M.M. WARBURG & CO
BANK

ECONOMIC SITUATION AND STRATEGY

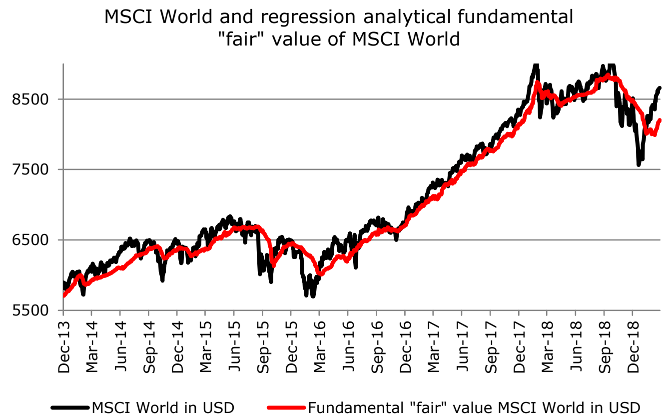
March 1, 2019

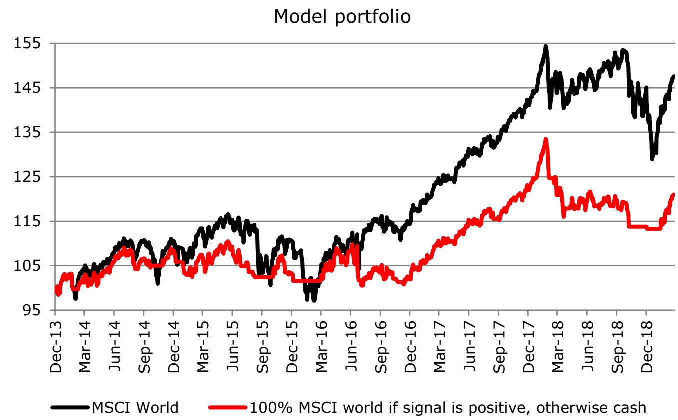
DAX up 1,000 points in 8 weeks – capital market spring ahead?

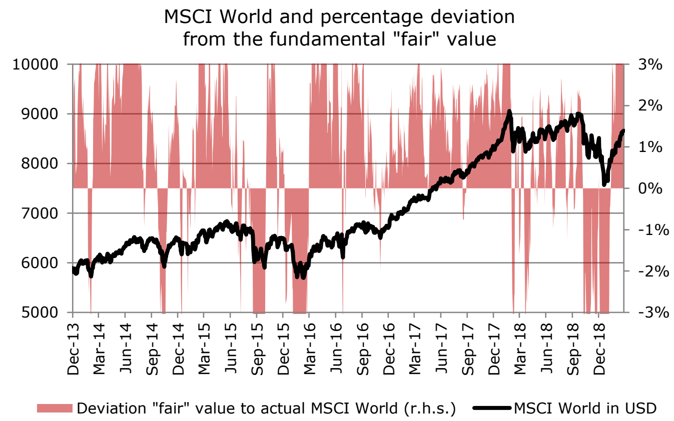
Sometimes, the capital markets are a little exasperating. We are of course pleased with the current rise in stock prices, but it is difficult to understand why they do. Stock markets around the world have gained enormously in value since the beginning of the year and have made up a considerable part of last year's losses. However, all this is happening against the background of steadily worsening economic data. For example, the Warburg Business Cycle Model has been at about 10% for many weeks, a low level such as we have seldom seen. At the same time, earnings estimates for many stock markets are moving in reverse. For some, this development may be a little reminiscent of the end of 2001, when nearly all fundamental data were likewise headed south. But a significant stock market recovery began in October of that year, with the result that many market participants closed their ears to bad economic news.

