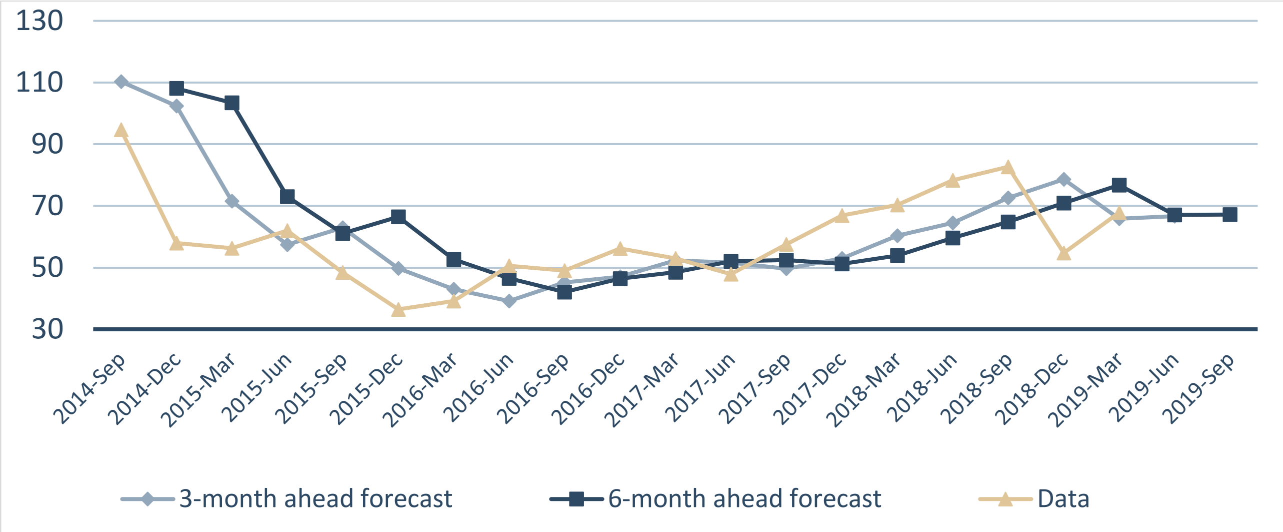
Source: Bloomberg, IW Financial Expert Survey

2.5 Oil Prices

The oil price dropped from 94.7 USD per barrel at the end of the third quarter of 2014 to 36.5 USD per barrel at the end of the year 2015. Since then the oil price experienced a slow, but long upward movement to 82.7 USD per barrel until the end of the third quarter of 2018. Then it suddenly dropped sharply to 54.7 USD (-33.9 percent) in the last quarter of 2018. During the first quarter of 2019, oil prices recovered to 67.8 USD (24.0 percent). The forecasters over-predicted oil prices until March 2016, i.e. that oil prices declined faster than predicted by the experts. From the end of the second quarter of 2016 to the end of the third quarter of 2017, expectations converged and tracked the data well since then. However, since the end of the third quarter of 2017 the experts under-predicted oil prices, i.e. oil prices rose faster than predicted by the experts. The experts predict a sideways movement for the next two quarters (figure 2-12).

