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IW Financial Expert Survey: Second Quarter 2020

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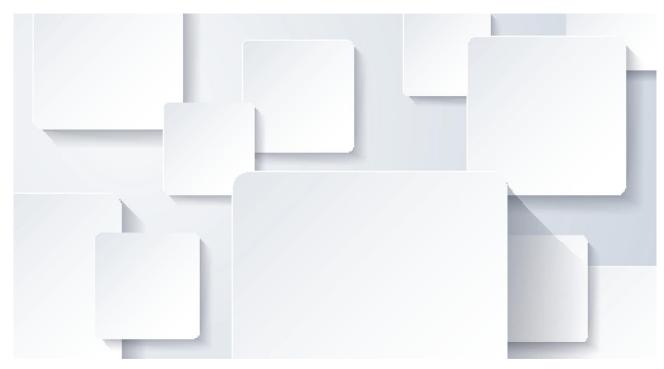
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Wirtschaftliche Untersuchungen, Berichte und Sachverhalte



IW-Report 27/2020

IW Financial Expert Survey: Second Quarter 2020

Markus Demary / Stefan Hasenclever

Cologne, May 29, 2020



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JEL Classification:

G12 – Asset pricing

G17 – Financial forecasting



Abstract

Pessimism related to the outbreak of the Coronavirus Disease 2019 and its development in 2020 determines the experts' predictions for the second and third quarter of 2020. The pessimistic outlook can be inferred from the downward revisions of the experts' forecasts. More downward revisions than upward revisions for almost all indicators illustrate that the survey participants assume that the corona crisis will plunge the economy into recession over the next two quarters. Consequently, all experts have revised their growth outlooks for Germany and the Euro Area downwards. The same applies for the prediction of Germany's and the Eurozone's inflation rates with one exception. At a first glance, it may seem counterintuitive that the subdued inflation and growth outlooks associated with the corona crisis are not reflected in the experts' shortterm interest rates forecasts as most experts revised these upwards. Obviously, this is related to the previous pessimistic projections of the short-term rate after it has plunged in September 2019 as a reaction to the ECB's cut of the deposit rate to -0.5 percent. Though, most of the experts expect the short-term to rise but the projected rates are still lower than the current rate at the end of March 2020. These projections cover the forecasters expected path of monetary policy. Following the corona crisis, the FED has cut the FED Funds Rate aggressively so that both the FED Funds rate and the EZB main policy rate have been at their effective lower bound at the end of March. Most experts predict that neither the ECB nor the FED will adjust their short-term policy rate during the second quarter of 2020. Hence, the main policy instrument of these central banks is expected to remain accommodative.

The participants still expect the yield curve to become flatter. The lower average forecasts for the short-term interest rate are consistent with the experts' lower inflation and growth expectations. For 2020, the experts expect 0.7 percent inflation in the Eurozone and a growth rate of real gross domestic product of -4.9 percent, which indicates a plunge of economic growth and a failure of the European Central Bank (ECB) to meet its inflation target. Given that, the forecasters have lowered their outlook for the long-term interest rate to -0.57 percent at the end of the second quarter of 2020. The yield on US Treasury bonds with 10-years maturity is expected to increase slightly from 0.67 percent at the end of March 2020 to 0.76 percent by the end of the second quarter 2020. In the light of the global flight to safety in government debt due to the outbreak of the corona crisis, the US long-term rate has hit a new low in March 2020. The Federal Funds Rate is anticipated to remain at 0.00-0.25 percent, i.e. its effective lower bound. The increase in demand for safety assets together with the investors' needs to raise cash for debt repayments denominated in USD have been leading to an appreciation of the USD in the first quarter 2020. Until the end of the second quarter, the participants predict a small depreciation of the US-Dollar against the Euro from 1.103 Euros at the end of the first quarter 2020 to 1.096 Euros at the end of the second quarter 2020.

Due to the expected fall in output and the heighted uncertainty associated with the corona crisis, for all three stock market indices the experts have revised their three-month ahead forecasts downwards. By the end of the second quarter 2020 they expect the DAX, the Stoxx 50 and the S&P 500 to decrease by -6.3 percent, -6.2 percent, and -0.5 percent, respectively. However, for the end of the third quarter 2020 a recovery on the stock markets is expected with the S&P 500 index is predicted to recover best. In the long-term ranking, which covers the last 18 quarters,



National-Bank defended rank one, while Nord/LB and Commerzbank remained at rank two and three, respectively.



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-term rate"), the yield of German government bonds with 10-year maturity (called "long-term rate"), the Stoxx 50 Europe Index, the DAX 30 Index, the EUR-USD exchange rate, and the oil price (brent). Since the first quarter of 2019 we have introduced new variables to the survey. Due to the global nature of financial markets we have asked the participants about their expectations on the US Treasury Yield with 10 years maturity ("US long-term rate") and on the S&P 500 index. Since monetary policy is an important factor, we have also 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 three months ahead and six months ahead. In addition to that we have extended the survey to include the participants' outlook on inflation and economic growth in 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 and third quarter of 2020, respectively. The individual point forecasts, which the experts have submitted, were aggregated to a mean forecast. Moreover, trend forecasts were calculated from the individual point forecasts and the most recent data points of the indicators.

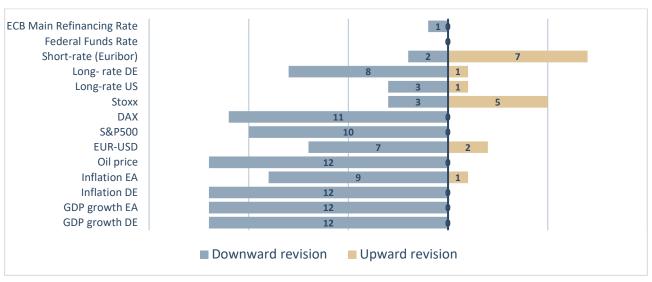
2.1 Upward and downward revisions

Figure 2-1 provides an overview of the changes in market sentiment derived from the submitted forecasts. This indicator measures how the experts revise their forecasts when new information arrives. To this end, the differences between the forecasts for the end of June 2020 from March 2020 and the forecasts for the end of June 2020 from December 2019 were compared. In the case that the forecasters interpret the incoming information on economic indicators that have been arrived between December 2019 and March 2020 as good news, the forecasters would have revised their forecasts for June 2020 upwards. An upward revision leads to a positive difference between the forecast based on information available on March 2020 and the forecast based on information available in December 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 2020 from March 2020** and the **forecasts for June 2020 from December 2019**, number of forecasters with a positive difference (upward revision) or a negative difference (downward revision)



