M.M. WARBURG & CO
BANK

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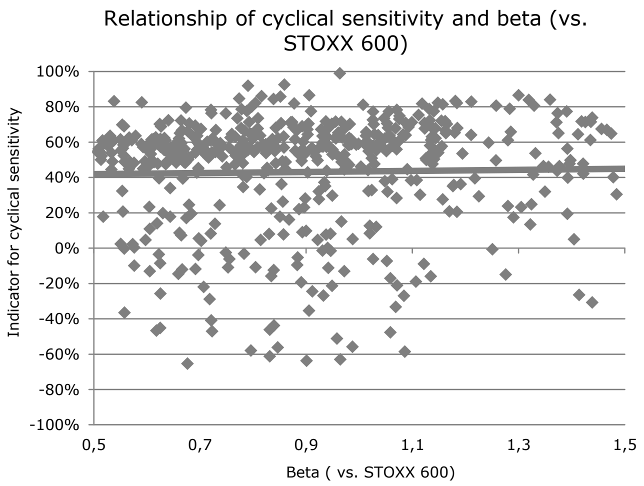
Cyclical sensitivity of stocks as selection criterion

Our regular readers know our investment philosophy. We believe active management adds value at both allocation and selection levels. However, we also claim that active management in selection can only be productive after costs if asset managers are willing to depart significantly from the benchmark structure. If not, they track the benchmark (sometimes unintentionally) so much that it becomes impossible to beat it after costs. Since that is actually the case for many active funds, the often-observed underperformance of publicly offered mutual funds leads to the wrong conclusion that markets are highly efficient and active management is necessarily doomed to failure. However, if one seriously wants to battle the markets in the selection process, rigorous criteria and methods are necessary. In addition to a thorough analysis of key financial figures, they include a deep understanding of individual business models and company-specific competitive situations.

Another key consideration for selecting a stock is also whether it has a realistic chance of outperforming in the relevant macroeconomic environment. If the world economy is in the midst of a major crisis, for example, portfolio managers will do themselves no favor by accumulating cyclically sensitive stocks in their portfolios. The same applies vice versa for a strong upswing. In an upswing, stocks that benefit from increasing economic activity and rising demand for goods and products perform particularly well. But how does one know whether a stock should be classified as cyclical or non-cyclical? In many cases, this is more or less obvious. Even stock market neophytes are aware that, for example, chemical giant BASF is a typical upswing candidate, while it is hard to go wrong with a brewery like Anheuser-Busch even in a downswing – people are going to drink either way. But taking, for example, the MSCI World index with its 1,641 stocks as the investment universe can obscure matters somewhat regarding the cyclical sensitivity of stocks. People therefore like to use the beta as the "estimator" of a stock's cyclicity. It describes how strongly a stock fluctuates as a function of the overall market.

Our investigations now suggest that this approach is problematic. We have used a statistical model to determine the connection between the real-time data of our business cycle model and the performance of stocks in the STOXX 600 index. This shows that a stock's cyclical sensitivity is correlated with its beta only to a small extent, so taking a closer look is advisable. For example, according to our calculations anyone betting on a continuing economic upswing should keep an eye on stocks like Covestro or ABB, even though their betas are not very high. But pessimists about future economic development would be well served, for example, by stock like BT Group or Siemens Healthineers.



However, our calculations can also be used to make statements about the cyclicity of sectors. T

o that end, we have determined the average of the cyclical sensitivities of all stocks in each sector at the industrial group level. The result shows that, for example, telecom equipment firms are the ideal candidate for downswings.

On the other hand, those who expect an economic upswing should populate their portfolios with industrial conglomerates and aluminum producers. For the undecided, the broadcast and entertainment sector is not a bad choice, since the positive and negative effects of cyclical development offset each other there from a statistical perspective. Of course, it is always a good idea not to put all one's eggs in a single basket. Diversification is a basic prerequisite for long-term success. Good managers will not gear their entire portfolio to an upswing or a downswing. Moreover, it is never possible to be absolutely certain that one's economic expectations for the months ahead are correct. Finally, one should consider that different regions may find themselves in different cyclical phases. Consequently, we have only evaluated European economic indicators in this analysis of European stocks, for example. In our opinion, doing without such information is like giving away valuable performance potential.