Figure 2-13: Oil prices

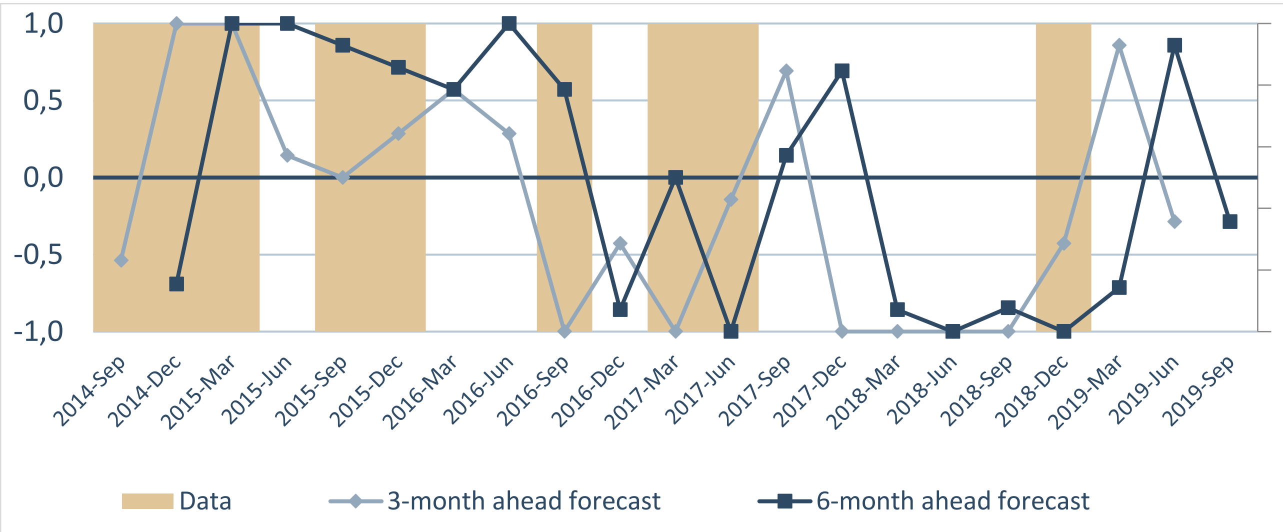
Brent, London, US Dollars per barrel



Source: Bloomberg, IW Financial Expert Survey

Figure 2-14: Trend forecasts: oil prices

Diffusion index: number of respondents with positive trend predictions minus number of respondents with negative trend predictions divided by all respondents, shaded area: periods with a downward trend in the data.



Source: Bloomberg, IW Financial Expert Survey

While the majority of experts expected rising oil prices from the end of the first quarter of 2015 to the end of the third quarter of 2016, forecasters got pessimistic then. From the end of the year 2016 to the end of the first half of 2017, the majority of experts expected declining oil prices. After that, the majority of forecasters was optimistic for two quarters. For all quarters of 2018 the majority of experts predicted declining oil prices. However, for the first and the second quarter of 2019 all forecasters expect increasing oil prices. Now, the majority of forecasters expect oil prices to decline (figure 2-13).

Table 2-4: Summary statistics: oil prices

End of survey: December 28 2018, 15 respondents

	Oil prices	Oil prices
December 28 2018 value	67.8	67.8
	3-month-ahead forecast	**6-month-ahead forecast**
Mean Forecast	66.7	67.1
Change in percent	-1.6	-1.0
Standard deviation	3.3	3.9
Lowest forecast	63.0	60.0
Highest forecast	75.0	75.0

Source: Bloomberg, IW Financial Expert Survey

3 Macroeconomic forecasts

Since the first quarter of 2019, we also survey the experts on their view about the policy interest rates of the ECB and the Federal Reserve. Moreover, we survey the experts on their inflation and growth forecasts for Germany and the Eurozone.

The experts uniformly expect no policy change from the ECB at least until the end of the third quarter of 2019, i.e. all experts expect the ECB's main financing rate to stay at 0.0 percent consistent with the ECB's forward guidance on its monetary policy. For the Federal Reserve Bank's interest rate decision there is, however, uncertainty among the experts about the interest rate steps by the Federal Reserve. The lowest estimate is no changes in the second and third quarter, while the highest estimate is a 0.5 percentage points increase in the second quarter and a 0.25 percentage points increase in the third quarter of 2019. On average the experts predict the effective Federal Funds Rate to lie in an interval from 2.30 to 2.55 percent at the end of the second quarter of 2019 and for the end of the second quarter of 2019 they predict the Funds Rate to lies in an interval ranging from 2.34 to 2.59 percent.

