ECONOMIC SITUATION AND STRATEGY January 25, 2019

Sector allocation in the economic cycle

Certainly, there is no simple formula that will enable active asset managers to beat the market in the long haul. However, there are some basic rules one should heed for long-term success. They include not seeking risk in weak economic phases, but rather reducing risky positions. Risk-taking is not rewarded on the financial markets in downswings and recessions; that makes economic sense and can be clearly demonstrated empirically. Besides the question of tactical allocation, another parameter is very relevant for investment success. That concerns the selection of individual stocks in the framework of the economic cycle. Different companies exhibit very different "sensitivities" regarding the macroeconomic trend. For some, earnings and sales development is largely independent of the economic cycle, while for others, it correlates almost exactly with the cycle. It is therefore only logical to bet on companies that are not cyclically sensitive in downswing phases, while cyclical stocks should be overweighted in upswings.

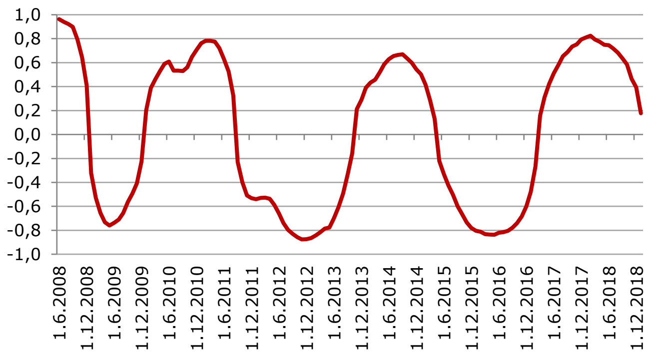
What goes for individual companies should also apply to whole sectors. Even though sectors are not as homogeneous as often assumed, basic connections between economic trend and company stock performance should also be observable at the sectoral level. If so, that would suggest investors should take advantage of those connections.

However, though sounding comparatively trivial at first, this cannot be accomplished entirely "by the way" due to the data situation. People always simply talk of "upswings" or "downswings," but how do we actually know exactly what phase of the economic cycle we are in at the moment. Where do we get the data for a historical analysis? And even if there were an "official" history of upswings and downswings, can investors assume that they would also have access to precisely this source in real time? There is no clear answer to any of these questions. For the United States, there is a quasi-official assessment as to when the economy is in a recession. However, the quality of that assessment may well be doubted, and it is always made retrospectively and thus cannot be used for a real-time analysis. Moreover, only US data are involved, while a European counterpart or (better yet) a quasi-official global model of upswings and downswings do not exist. Given this lack of data, many asset managers help themselves by using a substitute such as the global purchasing manager index and determining the nature and time of economic phases based on simple rules. That is also not trivial, since such a time series is comparatively volatile and therefore must be smoothed before conclusions can be derived about what phase the current economic situation may be assigned to. Moreover, the nature of the smoothing operation is subject to a certain arbitrariness. Finally, there is no such thing as "the" time series from which the state of the economy can be derived.

We have therefore considered whether there might be another way to approach this topic. And we have found one right here – in an inertly modeled version of our business cycle model. It very robustly evaluates an especially high number of time series of global economic relevance and links them into an index. The model tends to range between -1 and +1, but may overshoot those values in extreme phases. It is so designed that values around zero are compatible with a neutral global economic situation.

Since the model is hardly subject to short-term fluctuations due to the high number of time series used and its curve resembles a sine wave, the model is almost ideal-typical for dividing economic phases. We have proceeded as follows. We assign phases in which the indicator is above zero and rising to the boom category. We classify falling phases with a plus sign as downswings, and falling phases with minus signs as recessions. Rising phases with minus signs are consequently counted as upswings.

M.M.Warburg business cycle model



The performance of sectors can now be assigned to these phases. Here, we determine on a monthly basis the performance of 18 STOXX sectors and calculate the average. In a second step, we determine the monthly performance of each sector relative to the average of all sectors. For these relative monthly returns on a sectoral basis, we then calculate the average over the period from 2008 to 2019 for each economic phase. We then rank the phase-specific relative performance thus obtained as shown in the table below.

Rank of the relative performance of sectors in the business cycle

	Upswing	Boom	Downswing	Recession
Automobile	3	1	9	13
Banks	6	16	17	9
Basic reources	1	4	18	16
Chemicals	8	3	13	8
Construction	2	14	16	5
Financial services	13	2	14	4
Food and beverage	17	9	3	1
Health care	15	11	1	12
Industry	4	7	15	6
Insurance	7	6	12	3
Media	10	12	4	14
Oil and gas	11	15	11	15
Pers. household goods	9	10	6	2
Retail	16	18	5	10
Technology	5	8	10	11
Telecoms	12	17	2	18
Travel and leisure	14	5	7	7
Utilities	18	13	8	17

The results are almost so textbook and ideal-typical that it may be hard to believe. In upswings, one should primarily hold basic resources, construction, and automobile stocks, and in booms likewise automobiles but also financial services and chemicals. In downswings, defensive stocks like pharmaceuticals, telecoms, and food exhibit the best performance. In recessions, one should likewise rely on food stocks but also on personal household goods and insurance stocks. The resulting outperformance may well amount to half a percentage point or more per month. Our model is currently in downswing mode and is about to reach the recession segment. However, our results show that investors can prepare well even for this phase with appropriate sectoral allocation.