Source: Bloomberg, IW Financial Expert Survey

According to figure 2-1, most of the experts have revised their interest rate forecasts for the end of June 2020 downwards based on the incoming information between January and March 2020. While all experts have expected no change for the Federal Funds Rate until the end of June 2020, one expert has revised her expectation about the ECB' main refinancing rate downwards. In line with this, three experts have expected a lower long-term rate in the US compared to their forecast based on the information available in December 2019. For the interest rates of the Euro area, the experts share a more puzzling view. Compared to their forecasts for the end of June 2020 based on the information available at the end of 2019, they expect higher shortterm but lower long-term interest rates. For the short-rate seven experts revised their forecasts upwards, though from a low basis, while eight experts revised their forecasts for the German sovereign bond with 10 years maturity downwards. At a first glance, it may seem counterintuitive that the subdued inflation and growth outlooks associated with the corona crisis are not reflected in the experts' short-term interest rates forecasts as most experts revised these upwards. Obviously, this is related to the previous pessimistic projections of the short-term rate after it has plunged in September 2019 as a reaction to the ECB's cut of the deposit rate to -0.5 percent. Though, most of the experts expect the short-term to rise but the projected rates are still lower than the current rate at the end of March 2020 (Figure 2-2).

Concerning the Stoxx 50 index, the experts have interpreted the incoming information in the first quarter of 2020 differently. While three experts revised their outlook downwards and 5 experts revised their outlook upwards, most of the experts have interpreted the incoming information in a neutral way. For the DAX and the S&P 500 index, the respondents have made more clear pessimistic assessments. All experts have revised their outlook for both the DAX and the S&P 500 downwards.



In contrast with the more optimistic interest rate outlook, the respondents expect the EUR-USD exchange rate to decline, i.e. a depreciation of the US-Dollar against the Euro. In line with this, seven experts revised their outlook for the end of June 2020 downwards based on the incoming information in January, February, and March.

All experts have revised their oil price forecasts for the end of the June 2020 downwards. In agreement with this have all experts revised their outlook for inflation for 2020 in Germany. For the Euro area, nine experts have revised their inflation expectations downwards, while one has upgraded his expectation and one participant has interpreted the incoming information in a neutral way. Also, for the growth outlook the experts are deeply pessimistic as all of them have revised their forecasts for growth in Germany as well as for the Euro area downwards.

2.2 Interest rates

Most experts have revised their interest rate outlook for the end of June 2020 slightly upwards, though from a low basis. Since we have begun to survey the experts, the short-term interest rate was characterized by a downward movement from 0.08 percent to -0.33 percent towards the end of the first quarter of 2017. The short rate remained at this rate until second quarter of 2018. Subsequently, it only rose marginally to -0.31 percent by the end of the first quarter of 2019. By the common downward trend of the shot-term interest rate and the ECB's deposit facility rate a close relationship between these rates can be identified. This relationship can be explained by the fact that the deposit rate acts as a lower bound to the short-term interest rate. Probably due to expectation about the another cut of the deposit rate, the short-term rate declined in the second quarter 2019 before it plunged to -0.41 percent in the third quarter of 2019 as a response to the cut in the deposit rate by the ECB to -0.5 percent. In the next two consecutive quarters the short-term rate has been recovered from that drop, though it has not achieved its level at the end of the first quarter 2019. However, due to the latest rise in the short-term rate also the forecasts have picked up. The survey respondents expect a shot-term rate of -0.41 by the end of June 2020 and a short-term rate of -0.42 percent by the end of September 2020 (figure 2-2).

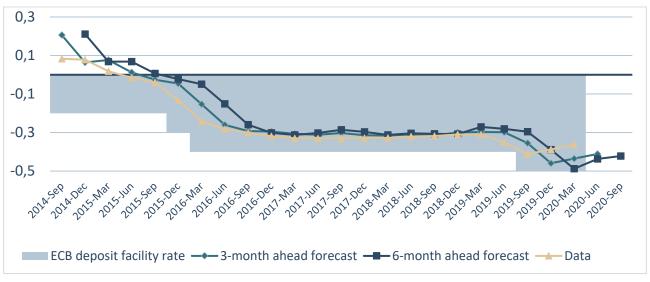
Figure 2-2 contains the data for the short-term rate at the last trading day of each quarter together with the mean prediction of the experts, i.e. the average over all individual point forecasts. While the mean prediction over-predicted the short-term rate for most of the time during the early years, the over-prediction became smaller over time. This holds especially for the time, after the short-term rate converged to its intermediate lower bound of -0.33 percent at the end of the first quarter 2017. One reason for the over-prediction could be that the experts experienced for the first time a negative interest rate environment, which challenged their forecasting activities. The experts forecasting models might have contained a zero-lower-bound on policy rates, first, which was then lowered cautiously step-by-step, when policy rates proved to become negative. After the short-term rate reached its intermediate bound of -0.33 percent at the end of March 2020, the experts' assessment of the lower bound on interest rates probably have been settled there, as reflected in better forecasting performance. After the ECB has lowered its deposit facility rate to -0.5 in September 2019 percent, the experts have been reassessing



the lower bound on policy rates again leading to an intermediate fall of the short-term rate to a new lower bound of -0.41. In the consecutive quarters the interest rate has recovered almost to its level before the ECB lowered the deposit which may indicate that this cut may has not been successful in settling the short-term rate.

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

3-Month Euribor, in percent



Source: Bloomberg, IW Financial Expert Survey

Recently, the interest rate forecasts for the short-term rate had been less precise as those before the ECB cut the deposit facility rate. The mean forecasts for the end of the end of the second quarter of 2020 and the end of the third quarter of 2020 are -0.41 percent and -0.42 percent with standard deviations of 0.05 and 0.04 percentage points, respectively (table 2-1). These projections imply declining interest rates compared to their level of -0.36 percent at the end of the first quarter 2020 which seem to be in line with the overall economic outlook and the ECB's forward guidance on its monetary policy. The fact that the experts rely on the ECB's forwards guidance for making predictions can be inferred from their expectation of the ECB's main refinancing rate: most of the experts expects the ECB monetary policy to remain maximal accommodative by the end of the survey horizon.