Table 3-1: Summary statistics: monetary policy interest rates

End of survey: December 28 2018, 15 respondents

	European Central Bank	Federal Reserve	European Central Bank	Federal Reserve
March 28, 2019 value	0.00	2.25-2.50	0.00	2.25-2.50
	3-month-ahead forecast		6-month-ahead forecast	
Mean Forecast	0.00	2.30-2.55	0.00	2.34-2.59
Change in percentage points	0.00	0.05	0.00	0.09
Standard deviation	0.00	0.14	0.00	0.18
Lowest forecast	0.00	2.25-2.50	0.00	2.50-2.75
Highest forecast	0.00	2.75-3.00	0.00	3.00-3.25

Source: European Central Bank, Federal Reserve Bank of St. Louis, IW Financial Expert Survey

We also asked the experts about their projections about inflation and growth for 2019 in the Eurozone. The experts expect the growth rate of real gross domestic product in the Euro Area to slow down to 1.1 percent in 2019. For Germany they expect an even larger decline to 0.9 percent in 2019.

The experts' inflation expectations are in line with their interest rate expectations. They have expected interest rates to increase only marginally and monetary policy to stay accommodative in the second and third quarter of 2019. For the Eurozone inflation rate for 2019 they expect it to slow down from 1.7 percent to 1.4, which farer away from the ECB's inflation target and a value which is too low to be consistent with an interest rate hike by the ECB. For Germany the experts expect a slowdown of inflation dynamics from 2.2 percent in 2018 to 1.4 percent in 2019.

Table 3-2: Summary statistics: Inflation and growth

End of survey: December 28 2018, 15 respondents

	Inflation Euro-zone	Inflation Germany	Growth Euro-zone	Growth Germany
March 28, 2019 value	1.5	1.4	1.1	0.6
	3-month-ahead forecast		6-month-ahead forecast	
Mean Forecast	1.4	1.6	1.1	0.9
Change in percentage points	-0.1	0.2	0.0	0.3
Standard deviation	0.1	0.1	0.2	0.3
Lowest forecast	1.2	1.3	0.9	0.5
Highest forecast	1.6	1.8	1.4	1.3

Source: Eurostat, IW Financial Expert Survey

4 Ranking of the best performing forecasters

This section contains the results of the ranking of the best forecasters.

4.1 Trend Forecasts

In the short-term ranking, which measures the predictive accuracy of the last two 3-month ahead forecasts and the last 6-month ahead forecast, DZ Bank reached the first rank after Helaba reached the first place in the first quarter of 2019. DZ Bank predicted 61 percent of all trends correctly. The second place was reached by LBBW with 60 percent correctly predicted trends. LBBW was on rank three in the survey from the first quarter of 2019. Hamburger Sparkasse defended the third rank with a success rate of 55.6 percent.

In the long-term ranking, which covers the last 16 quarters, Hamburger Sparkasse reached the first rank after Commerzbank reached rank one in the survey from the first quarter of 2019. Hamburger Sparkasse had a success rate of 57.8 percent. Commerzbank reached rank two with a success rate of 57.3 percent, while DZ Bank reached rank three with a success rate of 56.8 percent (Table 4-1).

Table 4-1: The best performing trend forecasters

Forecast evaluation based on the number of precisely predicted trends, in percent

	Short-term ranking	Long-term ranking
	Evaluation period: September 2018 to December 2018	Evaluation period: December 2014 to December 2018
1	DZ Bank	Hamburger Sparkasse
	61.1 percent	57.8 percent
2	LBBW	Commerzbank
	60.1 percent	57.3 percent
3	Hamburger Sparkasse	DZ Bank
	55.6 percent	56.8 percent

Source: Bloomberg, IW Financial Expert Survey

Table 4-2: The best performing trend forecasters: single indicators

Forecast evaluation based on Theil's U defined as the root mean squared forecast error of the forecaster divided by the root mean squared error of a random walk forecast, evaluation period: September 2015 to September 2018

