



ECONOMIC SITUATION AND STRATEGY 24. August 2018

How to Profit from Disruptive Enterprises Part I

Disruptive Enterprises are not a strictly 21st century phenomenon. There have always been companies that changed if not revolutionized whole business models and industries with their product and process innovations. One of the classic examples was probably Boulton & Watt who got the steam engine to work reliably and efficiently in 1776. This innovation changed the world as few before or after and kicked off the industrial age. Around the fin de siècle German companies were at the forefront of disruptive innovations. Siemens and AEG, for instance, significantly contributed to making electric appliances and telecommunications household staples around the world while BASF and others used the Haber-Bosch process to revolutionize food production with industrial fertilizers. There are currently unusually many companies that may be classified as disruptive. Amazon and Apple are prime examples for companies whose services and products have to some extent or another dramatically changed our daily lives with massive direct and indirect impact on other companies that either supply them or have been marginalized in the disruption process. A closer look reveals even more companies with disruptive potential. One example is the innovator of payment transactions, Wirecard, and another is Adidas who has taken to 3D printing in manufacturing soles for its shoes. The list could be going on and on as there is really no clear distinction where normal innovation ends and actual disruption begins.

One thing is clear, though, stocks of companies with disruptive potential perform substantially better than the overall market – and clearly they should because disruptive companies typically break new ground in the mar-

ket place where they displace existing providers or produce at much lower costs than the competition. This leads to above-average growth in sales, cash flow, and earnings, which then makes their share prices go up. It thus comes as no surprise that asset managers find disruptive enterprises highly intriguing and that some of them may try to construct portfolios entirely composed of disruptive companies' stocks. While that seems absolutely logical if not outright compelling at first glance it comes with its own pitfalls as things tend to do on the capital markets. It would be no special achievement to just buy stocks of companies that have already been considered disruptive for years as their disruptive potential has probably been largely priced in. After all, there is a good reason why Apple and Amazon stocks have been greatly outperforming broad-based indices like the S&P 500 for years. Even though Apple and Amazon are very likely to perform well going forward, the secret to success in building a successful disruptor stock portfolio is to identify and buy the next Apples and Amazons early on.

There are two competing approaches that may help you come even close to meeting such an ambitious goal. Approach number one is based on using expertise in identifying companies with disruptive potential based on their technological capabilities, extraordinary entrepreneurial vision, and implementation abilities. Approach number two is not based on specific expert knowledge but rather innovative, effective analysis processes and patent data bases to determine the economic potential of inventions as a measure of the company's future disruptive potential.

Economic Situation and Strategy

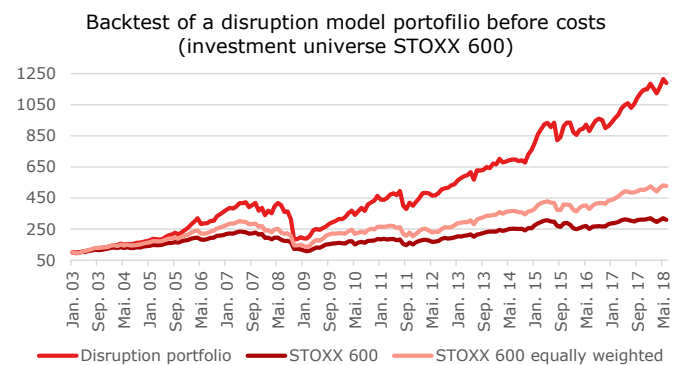
We do not deny that either one of these approaches could in principle be sufficient but they both seem to have systematic problems that make it relatively likely to fail in the endeavor of successfully assembling a portfolio of actual future disruptors. In case of the first approach, we fundamentally doubt that there are individuals who can anticipate highly dynamic entrepreneurial processes over an extended time horizon. Good analysts and investors may have well-founded opinions on whether a company's stock is a bargain or whether the company is operating more profitably than the competition and could service its debt from cash flow even when times get tough. Good analysts and investors should also be able to assess to what extent a company's market position is under competitive pressure. This includes being able to intuit the actual resilience of corporate plans and projections in meetings with the management.

The above actually rather falls under the rubric of static analysis focusing on a company's present situation and immediate future outlook. Looking for companies with major disruptive potential is less about a well documented status quo but future potential deriving from a still inconspicuous technological innovation or entrepreneurial idea. This requires a much more humble approach in our opinion. A fundamentals-based approach would probably yield a rather high failure rate.

The second approach of analyzing, for instance, patent data bases to determine the future economic value of current technological capabilities comes with its own bag of problems. It is not that we reject the validity of such quantitative approaches out of hand. Au contraire: We are even convinced that modern, data-based analyses are relatively good at assessing the import and

technological reach of inventions. However, that is far from determining the specific economic value of an invention for a specific enterprise. On the one hand, even the most ingenious invention is probably not very relevant for the share price of a very large company like Siemens, for example, and, on the other hand, many entrepreneurial decisions and developments have to come together to turn a good idea or technological capability into a truly disruptive enterprise.