Sector at industry group level	Sensitivity
Telecom. Equipment	-42%
Home Improvement Ret.	-10%
Retail REITs	-9%
Spec.Consumer Service	-4%
Broadcast & Entertain	-1%
Broadline Retailers	3%
Recreational Products	4%
Multiutilities	7%
Railroads	8%
Fixed Line Telecom.	12%
Gas Distribution	14%
Apparel Retailers	15%
Diversified REITs	18%
Water	21%
Gambling	23%
Computer Hardware	23%
Food Retail,Wholesale	24%
Publishing	26%
Specialty Retailers	26%
Oil Equip. & Services	27%
Nondur.Household Prod	29%
Industrial Suppliers	30%
Media Agencies	32%
Ind. & Office REITs	32%
Mobile Telecom.	33%
Travel & Tourism	33%
Pharmaceuticals	34%
Alt. Electricity	35%
Clothing & Accessory	35%
Renewable Energy Eq.	35%
Medical Supplies	36%
Medical Equipment	36%
Exploration & Prod.	36%
Food Products	37%
Marine Transportation	37%
Banks	37%
Aerospace	39%
Brewers	40%
Airlines	40%
Internet	40%
Tobacco	41%
Delivery Services	41%
Recreational Services	41%
Con. Electricity	42%
Business Support Svs.	43%
Tires	43%
Personal Products	43%
Healthcare Providers	44%
Real Estate Hold, Dev	44%

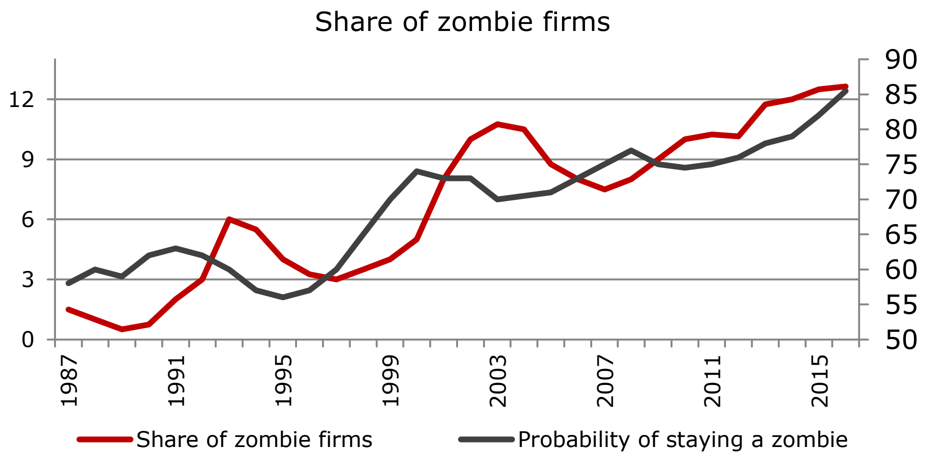
Sector at industry group level	Sensitivity
Software	45%
Heavy Construction	45%
Restaurants & Bars	47%
Insurance Brokers	47%
Automobiles	47%
Investment Services	48%
Defense	51%
Home Construction	51%
Biotechnology	51%
Life Insurance	51%
Hotels	52%
Soft Drinks	52%
Commodity Chemicals	53%
Asset Managers	53%
Farm Fish Plantation	54%
Toys	54%
Prop. & Casualty Ins.	54%
Containers & Package	54%
Footwear	54%
Reinsurance	54%
Paper	55%
Gold Mining	55%
Forestry	56%
Distillers & Vintners	56%
Trucking	57%
Specialty Chemicals	57%
Mortgage Finance	57%
Full Line Insurance	59%
Computer Services	59%
Industrial Machinery	59%
Building Mat.& Fix.	60%
Iron & Steel	60%
Auto Parts	60%
Transport Services	60%
Electronic Equipment	61%
Nonferrous Metals	61%
Financial Admin.	61%
Bus.Train & Employmnt	62%
Dur. Household Prod.	63%
Investment Trusts	64%
Integrated Oil & Gas	65%
Specialty Finance	68%
Electrical Equipment	69%
General Mining	69%
Semiconductors	69%
Comm. Vehicles,Trucks	75%
Consumer Electronics	76%
Aluminum	77%
Divers. Industrials	79%

