Wirtschaftliche Untersuchungen,
Berichte und Sachverhalte

IW-Report 13/2018

IW Financial Expert Survey

Second Quarter 2018

Markus Demary

Cologne, April 24, 2018

INSTITUT DER DEUTSCHEN WIRTSCHAFT

Contents

JEL Classification:

G12 – Asset pricing
G17 – Financial forecasting

Abstract

In the IW Financial Expert Survey for the second quarter of 2018 the surveyed experts predict, on average, a steeper yield curve, i.e. a larger increase in the long-term than in the short-term interest rate. Moreover, the average forecasts indicate higher stock market indices, a depreciation of the Euro vis-à-vis the US Dollar, and lower oil prices by the end of the third quarter of 2018. However, despite the expectation of higher interest rates, the short-term interest rate is predicted to remain in negative territory. The 3-month Euribor is, on average, expected to reach -0.31 percent at the end of the third quarter of 2018, while the yield on German government bonds with 10-year maturity is expected to reach 0.81 percent by then. However, the experts do not expect the European Central Bank (ECB) to change the forward guidance of its monetary policy significantly. Stock markets are, on average, expected to increase by 9.2 percent (Stoxx 50) and 8.4 percent (DAX 30) until the end of the third quarter of 2018. During that same period, the experts predict the Euro to depreciate by 2.5 percent vis-à-vis the US Dollar, while oil prices are expected to fall by 7.8 percent.

The expectation of an increase in the long rate and a slight increase in the short rate, together with the expected delayed monetary tightening of the ECB, hints at a financial market outlook characterised by a cautious approach to monetary policy normalisation. In this cautious approach, the ECB lets the market determine the first increases in long-term interest rates before it stops intervening at the long end of the yield curve, while keeping the short end of the yield curve lower. This cautious approach to monetary policy normalization is reflected in the projections of the yield curve. Moreover, the experts expect that the development of the Euro and the development of oil prices as well as the development of the stock market will support the ECB's cautious approach to monetary normalization instead of forcing a faster exit from low interest rates. The experts do not expect the ECB to change its forwards guidance in the forthcoming Governing Council meeting.

The evaluation of the forecasting performance of the latest forecasts yields the result that Commerzbank and DZ Bank performed best in predicting trends within the long-term ranking, which covers all forecasts from March 2015 to March 2018. DekaBank and Deutsche Bank performed best in the short-term ranking, which covers the surveys for the third and the fourth quarter of 2017 for the 3-months ahead prediction and the survey for the third quarter of 2017 for the 6-month forecasts. When it comes to point prediction, in the long-term evaluation of the period running from March 2015 to March 2018, the experts of National-Bank performed best in predicting all indicators, while the Postbank experts produced the most precise point forecasts for all indicators for the short-term evaluation period.

1 The IW Financial Expert Survey

Since the second quarter of 2017, the IW has been undertaking the former forecasting test of the Center for European Economic Research (ZEW). The ZEW has been conducting the survey of financial market experts since the beginning of 2001. The former ZEW forecasting test is now called the IW Financial Expert Survey, which is and will be conducted and published on a quarterly basis.

The participating forecasters of financial companies submit their forecast to the IW on a quarterly basis. The IW in turn 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). Moreover, the IW surveys alternating questions on the current stance of monetary policy or on macroeconomic trends that are relevant for financial markets.

2 Current forecasts

This section contains an analysis of the current forecasts for the end of the second and the end of the third quarter of 2018. 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.

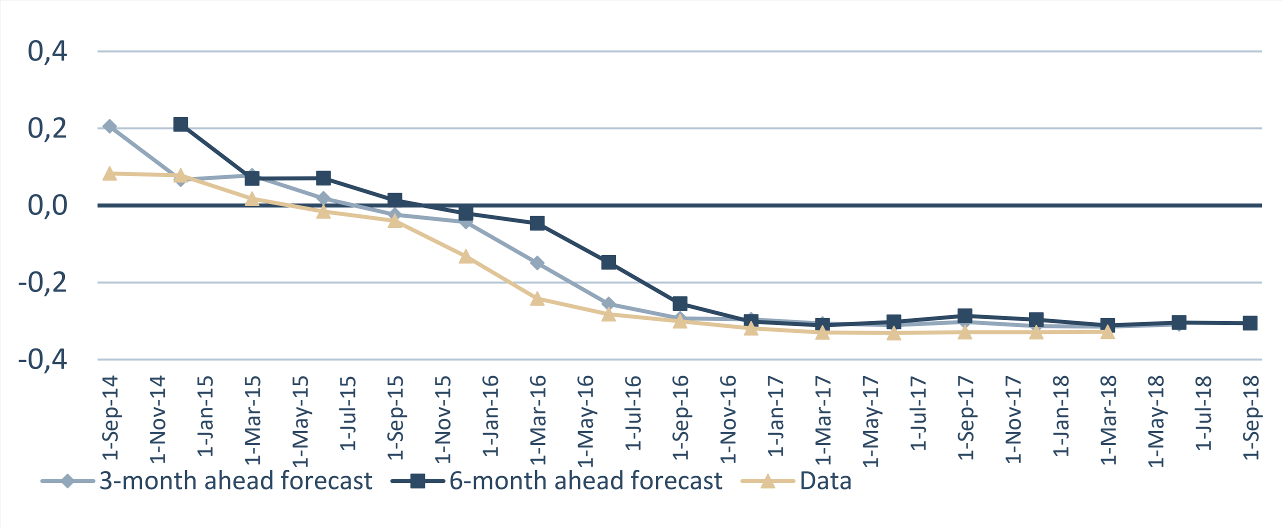
2.1 Interest rates

During the period we surveyed the experts, i.e. from the beginning of the sample period in the third quarter of 2014 to the end of the second quarter 2017, the short-term interest rate was characterized by a slow downward trend from 0.08 percent at the end of the third quarter of 2014 to -0.33 percent at the end of the first quarter of 2017. Since then, the short rate remained at that lower floor of -0.33 percent (figure 2-1).

The figure 2-1 contains the data at the last 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, the over-prediction became smaller over time, especially during the time, where the short-rate converged to the value -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 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 interest rate has remained at that floor 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 2018 and the end of the third quarter 2018 are each -0.33 percent with a standard deviation of 0.04 and 0.03 percentage points (table 2-1).

