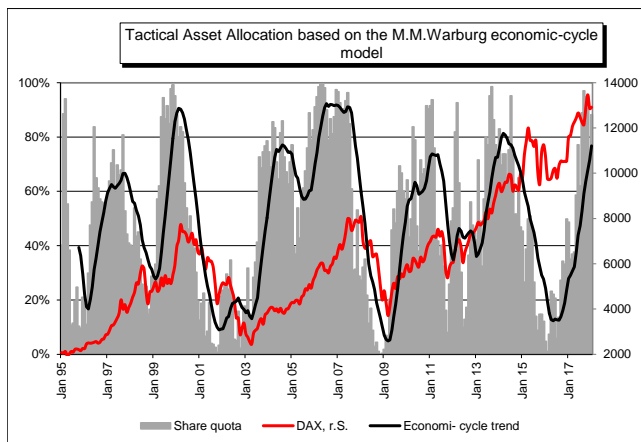


## ECONOMIC SITUATION AND STRATEGY

### Stock markets: Correction, not a lasting downturn

At the beginning of this week, prices on US stock exchanges dropped steeply. The Dow Jones index saw an intraday decline of almost 1,600 points on Monday and closed down 4.6%. That was the largest single-day loss since August 2011. The other US indexes also took a heavy beating and dragged further financial centers down with them. The buoyant price trend of the first few trading weeks have thus come to an abrupt end.

Paradoxically, this correction is happening when global economic data are better than they have been for a long time. The US economy is growing at about 3%, the euro zone at 2.5%, and Japan at 2%, and economic data have steadily improved in almost all emerging countries. Our Warburg Business Cycle Model is above 90 points and thus signals that conditions for higher stock prices continue to exist. In other words, the stock market still has a green light. The current price slump thus has nothing to do with the fundamental data, in our opinion. Things also look good on the business side. The reporting season in the United States has so far gone more than satisfactorily, as 80% of reporting companies have beaten expectations both for earnings and for sales.



At first glance, investors' worries about a return of inflation appear the most plausible explanation for the current price slump. That could force central banks like the US Federal Reserve to tighten monetary policy more than previously assumed. The sell-off began last Friday after a good US labor market report, which showed a stronger than expected rise of hourly wages. In January, they were 2.9% higher than their year-earlier number. But this does not automatically mean strong upward pressure on prices will result. We could expect that especially if consumers' disposable incomes were to rise substantially, since demand for goods and services could exceed supply in that case, theoretically speaking. Hourly wages did increase in January, but the number of hours worked per week decreased, so little is likely to happen overall in the pocketbooks of consumers. Since the sharper rise of hourly wages is only visible so far in a few industries, we regard the inflation worries as exaggerated.