An article in the German financial press (Frankfurter Allgemeine Zeitung, December 2, 2001) put it this way, "A typical sectoral rotation became a clear trend in November. The market is speculating on an economic turnaround." At that time, many actually assumed that the good market data anticipated better fundamentals. Accordingly, more and more investors dared to keep raising their stock ratios on further price advances. Some today may have forgotten how this ended. The small rally at the end of 2001 turned out to be a nasty trap. After reaching an interim high, the DAX fell again by over 50%. No sign emerged of the hoped-for economic recovery that the markets were supposedly anticipating. That did not happen until about 18 months later, after the DAX had fallen to 2,200 points. Of course, we do not intend to suggest with this historical example that something similar necessarily lies ahead, but we also do not regard the current advance as fundamentally justified. As Mark Twain said, "history doesn't repeat itself, but it often rhymes," and a kernel of truth for the capital markets may well be found in this example from the past. Just because the stock market is moving contrary to fundamental data does not necessarily mean that fundamentals are on the verge of changing direction. Ultimately, fundamental data are much more stable and less "noisy" than market data. From this perspective, it seems more likely that not fundamental but rather market data is "wrong" when there is a discrepancy between them.

But is this really the case? It seems quite logical at first glance, but sometimes close empirical examination is necessary to arrive at reliable conclusions. To study this question, we have tested the following model design. In a first step, based on our daily real-time business cycle model available since 2013, we have used a regression analysis every day to calculate a "fair" index value derived from the global economic situation. Since our model aims to describe the world economy's development, we have chosen the MSCI World as our stock market index. Of course, the actual MSCI World is practically never at its putative fair value based on the economic trend.







Instead, there are constantly positive and negative exaggerations that find expression in index levels above and below the value determined by regression analysis. If there were additional informative content in the stock market's deviation from the fundamentally "logical" value, it would have to emerge as follows:

Let us assume that the index level of the fundamentally derived MSCI World were lower than the actual value (as is the case now). Following the notion that the stock market is especially efficient in processing information, and thus not "noisy," we would have to take a positive deviation as a signal to continue betting on stocks in the days and weeks ahead, because a trend turn for the better in the fundamental data also becomes probable and has been anticipated by the positive market development. Analogously, we would have to interpret an actual index level below a fundamentally derived value as a negative signal. We have carried out exactly this investigation.

For simplicity's sake, we assumed 100% investment in the MSCI World when the actual market index is above fair value determined by regression analysis. Analogously, we reduced the investment ratio to zero whenever the market index fell below its fair value. We then compared the resulting performance with that of the MSCI World. The chart above shows both time series. Assuming that we had started at the end of 2013 with EUR 100, the described strategy would have led to a value of somewhat over EUR 120 by the end of February 2019, while the MSCI World would have reached nearly EUR 150.

This may surprise at first glance since the two charts in the left column suggest that the deviation of actual performance from fair performance seems to be a nearly perfect signal. For example, one is almost always on the "right" side in the period from March 2016 to September 2018, because the market runs ahead of the fundamental trend and thus on this logic suggests a buy, which would have been absolutely correct in that market phase. On the other hand, many turning points are to be found at which the allocation signal would have come at the wrong time if the logic described above were applied.

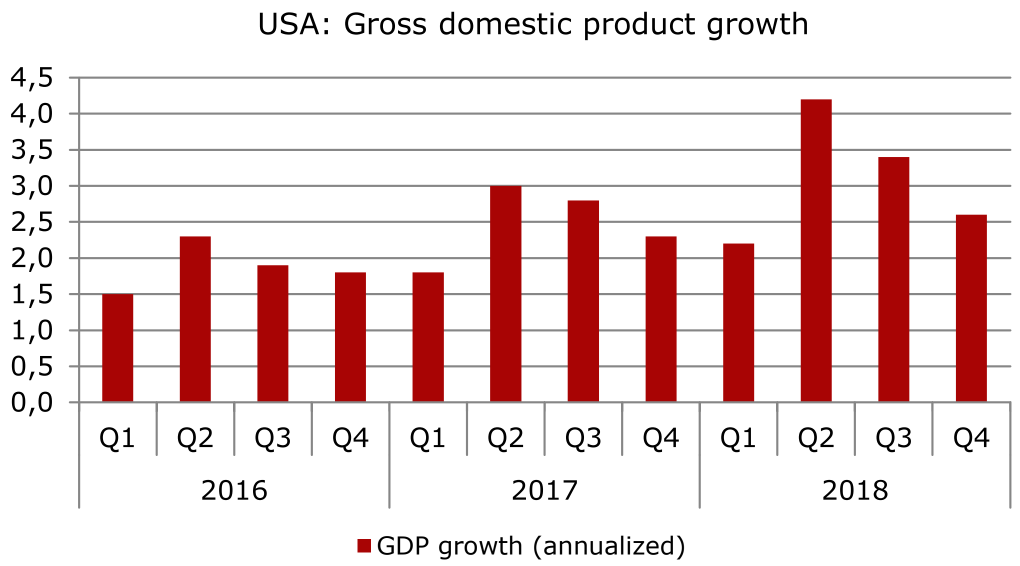
The benefit of listening to the market and not to fundamental data thus seems to be limited. Of course, optimizing the choice of parameters may improve these results, but that would be the same as data mining and lead to a rude awakening in real-time application. Regrettably, we still believe a few weeks of surprisingly good fundamentals do not a spring make (not to mention a summer).