Figure 2-1: Point forecasts: short-term interest rate

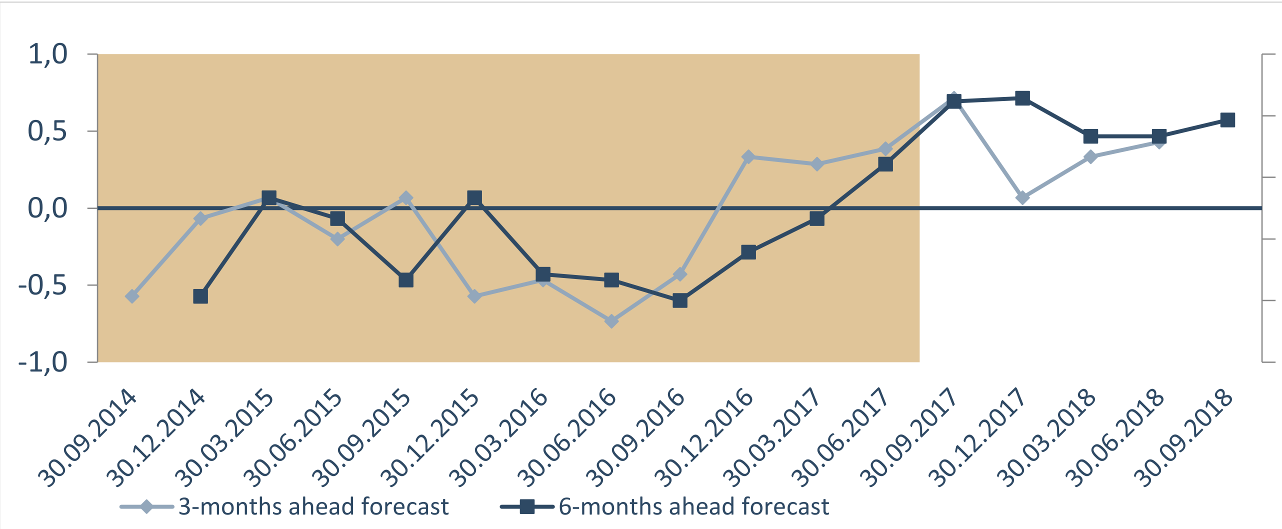
3-Month Euribor, in percent



Source: Bloomberg, IW Financial Expert Survey

Figure 2-2: 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.

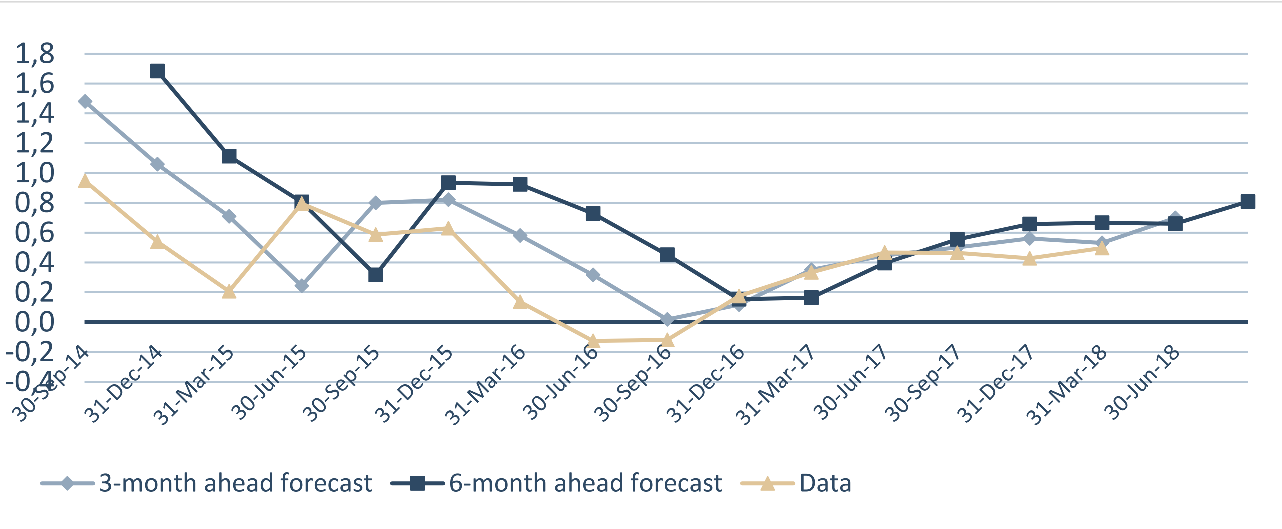


Source: Bloomberg, IW Financial Expert Survey

From the trend forecasts, it can also be seen that trend predictions of the short-rate in an environment of negative interest rates was 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 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 index 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 actually 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 prediction for the end of the second quarter of 2018 and the end of the third quarter of 2018 indicates the short rate to stay at its value of -0.33 percent, most experts are in favour of increasing interest rates.

Figure 2-3: Long-term interest rate

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



Source: Bloomberg, IW Financial Expert Survey

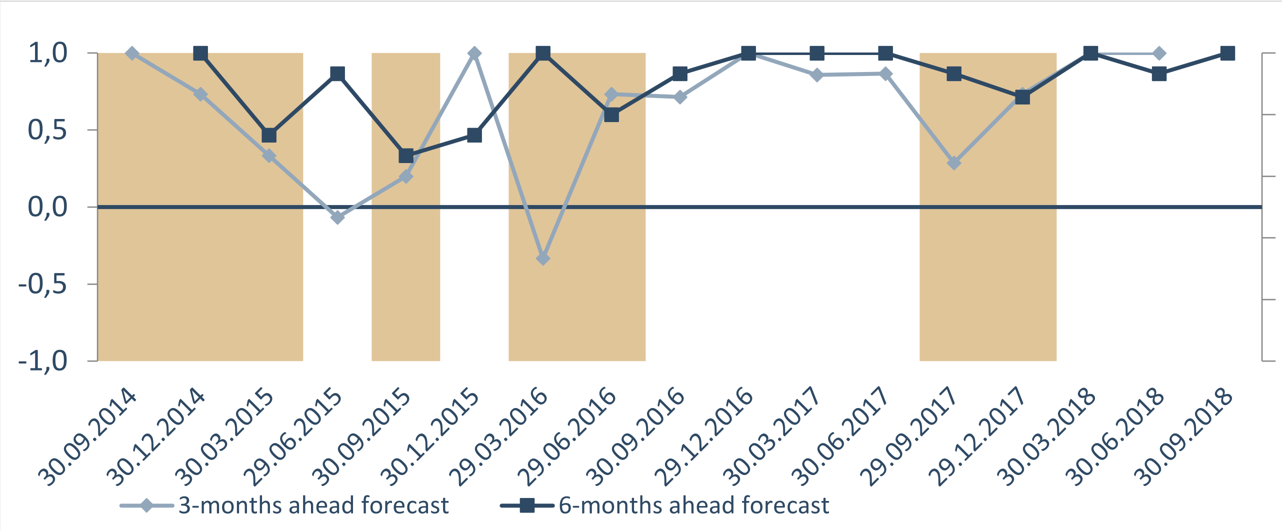
The long-term interest rate declined from 0.95 percent at the end of the third quarter of 2014 to -0.13 percent at the end of the second quarter in 2016. It then recovered to 0.5 percent at the end of the first quarter of 2018 (figure 2-3).