	Short rate	Long rate	Stoxx 50	DAX 30	EUR-USD	Oil price
	Evaluation period: October 2014 to October 2018					
1	Hamburger Sparkasse	Commerzbank	UniCredit	DekaBank	Helaba	DZ Bank Postbank UniCedit
	84.8 percent	66.7 percent	59.4 percent	66.7 percent	63.6 percent	57.6 percent
2	Nord/LB	National-Bank	Commerzbank DZ Bank Hamburger Spar-kasse Weberbank	Weberbank	Bayerische Landes-bank DZ Bank	Deutsche Bank
	78.8 percent	60.6 percent	55.9 percent	60.6 percent	57.6 percent	55.6 percent
3	Deutsche Bank	UniCredit	Helaba Santander Bank	Santander Bank	Commerzbank Hamburger Spar-kasse LBBW Nord/LB	National-Bank
	74.1 percent	51.6 percent	52.9 percent	57.6 percent	54.5 percent	54.5 percent

Source: Bloomberg, IW Financial Expert Survey

The accuracy rates of the trend forecasts of the long-term ranking for individual indices can be found in Table 4-2. Hamburger Sparkasse again reached the first rank for forecasting the short-term interest rate with a success rate of 84.8 percent followed by Nord/LB with a success rate of 78.8 percent and Deutsche Bank with a success rate of 74.1 percent.

The best forecaster for the long-term interest rate was again Commerzbank with a success rate of 66.7 percent followed by National-Bank with an accuracy rate of 60.6 percent and UniCredit with a success rate of 51.6 percent.

UniCredit was the best forecaster for the Stoxx with a success rate of 59.4 percent followed by Commerzbank, DZ Bank, Hamburger Sparkasse and Weberbank on the second rank. DekaBank was the best forecaster for the DAX with an accuracy rate of 66.7 percent followed by Weberbank and Santander Bank on ranks two and three with success rates of 60.6 percent and 57.6 percent.

Helaba reached rank one for the best forecasters of the EUR-USD exchange rate with a success rate of 63.6 percent. Bayerische Landesbank and DZ Bank reached rank two with a success rate of 57.6 percent each. Commerzbank, Hamburger Sparkasse, LBBW and Nord/LB share rank three with a success rate of 54.5 percent each.

DZ Bank, Postbank and UniCredit had the most success in forecasting oil prices with an accuracy rate of 57.6 percent each. Deutsche Bank is on rank two with a success rate of 55.6 percent followed by National-Bank on rank three with a success rate of 54.5 percent

4.2 Point Forecasts

In the short-term all indicators ranking of the survey, Santander Bank reached the first rank after Commerzbank reached the first rank in the last survey. Commerzbank is now on rank two followed by Nord/LB on rank three. In the long-term ranking National-Bank reached rank one followed by Commerzbank and Nord/LB on ranks two and three (table 4-3).

Table 4-3: The best performing point forecasters

Forecast evaluation based on Theil's U defined as the root mean squared forecast error of the forecaster divided by the root mean squared error of a random walk forecast

	Short-term ranking	Long-term ranking
	Evaluation period: September 2018 to December 2018	Evaluation period: December 2014 to December 2018
1	Santander Bank	National-Bank
	1.000	1.096
2	Commerzbank	Commerzbank
	1.006	1.117
3	Nord/LB	Nord/LB
	1.107	1.183

Source: Bloomberg, IW Financial Expert Survey

Hamburger Sparkasse performed best at predicting the short-term interest rates followed by DZ Bank and Commerzbank, while Commerzbank reached rank one in predicting the long-term interest rate. DekaBank performed best at predicting the Stoxx followed by Helaba and Commerzbank, while Helaba performed best at predicting the DAX. Nord/LB produced the most accurate exchange rate forecasts followed by National-Bank and DZ Bank. National-Bank performed best in predicting oil prices followed by LBBW and Weberbank.