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

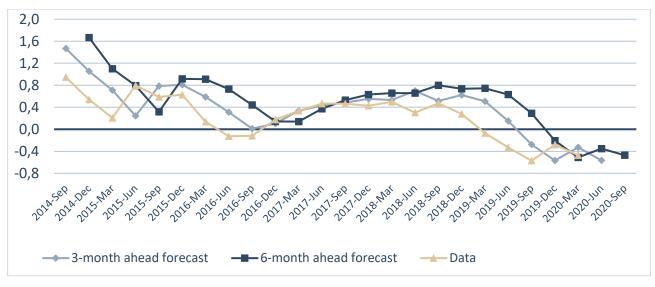
Figure 2-3 contains the trend forecasts for the upcoming three and six months as so-called diffusion indices. These indices were calculated as the number of experts who predict a positive trend minus the number of experts who predict a negative trend divided by the number of total forecasters. The diffusion 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.

In the period from when we began surveying the experts until June 2017 the short-term interest rate was characterized by a downward trend and most experts predicted declining interest rates. Subsequently, the participants became more optimistic. While the short-term interest rate stayed roughly constant until December 2018, most experts predicted a rising short-term interest rate. In 2019 the short-term interest rate started to decline again and, consequently, most of the experts predict a downward trend in interest rates (figure 2-3). From the end of September 2019 until the end of March 2020 the interest rate has been risen with the diffusion index still be at a negative level.



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

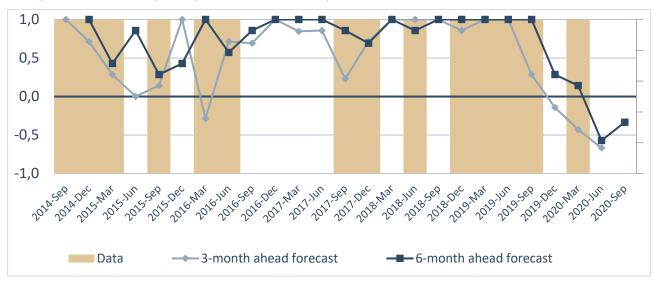
The long-term interest rate declined from 0.95 percent at the end of the third quarter of 2014 to -0.13 percent at the end of the second quarter in 2016. It then recovered to 0.50 percent at the end of the first quarter of 2018 and then dropped to 0.30 percent by the end of the second quarter of 2018. After an increase by the end of the third quarter of 2018 it fell to 0.28 percent at the end of 2018. The long-term interest rate for Germany became negative again during the first quarter of 2019. It has been remained in negative territory since then. The experts predict the long-term rate to stay further negative at least until the end of the third quarter of 2020 (figure 2-4).

Figure 2-4 also shows that forecasting the long-term rate in a low interest rate environment is challenging. The experts over-predicted on average the two declines of the long-term 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 roughly vanished. On average, participants expect the long-term rate to decrease slightly from its current level of -0.47 percent to -0.57 percent until the end of the second quarter before the long-term rates returns to its level of -0.47 at the end of the third quarter 2020. Both the three months and the six-month predictions come along with a standard deviation of 0.16 (table 2-1).



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

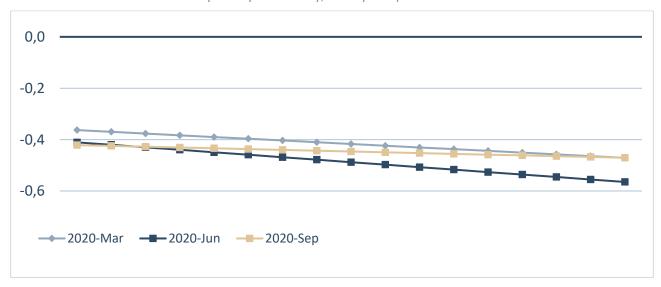


Source: Bloomberg, IW Financial Expert Survey

Regarding the trend forecasts, most experts were optimistic most of the time when it came to predict the trend in the long-term rate in Germany, while the pessimists were in the minority (figure 2-5). During the periods of declining yields, most experts forecasted a positive trend for the next three and six months, respectively. While most participants erred on the direction of the long-term rate during the periods of declining yields, they were very accurate during the periods of increasing yields. Currently, many forecasters have become pessimistic again. For both forecasting horizons, most of the forecasters expect 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 2-6 provides the prediction of the yield curve, for which yields between 3-month maturity and 10-year maturity were interpolated linearly. The figure displays that the experts predict the yield curve to become flatter. While they predict the short end of the yield curve to decline from currently -0.36 percent to -0.42 percent at the end of the third quarter of 2020, they predict the long end to remain at -0.47 percent. The expectation of a flatter yield curve is consistent with the expectation of slowing economic growth.

New to the survey is the inclusion of the US long rate into the forecasts, i.e. the yield of US Treasury bonds with 10-year maturity, which has been surveyed for the sixth time. The experts do not expect the US yields to stay constant at the current level of 0.67 percent, but to increase to 0.76 percent until the end of the third quarter and to further increase to 0.90 percent at the end of the third quarter of 2020 (table 2-1). Thus, the experts expect the interest rate differential between the US and German to increase from currently 1.03 percentage points to 1.37 percentage points by the end of the third quarter of 2020.

Table 2-1: Summary statistics: interest rates

End of survey: 31th March 2020, 12 respondents for the short rate and the long rate

and the second s	Short rate	Long rate	US Long rate	Short rate	Long rate	US Long rate
Value from 31 th March 2020	-0.36	-0.47	0.67	-0.36	-0.47	0.67
	3-month	n-ahead for	ecast	6-mont	h-ahead fo	recast
Mean Forecast	-0.41	-0.57	0.76	-0.42	-0.47	0.90
Change in perc. points	-0.05	-0.09	0.00	-0.06	0.00	0.00
Standard deviation	0.05	0.16	0.14	0.04	0.16	0.20
Lowest forecast	-0.50	-0.88	0.50	-0.50	-0.70	0.65
Highest forecast	-0.35	-0.30	1.00	-0.35	-0.10	1.50

Source: Bloomberg, IW Financial Expert Survey

2.3 Stock Market Performance

The Stoxx 50 Europe 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. Subsequently, 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



again 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 before it has been dropping sharply in the first quarter 2020 due to the economic consequences of the corona crisis. Also, the three and six months ahead forecasts have adjusted downwards dramatically. On average, the forecasters expect lower stock prices than today in the second quarter 2020 (figure 2-7). By the end of the June 2020 they predict the Stoxx index to decline from currently 2 730 to 2 560 points For the end of the third quarter 2020 the participants predict the Stoxx index to slightly rise to 2 785 points, which implies in an increase by 2.0 percent compared to its level at the end of March 2020.