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. Experts expect on average the long-rate to increase to 0.7

and 0.81 percent by the end of the second and third quarter of 2018 with standard deviations of 0.08 and 0.13 percentage points (figure 2-3).

Figure 2-4: 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.



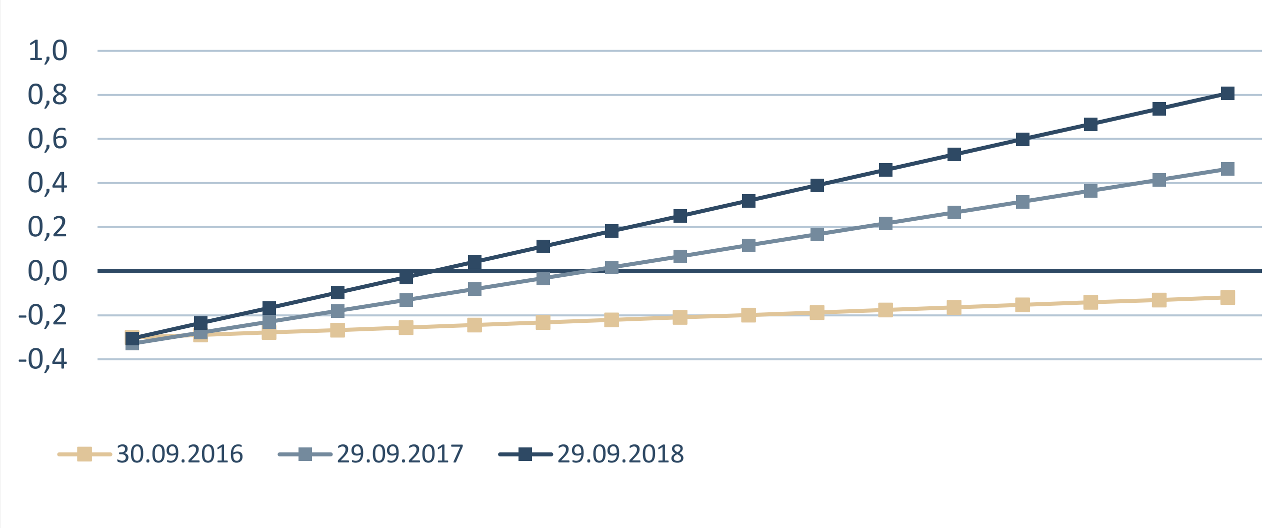
Source: Bloomberg, IW Financial Expert Survey

The majority of experts was most of the time optimistic when it came to predicting the trend in the long-rate, 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. For the end of the second quarter of 2018 and the end of the third quarter of 2018 close to all experts expect increasing long-term interest rates.

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 only a minor change at the short end of the yield curve, they predict the long end to increase more sharply to up to 0.8 percent by the end of the third quarter of 2018. The expectation of a steeper yield curve is consistent with the expectation of normalizing interest rates.

Figure 2-5: Estimated yield curve

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



Source: Bloomberg, IW Financial Expert Survey

Table 2-1: Summary statistics: interest rates

End of survey: March 29 2018, 14 respondents for the short rate and the long rate

	Short rate	Long rate	Short rate	Long rate
March 29 2018 value	-0.33	0.50	-0.33	0.50
	3-month-ahead forecast		6-month-ahead forecast	
Mean Forecast	-0.31	0.70	-0.31	0.81
Change in perc. points	0.02	0.20	0.02	0.31
Standard deviation	0.04	0.08	0.03	0.13
Lowest forecast	-0.35	0.58	-0.35	0.50
Highest forecast	-0.20	0.80	-0.20	1.00

Source: Bloomberg, IW Financial Expert Survey

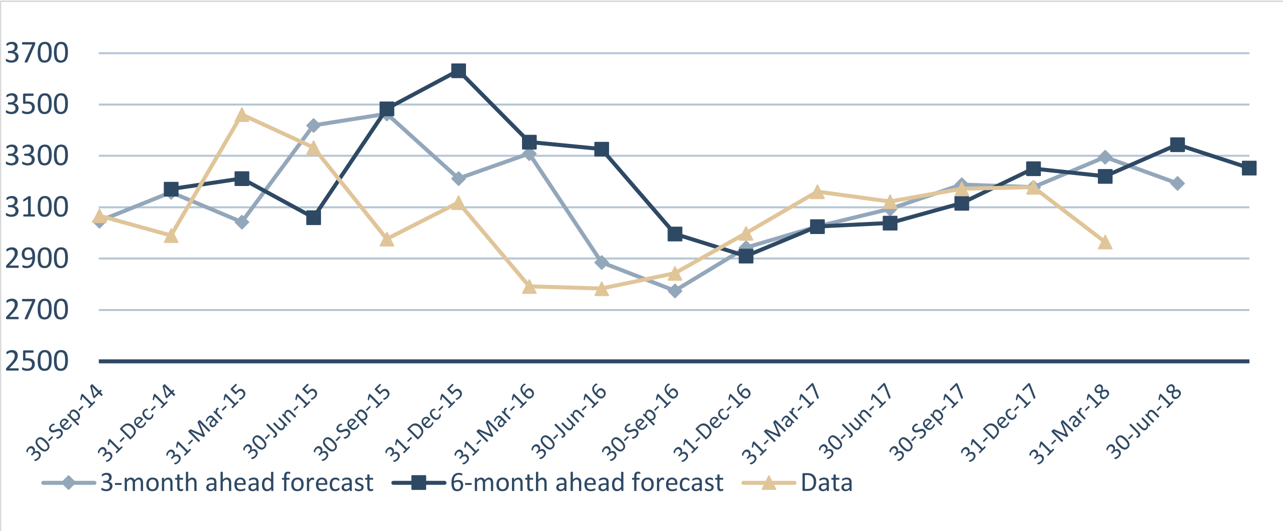
2.2 Stock Market Performance

The Stoxx index trended upward from the end of the third quarter of 2014 to the first quarter of 2015, after which it declined until the end of the first quarter of 2016. After that, it increased until 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 (figure 2-6).

In contrast to their interest rate forecast, the experts' stock market forecasts tended less towards over-prediction. There is, in fact, only one period between 2015 and 2017, in which the experts over-predict the Stoxx 50 in the years 2015 and 2016. However, their forecasts became more precise in the year 2017 with smaller forecast errors (figure 2-6).