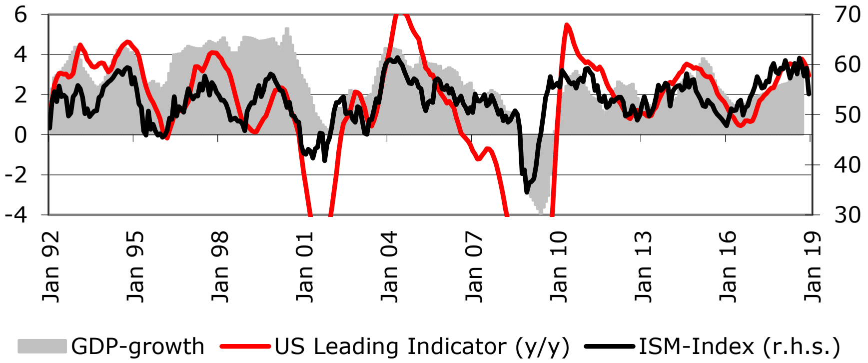
Weekly Outlook for January 28 – February 1, 2019

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Release
DE. GfK consumption climate	10.5	10.6	10.6	10.4	10.4	10.6	January 30
DE. Import prices, m/m	0.4%	1.0%	-1.0%	-0.7%			January 30
DE. Inflation rate, m/m – flash	0.4%	0.2%	0.1%	0.1%	-0.9%		January 30
DE. Inflation rate, y/y – flash	2.3%	2.5%	2.3%	1.7%	1.5%		January 30
DE. Retail sales, m/m	-0.3%	0.1%	1.4%	0.7%			January 31
DE. Unemployed, change in 000s	-24	-12	-16	-14	-15		January 31
DE. Unemployment rate	5.1%	5.1%	5.0%	5.0%	5.0%		January 31
DE. PMI, manufacturing – final	53.7	52.2	51.8	51.5	49.9		February 1
EUR19: M3 money supply, y/y	3.6%	3.9%	3.7%	3.8%			January 28
EUR19: Business climate	1.21	1.01	1.04	0.82	0.71		January 30
EUR19: Economic confidence	110.9	109.7	109.5	107.3	106.1		January 30
EUR19: Consumer confidence – final	-6.2	-5.9	-6.6	-8.3	-7.9		January 30
EUR19: Industrial confidence	4.7	3	3.4	1.1	0.8		January 30
EUR19: Unemployment rate, s.a.	8.0%	8.0%	7.9%	7.9%			January 31
EUR19: PMI, manufacturing – final	53.2	52.0	51.8	51.4	50.5		February 1
EUR19: Inflation rate, y/y – flash	2.1%	2.2%	1.9%	1.6%	1.5%		February 1
EUR19: Core inflation rate, y/y – flash	0.9%	1.1%	1.0%	1.0%	1.0%		February 1

MMWB estimates in red

Chart of the Week: Second month of shutdown

USA: GDP growth and leading indicators



The partial government shutdown in the United States has entered its second month with no end in sight. Yesterday, Republicans and Democrats voted on two competing bills to end the shutdown, but neither gained the necessary majority. This raises the question of the macroeconomic consequences for the United States. Because of the shutdown, about 800,000 government workers are on furlough or working without pay. That represents an income loss of about USD 70 billion and hence 0.3 percentage points in annualized growth. However, there are an estimated four million more jobs in the private sector that are tied at least partly to the government and represent an annualized growth loss of 0.3 percentage points. That need not be a big deal, however, because the setback should be made up again quickly, provided government operations resume soon. One could thus continue to expect significantly positive growth in the first quarter of 2019. However, if the shutdown goes on longer, the effects will increase exponentially, since more and more sectors will be affected. Consider security workers in airports, for example. They might seek other employment if their pay should continue to be withheld, and that would impact airport operation on a large scale and for a long time. This reflection also applies to many other essential government facilities. The danger thus lies in a protracted shutdown, whereas the effects are likely to be small in the short term.