Index 3.700 3.500 3.300 3.100 2.900 2.700 2.500 2016-SeP 2016.Dec 2017.Mar 2017.1110 2017.580 2017.Dec 2016:Jun 3-month ahead forecast 6-month ahead forecast Data

Figure 2-7: Point forecasts: Stoxx 50 Europe

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 rallied at 12 917 points. In the first quarter of 2018, the DAX 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 the DAX also experienced a plunge in the fourth quarter of 2018. In the subsequent periods the DAX could recovered before it has been crashing in the first quarter 2020 due to the outbreak of the corona crisis. In line with the forecast for the Stoox index, the participants predict the DAX to further decline in the next three months and to slightly recover at the end of the third quarter 2020 (figure 2-8). In particular, experts anticipate the DAX to decline from currently 9 935 points to 9 312 points by the end of the second guarter 2020. At the end of the third quarter 2020 the DAX is expected to rise slightly to 10 163 points. Compared to the its level at the end of March 2020, these scenarios correspond to a decrease by -6.3 percent at the end of June 2020 to and increase by 2.3 percent at the end of September 2020. The experts are similar pessimistic in their outlook for the S&P 500 index. They forecast it to decline from currently 2 585 to 2 786 points by the end of the second quarter 2020. At the end of the



third quarter 2020 the participants predict an increase towards 2 789 points. This would correspond to a decrease by -0.5 until the end of June 2020 and an increase by 6.0 percent until the end of September 2020 compared to the S&P value at the end of the first quarter 2020 respectively. Hence, forecasters seem to be more optimistic about the performance of the S&P 500 index than to those of the DAX and the Stoxx 50 Europe indices.

Index 14.000 13.000 12.000 11.000 10.000 9.000 8.000 2016 Sep 2017.580 2017.Dec 2016:Jun 2016.Dec 2017.1121 2017.140 2018, Mar 2015.Dec 2018-1110 -3-month ahead forecast -6-month ahead forecast Data

Figure 2-8: DAX 30 Index

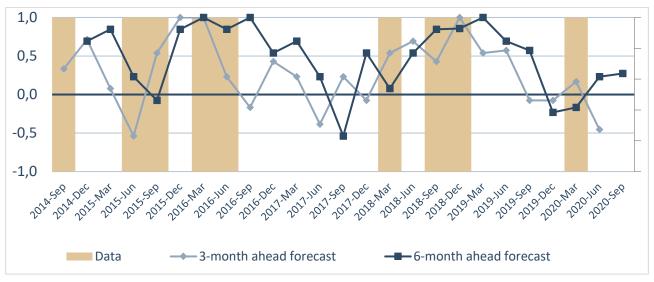
Source: Bloomberg, IW Financial Expert Survey

The experts over-predicted the growth of the DAX on average in 2015 and in the first half of 2016. However, forecast errors became smaller during the positive trend growth, which the DAX experienced since then. However, the experts subsequently under-predicted the positive trend growth (figure 2-8). The mis-predictions of the DAX is also reflected in the trend forecasts. Here, most of the experts expected increasing stock prices in times, in which the DAX declined, e.g. in 2016 (figure 2-9). After that, more and more experts had become pessimistic and under-predicted the growth of the DAX, e.g in the year 2017. The larger number of pessimists is one reason, why the mean forecast was below the actual DAX index during the time of the positive trend growth in the second half of 2016 and in 2017. In 2018 and in the first half of 2019, however, survey respondents were more optimistic regardless of intermediate downward trends of the DAX. As pointed out earlier the large drop in stock markets associated with the corona crisis in the first quarter 2020 has led to a pessimistic outlook for the DAX performance in the next three months. On the other hand, participants are more optimistic about a recovery of the DAX at the six-month horizon. Currently, the experts have similar views about the development of the DAX and the Stoxx 50 index (figure 2-10).



Figure 2-9: Trend forecasts: DAX 30

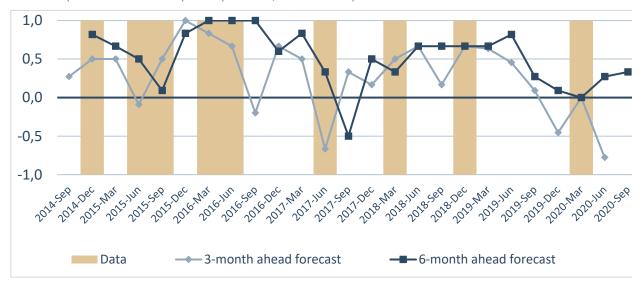
Diffusion index: number of respondents with positive trend predictions minus number of respondents with negative trend predictions divided by all respondents, shaded area: periods with a downward trend in the data.