Figure 2-6: Point forecasts: Stoxx 50 Europe

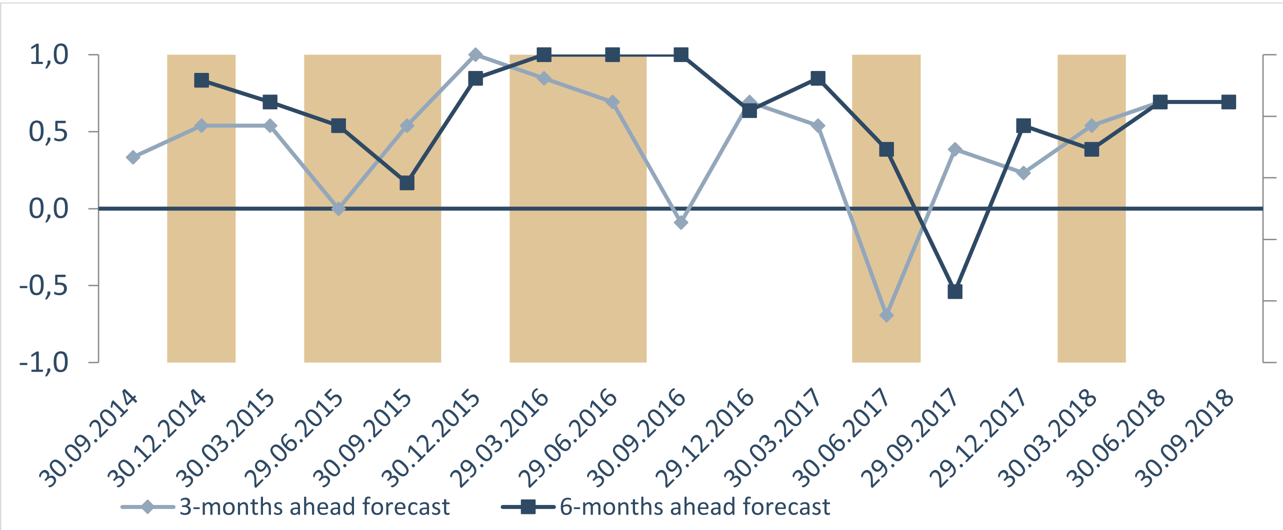
Index



Source: Bloomberg, IW Financial Expert Survey

Figure 2-7: Trend forecasts: Stoxx 50 Europe

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.

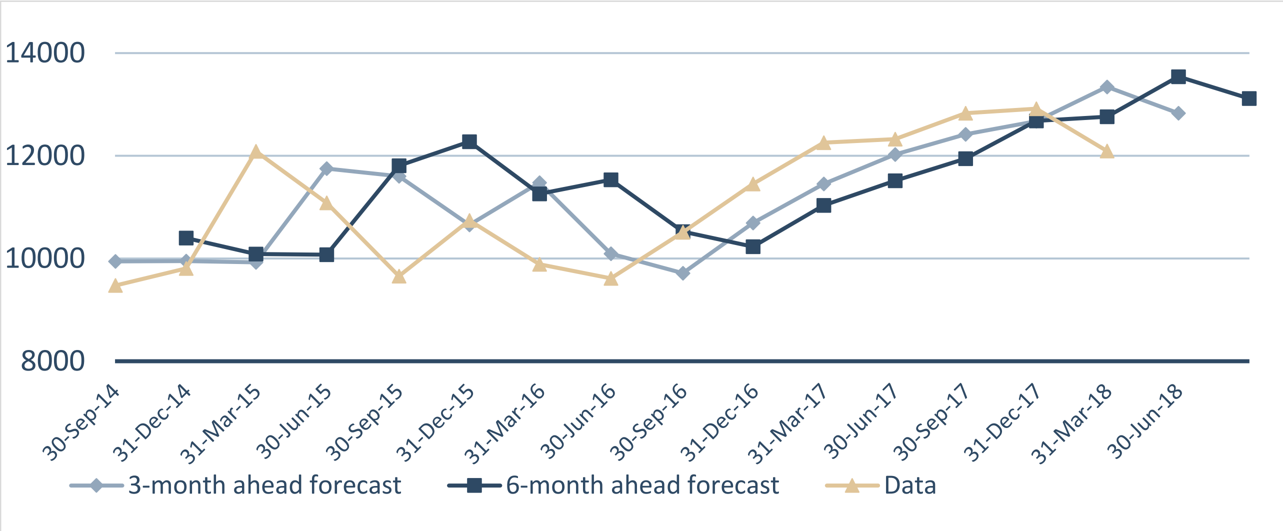


Source: Bloomberg, IW Financial Expert Survey

The analysis of the experts' trend forecasts reveal, that they were optimistic during the periods of declining stock prices, but they lost their confidence in 2017. However, the experts regained their confidence in rising stock prices in 2018. For the end of the second and third quarters of 2018, the majority of experts expect a rising Stoxx 50 index as can be seen from figure 2-7. On average, the experts predict the index to increase from 2.965 points to 3.197 points at the end of the second quarter of 2018 and to 3.254 points at the end of the third quarter of 2018, which would correspond to increases of 7.7 percent and 9.7 percent (Table 2-2).

Figure 2-8: DAX 30 Index

Index



Source: Bloomberg, IW Financial Expert Survey

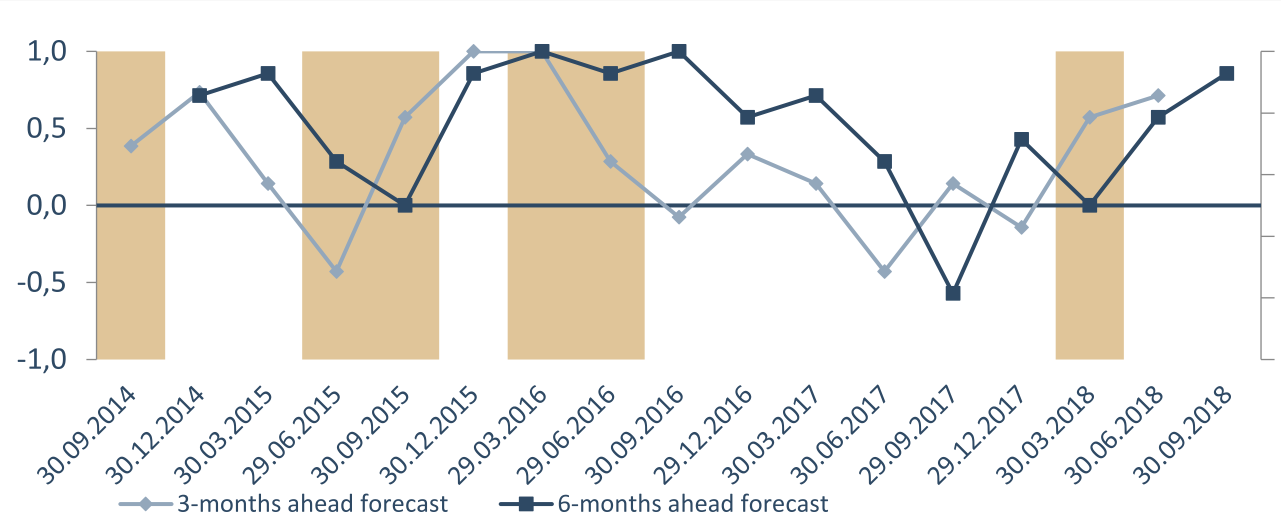
The DAX index increased from the end of the third quarter of 2014 to the first quarter of 2015, after which it dropped until the end of the second quarter of 2016. After that, the DAX experienced a long upward trend until the end of the year 2017. Currently, the DAX has dropped (figure 2-8).