Weekly outlook for October 1-5, 2018

	Apr.	Mar.	June	July	Aug.	Sept.	Release
DE: Retail sales, m/m	1.4%	-1.4%	0.9%	-0.4%	0.3%		October 1
DE: PMI, manufacturing - final	58.1	56.9	55.9	56.9	55.9	53.9	October 1
DE: PMI, services - final	53.0	52.1	54.5	54.1	55.0	56.4	October 3
DE: New orders, m/m	-1.5%	2.6%	-3.9%	-0.9%	0.4%		October 5
DE: New orders, y/y	0.9%	4.7%	-0.8%	-0.9%	-3.7%		October 5
EUR19: Unemployment rate, sa	8.4	8.2	8.2	8.2	8.1		October 1
EUR19: PMI, manufacturing - final	56.2	55.5	54.9	55.1	54.6	53.3	October 1
EUR19: Producer prices, m/m	0.0%	0.8%	0.4%	0.4%	0.2%		October 2
EUR19: Producer prices, y/y	1.9%	3.0%	3.6%	4.0%	3.8%		October 2
EUR19: PMI, services - final	54.7	53.8	55.2	54.2	54.4	54.7	October 3
EUR19: Retail sales, m/m	-0.2%	0.3%	0.3%	-0.2%	0.2%		October 3

MMWB estimates in red

Chart of the Week: Low inflation and zombie firms



Source: Banerjee R. und Hofmann B. (2018): "The rise of zombie frms: causes and consequences", BIS Quarterly Review

"The rise of zombie firms" is the title of a recent study from the Bank for International Settlements (BIS). Zombie firms are unable to cover debt servicing costs from current profits for extended periods and are thus kept alive "artificially" by renewed lending from banks. The BIS study shows that the proportion of zombie firms among the listed companies from 14 large industrialized countries rose significantly from about 1% in 1987 to 12% in 2016. Even on a narrower definition, their share increased to about 6%. This development has been driven by fact that those companies have been supplied with loans for ever longer periods instead of becoming profitable again or leaving the market. A weak banking sector is an often-cited reason. To avoid writing off loans, banks are choosing to extend their terms. Another factor, previously not in the forefront, is far more important, and that is low interest rates. They take the pressure off banks to clean up their balance sheets and thus encourage them to make loans "evergreen." But what are the consequences for the national economy of the increased proportion of zombie firms? For one thing, such firms are less productive, so when their proportion increases, then the productivity of the entire economy decreases, other things being equal. For another, the loans granted to zombie firms cannot be granted a second time. Consequently, lending to healthy, more productive companies and their investment activities are also constrained. This shows that low interest rates do not have solely positive effects on business investment, but rather cause misallocations of capital that slow productivity growth in the longer term.

