M.M. WARBURG & CO

BANK

ECONOMIC SITUATION AND STRATEGY

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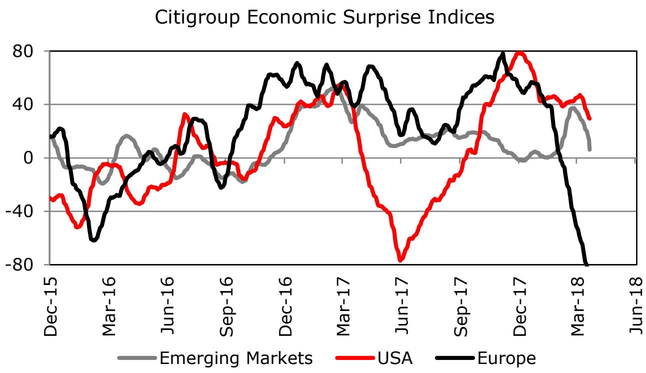
Weaker leading indicators: Precursors of economic crisis?

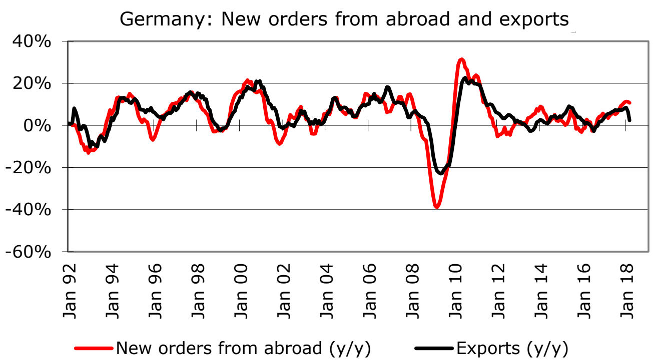
The stock markets have had quite a shakeup this year. First, inflation worries made for rising interest rates and debate about the future path of Fed monetary policy. Then, US President Trump aroused concern by ordering tariffs on steel and aluminum and announcing import restrictions on Chinese goods. Finally, several economic indicators have disappointed in the past few weeks and spoiled the mood of stock market participants. Stock prices have recovered lately thanks to conciliatory sounds from Beijing in the trade conflict and very good results to date from the US earnings season. However, the economic scenario will mainly determine their direction going forward. After surprisingly strong growth of the world economy in 2017, prospects for 2018 have dimmed somewhat recently. Almost all major leading economic indicators have registered declines. In the euro zone, in particular, most economic data have been disappointing. Not only does that apply to the leading indicators, but data on the real economy have also not met expectations. This is especially clear from Citigroup's daily economic surprise index, which measures the development of published data in comparison with expectations. It began to descend in late January at almost the same time as the stock market started to falter. Like the weak real-economic data, the decline of leading indicators such as the purchasing manager indexes and the Ifo business climate index has prompted investors to doubt the economy's momentum. In Germany, in particular, almost all major economic metrics have shifted into reverse since the beginning of the year, whether in industrial production, retail sales, or exports. However, it is difficult to find a plausible explanation for this sudden weakness. In the past, abrupt changes in the economic cycle have been triggered primarily by exogenous shocks (e.g. sharp changes in commodity prices) or by more restrictive monetary or fiscal policy. But these factors cannot contribute this time to explaining the current development, since there has been little movement there in the past months.



Considering the trade war possibility put into play by the US administration, the negative reaction of the leading indicators does not surprise us. Although we assume this is just a negotiating tactic on the part of Donald Trump, a heavy-handed way of getting partners or even opponents to the table, it is fueling uncertainty. The effect of uncertainty on expectations is almost always negative. Consequently, leading indicators, based on the expectations of businesses, and stock prices, based on the future development of earnings, cash flows, and dividends, are both reacting negatively.

However, it is much more difficult to find reasonable explanations for the crumbling of real-economic data observed in the last three months. Retail sales, for example, have fallen both in the United States and in

Germany for three consecutive months since December 2017, although both countries are registering an employment boom with higher wages and salaries. German exports have also not increased for three months in a row, and industrial production saw in February the sharpest decline since summer 2015. But since orders have grown strongly in the past few months and those have not all been worked off yet (as reflected in the book-to-bill ratio), industrial production is likely to increase again soon. In that case, exports will probably also recover. There is a very close correlation between new orders from abroad and exports. While orders were up by more than 10% in February over their year-earlier level, exports only increased by just over 2%. Such a large gap has usually closed quickly in the past, so we expect figures for March or April at the latest to show a positive countermovement in German exports.



This year's severe winter weather is likely to have negatively affected many sectors of the economy. Both home improvement centers and clothing stores have had lower sales in the past months than is usual in this season. Moreover, many more people have had the flu this winter than in previous years, so absence from work due to illness has been unusually high at times. And not least, a series of strikes have greatly impeded economic activity in certain sectors and public life generally. Such special effects can heavily influence macroeconomic time series in the short term (especially if they occur at the same time), but their impact is not lasting.