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 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 pessimist is one reason, why the mean forecast was below the DAX index during the time of the positive trend growth in 2016 and 2017.

Figure 2-9: 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 29 2017, 13 respondents for the Stoxx 50 and 14 respondents for the DAX 30

	Stoxx 50	DAX 30	Stoxx 50	DAX 30
March 29 2018 value	2,965	12,097	2,965	12,097
	3-month-ahead forecast		6-month-ahead forecast	
Mean Forecast	3,194	12,832	3,254	13,114
Change in percent	7.7	6.1	9.7	8.4
Standard deviation	274	613	323	669
Lowest forecast	2,850	11,500	2,800	11,500
Highest forecast	3,900	13,800	4,050	13,900

Source: Bloomberg, IW Financial Expert Survey

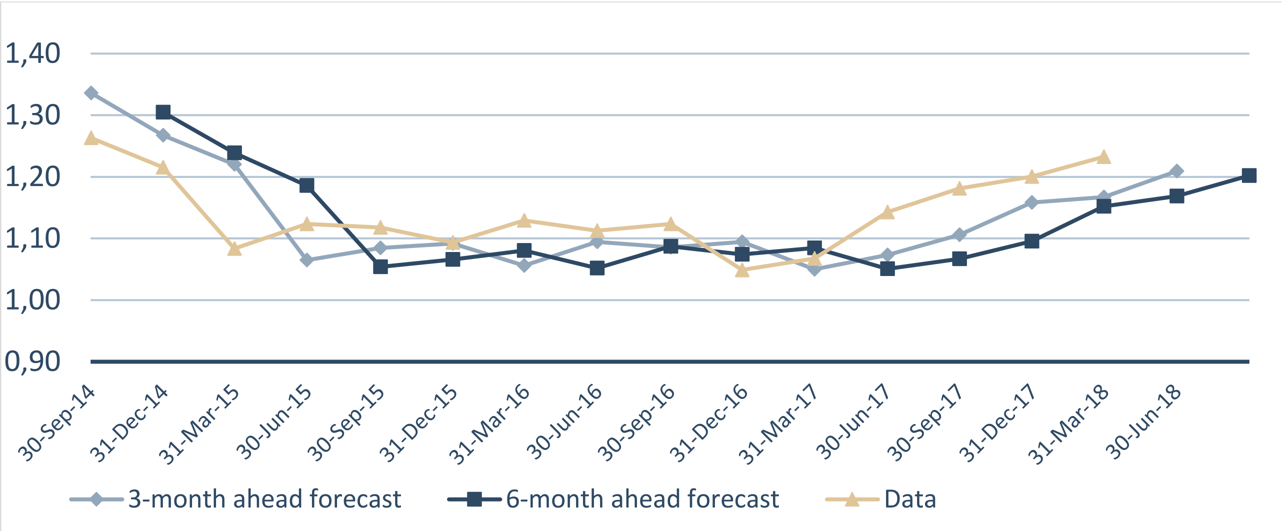
Confidence has returned, however. For the second and third quarter of 2018, the majority of experts expect the DAX to increase (figure 2-9). On average, they predict the DAX to rise from 12.097 points to 12.832 at the end of the second quarter of 2018 and 13.144 at the end of the third quarter of 2018, which corresponds to growth rates of 6.1 percent and 8.4 percent. The lowest forecast is 11.500 points for the second and the third quarter, while the highest forecast is 13.800 points for the second quarter and 13.900 points for the third quarter of 2018 (table 2-3).

2.3 Foreign Exchange

The EUR-USD exchange rate decline from 1.263 EUR per one USD at the end of the third quarter of 2014 to 1.083 Euro per one USD 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 dropped at the end of the year 2016, while it increase from 1.124 EUR per one USD to 1.232 EUR per one USD since then (figure 2-10).

Figure 2-10: Point forecasts: EUR-USD exchange rate

US Dollars per 1 Euro



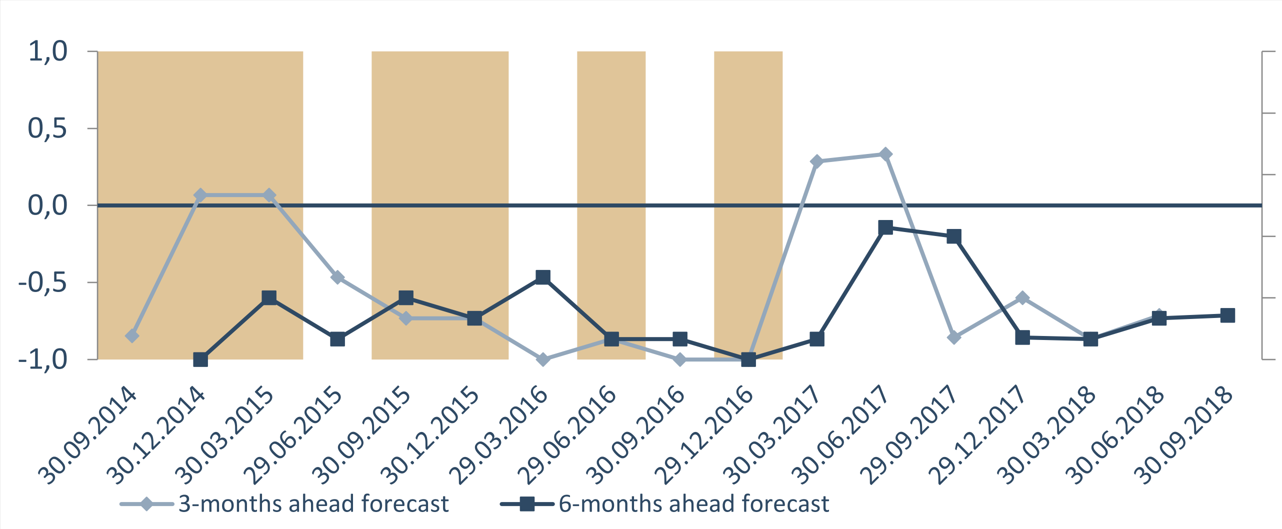
Source: Bloomberg, IW Financial Expert Survey

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 on the exchange rate increased faster than predicted by the experts leading to an under-prediction of the mean forecasts (figure 2-10). From the trend forecasts can be seen that the majority of experts expected a declining exchange rate for most of the time. Also for the second quarter and the third quarter of 2018, the majority of experts expects the exchange rate to decline (figure 2-11).

On average, the experts expect the exchange rate to decline from 1.232 EUR per one USD at the end of the first quarter of 2018 to 1.209 EUR per one USD at the end of the second quarter of 2018 and to 1.202 EUR per one USD at the end of the third quarter of 2018, which corresponds to a decline of 1.9 and 2.5 percent. The lowest forecasts are 1.15 and 1.14, while the highest forecasts are 1.29 and 1.31 (table 2-3).