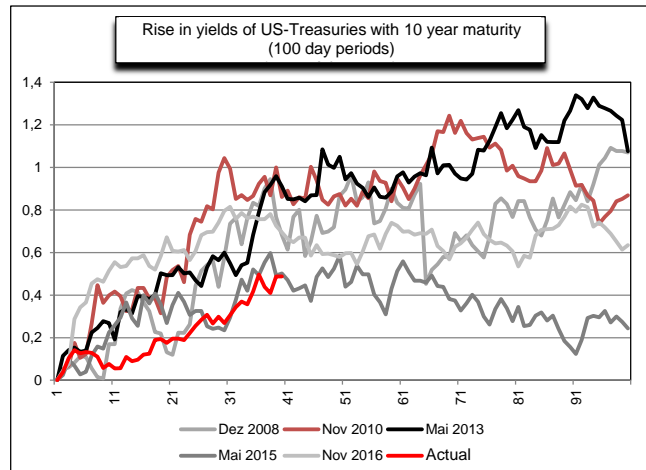
USA: Average hourly wages against the previous year				
	Jan 15	Jan 16	Jan 17	Jan 18
TOTAL PRIVATE, sa.	2,2%	2,5%	2,4%	2,9%
TOTAL PRIVATE, nsa.	2,2%	2,5%	3,2%	2,2%
GOODS-PRODUCING	1,7%	2,4%	2,8%	2,3%
MINING & LOGGING	0,1%	4,2%	1,4%	0,3%
CONSTRUCTION	2,5%	2,1%	3,2%	2,9%
MANUFACTURING	1,3%	2,6%	2,7%	1,9%
DURABLE GOODS	0,8%	2,5%	2,3%	1,8%
NONDURABLE GOODS	2,2%	2,7%	3,9%	2,0%
PRIVATE SERVICE-PROVIDING	2,3%	2,6%	2,3%	3,0%
TRADE, TRANSPORT & UTILS	2,0%	2,1%	2,3%	2,3%
WHOLESALE TRADE	1,4%	2,4%	3,2%	0,9%
RETAIL TRADE	3,5%	2,2%	1,5%	2,2%
TRANSPORT & WAREHOUSING	0,4%	1,3%	2,0%	3,2%
UTILITIES	1,3%	4,9%	3,0%	1,9%
INFORMATION	3,4%	4,4%	4,1%	3,7%
FINANCIAL ACTIVITIES	2,5%	3,1%	1,7%	4,2%
PROF & BUSINESS SERVICES	2,8%	2,7%	2,3%	3,0%
EDUCATION & HEALTH SERV	1,7%	2,2%	1,7%	3,0%
LEISURE & HOSPITALITY	3,4%	3,1%	4,3%	3,3%
OTHER SERVICES	2,0%	2,7%	3,2%	3,1%
Average	2,0%	2,8%	2,7%	2,5%
Median	2,0%	2,6%	2,5%	2,6%

Moreover, the connection between wages and the inflation rate in the United States has not been especially close in the past years. The annual rate of change in the personal consumption expenditure (PCE) price index, which is the critical inflation indicator for the Fed, was at 1.7% in December 2017. The core rate (excluding energy and food prices) actually only came to 1.5%. The last time that inflation metric was above 2% was in 2012, and rates of more than 3% have not been reached in the last 25 years. The assumption that the good global economic trend must lead to higher inflation rates is not confirmed by the present situation. The average inflation rate of almost 70 countries has fallen from 2.9% in spring 2017 to 2.5%. In the United States, the various price statistics also show a decline of inflation there since last spring.

Nevertheless, the yield on 10-year US Treasuries has advanced from 2.35% in mid-December 2017 to 2.85%. Other government bonds have also registered price losses in this period. For example, the yield on 10-year German Bunds has risen from 0.30% to almost 0.80%. This might reflect the assumption that the era of global expansionary monetary policy is slowly ending. As for the United States, some market participants now expect that the Fed will raise interest rates not just three times this year, as announced, but perhaps even a fourth time. However, a look at fed funds futures shows that this is not the majority opinion of market participants and their assessments have hardly changed. Almost 50% expect fewer than three interest rate hikes, just over 30% expect three, and less than 20% foresee more than three.

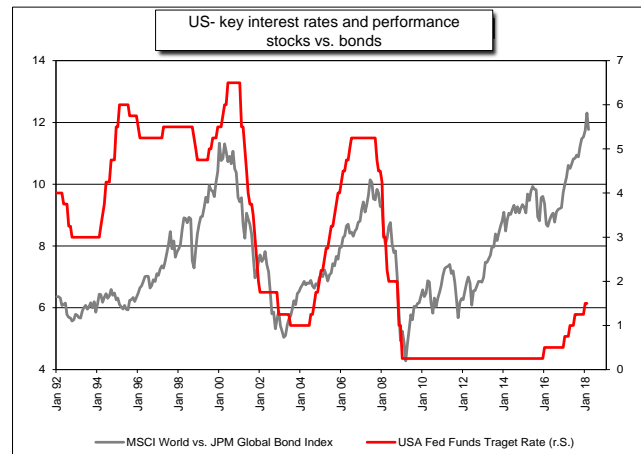
A look at the US bond market reveals that in almost every year since 2000 there have been phases in which yields have risen by 40 basis points or more within a relatively short time of 60 trading days. The only years such a development was not observed were 2000, 2008, and 2014. Moreover, our studies show there have been five phases since 2008 in which yields advanced very significantly over several weeks. That was the case, for example, in 2009 and

2011 after the quantitative easing programs began in the United States and in May 2013 after Ben Bernanke caused the "taper tantrum". In May 2015, yields increased sharply, especially in the euro zone, after China sold some of its bond holdings. And finally, there were rising yields after Donald Trump's election as US president.