Source: Bloomberg, IW Financial Expert Survey

Figure 2-10: 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



Table 2-2: Summary statistics: stock market indices

End of survey: 31th March 2020, 9 respondents for the Stoxx 50, 11 respondents for the DAX 30 and for the S&P 500

	Stoxx 50	DAX 30	S&P 500	Stoxx 50	DAX 30	S&P 500
Value from 31 th March 2020	2.730	9.936	2.585	2.730	9.936	2.585
	3-month	n-ahead fore	ecast	6-mont	:h-ahead for	ecast
Mean Forecast	2.561	9.312	2.572	2.786	10.164	2.741
Change in per- cent	-6.2	-6.3	-0.5	2.0	2.3	6.0
Standard deviation	208	833	289	198	785	223
Lowest forecast	2.100	8.000	2.250	2.500	8.800	2.400
Highest forecast	2.895	10.534	3.350	3.071	11.200	3.250

Source: Bloomberg, IW Financial Expert Survey

2.4 Foreign Exchange

The Euro depreciated from the end of the third quarter 2014 until the first quarter 2015 indicated by a drop of the EUR-USD exchange rate from 1.26 USD/Euro to 1.08 USD/Euro. Apart from fluctuations the exchange rate subsequently remained constant until the end of the third quarter of 2016. In the following quarter, the Euro further depreciated leading to an exchange rate of 1.05 USD/Euro at the end of 2016. Until the end of the first quarter 2018 the Euro appreciated expressed as a rise in the exchange rate to 1.23 USD/Euro. Subsequently, the rate declined until the end of the third quarter 2019 towards 1.09 USD/Euro before it rebounded to a rate of 1.12 USD/Euro at the end of 2019. In the light of the outbreak of the corona crisis, the US-Dollar has been appreciating against the Euro indicated by a fall in the EUR-USD exchange rate to 1.10 at the end of March 2020 (figure 2-10). However, the experts predict the EUR-USD exchange to stay roughly constant in the next quarters compared to its level at the end of March 2020. In particular, they predict the Euro to slightly depreciate to 1.096 USD/Euro (-0.4 percent) by the end of the second quarter 2020 before it slightly appreciates to 1.105 USD/Euro (+0.5 percent) by the end of the third quarter of 2020 (table 2-11).

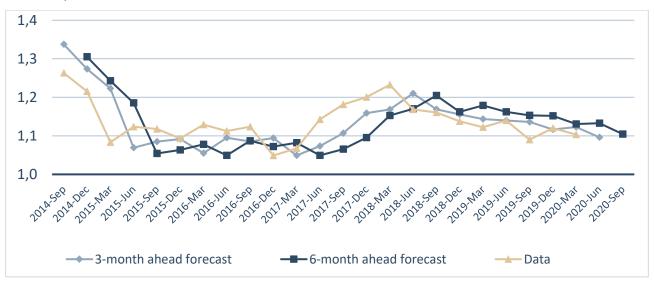
The experts over-predicted the exchange rate between the end of the third quarter 2014 and the end of the first quarter of 2015. In fact, the exchange rate declined sharper than the experts had predicted. For the rest of 2015 and 2016 as well as 2017, when the exchange rate was roughly less constant, the forecasts were able to match the real data quite well. However, from the end of the first quarter 2017 the exchange rate increased faster and higher than predicted



by the experts leading to an under-prediction of the mean forecasts before the projections have been matching the real data again quite well since the second half of 2018 (figure 2-11).

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

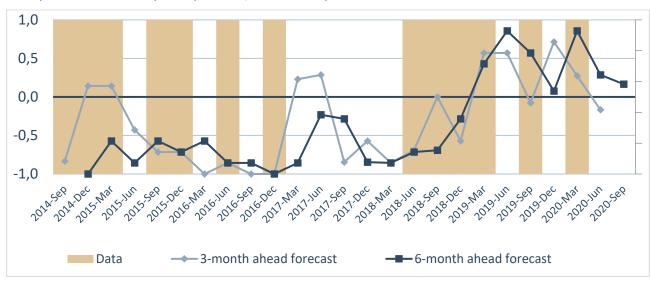
US Dollars per 1 Euro



Source: Bloomberg, IW Financial Expert Survey

Figure 2-3: 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

From the trend forecasts it can be seen that most experts forecasted a declining exchange rate for most of the time. Since the beginning of the year 2019, most experts expect an appreciation of the Euro. However due to the corona crisis the forecaster have adjusted their expectations



downwards at the end of March 2020, i.e. they have predicted a depreciation for the end of the second quarter 2020 and a less stronger appreciation at the end of the third quarter compared to these anticipated within the previous forecast (figure 2-12).

Table 2-3: Summary statistics: foreign exchange

End of survey: 31th Marc 2020, 12 respondents, in US Dollars per 1 Euro

	EUR-USD	EUR-USD
Value from 31 th March 2020	1.103	1.103
	3-month-ahead forecast	6-month-ahead forecast
Mean Forecast	1.096	1.105
Change in percent	-0.621	0.134
Standard deviation	0.028	0.041
Lowest forecast	1.010	1.015
Highest forecast	1.130	1.170

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 towards 82.7 USD per barrel at the end of the third quarter of 2018. Subsequently, it suddenly dropped sharply to 54.7 USD (-33.9 percent) in the last quarter of 2018. During the first quarter of 2019, the oil price recovered to 67.8 USD (24.0 percent). The oil price remained roughly at this level before it dramatically plunged in the first quarter 2020 due to the outbreak of the corona crisis. From the end of 2019 until the end of March 2020 the oil price dropped by -66 percent to 22,74 USD per barrel.

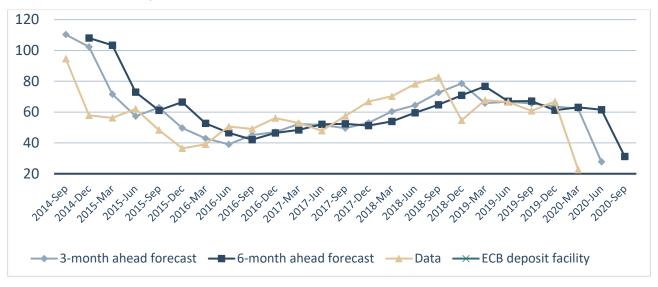
The forecasters had over-predicted the oil price until March 2016, i.e. that the oil price declined stronger than had been predicted by the experts. From the end of the second quarter of 2016 to the end of the third quarter of 2017, expectations matched the real data quite well. However, since the end of the third quarter of 2017 the participants had under-predicted the oil price, i.e. the oil price rose stronger than forecasted by the experts. After the unforeseen drop in oil prices at the end of 2018, the predictions again matched the data quite well. Currently, the survey respondents predict that the oil price will slightly recover from the dramatic plunge at the end of March 2020 (figure 2-13). On average, the experts forecast the oil price to increase from currently 22.7 USD to 27.8 USD by the end of June 2020 and to further increase to 31.5 USD by



the end of the third quarter 2020. Compared to the oil price level at the end of March 2020, the projections imply increases by 22 percent and 38 percent, respectively.