Figure 2-11: 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 29 2017, 15 respondents, in US Dollars per 1 Euro

	EUR-USD	EUR-USD
March 29 2018 value	1.232	1.232
	3-month-ahead forecast	**6-month-ahead forecast**
Mean Forecast	1.209	1.202
Change in percent	-1.876	-2.455
Standard deviation	0.034	0.044
Lowest forecast	1.150	1.140
Highest forecast	1.290	1.310

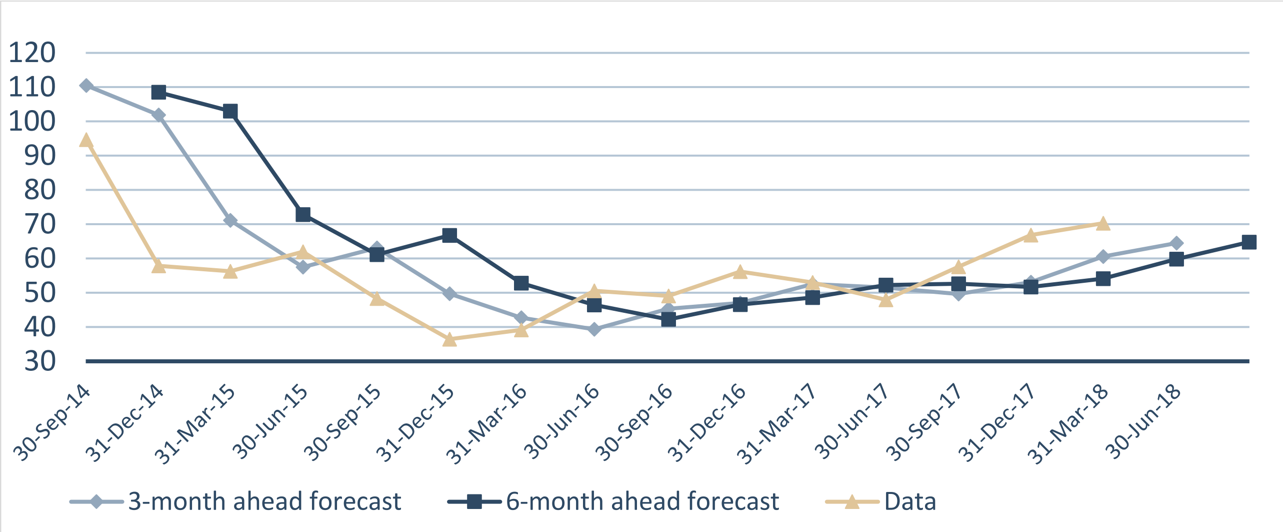
Source: Bloomberg, IW Financial Expert Survey

2.4 Oil Prices

The oil price dropped from 94.7 USD per barrel at the end of the third quarter of 2014 to 94.7 USD per barrel at the end of the year 2015. Since then the oil price experienced a long upward movement to currently 70.3 USD per barrel (figure 2-12).

Figure 2-12: Oil prices

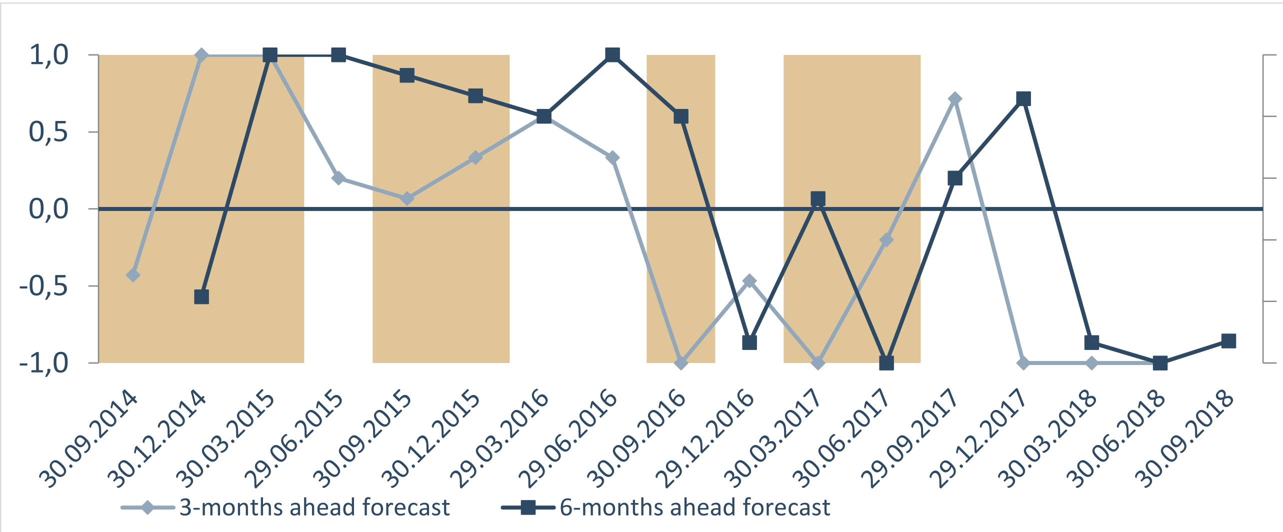
Brent, London, US Dollars per barrel



Source: Bloomberg, IW Financial Expert Survey

Figure 2-13: 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

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.

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 the first three quarters of 2018 the majority of expects predicts declining oil prices (figure 2-13).

Experts expect on average that oil prices fall from 70.3 USD per barrel to 64.5 and 64.8 USD per barrel, which corresponds to a decline by 8.2 and 7.8 percent. The lowest forecasts are 59.0 USD per barrel for both quarters, while the highest forecasts are 70.0 and 78.5 USD per barrel (table 2-4).

Table 2-4: Summary statistics: oil prices

End of survey: March 29 2018, 15 respondents

	Oil prices	**Oil prices**
March 29 2018 value	70.3	70.3
	3-month-ahead forecast	**6-month-ahead forecast**
Mean Forecast	64.5	64.8
Change in percent	-8.2	-7.8
Standard deviation	3.5	4.3
Lowest forecast	59.0	59.0
Highest forecast	70.0	72.5

Source: Bloomberg, IW Financial Expert Survey

3 ECB’s Forward Guidance

The experts were asked what they expect for the forward guidance of the ECB at the next press conference after the Governing Council’s meeting at the 26 April 2018. The experts were close to unanimity in their assessment that the ECB will not change its forward guidance at the next meeting (table 3-1):

- The majority of the experts expect the ECB to keep the formulation in the next press statement that interest rates will remain on their current level for an extended period of time and longer than the net asset purchases. Only one experts expects the ECB to formulate this point in the forward guidance less expansionary.
- The majority expects the ECB to keep the formulation that the net asset purchases of 30 billion Euro per month will be maintained until September 2018 or longer if necessary. Only two experts predict that the ECB will formulate this statement less expansionary in its forward guidance.