On average, the yield on 10-year US Treasuries has risen by just over 100 basis points during these five phases, while the yield on 10-year Bunds has increased by about 70 basis points. And how have the stock markets reacted to the advancing yields? Both Germany's DAX index and the S&P 500 gained about 6% on average of those periods. The yield advance in 2015 was an exception. The DAX lost just over 5% in value in the first 100 days after the bond market sell-off began. But that was mainly due to two exogenous shocks that led to a worsening of fundamental conditions. One was the devaluation of China's currency, and the other was the Volkswagen diesel emission scandal.

The stock market's positive reaction to rising interest rates "in the normal case" is not surprising, since climbing interest rates are almost always due to an improved economic environment. Instead fearing less accommodative monetary policy, one should actually welcome it, because it is a signal that the world economy is gradually returning to normalcy. However, since some people might not know any more what the characteristics of such normalcy are, this transitional phase in monetary policy may be a rocky path. After all, stock markets tend to overshoot, and some investors are guided more by fear and greed than by cool rationality.



To calm the hotheads on the stock market, however, it may be said that the process of normalizing monetary policy will move forward very cautiously. The new Fed chair, Jerome Powell, will not pursue monetary policy fundamentally different from that of his predecessor, Janet Yellen. And a quick turn away from the policy of quantitative easing is not in sight either in the euro zone or in Japan, and that would be a necessary condition for the central banks of those countries to raise interest rates. Bank of Japan Governor Haruhiko Kuroda has emphasized again this week that it is much too soon to consider turning away from loose monetary policy. After all, he points out, the inflation rate is still less than 1% and thus significantly below the target of 2%. Statements from the European Central Bank sound similar. ECB Chief Economist Peter Praet today stressed again that current uncertainty regarding the inflation outlook is still much too high to make further adjustments in monetary policy.

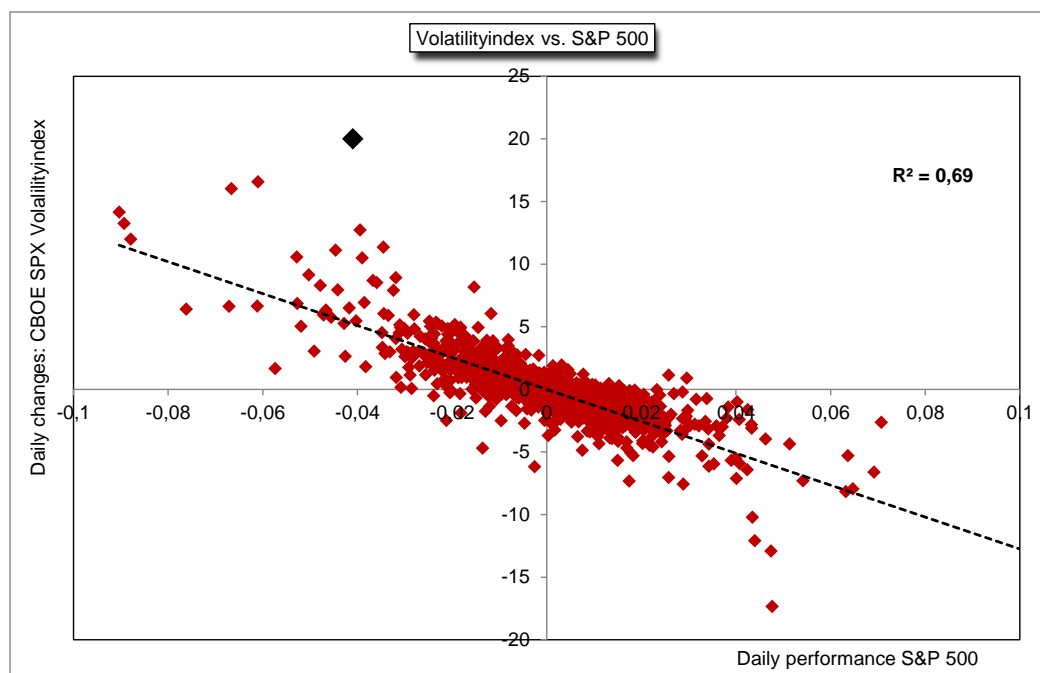
Overall, the current correction does not seem to us to be the precursor of a long-lasting downward phase. Since the S&P 500 had not fallen for more than 15 consecutive months, many investors may no longer be accustomed to the possibility of declining prices, thus making what is happening now feel more uncomfortable than it is. The long-observed record-low volatility (not only on the stock market, but also in many other market segments) was and is certainly not a permanent condition, especially since the perceived room for positive surprises in the economic data is shrinking. The price slump in recent days has caused the valuation of the stock markets to fall back. Based on earnings expected for the coming 12 months, the S&P 500 is now valued at a P/E ratio of 17.4, the lowest level in the past 12 months. The DAX P/E ratio is only 12.6. So, the general statement that "stocks have become (too) expensive" is not true. Actually, the opposite applies. This should also help keep the sell-off from continuing.