Figure 2-13: Oil prices

Brent, London, US Dollars per barrel



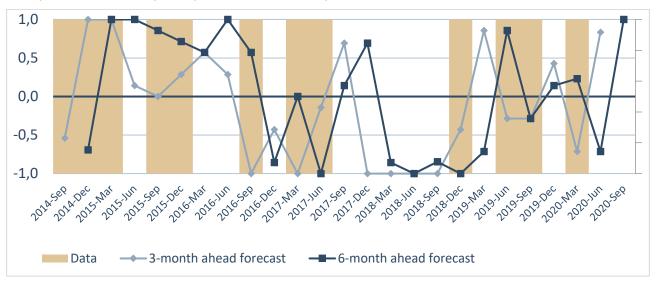
Source: Bloomberg, IW Financial Expert Survey

While most experts expected the oil price to rise from the end of the first quarter of 2015 to the end of the third quarter of 2016, forecasters have become more pessimistic subsequently. From the end of the year 2016 to the end of the first half of 2017, most experts expected the oil price to decline. After that, most participants were optimistic for two quarters. For all quarters of 2018, most experts had predicted the oil price to fall before expectation became volatile in 2019. However, for the second and the third quarter of 2020 most forecasters expect the oil price to increase (figure 2-14).



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

Table 2-4: Summary statistics: oil prices

End of survey: 31th March 2020, 12 respondents

	Oil prices	Oil prices
Value from 31 th March 2020	22.7	22.7
	3-month-ahead forecast	6-month-ahead forecast
Mean Forecast	27.8	31.3
Change in percent	22.0	37.4
Standard deviation	3.8	4.2
Lowest forecast	20.0	25.0
Highest forecast	35.0	40.0

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.

On average, the experts predict the ECB's main refinancing rate to slightly decrease to -0.04 percent at the end of the second and the third quarter of 2020, respectively. Except of one survey participant who predicted the ECB's main refinancing rate to decrease to -0.5 percent at the end of June and September 2020 respectively, all respondents expect the policy rate to remain constant. All participants expect the Federal Reserve Bank's effective Federal Funds Rate to be within the interval from 0.00 percent to 0.25 percent by the end of the second and third quarter of 2020, respectively. Taken together, the participants expect the policy rates to remain maximal accommodative to the economy.

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

End of survey: 31th March 2020, 12 respondents

	European Cen- tral Bank	Federal Re- serve	European Cen- tral Bank	Federal Re- serve
Value from 31 th March 2020	0.00	0.00-0.25	0.00	0.00-0.25
	3-month-ahead	d forecast	6-month-ahea	ad forecast
Mean Forecast	-0.04	0.00-0.25	-0.04	0.00-0.25
Change in percentage points	-0.04	0.00	-0.04	0.00
Standard deviation	0.14	0.00	0.14	0.00
Lowest fore- cast	-0.50	0.00-0.25	-0.50	0.00-0.25
Highest fore- cast	0.00	0.00-0.25	0.00	0.00-0.25

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 2020 in the Eurozone. In light of the corona crisis, the experts forecast the real gross domestic product in the Euro Area to drop by -4.9 percent. For Germany they expect a plunge of gross domestic product by -4.5 percent in 2020.



The experts' inflation expectations are in line with their gross domestic output and policy rate expectations. As pointed out above the forecaster they expect policy rates to remain maximal accommodative for the next quarters. For the Eurozone and Germany, they predict an inflation rate of 0.7 percent and 0.9 respectively in 2020. Both predictions are lower as the quarterly inflation rate at the end of March 2020, i.e. 1.2 Percent in the Eurozone and 1.4. percent in Germany.

Table 3-2: Summary statistics: Inflation and growth

End of survey: 31th March 2020, 12 respondents for Germany's growth and inflation rates; 11 respondents for Eurozone's growth and inflation rates;

	Inflation Euro- zone	Inflation Germany	Growth Euro- zone	Growth Ger- many
Value from 31 th March 2020	1.2	1.4	1.2	0.6
Mean Forecast	0.7	0.9	-4.9	-4.5
Change in percentage points	0.5	0.5	6.1	5.1
Standard deviation	0.3	0.4	1.9	1.7
Lowest fore- cast	0.0	0.1	-7.1	-7.5
Highest fore- cast	1.2	1.4	-1.1	-1.0

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, UniCredit reached the first rank with 70.0 percent correctly predicted trends. The second place was reached by Santander Bank with 46.2 percent correctly predicted trends. DZ Bank, Postbank and Nord/LB predicted 27.8 percent of all trends correctly and share the third place.



In the long-term ranking, which covers the last 18 quarters, DZ Bank reached the first rank with 54.1 percent correctly identified trends. Hamburger Sparkasse had a success rate of 52.3 percent and reached rank two. Helaba reached rank three with a success rate of 50.9 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 2019 and December 2019	Evaluation period: March 2015 to December 2019	
1	UniCredit	DZ Bank	
1	70.0 percent	54.1 percent	
2	Santander Bank	Hamburger Sparkasse	
2	46.2 percent	52.3 percent	
3	DZ Bank; Nord/LB; Postbank	Helaba	
	27.8 percent	50.9 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 December 2019

	Short rate	Long rate	Stoxx 50	DAX 30	EUR-USD	Oil price
	Evaluation period: March 2015 to December 2019					
1	Commerzbank; Hamburger Spar- kasse	UniCredit	Deka Bank	Weberbank	DZ Bank	UniCedit
	58.3 percent	47.1 percent	66.7 percent	62.2 percent	62.2 percent	65.7 percent
2	National-Bank	DZ Bank National-Bank	Hamburger Spar- kasse Weberbank	Santander Bank	Nord/LB	Deka Bank DZ Bank Postbank
	55.6 percent	45.9 percent	61.1 percent	61.1 percent	59.5 percent	59.5 percent
3	Helaba	Commerzbank Helaba Weberbank	DZ Bank National-Bank	Hamburger Spar- kasse	Helaba LBBW	Deutsche Bank
	50.0 percent	43.2 percent	55.6 percent	59.5 percent	54.5 percent	58.1 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 and Commerzbank together reached the first rank for forecasting the short-term interest rate with a success rate of 58.3 percent followed by National-Bank with a success rate of 55.6 percent and DZ Bank on rank three with a success rate of 50.0 percent.