Weekly outlook for March 4-8, 2019

	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Release
DE: Retail sales, m/m	0.4%	1.4%	-4.3%	1.9%			March 5
DE: PMI, services - final	54.7	53.3	51.8	53.0	55.0		March 5
DE: New orders, m/m	0.3%	-0.2%	-1.6%	0.3%			March 8
DE: New orders, y/y	-3.2%	-3.4%	-7.0%	-3.3%			March 8
EUR19: Sentix	11.4	8.8	-0.3	-1.5	-3.8	-3.2	March 4
EUR19: Producer prices m/m	0.8%	-0.3%	-0.8%	0.4%			March 4
EUR19: Producer prices y/y	4.9%	4.0%	3.0%	3.0%			March 4
EUR19: PMI, services - final	53.7	53.4	51.2	51.2	52.3		March 5
EUR19: Retail sales m/m	0.8%	0.8%	-1.6%	0.3%			March 5

MMWB estimates in red

Chart of the Week: US growth surprisingly positive



Because of the government shutdown in the United States, we had to wait a month longer than usual for the economic growth data released there today. As expected, they show momentum slackening. After rates of 4.2% in the second quarter and 3.4% in the third, growth in the fourth came to "only" 2.6%. The consensus expectation had only been 2.2% in view of the flagging world economy and trade dispute. The release has had a positive reception, with the US dollar and Treasury yields rising. Consumer spending developed well with an increase of 2.8%, thus contributing over 1.9 percentage points (pp) to the growth rate. Here, one also has to wonder how this fits together with the retail sales slump in December. The positive reports issued by major retailers had already called these numbers into question. Capital spending by businesses (+6.2%) also developed positively and, after a growth contribution in the third quarter of 0.35 pp, has now contributed 0.82 pp. On the other hand, the construction industry again appears weaker with a decline of 3.5%. Development in this sector had already been negative in the past four quarters. Trade also continued to slow and cost 0.22 pp in growth. Altogether, a (real) growth rate of 2.9% was achieved for the year 2018. Driven in particular by tax cuts, growth was thus significantly above estimated potential growth of 1.9%. Nevertheless, Donald Trump will not be entirely satisfied. His proclaimed target of 3% per year was not achieved despite the massive tax cuts.