### Weekly outlook for February 12-16, 2018

	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Release
DE: Consumer prices, m/m	0.1%	0.1%	0.0%	0,3%	0,6%	-0,7%	February 14
DE: Consumer prices, y/y	1.8%	1.8%	1.6%	1,8%	1,7%	1,6%	February 14
EUR19: Industrial production, m/m	1.5%	-0.5%	0.4%	1,0%	-0,7%		February 14
EUR19: Industrial production, y/y	3.7%	3.4%	3.9%	3,3%	3,4%		February 14
	Q2 17		Q3 17		Q4 17		
DE: GDP, q/q – s.a.	0.6%		0.8%		0.5%		February 14
DE: GDP, y/y – s.a.	2.3%		2.8%		2.9%		February 14
EUR19: GDP, q/q – s.a.	0.7%		0.7%		0.6%		February 14
EUR19: GDP, y/y – s.a.	2.4%		2.8%		2.7%		February 14

MMWB estimates in red

### Chart of the Week: Short squeeze in VIX



Monday's abrupt price decline on the stock exchanges was not the only thing to cause a stir this week. Down 4.1%, the S&P 500 index was hit hard. But that has happened no fewer than 24 times in the last ten years, or every 109 trading days. The Volatility Index of the Chicago Board of Exchange (VIX) was hit significantly harder. The VIX measures the volatility expected for the short term based on options on the S&P 500. On Monday, having been more or less at a historically low level in the preceding weeks, the VIX recorded the largest absolute and percentage increase since its inception. What is the reason for this sharp rise? Normally, volatility increases when there is uncertainty about valuation on the stock markets. In this case, however, there must have been another reason for the extent of the movement. Our Chart of the Week also shows that. It reveals a clear linear connection between daily changes in the VIX and the performance of the S&P 500. In the current case, though, the rise of volatility was

much more pronounced than could have been explained before by reference to the S&P's price losses. So, that means the VIX must have led a "life of its own" to some extent. There is much evidence that the cause was a "short squeeze," which happens when market participants who have sold volatility, and thus bet that it will decline, are forced to cover their positions by an increase of volatility. In the case of some exchange traded notes (ETNs) that have used futures to sell volatility, the entire net asset value has had to be liquidated from a certain loss threshold on, which has strengthened the rise of the VIX. The most prominent example of that was the VelocityShares Daily Inverse VIX Short-Term ETN (XIV), in which case the option for liquidation existed as of a daily loss of 80% – and was then exercised. Overall, this shows that the current market shifts are more technical than fundamental in nature.