- All of the experts expect the ECB to keep the formulation that the ECB will reinvest the returning principle payments from maturing securities purchased under the asset purchase programme for an extended period in order to maintain the level of its balance sheet after the end of its net asset purchases.
- All of the experts expect the ECB to keep the formulation that the growth outlook makes the ECB confident that inflation will return to its inflation target in the future.
- The majority of experts expect the ECB to keep the formulation that it still sees no signs of any upward trend in inflation so far. One expert expects the ECB to show more optimism in the statement at the next press conference.
- The majority of the experts expect that the ECB will keep the formulation that the large-scale monetary policy measures are still necessary for the ECB to meet its policy objectives. However, two experts expect the ECB to become less expansionary with this statement in its forward guidance.

Table 3-1: Changes in the ECB's forward guidance

End of survey: March 29 2018, 15 respondents

"Do you expect the ECB to maintain or change in the next press conference the following statements from the latest press conference on monetary policy decisions describing the forward guidance of the ECB"				
"We continue to expect [interest rates] to remain at their present levels for an extended period of time, and well past the horizon of our net asset purchases."				
	Will be maintained	More expansionary wording	Less expansionary wording	Will be excluded
Responders	12	0	1	0
"[…] that our net asset purchases, at the current monthly pace of €30 billion, are intended to run until the end of September 2018, or beyond, if necessary, and in any case until the Governing Council sees a sustained adjustment in the path of inflation consistent with its inflation aim."				
	Will be maintained	More expansionary wording	Less expansionary wording	Will be excluded
Responders	11	0	2	0
„The Eurosystem will continue to reinvest the principal payments from maturing securities purchased under the asset purchase programme for an extended period of time after the end of its net asset purchases, and in any case for as long as necessary."				
	Will be maintained	More expansionary wording	Less expansionary wording	Will be excluded
Responders	13	0	0	0
„This outlook for growth confirms our confidence that inflation will converge towards our inflation aim of below, but close to, 2% over the medium term."				

	Will be maintained	More optimistic wording	More pessimistic wording	Will be excluded
Responders	13	0	0	0
„At the same time, measures of underlying inflation remain subdued and have yet to show convincing signs of a sustained upward trend.“				
	Will be maintained	More optimistic wording	More pessimistic wording	Will be excluded
Responders	12	1	0	0
„Overall, an ample degree of monetary stimulus remains necessary for underlying inflation pressures to continue to build up and support headline inflation developments over the medium term.“				
	Will be maintained	More expansionary wording	Less expansionary wording	Will be excluded
Responders	11	0	2	0

Source: Bloomberg, IW Financial Expert Survey

All in all, the expectations hint at a continuation of the existing forward guidance at the next Governing Council meeting.

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, DekaBank and Deutsche Bank switched to the first place with both having 66.7 percent correct trend forecasts for all six indicators. In the last quarter, Commerzbank and Postbank were on rank 1. Hamburger Sparkasse and Nord/LB reached currently rank two with both having a success rate of 58.3 percent over all indicators. Commerzbank, Helaba and Weberbank reached rank three with a success rate of 50.0 percent for all six indicators.

In the long-term ranking, which covers the last 12 quarters, Commerzbank and DZ Bank reached rank one with a success rate of 57.6 percent for both forecasters. DekaBank reached rank two with a success rate of 56.4 percent. UniCredit reached rank three with a success rate of 56.0 percent.

Table 4-1: The best performing trend forecasters

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

	Short-term ranking Surveys from September 2017 and December 2017	Long-term ranking Evaluation of the period March 2015 to March 2018
1	DekaBank and Deutsche Bank	Commerzbank and DZ Bank
	66.7 percent	57.6 percent
2	Hamburger Sparkasse and Nord/LB	DekaBank
	58.3 percent	56.4 percent
3	Commerzbank, Helaba, Weberbank	UniCredit
	50.0 percent	56.0 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: March 2015 to March 2018

	Short rate	Long rate	Stoxx 50	DAX 30	EUR-USD	Oil price
1	Hamburger Sparkasse	Commerzbank	UniCredit	DekaBank	Nord/LB	DZ Bank, Postbank, UniCredit, Weberbank
	79.2	97.2	59.1	75.0	58.3	58.3
2	Bayerische Landesbank, DZ Bank	National-Bank	Commerzbank, Helaba	Weberbank	Allianz, DZ Bank	Allianz, National-Bank
	75.0	70.8	58.3	66.7	54.2	54.2
3	Nord/LB	UniCredit	DekaBank	DZ Bank, Helaba, Santander	Bayerische Landesbank, Deutsche Bank	DekaBank, Deutsche Bank, LBBW
	70.8	63.6	55.0	58.3	50.0	50.0

Source: Bloomberg, IW Financial Expert Survey

Hamburger Sparkasse reached the first rank for forecasting the short-term interest rate with a success rate of 79.2 percent. The best forecaster for the long-term interest rate was Commerzbank with a success rate of 97.2 percent. UniCredit was the best forecaster for the Stoxx and DekaBank the best forecaster for the DAX. UniCredit had a success rate of 59.1 percent, while Deka predicted three quarters of the trends correctly. Nord/LB was the best forecaster of the EUR-USD exchange rate with a success rate of 58.3 percent. DZ Bank, Postbank, UniCredit and Weberbank had all the highest success rates for forecasting oil prices.

4.2 Point Forecasts

In the short-term ranking Postbank reached the first rank after the second rank in the last quarter. The current second rank holds DekaBank, while DZ Bank holds the third rank, which was on rank one in the last quarter. In the long-term ranking National-Bank could defend rank one, while Commerzbank could defend rank two. New on rank three is Nord/LB after Bayerische Landesbank was on rank three in the last quarter.

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 Surveys from September 2017 and December 2017	Long-term ranking Evaluation of the period March 2015 to March 2018
1	Postbank	National-Bank
	1.147	1.019
2	DekaBank	Commerzbank
	1.189	1.062
3	DZ Bank	Nord/LB
	1.285	1.118

Source: Bloomberg, IW Financial Expert Survey

DZ Bank was best in predicting the short-term interest rate. Its prediction was better than the random walk forecast. Commerzbank was the best in predicting the long-term interest rate with predictions that had a lower variance of the forecast errors compared to the random walk forecast. DekaBank was best in predicting the Stoxx and its prediction was better than the random walk forecast. Helaba was best in predicting the DAX. Its forecasts had a lower forecast error variance compared to the random walk forecast. Nord/LB was best at predicting the EUR-USD exchange rate although its prediction could no beat the random walk forecast. Best at predicting the oil price was Weberbank. Its forecast was more accurate than the random walk benchmark.