Market Data Overview

Stock marktes	As of 01.03.2019 11:38	Change versus 22.02.2019 -1 week	31.01.2019 -1 month	30.11.2018 -3 months	28.02.2018 -1 year	31.12.2018 YTD
Dow Jones	25916	-0,4%	3,7%	1,5%	3,5%	11,1%
S&P 500	2784	-0,3%	3,0%	0,9%	2,6%	11,1%
Nasdaq	7533	0,1%	3,4%	2,8%	3,6%	13,5%
DAX	11627	1,5%	4,1%	3,3%	-6,5%	10,1%
MDAX	24603	1,0%	3,9%	4,9%	-6,4%	14,0%
TecDAX	2630	0,5%	1,6%	1,5%	0,0%	7,3%
EuroStoxx 50	3322	1,6%	5,1%	4,7%	-3,4%	10,7%
Stoxx 50	3042	0,8%	5,0%	3,7%	0,1%	10,2%
SMI (Swiss Market Index)	9426	0,8%	5,1%	4,3%	5,8%	11,8%
Nikkei 225	21603	0,8%	4,0%	-3,3%	-2,1%	7,9%
Brasilien BOVESPA	95584	-2,4%	-0,8%	6,8%	12,0%	8,8%
Russland RTS	1186	-1,0%	-2,3%	5,3%	-7,7%	11,2%
Indien BSE 30	36064	0,5%	-0,5%	-0,4%	5,5%	0,0%
China Shanghai Composite	2994	6,8%	15,8%	15,7%	-8,1%	20,1%
MSCI Welt (in €)	2086	-0,5%	3,9%	2,0%	5,8%	11,5%
MSCI Emerging Markets (in €)	1051	-1,2%	1,1%	5,5%	-5,6%	9,5%
Bond markets						
Bund-Future	165,31	-131	-36	377	587	177
Bobl-Future	132,71	-44	-22	74	167	19
Schatz-Future	111,82	-6	-5	-18	-15	-12
3 Monats Euribor	-0,31	0	0	1	2	0
3M Euribor Future, Dec 2017	-0,25	1	0	-3	-39	0
3 Monats $ Libor	2,63	-2	-11	-11	61	-18
Fed Funds Future, Dec 2017	2,40	3	5	-30	-9	0
10 year US Treasuries	2,73	7	9	-29	-14	4
10 year Bunds	0,19	9	9	-12	-42	-6
10 year JGB	-0,01	3	-1	-9	-5	-1
10 year Swiss Government	-0,25	10	5	-16	-28	-1
US Treas 10Y Performance	583,03	-0,4%	-0,5%	3,8%	4,0%	0,4%
Bund 10Y Performance	634,11	-0,8%	-0,3%	1,7%	6,1%	1,1%
REX Performance Index	488,60	-0,2%	-0,1%	0,5%	2,5%	0,2%
US mortgage rate	0,00	0	0	0	0	0
IBOXX AA, €	0,68	5	-7	-22	-7	-20
IBOXX BBB, €	1,71	-1	-14	-31	38	-35
ML US High Yield	6,82	-4	-31	-55	39	-119
JPM EMBI+, Index	831	0,3%	-0,1%	6,7%	2,2%	5,0%
Convertible Bonds, Exane 25	7078	0,0%	0,6%	0,7%	-3,4%	2,7%
Commodities						
CRB Spot Index	412,83	-0,5%	0,0%	-0,8%	-6,9%	0,9%
MG Base Metal Index	320,45	1,1%	3,6%	5,6%	-10,0%	8,7%
Crude oil Brent	66,20	-1,6%	6,3%	12,7%	0,8%	24,6%
Gold	1310,01	-1,5%	-1,0%	7,5%	-0,7%	2,2%
Silver	15,65	-1,9%	-2,7%	10,4%	-4,7%	0,9%
Aluminium	1889,50	0,0%	-0,1%	-3,5%	-12,3%	1,4%
Copper	6555,50	0,6%	6,6%	5,3%	-4,9%	10,2%
Iron ore	83,43	-5,4%	9,7%	15,4%	7,7%	20,6%
Freight rates Baltic Dry Index	658	3,8%	-1,5%	-46,5%	-44,8%	-48,2%
Currencies						
EUR/ USD	1,1374	0,4%	-1,0%	0,1%	-6,9%	-0,7%
EUR/ GBP	0,8590	-1,1%	-1,5%	-3,2%	-3,0%	-4,3%
EUR/ JPY	127,17	1,3%	1,9%	-1,4%	-2,7%	1,0%
EUR/ CHF	1,1358	0,1%	-0,4%	0,2%	-1,4%	0,8%
USD/ CNY	6,7043	-0,2%	0,0%	-3,7%	5,9%	-2,5%
USD/ JPY	111,39	0,6%	2,3%	-1,8%	4,4%	1,7%
USD/ GBP	0,76	-1,4%	-0,6%	-3,6%	4,1%	-3,8%

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