Table 4-4: The best performing point forecasters: single indicators

Forecast evaluation based on Theil's U defined as the root mean squared forecast error of the forecaster divided by the root mean squared error of a random walk forecast

	Short rate	Long rate	Stoxx 50	DAX 30	EUR-USD	Oil price
	Evaluation period: December 2014 to December 2018					
1	Hamburger Sparkasse	Commerzbank	DekaBank	Helaba	Nord/LB	National-Bank
	0.821	1.063	0.990	0.944	1.023	1.007
2	DZ Bank	National-Bank	Helaba	Postbank	National-Bank	LBBW
	0.832	1.065	1.274	1.105	1.200	1.010
3	Commerzbank	Nord/LB	Commerzbank	DekaBank	DZ Bank	Weberbank
	0.8881	1.227	1.302	1.108	1.224	1.023

Source: Bloomberg, IW Financial Expert Survey

5 Conclusion

Pessimism determines the experts' predictions for the second and third quarter of 2019 which can be inferred from the downward revisions of the experts' forecasts. All in all, more downward revisions than upward revisions can be found in the forecasts indicating that the experts have interpreted the incoming information between end of December 2018 and end of March 2019 as bad news. Part or the forecast revision for the interest rates is due to their subdued inflation and growth outlook. All experts have revised their growth outlooks for Germany and the Euro Area downwards. So were Inflation forecasts for Germany revised downwards by 12 experts and inflation outlooks for the Euro Area were revised downwards by 8 experts. The other part of the interest rate forecast revisions were due to revisions about the future part of monetary policy interest rates, which also reflect a subdued inflation and growth outlook. While no experts expect the ECB to change its monetary policy, 12 experts have revised their forecasts for the federal funds rate downwards.

Although the experts still expect the yield curve to become steeper, they expect long-term interest rates to increase less compared to the last survey. The lower interest rate forecasts are consistent with the experts' lower inflation and growth expectations. The experts expect 1.4

percent inflation in the Eurozone and a growth rate of real gross domestic product of 1.1 percent for 2019, which indicates a slowdown of economic growth and a failure of the European Central Bank (ECB) to meet its inflation target. Given that, the experts lowered their outlook for the long-term interest rate to 0.15 percent. For the short rate, the experts predict a slight downward change, since they expect the ECB's main refinancing rate to stay at 0.0 percent at least until the end of the third quarter of 2019. But the experts expect the yield of US Treasury bonds to increase from 2.39 percent to 2.70 percent by the end of the third quarter of 2019. Given the still accommodative monetary policy stance of the ECB in 2019, the experts forecast an appreciation of the Euro from 1.122 US-Dollar to 1.140 US-Dollar in the second quarter and to 1.153 US-Dollar in the third quarter of 2019.

Although some the experts revised their stock market forecasts downwards, they expect the DAX and the Stoxx index to recover by the end of the third quarter of 2019. On average, the experts predict the Stoxx index to increase from 3.101 points at the end of the first quarter of 2019 to 3.178 points at the end of the second quarter of 2019 and to 3.214 points at the end of the third quarter of 2019. This would correspond to increases of 2.5 percent and 3.6 percent since March 2019. Moreover, the experts expect the DAX to increase from 11.428 to 11.729 in the second quarter of 2019 and to 11.814 by the third quarter of 2019, which corresponds to increases by 2.6 and 3.5 percent since end of March 2019. Interesting is that the experts expect the Stoxx and the DAX to grow faster than the S&P 500, which we surveyed for the second time. For the S&P 500 the experts only expect increases by 1.5 and 2.5 percent.

In the long-term ranking, which covers the last 16 quarters, National-Bank could defend rank one, while Commerzbank and Nord/LB could defend rank two and rank three.