Market Data Overview

Stock marktes	As of 25.01.2019 14:04	Change versus 18.01.2019 -1 week	24.12.2018 -1 month	24.10.2018 -3 months	24.01.2018 -1 year	31.12.2018 YTD
Dow Jones	24553	-0,6%	12,7%	-0,1%	-6,5%	5,3%
S&P 500	2642	-1,1%	12,4%	-0,5%	-6,9%	5,4%
Nasdaq	7073	-1,2%	14,2%	-0,5%	-4,6%	6,6%
DAX	11303	0,9%	6,3%	1,0%	-15,7%	7,0%
MDAX	23841	2,9%	10,4%	2,4%	-12,2%	10,4%
TecDAX	2661	3,1%	9,4%	5,1%	0,1%	8,6%
EuroStoxx 50	3155	0,6%	6,1%	0,8%	-13,4%	5,1%
Stoxx 50	2873	-0,4%	4,6%	-0,6%	-11,9%	4,1%
SMI (Swiss Market Index)	8950	-0,8%	6,3%	2,6%	-6,3%	6,2%
Nikkei 225	20774	0,5%	3,0%	-6,0%	-13,2%	3,8%
Brasilien BOVESPA	97677	1,6%	14,0%	17,6%	16,7%	11,1%
Russland RTS	1185	0,8%	10,8%	5,4%	-8,3%	11,2%
Indien BSE 30	36026	-1,0%	1,6%	5,9%	-0,4%	-0,1%
China Shanghai Composite	2602	0,2%	3,0%	-0,1%	-26,9%	4,3%
MSCI Welt (in €)	1983	-0,4%	10,6%	0,1%	-3,2%	6,3%
MSCI Emerging Markets (in €)	1019	0,7%	7,6%	7,4%	-11,8%	6,6%
Bond markets						
Bund-Future	165,32	125	196	514	492	178
Bobl-Future	132,93	26	57	149	175	41
Schatz-Future	111,91	0	2	-8	-1	-3
3 Monats Euribor	-0,31	0	0	1	2	0
3M Euribor Future, Dec 2017	-0,25	-1	-2	-11	-39	0
3 Monats $ Libor	2,76	0	-5	26	101	-4
Fed Funds Future, Dec 2017	2,46	-2	2	-36	17	0
10 year US Treasuries	2,73	-5	0	-39	8	5
10 year Bunds	0,18	-3	-7	-21	-34	-6
10 year JGB	0,00	-1	-4	-13	-8	0
10 year Swiss Government	-0,21	1	3	-21	-19	3
US Treas 10Y Performance	581,61	0,6%	1,0%	4,7%	2,0%	0,2%
Bund 10Y Performance	634,60	0,9%	1,2%	2,6%	5,5%	1,2%
REX Performance Index	489,06	0,3%	0,4%	0,9%	2,2%	0,3%
US mortgage rate	0,00	0	0	0	0	0
IBOXX AA, €	0,81	-7	-7	2	13	-7
IBOXX BBB, €	1,95	-6	-11	18	76	-11
ML US High Yield	7,25	9	-86	39	117	-76
JPM EMBI+, Index	823	0,8%	4,1%	5,6%	-0,9%	4,0%
Convertible Bonds, Exane 25	6997	0,0%	1,7%	-1,9%	-6,5%	1,5%
Commodities						
CRB Spot Index	411,35	0,0%	0,2%	-1,0%	-6,2%	0,5%
MG Base Metal Index	298,97	-0,3%	0,8%	-4,3%	-16,4%	1,5%
Crude oil Brent	60,74	-3,1%	12,1%	-21,0%	-13,2%	14,3%
Gold	1284,07	0,0%	1,5%	4,4%	-5,1%	0,2%
Silver	15,33	-0,6%	3,8%	4,3%	-11,8%	-1,2%
Aluminium	1873,25	0,6%	-1,3%	-5,3%	-16,6%	0,6%
Copper	5894,00	-2,2%	-0,6%	-4,8%	-17,1%	-0,9%
Iron ore	74,61	-0,7%	8,5%	3,6%	-2,1%	7,8%
Freight rates Baltic Dry Index	939	-15,6%	-26,1%	-39,3%	-21,8%	-26,1%
Currencies						
EUR/ USD	1,1342	-0,5%	-0,6%	-0,4%	-8,2%	-0,9%
EUR/ GBP	0,8665	-1,6%	-3,4%	-1,8%	-0,5%	-3,5%
EUR/ JPY	124,63	-0,1%	-1,5%	-2,9%	-7,8%	-1,0%
EUR/ CHF	1,1308	-0,2%	0,0%	-0,6%	-3,6%	0,3%
USD/ CNY	6,7568	-0,3%	-2,1%	-2,7%	6,1%	-1,7%
USD/ JPY	109,65	-0,1%	-0,7%	-2,3%	0,4%	0,1%
USD/ GBP	0,76	-1,4%	-2,8%	-1,3%	8,7%	-2,7%

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