More serious worries about the economic situation in Germany and the euro zone would be necessary, if a greater economic slowdown were to occur in the United States and China, the world's two largest national economies. True, some leading indicators have also weakened recently in those two countries, but compared with the euro zone, the decline has been much more moderate. Moreover, this development can probably also be attributed largely to the risk of a trade war. This week, China has already released its figures on economic growth in the first quarter of 2018, which remained high at 6.8%. Since measures to slow the real estate market have reached an advanced stage and signs of renewed acceleration are already emerging, economic momentum in China will probably remain high in the coming quarters. And in the United States, almost everything argues in favor of accelerating, not slowing, economic growth. Anything else would be surprising in view of the recent tax reform and even more expansionary fiscal policy. We therefore conclude that despite the current weak tendencies, also in the euro zone, better economic data may be expected in the near future. A new economic crisis is not yet on the horizon.

And what about the weak economic surprise ratio for the euro zone? For one thing, it exhibits a tendency towards mean reversion, so the low point has probably been reached. For another, it is hardly relevant for economic growth. In the United States, the index plunged, for example, during the second quarter of 2017, but GDP growth increased sharply.

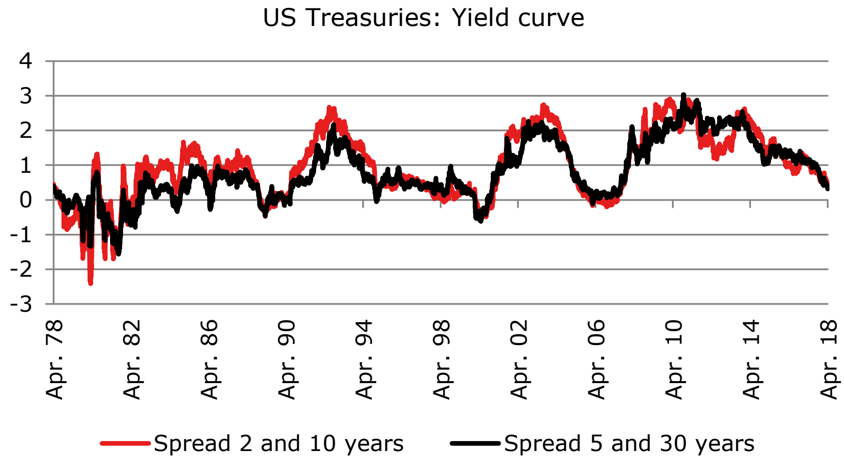
Weekly outlook for April 23-24, 2018

(The Ifo index has a wider base as of April; we show the new time series here.)

	Dec.	Jan.	Feb.	Mar.	Apr.	May	Release
DE: PMI, manufacturing, flash	63.3	61.1	60.6	58.2	58.0		April 23
DE: PMI, services, flash	55.8	57.3	55.3	53.9	53.4		April 23
DE: Ifo business climate index	104.9	104.7	103.9	103.2	103.0		April 24
DE: Ifo current business situation	106.8	108.0	107.7	106.5	106.2		April 24
DE: Ifo business expectations	103.0	101.4	100.2	100.1	99.8		April 24
DE: GfK consumer climate	10.7	10.8	11	10.8	10.9	10.6	April 26
DE: Unemployed, change in 000s	-30	-24	-23	-19	-15		April 27
DE: Unemployment rate	5.5%	5.4%	5.4%	5.3%	5.3%		April 27
EUR19: PMI, manufacturing, flash	60.6	59.6	58.6	56.6	56.4		April 23
EUR19: PMI, services, flash	56.6	58.0	56.2	54.9	54.5		April 23
EUR19: Business climate	1.6	1.56	1.48	1.34	1.2		April 27
EUR19: Economic confidence	115.3	114.9	114.2	112.6	112		April 27
EUR19: Consumer confidence, final	0.5	1.4	0.1	0.1	-0.1		April 27
EUR19: Industrial confidence	8.8	9.1	8	6.4	6.0		April 27

MMWB estimates in red

Chart of the Week: US yield curve continues to flatten



There have been nine recessions in the United States since 1955, all of which have been predicted by an inverted yield curve at a time lag of 6 to 24 months. There have been growing signs recently that another inversion of the yield curve is possible, i.e., yields on long-term Treasuries below those on short-term Treasuries. A look at the spreads of 2-year and 10-year Treasuries and of 5-year and 30-year Treasuries reveals that they have come down significantly and this movement has even accelerated lately. At 44 and 31 basis points, the curve is nearing the zero line. In 2005-2006, it barely took six months for the curve of 5-year and 30-year Treasuries to flatten from 30 basis points to zero. The curve of 2-year and 10-year Treasuries flattened similarly. The curve could thus become inverted this year, which would greatly increase the probability of a recession. One should always be careful about saying things like "this time is different." Nevertheless, there are arguments to the effect that the changed yield curve is not yet a reason for undue concern. One is that the flattening yield curve may be a purely technical matter, since especially short-term Treasuries have been issued recently to finance the US deficit. The reduced spreads would thus not be an expression of a worsened economic outlook. Another is that the interest rate level is so low that rising short-term interest rates should not lead to an economic downturn, as has occurred in past instances of interest rate increases and flattening yield curves. So, for the time being, we do not infer danger of recession for the United States from the yield curve, but we will keep a close eye on how this situation develops going forward.