	As of	Change versus			
	09.02.2018	01.02.2018	05.01.2018	07.11.2017	29.12.2017
Stock marktes	16:48	-1 week	-1 month	-3 months	YTD
Dow Jones	23708	-9,5%	-6,3%	0,6%	-4,1%
S&P 500	2603	-7,8%	-5,1%	0,5%	-2,6%
Nasdaq	7052	-4,5%	-1,2%	4,2%	2,2%
DAX	12079	-7,1%	-9,3%	-9,7%	-6,5%
MDAX	25016	-5,9%	-7,4%	-7,1%	-4,5%
TecDAX	2433	-7,8%	-7,9%	-4,9%	-3,8%
EuroStoxx 50	3349	-6,4%	-7,2%	-8,5%	-4,4%
Stoxx 50	2992	-6,0%	-7,4%	-7,2%	-5,8%
SMI (Swiss Market Index)	8742	-5,9%	-8,5%	-5,2%	-6,8%
Nikkei 225	21383	-9,0%	-9,8%	-6,8%	-6,1%
Brasilien BOVESPA	81498	-4,7%	3,1%	12,5%	6,7%
Russland RTS	1190	-7,9%	-2,4%	3,8%	3,1%
Indien BSE 30	34006	-5,3%	-0,4%	1,9%	-0,1%
China Shanghai Composite	3131	-9,2%	-7,7%	-8,3%	-5,3%
MSCI Welt (in €)	2045	-5,9%	-6,7%	-5,7%	-4,8%
MSCI Emerging Markets (in €)	1163	-5,2%	-4,7%	-3,2%	-1,7%
Bond markets					
Bund-Future	163,14	454	155	-14	146
Bobl-Future	130,55	3	-111	-142	-106
Schatz-Future	111,88	3	-8	-42	-9
3 Monats Euribor	-0,33	0	0	0	0
3M Euribor Future, Dec 2017	-0,26	0	-1	2	0
3 Monats \$ Libor	1,79	0	9	39	10
Fed Funds Future, Dec 2017	1,29	-76	-64	-39	-1
10 year US Treasuries	2,83	6	36	52	42
10 year Bunds	0,74	8	30	40	31
10 year JGB	0,07	-3	1	4	2
10 year Swiss Government	0,17	12	34	29	30
US Treas 10Y Performance	561,44	-0,6%	-2,9%	-4,0%	-3,4%
Bund 10Y Performance	596,31	-0,2%	-2,2%	-3,1%	-2,3%
REX Performance Index	475,05	-0,1%	-1,2%	-2,0%	-1,2%
US mortgage rate	0,00	0	0	0	0
IBOXX AA, €	0,78	2	11	17	10
IBOXX BBB, €	1,32	3	13	26	9
ML US High Yield	6,34	15	28	27	18
JPM EMBI+, Index	823	-1,0%	-1,7%	-0,1%	-1,6%
Convertible Bonds, Exane 25	7261	-0,2%	-2,9%	-1,8%	-1,9%
Commodities					
CRB Spot Index	442,03	-0,3%	1,2%	2,7%	2,2%
MG Base Metal Index	359,53	-0,9%	0,1%	3,4%	0,2%
Crude oil Brent	63,69	-7,8%	-5,8%	-0,2%	-4,4%
Gold	1314,20	-2,1%	-0,4%	3,1%	0,8%
Silver	16,38	-4,4%	-5,0%	-3,4%	-3,7%
Aluminium	2161,50	-2,8%	-1,2%	2,3%	-4,2%
Copper	6836,25	-3,4%	-3,4%	0,6%	-5,1%
Iron ore	75,27	4,6%	-0,2%	22,2%	5,6%
Freight rates Baltic Dry Index	1106	-0,7%	-19,3%	-25,1%	-19,0%
Currencies					
EUR/ USD	1,2244	-1,7%	1,7%	5,9%	2,1%
EUR/ GBP	0,8872	1,3%	0,0%	0,7%	-0,1%
EUR/ JPY	132,97	-2,7%	-2,6%	0,7%	-1,5%
EUR/ CHF	1,1489	-1,0%	-2,3%	-0,6%	-1,8%
USD/ CNY	6,2966	0,0%	-3,0%	-5,1%	-3,2%
USD/ JPY	109,33	-0,1%	-3,3%	-4,1%	-3,0%
USD/ GBP	0,72	3,2%	-1,7%	-4,8%	-1,9%

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