The best forecaster for the long-term interest rate Unicredit with a success rate of 47.1 percent followed by DZ Bank and National-Bank with both having an accuracy rate of 45.9 percent. The thrid place is shared by Commerzbank, Weberbank and Helaba with a success rate of 43.2 percent.

DekaBank was again the best forecaster for the Stoxx with a success rate of 66.7 percent followed by Hamburger Sparkasse and Weberbank on the second rank both having an accuracy rate of 61.1 percent. DZ Bank and National-Bank reached rank three with a success rate of 55.6 percent. Weberbank was best in predicting the DAX with a success rate of 62.2 percent correctly identified trends. Santander Bank reached rank two, while Hamburger Sparkasse reached rank three.

DZ Bank reached rank one for the best forecasters of the EUR-USD exchange rate with a success rate of 62.2 percent. Nord/LB reached rank two with an accuracy rate of 59.5 percent each. Helaba

LBBW share rank three with a success rate of 54.5 percent each.

UniCredit had the most success in forecasting the oil price with an accuracy rate of 65.7 percent. Deka Bank, DZ Bank and Postbank share the second rank with a success rate of 59.5 percent followed by Deutsche Bank on rank three with a success rate of 58.1 percent

4.2 Point Forecasts

In the short-term all indicators ranking of the survey, UniCredit reached the first rank. DZ Bank is on rank two followed by Commerzbank on rank three. In the long-term ranking National-Bank reached again rank one followed by Nord/LB and Commerzbank on ranks two and three respectively (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 2019 and December 2019	Evaluation period: March 2015 to December 2019
1	UniCredit	National-Bank
	0.700	1.208
2	DZ Bank	Nord/LB
	0.965	1.248
3	Commerzbank	Commerzbank
	0.993	1.271

Source: Bloomberg, IW Financial Expert Survey

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

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 pe	eriod: March 20	15 to Decemb	er 2018		
1	Commerzbank	National-Bank	DekaBank	Helaba	Nord/LB	UniCredit
1	1.324	1.366	0.788	1.037	1.020	0.772
2	Hamburger Sparkasse	Nord/LB	Nord/LB	Hamburger Sparkasse	DZ Bank	Helaba
	1.341	1.505	1.149	1.083	1.046	0.945
3	National-Bank	Commerzbank	Postbank	Postbank	National-Bank	DZ Bank
3	1.342	1.513	1.180	1.085	1.116	0.950

Source: Bloomberg, IW Financial Expert Survey



5 Conclusion

Pessimism related to the outbreak of the Coronavirus Disease 2019 determines the experts' predictions for the second and third quarter of 2020. The pessimistic outlook can be inferred from the downward revisions of the experts' forecasts. More downward revisions than upward revisions for almost all indicators illustrate that the survey participants assume that the corona crisis will plunge the economy into recession over the next two quarters. Consequently, all experts have revised their growth outlooks for Germany and the Euro Area downwards. The same applies for the prediction of Germany's and the Eurozone's inflation rates with one exception. At a first glance, it may seem counterintuitive that the subdued inflation and growth outlooks associated with the corona crisis are not reflected in the experts' short-term interest rates forecasts as most experts revised these upwards. Obviously, this is related to the previous pessimistic projections of the short-term rate after it has plunged in September 2019 as a reaction to the ECB's cut of the deposit rate to -0.5 percent. Though, most of the experts expect the short-term to rise but the projected rates are still lower than the current rate at the end of March 2020. These projections cover the forecasters expected path of monetary policy. Following the corona crisis, the FED has cut the FED Funds Rate aggressively so that both the FED Funds rate and the EZB main policy rate have been at their effective lower bound at the end of March. Most experts predict that neither the ECB nor the FED will adjust their short-term policy rate during the second quarter of 2020. Hence, the main policy instrument of these central banks is expected to remain maximal accommodative.

The participants still expect the yield curve to become flatter. The lower average forecasts for the short-term interest rate are consistent with the experts' lower inflation and growth expectations. For 2020, the experts expect 0.7 percent inflation in the Eurozone and a growth rate of real gross domestic product of -4.9 percent, which indicates a plunge of economic growth and a failure of the European Central Bank (ECB) to meet its inflation target. Given that, the forecasters have lowered their outlook for the long-term interest rate to -0.57 percent at the end of the second quarter of 2020. The yield of US Treasury bonds with 10-years maturity is expected to increase slightly from 0.67 percent at the end of March 2020 to 0.76 percent by the end of the second quarter 2020. The Federal Funds Rate is anticipated to remain at 0.00-0.25 percent, i.e. its effective lower bound. The increase in demand for safety US government debt together with the investors' needs to raise cash for debt repayments denominated in USD have been leading to an appreciation of the USD in the first quarter 2020. Until the end of the second quarter, the participants predict a small depreciation of the US-Dollar against the Euro from 1.103 Euros at the end of the first quarter 2020 to 1.096 Euros at the end of the second quarter 2020.

Due to the expected fall in output and the heighted uncertainty associated with the corona crisis, for all three stock market indices the experts have revised their three-month ahead forecasts downwards. By the end of the second quarter 2020 they expect the DAX, the Stoxx 50 and the S&P 500 to decrease by -6.3 percent, -6.2 percent, and -0.5 percent, respectively. However, for the end of the third quarter 2020 a recovery on the stock markets is expected with the S&P 500 index is predicted to recover best.



In the long-term ranking, which covers the last 18 quarters, National-Bank defended rank one, while Nord/LB and Commerzbank remained at rank two and three, respectively.