Market data overview

Stock marktes	As of 20.04.2018 14:11	Change versus 12.04.2018 -1 week	16.03.2018 -1 month	18.01.2018 -3 months	29.12.2017 YTD
Dow Jones	24665	0,7%	-1,1%	-5,2%	-0,2%
S&P 500	2693	1,1%	-2,1%	-3,7%	0,7%
Nasdaq	7295	2,2%	-2,5%	0,0%	5,7%
DAX	12535	1,0%	1,2%	-5,6%	-3,0%
MDAX	26046	1,6%	1,6%	-4,3%	-0,6%
TecDAX	2621	0,5%	-2,2%	-2,3%	3,6%
EuroStoxx 50	3496	1,5%	1,7%	-3,5%	-0,2%
Stoxx 50	3039	-0,1%	0,8%	-6,2%	-4,4%
SMI (Swiss Market Index)	8802	0,3%	-0,9%	-6,9%	-6,2%
Nikkei 225	22162	2,3%	2,2%	-6,7%	-2,6%
Brasilien BOVESPA	85824	0,4%	1,1%	6,0%	12,3%
Russland RTS	1143	1,6%	-8,9%	-10,7%	-1,0%
Indien BSE 30	34416	0,9%	3,7%	-2,4%	1,1%
China Shanghai Composite	3071	-3,4%	-6,1%	-11,6%	-7,1%
MSCI Welt (in €)	2116	1,3%	-0,9%	-4,2%	-2,0%
MSCI Emerging Markets (in €)	1184	0,8%	-2,4%	-4,1%	-0,4%
Bond markets					
Bund-Future	163,14	385	495	256	146
Bobl-Future	130,76	-35	6	-42	-85
Schatz-Future	111,87	-4	-3	-3	-11
3 Monats Euribor	-0,33	0	0	0	0
3M Euribor Future, Dec 2017	-0,31	0	-1	-6	0
3 Monats $ Libor	2,36	1	15	61	66
Fed Funds Future, Dec 2017	2,16	4	6	17	0
10 year US Treasuries	2,92	8	7	31	51
10 year Bunds	0,60	9	3	9	17
10 year JGB	0,06	3	4	-2	1
10 year Swiss Government	0,11	10	10	18	24
US Treas 10Y Performance	562,72	-0,1%	0,2%	-1,7%	-3,2%
Bund 10Y Performance	605,39	-0,2%	0,4%	0,4%	-0,3%
REX Performance Index	479,03	-0,3%	-0,1%	0,1%	-0,3%
US mortgage rate	0,00	0	0	0	0
IBOXX AA, €	0,81	-1	4	10	13
IBOXX BBB, €	1,39	-1	2	17	16
ML US High Yield	6,28	-11	-24	17	13
JPM EMBI+, Index	819	-0,1%	0,5%	-1,8%	-2,0%
Convertible Bonds, Exane 25	7394	0,1%	1,0%	-1,0%	-0,1%
Commodities					
CRB Spot Index	444,35	0,8%	0,1%	1,7%	2,8%
MG Base Metal Index	367,03	6,0%	5,2%	2,4%	2,3%
Crude oil Brent	73,19	2,2%	10,8%	5,5%	9,9%
Gold	1342,23	0,3%	2,1%	1,0%	3,0%
Silver	17,23	4,2%	5,8%	1,2%	1,3%
Aluminium	2540,50	6,9%	23,1%	13,2%	12,6%
Copper	6980,25	2,8%	1,7%	-0,7%	-3,1%
Iron ore	65,49	2,0%	-9,9%	-14,0%	-8,1%
Freight rates Baltic Dry Index	1201	20,9%	5,1%	5,4%	-12,1%
Currencies					
EUR/ USD	1,2306	-0,1%	0,0%	0,6%	2,6%
EUR/ GBP	0,8756	1,2%	-0,7%	-0,7%	-1,4%
EUR/ JPY	132,41	0,3%	1,7%	-2,7%	-1,9%
EUR/ CHF	1,1964	0,7%	2,2%	1,8%	2,2%
USD/ CNY	6,2907	0,0%	-0,7%	-2,0%	-3,3%
USD/ JPY	107,24	-0,1%	1,2%	-3,5%	-4,8%
USD/ GBP	0,71	1,3%	-0,9%	-1,2%	-3,7%

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