6 Appendix: Individual Forecasts

Table 6-1: Individual forecasts: short-term interest rate

In percent

Forecaster	End of June 2019	End of September 2019
Bayerische Landesbank	-0.31	-0.31
Commerzbank	-0.30	-0.30
DekaBank	-0.31	-0.31
Deutsche Bank	-0.33	-0.30
DZ Bank	-0.30	-0.30
Hamburger Sparkasse	-0.31	-0.30
Helaba	-0.30	-0.30
LBBW	-0.30	-0.30
National-Bank	-0.31	-0.31
Nord/LB	-0.31	-0.31
Postbank	-0.30	-0.30
Santander Bank	-0.30	-0.30
UniCredit	-0.30	-0.30
Weberbank	-0.20	-0.20

Source: IW Financial Expert Survey

Table 6-2: Individual forecasts: long-term interest rate

In percent

Forecaster	End of June 2019	End of September 2019
Bayerische Landesbank	0.30	0.40
Commerzbank	0.30	0.30
DekaBank	0.05	0.51
Deutsche Bank	0.20	0,35
DZ Bank	0.20	0.50
Hamburger Sparkasse	0.10	0.20
Helaba	0.25	0.35
LBBW	0.20	0.20
National-Bank	0.10	0.20
Nord/LB	0.00	0.10
Postbank	0.10	0.30
Santander Bank	0.00	0.10
UniCredit	0.15	0.25
Weberbank	0.15	0.30

Source: IW Financial Expert Survey

Table 6-3: Individual forecasts: US long-term interest rate

In percent

Forecaster	End of June 2019	End of September 2019
Bayerische Landesbank	2.80	2.70
Commerzbank		
DekaBank	2.80	2.85
Deutsche Bank	2.95	2.95
DZ Bank	2.75	2.75
Hamburger Sparkasse	2.40	2.50
Helaba	2.70	2.70
LBBW	2.75	2.75
National-Bank	2.50	2.70
Nord/LB	2.70	2.80
Postbank	2.50	2.45
Santander Bank	2.50	2.60
UniCredit	2.65	2.55
Weberbank	2.70	2.80

Source: IW Financial Expert Survey

Table 6-4: Individual forecasts: Stoxx Index

In index points

Forecaster	End of June 2019	End of September 2019
Bayerische Landesbank	3,220	3,080
Commerzbank	2,900	2,950
DekaBank		
Deutsche Bank		
DZ Bank	3,300	3,350
Hamburger Sparkasse	3,450	3,500
Helaba	3,250	3,350
LBBW		
National-Bank	3,365	3,450
Nord/LB	3,025	3,075
Postbank	3,125	3,175
Santander Bank	3,175	3,225
UniCredit	3,000	2,900
Weberbank	3,150	3,300

Source: IW Financial Expert Survey

Table 6-5: Individual forecasts: DAX 30 Index

In index points

Forecaster	End of June 2019	End of September 2019
Bayerische Landesbank	11,800	11,400
Commerzbank	10,600	10,800
DekaBank	11,000	11,700
Deutsche Bank	11,800	11,400
DZ Bank	11,600	11,800
Hamburger Sparkasse	11,800	12,000
Helaba	12,700	13,000
LBBW	12,000	11,750
National-Bank	12,000	12,400
Nord/LB	11,400	11,700
Postbank	11,500	11,750
Santander Bank	11,700	12,000
UniCredit	12,500	11,600
Weberbank	11,800	12,100

Source: IW Financial Expert Survey

Table 6-6: Individual forecasts: S&P 500

In percent

Forecaster	End of June 2019	End of September 2019
Bayerische Landesbank	2,920	2,850
Commerzbank		
DekaBank	2,650	2,650
Deutsche Bank	3,075	3,175
DZ Bank	2,850	2,950
Hamburger Sparkasse	2,800	2,800
Helaba	2,900	2,950
LBBW		
National-Bank	2,850	2,950
Nord/LB	2,800	2,820
Postbank	2,825	2,875
Santander Bank	2,875	2,900
UniCredit	2,850	2,700
Weberbank	2,900	3,000

Source: IW Financial Expert Survey

Table 6-7: Individual forecasts: EUR-USD exchange rate

In US Dollars per 1 Euro

Forecaster	End of June 2019	End of September 2019
Bayerische Landesbank	1.13	1.17
Commerzbank	1.16	1.18
DekaBank	1.13	1.15
Deutsche Bank	1,18	1.22
DZ Bank	1.15	1.15
Hamburger Sparkasse	1.13	1.15
Helaba	1.20	1.20
LBBW	1.12	1.11
National-Bank	1.12	1.13
Nord/LB	1.13	1.12
Postbank	1.13	1.14
Santander Bank	1.13	1.15
UniCredit	1.10	1.12
Weberbank	1.15	1.16