Market data overview

Stock marktes	As of 28.09.2018 11:46	Change versus 21.09.2018 -1 week	27.08.2018 -1 month	27.06.2018 -3 months	27.09.2017 -1 year	29.12.2017 YTD
Dow Jones	26440	-1,1%	1,5%	9,6%	18,3%	7,0%
S&P 500	2914	-0,5%	0,6%	7,9%	16,2%	9,0%
Nasdaq	8042	0,7%	0,3%	8,0%	24,6%	16,5%
DAX	12354	-0,6%	-1,5%	0,0%	-2,4%	-4,4%
MDAX	26073	-1,0%	-3,8%	0,4%	1,4%	-0,5%
TecDAX	2839	0,8%	-6,3%	4,3%	18,2%	12,2%
EuroStoxx 50	3425	-0,2%	-0,9%	0,8%	-3,7%	-2,2%
Stoxx 50	3089	0,7%	0,2%	1,8%	-2,1%	-2,8%
SMI (Swiss Market Index)	9096	1,1%	0,0%	7,0%	0,0%	-3,1%
Nikkei 225	24120	1,0%	5,8%	8,3%	19,0%	6,0%
Brasilien BOVESPA	80000	0,7%	2,7%	13,3%	8,4%	4,7%
Russland RTS	1182	2,8%	9,0%	5,1%	4,9%	2,4%
Indien BSE 30	36091	-2,0%	-6,7%	2,5%	15,8%	6,0%
China Shanghai Composite	2821	0,9%	1,5%	0,3%	-15,7%	-14,7%
MSCI Welt (in €)	2189	0,9%	0,7%	5,6%	11,5%	7,6%
MSCI Emerging Markets (in €)	1051	1,4%	-1,4%	0,1%	-1,3%	-6,2%
Bond markets						
Bund-Future	158,06	-94	-458	-424	-296	-362
Bobl-Future	130,70	-19	-136	-145	-50	-91
Schatz-Future	111,77	-4	-19	-33	-37	-20
3 Monats Euribor	-0,32	0	0	1	1	1
3M Euribor Future, Dec 2017	-0,30	0	-1	-1	-10	0
3 Monats $ Libor	2,39	1	7	5	105	69
Fed Funds Future, Dec 2017	2,26	0	2	9	66	0
10 year US Treasuries	3,04	-3	18	21	73	63
10 year Bunds	0,47	1	9	15	1	5
10 year JGB	0,13	-1	3	9	8	8
10 year Swiss Government	0,03	3	13	7	5	16
US Treas 10Y Performance	555,59	0,0%	-1,9%	-1,8%	-4,8%	-4,4%
Bund 10Y Performance	609,80	-0,7%	-1,4%	-1,3%	0,8%	0,4%
REX Performance Index	481,28	-0,3%	-0,7%	-0,9%	-0,2%	0,1%
US mortgage rate	0,00	0	0	0	0	0
IBOXX AA, €	0,88	7	14	11	11	20
IBOXX BBB, €	1,74	8	11	12	43	51
ML US High Yield	6,50	-1	1	-2	53	35
JPM EMBI+, Index	797	0,8%	1,5%	1,7%	-4,6%	-4,7%
Convertible Bonds, Exane 25	7433	0,0%	-0,1%	0,9%	2,6%	0,5%
Commodities						
CRB Spot Index	416,50	0,5%	0,9%	-5,0%	-2,9%	-3,7%
MG Base Metal Index	312,28	0,1%	0,4%	-8,9%	-6,1%	-13,0%
Crude oil Brent	82,06	4,1%	7,7%	5,4%	41,4%	23,2%
Gold	1183,59	-1,2%	-2,2%	-5,7%	-8,1%	-9,2%
Silver	14,26	-0,6%	-4,2%	-11,9%	-15,1%	-16,2%
Aluminium	2011,50	-2,5%	-3,0%	-8,0%	-4,5%	-10,8%
Copper	6182,00	-3,1%	1,5%	-7,6%	-3,3%	-14,2%
Iron ore	68,69	0,0%	1,9%	5,9%	-2,7%	-3,6%
Freight rates Baltic Dry Index	1524	7,9%	-10,2%	16,4%	6,6%	11,6%
Currencies						
EUR/ USD	1,1597	-1,4%	-0,3%	-0,2%	-1,2%	-3,3%
EUR/ GBP	0,8883	-1,1%	-1,9%	0,7%	1,4%	0,1%
EUR/ JPY	131,57	-0,7%	1,9%	2,7%	-0,8%	-2,5%
EUR/ CHF	1,1312	0,7%	-1,0%	-1,9%	-1,2%	-3,3%
USD/ CNY	6,8838	0,4%	1,0%	4,1%	3,6%	5,8%
USD/ JPY	113,38	0,7%	2,1%	2,8%	0,5%	0,6%
USD/ GBP	0,77	0,4%	-1,2%	0,7%	2,6%	3,7%

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