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, evaluation period: March 2015 to March 2018

	Short rate	Long rate	Stoxx 50	DAX 30	EUR-USD	Oil price
1	DZ Bank	Commerz-bank	DekaBank	Helaba	Nord/LB	Weber-bank
	0.788	0.970	0.996	0.892	1.015	0.991
2	Hamburger Sparkasse	National-Bank	Commerz-bank	DekaBank	UniCredit	National-Bank
	0.796	0.988	1.211	0.956	1.137	1.006
3	Deutsche Bank	LBBW	Helaba	Commerz-bank	DZ Bank	Allianz
	0.849	1.096	1.341	0.962	1.195	1.017

Source: Bloomberg, IW Financial Expert Survey

5 Conclusion

The IW Financial Expert Survey for the second quarter of 2018 revealed that the surveyed experts predict, on average, a steeper yield curve with a larger increase in long-term than in short term interest rate. Moreover, the average forecasts indicate higher stock market indices, a depreciation of the Euro vis-à-vis the US Dollar, and lower oil prices by the end of the third quarter of 2018. However, despite the expectation of higher interest rates, the short-term interest rate is predicted to remain in negative territory. The 3-month Euribor is, on average, expected to reach -0.31 percent at the end of the third quarter of 2018, while the yield on German government bonds with 10-year maturity is expected to reach 0.81 percent by then. However, the experts do not expect the European Central Bank (ECB) to change the forward guidance of its monetary policy significantly. Stock markets are, on average, expected to increase by 9.2 percent (Stoxx 50) and 8.4 percent (DAX 30) until the end of the third quarter of 2018. During that same period, the experts predict the Euro to depreciate by 2.5 percent vis-à-vis the US Dollar, while oil prices are expected to fall by 7.8 percent.

The expectation of an increase in the long rate and a slight increase in the short rate, together with the expected delayed monetary tightening of the ECB, hint at a financial market outlook characterised by a cautious approach to monetary normalisation. In this cautious approach, the ECB lets the market determine the first increases in long-term interest rates before it stops intervening at the long end of the yield curve, while keeping the short end of the yield curve lower. This cautious approach to monetary policy normalization is reflected in the projection of the yield curve. Moreover, the experts expect that the development of the Euro and the development of oil prices as well as the development of the stock market will support the ECB's cautious approach to monetary normalization instead of forcing a faster exit from low interest rates.

The evaluation of the forecasting performance of the latest forecasts yielded the result that Commerzbank and DZ Bank performed best in predicting trends in the long-term ranking, which covers all forecasts from March 2015 to March 2018. DekaBank and Deutsche Bank performed best in the short-term ranking, which covers the surveys for the third and the fourth quarter of 2017 for the 3-months ahead prediction and the survey for the third quarter of 2017 for the 6-month forecasts. When it comes to point prediction, in the long-term evaluation of the period running from March 2015 to March 2018, the experts of National-Bank performed best in predicting all indicators, while the Postbank experts produced the most precise point forecasts for all indicators for the short-term evaluation period.

6 Appendix: Individual Forecasts

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

In percent

Forecaster	June 30 2018	September 30 2018
Allianz	-0.30	-0.30
Bayerische Landesbank	-0.33	-0.33
Commerzbank	-0.30	-0.30
DekaBank	-0.30	-0.30
DZ Bank	-0.35	-0.35
Hamburger Sparkasse	-0.32	-0.31
Helaba	-0.30	-0.30
LBBW	-0.30	-0.30
National-Bank	-0.33	-0.32
Nord/LB	-0.33	-0.32
Postbank	-0.30	-0.30
Santander Bank	-0.33	-0.30
UniCredit	-0.35	-0.35
Weberbank	-0.20	-0.20

Source: IW Financial Expert Survey

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

In percent

Forecaster	June 30 2018	September 30 2018
Allianz	0.70	0.90
Bayerische Landesbank	0.70	1.00
Commerzbank	0.60	0.50
DekaBank	0.75	0.95
DZ Bank	0.60	0.70
Hamburger Sparkasse	0.70	0.80
Helaba	0.80	0.80
LBBW	0.80	0.80
National-Bank	0.58	0.65
Nord/LB	0.70	0.80
Postbank	0.70	0.80
Santander Bank	0.60	0.80
UniCredit	0.75	0.80
Weberbank	0.80	1.00

Source: IW Financial Expert Survey

Table 6-3: Individual forecasts: Stoxx 50 Index

In index points

Forecaster	June 30 2018	September 30 2018
Allianz	3,100	3,200
Bayerische Landesbank	3,070	3,100
Commerzbank	3,100	3,000
DekaBank	2,850	2,850
DZ Bank	3,600	3,600
Hamburger Sparkasse	3,150	3,200
Helaba	2,900	3,800
LBBW		
National-Bank	3,400	3,550
Nord/LB	3,100	3,250
Postbank	3,050	3,100
Santander Bank	3,900	4,050
UniCredit	3,150	3,200
Weberbank	3,150	3,400

Source: IW Financial Expert Survey

Table 6-4: Individual forecasts: DAX 30 Index

In index points

Forecaster	June 30 2018	September 30 2018
Allianz	12,500	12,700
Bayerische Landesbank	12,800	13,000
Commerzbank	12,600	12,400
DekaBank	11,500	12,600
DZ Bank	13,800	13,900
Hamburger Sparkasse	13,000	13,200
Helaba	12,000	11,500
LBBW	13,200	13,750
National-Bank	13,800	13,900
Nord/LB	12,500	13,500
Postbank	12,600	12,750
Santander Bank	12,400	13,000
UniCredit	13,500	13,500
Weberbank	13,100	13,900

Source: IW Financial Expert Survey

Table 6-5: Individual forecasts: EUR-USD exchange rate

In US Dollars per 1 Euro

Forecaster	June 30 2018	September 30 2018
Allianz	1.20	1.17
Bayerische Landesbank	1.20	1.18
Commerzbank	1.21	1.19
DekaBank	1.22	1.19
DZ Bank	1.25	1.28
Hamburger Sparkasse	1.20	1.19
Helaba	1.15	1.15
LBBW	1.15	1.14
National-Bank	1.22	1.21
Nord/LB	1.20	1.18
Postbank	1.22	1.22
Santander Bank	1.22	1.20
UniCredit	1.29	1.31
Weberbank	1.20	1.22

Source: IW Financial Expert Survey

Table 6-6: Individual forecasts: oil prices

Brent, in US Dollars per barrel

Forecaster	June 30 2018	September 30 2018
Allianz	65	65
Bayerische Landesbank	60	60
Commerzbank	62	60
DekaBank	59	59
DZ Bank	62	62
Hamburger Sparkasse	64	62
Helaba	67	65
LBBW	65	68
National-Bank	70	73
Nord/LB	69	69
Postbank	65	65
Santander Bank	65	70
UniCredit	60	60
Weberbank	70	70

Source: IW Financial Expert Survey

Tables

Figures