Source: IW Financial Expert Survey

Table 6-8: Individual forecasts: oil prices

Brent, in US Dollars per barrel

Forecaster	End of June 2019	End of September 2019
Bayerische Landesbank	65	60
Commerzbank	63	67
DekaBank	64	65
Deutsche Bank	63	63
DZ Bank	70	74
Hamburger Sparkasse	66	68
Helaba	68	66
LBBW	70	70
National-Bank	69	70
Nord/LB	67	66
Postbank	65	65
Santander Bank	65	65
UniCredit	64	66
Weberbank	75	75

Source: IW Financial Expert Survey

Table 6-9: Individual forecasts: ECB main refinancing rate

In percent

Forecaster	End of June 2019	End of September 2019
Bayerische Landesbank	0.00	0.00
Commerzbank		
DekaBank	0.00	0.00
Deutsche Bank	0.00	0.00
DZ Bank	0.00	0.00
Hamburger Sparkasse	0.00	0.00
Helaba	0.00	0.00
LBBW	0.00	0.00
National-Bank	0.00	0.00
Nord/LB	0.00	0.00
Postbank	0.00	0.00
Santander Bank	0.00	0.00
UniCredit	0.00	0.00
Weberbank	0.00	0.00

Source: IW Financial Expert Survey

Table 6-10: Individual forecasts: Federal Funds Rate

In percent

Forecaster	End of June 2019	End of September 2019
Bayerische Landesbank	2.25-2.50	2.25-2.50
Commerzbank	2.50-2.75	2.75-3.00
DekaBank	2.25-2.50	2.25-2.50
Deutsche Bank	2.25-2.50	2.50-2.75
DZ Bank	2.25-2.50	2.25-2.50
Hamburger Sparkasse	2.25-2.50	2.25-2.50
Helaba	2.25-2.50	2.25-2.50
LBBW	2.25-2.50	2.25-2.50
National-Bank	2.75-3.00	2.25-2.50
Nord/LB	2.25-2.50	2.25-2.50
Postbank	2.25-2.50	2.25-2.50
Santander Bank	2.25-2.50	2.25-2.50
UniCredit	2.25-2.50	2.25-2.50
Weberbank	2.75-3.00	2.75-3.00

Source: IW Financial Expert Survey

Table 6-11: Individual forecasts: consumer price inflation

Forecasts for 2019, in percent

Forecaster	Germany	Eurozone
Bayerische Landesbank	1.6	1.4
Commerzbank		
DekaBank	1.6	1.4
Deutsche Bank	1.7	1.3
DZ Bank	1.7	1.4
Hamburger Sparkasse	1.5	1.5
Helaba	1.8	1.6
LBBW	1.6	1.5
National-Bank	1.5	1.3
Nord/LB	1.3	1.2
Postbank	1.6	1.3
Santander Bank	1.5	1.5
UniCredit	1.7	1.4
Weberbank	1.7	1.4

Source: IW Financial Expert Survey

Table 6-12: Individual forecasts: real GDP growth

Forecasts for 2019, in percent

Forecaster	Germany	Eurozone
Bayerische Landesbank	0.7	1.0
Commerzbank		
DekaBank	1.0	1.3
Deutsche Bank	0.5	0.9
DZ Bank	1.0	1.2
Hamburger Sparkasse	0.7	1.1
Helaba	1.3	1.4
LBBW	1.1	1.3
National-Bank	1.1	1.1
Nord/LB	0.8	1.1
Postbank	0.5	0.9
Santander Bank	1.0	1.2
UniCredit	0.6	1.0
Weberbank	1.2	1.3

Source: IW Financial Expert Survey

Tables

Figures