6 Appendix: Individual Forecasts

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

In percent

Forecaster	End of June 2020	End of September 2020
Bayerische Landesbank	-0.40	-0.39
Commerzbank	-0.40	-0.40
DekaBank	-0.38	-0.40
Deutsche Bank	-0.40	-0.40
DZ Bank	-0.35	-0.45
Hamburger Sparkasse	-0.37	-0.40
Helaba	-0.50	-0.50
LBBW	-0.45	-0.40
National-Bank	-0.38	-0.42
Nord/LB	-0.45	-0.45
Postbank	-0.35	-0.35
Santander Bank		
UniCredit		
Weberbank	-0.50	-0.50



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

In percent

Forecaster	End of June 2020	End of September 2020
Bayerische Landesbank	-0.60	-0.60
Commerzbank	-0.60	-0.55
DekaBank	-0.55	-0.55
Deutsche Bank	-0.88	-0.70
DZ Bank	-0.50	-0.40
Hamburger Sparkasse	-0.30	-0.20
Helaba	-0.50	-0.50
LBBW	-0.75	-0.50
National-Bank	-0.50	-0.45
Nord/LB	-0.60	-0.60
Postbank	-0.30	-0.10
Santander Bank		
UniCredit		
Weberbank	-0.70	-0.50



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

In percent

Forecaster	End of June 2020	End of September 2020
Bayerische Landesbank	0.90	0.90
Commerzbank	0.75	0.80
DekaBank	0.90	0.90
Deutsche Bank	0.50	0.65
DZ Bank	0.60	0.75
Hamburger Sparkasse	0.70	0.80
Helaba	1.00	1.00
LBBW	0.60	0.90
National-Bank	0.75	0.95
Nord/LB	0.70	0.90
Postbank	0.90	0.80
Santander Bank		
UniCredit		
Weberbank	0.80	1.50



Table 6-4: Individual forecasts: Stoxx Index

In index points

Forecaster	End of June 2020	End of September 2020
Bayerische Landesbank	2610	2900
Commerzbank	2600	2600
DekaBank		
Deutsche Bank		
DZ Bank	2895	3071
Hamburger Sparkasse	2650	2800
Helaba	2600	2800
LBBW		
National-Bank	2490	2900
Nord/LB	2100	2500
Postbank	2700	3000
Santander Bank		
UniCredit		
Weberbank	2400	2500



Table 6-5: Individual forecasts: DAX 30 Index

In index points

Forecaster	End of June 2020	End of September 2020
Bayerische Landesbank	9500	10500
Commerzbank	9600	9600
DekaBank	10500	11000
Deutsche Bank		
DZ Bank	10534	11200
Hamburger Sparkasse	9500	10500
Helaba	9500	10500
LBBW	8500	9000
National-Bank	8500	10200
Nord/LB	8000	9500
Postbank	10000	11000
Santander Bank		
UniCredit		
Weberbank	8300	8800



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

In percent

Forecaster	End of June 2020	End of September 2020
Bayerische Landesbank	2400	2700
Commerzbank	2600	2600
DekaBank	2600	2700
Deutsche Bank	3350	3250
DZ Bank	2694	2900
Hamburger Sparkasse	2500	2600
Helaba	2650	2800
LBBW		
National-Bank	2300	2750
Nord/LB	2250	2500
Postbank	2650	2950
Santander Bank		
UniCredit		
Weberbank	2300	2400



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

In US Dollars per 1 Euro

Forecaster	End of June 2020	End of September 2020
Bayerische Landesbank	1.09	1.14
Commerzbank	1.10	1.12
DekaBank	1.11	1.10
Deutsche Bank	1.13	1.17
DZ Bank	1.10	1.10
Hamburger Sparkasse	1.11	1.12
Helaba	1.10	1.15
LBBW	1.09	1.07
National-Bank	1.11	1.11
Nord/LB	1.11	1.11
Postbank	1.01	1.02
Santander Bank		
UniCredit		
Weberbank	1.10	1.05



Table 6-8: Individual forecasts: oil prices

Brent, in US Dollars per barrel

Forecaster	End of June 2020	End of September 2020
Bayerische Landesbank	30	35
Commerzbank	35	35
DekaBank	29	32
Deutsche Bank	25	25
DZ Bank	28	30
Hamburger Sparkasse	25	30
Helaba	31	40
LBBW	30	30
National-Bank	25	28
Nord/LB	30	35
Postbank	25	25
Santander Bank		
UniCredit		
Weberbank	20	30



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

In percent

Forecaster	End of June 2020	End of September 2020
Bayerische Landesbank	0.00	0.00
Commerzbank	0.00	0.00
DekaBank	0.00	0.00
Deutsche Bank	-0.50	-0.50
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		
UniCredit		
Weberbank	0.00	0.00



Table 6-10: Individual forecasts: Federal Funds Rate

In percent

Forecaster	End of June 2020	End of September 2020
Bayerische Landesbank	0.00 - 0.25	0.00 - 0.25
Commerzbank		
DekaBank	0.00 - 0.25	0.00 - 0.25
Deutsche Bank	0.00 - 0.25	0.00 - 0.25
DZ Bank	0.00 - 0.25	0.00 - 0.25
Hamburger Sparkasse	0.00 - 0.25	0.00 - 0.25
Helaba	0.00 - 0.25	0.00 - 0.25
LBBW	0.00 - 0.25	0.00 - 0.25
National-Bank	0.00 - 0.25	0.00 - 0.25
Nord/LB	0.00 - 0.25	0.00 - 0.25
Postbank	0.00 - 0.25	0.00 - 0.25
Santander Bank	0.00 - 0.25	0.00 - 0.25
UniCredit	0.00 - 0.25	0.00 - 0.25
Weberbank	0.00 - 0.25	0.00 - 0.25



Table 6-11: Individual forecasts: consumer price inflation

Forecasts for 2020, in percent

Forecaster	Germany	Eurozone
Bayerische Landesbank	0.6	0.7
Commerzbank	1.3	0.6
DekaBank	1.2	0.7
Deutsche Bank	0.6	0.5
DZ Bank	0.1	0
Hamburger Sparkasse	1.2	1.2
Helaba	1.1	0.8
LBBW	1	0.9
National-Bank	1.3	0.6
Nord/LB	0.5	0.2
Postbank		
Santander Bank		
UniCredit		
Weberbank	1.4	1



Table 6-12: Individual forecasts: real GDP growth

Forecasts for 2020, in percent

Forecaster	Germany	Eurozone
Bayerische Landesbank	-4.6	-4.5
Commerzbank	-3.5	-4
DekaBank	-4.7	-5.4
Deutsche Bank	-5.3	-6.9
DZ Bank	-4	-5.6
Hamburger Sparkasse	-5	-5
Helaba	-3	-2.7
LBBW	-7	-7
National-Bank	-3.1	-2.5
Nord/LB	-7.5	-7.1
Postbank	-5.3	-6.9
Santander Bank		
UniCredit		
Weberbank	-1	-1.1



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