That is why we are setting our lever at a different place: Instead of trying to divine the future it seems more reasonable to us to identify companies that already show some signs of disruptive behavior. To this end, we are using statistical methods to identify patterns in time series of fundamental data that are typical for disruptive companies in their early stages.



That means we are using a disruptive data processing approach to identify stocks with disruptive entrepreneurial potential. Since the process is completely algorithmic the value development can be reliably back tested. In part II of this article, we will explain how the process works.

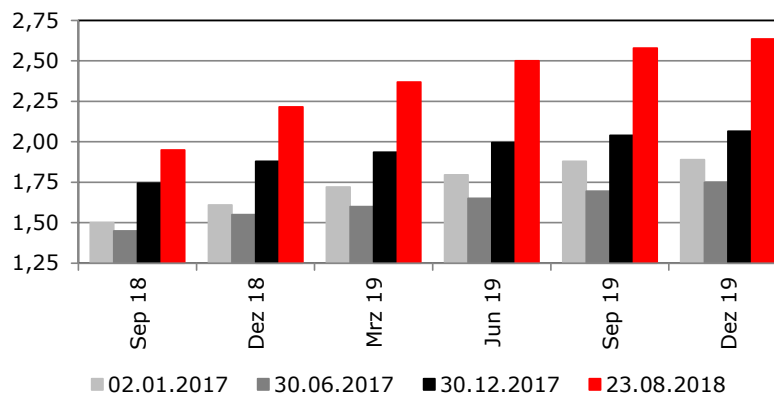
Weekly Outlook for August 27-31, 2018

	Apr	May	June	July	Aug	Sep	Release
DE: Ifo business climate index	102.3	102.3	101.8	101.7	101.9		August, 27
DE: Ifo business expectations	98.7	98.6	98.5	98.2	98.4		August, 27
DE: Ifo situation assessment	106	106.2	105.2	105.3	105.5		August, 27
DE: GfK consumer climate	10.9	10.8	10.7	10.7	10.6	10.7	August, 29
DE: Prelim. inflation, m/m	0.0%	0.5%	0.1%	0.3%	0.1%		August, 30
DE: Prelim. inflation, y/y	1.6%	2.2%	2.1%	2.0%	2.0%		August, 30
DE: Change in unemployed persons in 1000s	-8	-11	-14	-6	-10		August, 30
DE: Unemployment rate	5.3%	5.2%	5.2%	5.2%	5.2%		August, 30
DE: Retails sales, m/m	1.4%	-1.5%	1.2%	0.4%			August, 31
EUR-19: M3, y/y	3.8%	4.0%	4.4%	4.3%			August, 28
EUR-19: Business climate	1.38	1.44	1.38	1.29	1.31		August, 30
EUR-19: Economic confidence	112.7	112.5	112.3	112.1	112.2		August, 30
EUR-19: Consumer confidence, final	0.3	0.2	-0.6	-0.6	-0.5		August, 30
EUR-19: Industry confidence	7.3	6.9	6.9	5.8	6.0		August, 30
EUR-19: Prelim. inflation, y/y	1.3%	1.9%	2.0%	2.1%	2.0%		August, 31
EUR-19: Unemployment rate, sa.	8.4%	8.3%	8.3%	8.2%			August, 31

MMWB estimates in red

Chart of the Week: Growth with Risks

USA: Fed Funds Futures



On Wednesday, the Fed published the minutes of its Federal Open Market Committee (FOMC) meeting held on 31 July to 1 August. Since the Fed had already clearly stated that it will raise interest rates for the third time this year in September, investors mostly focused on the overall economic outlook and, especially, whether the FOMC thinks that the economy is overheating. According to the Fed, the US economy continues to grow vigorously at rates above potential growth. Combined with record low unemployment this suggests further wage and inflation pressure arguing in favor of more rate hikes in quick succession. At the same time, risks increased, too, and the trade conflict with China was an

especially hot topic. The committee members agreed that uncertainties stemming from the conflict may result in companies holding back on capital spending, which may hamper growth. The committee also discussed other potential economic threats including the domestic real estate market and the situation in emerging economies. The overall picture is thus a bit mixed with strong growth and increasing risks. The market reaction to the minutes was correspondingly subdued as the implicit probability of future rate hikes remained virtually unchanged.

Market data overview

	As of 24.08.2018 11:31	17.08.2018 -1 week	23.07.2018 -1 month	Change versus 23.05.2018 -3 months	23.08.2017 -1 year	29.12.2017 YTD
Stock markets						
Dow Jones	25657	0,0%	2,4%	3,1%	17,6%	3,8%
S&P 500	2857	0,2%	1,8%	4,5%	16,9%	6,9%
Nasdaq	7878	0,8%	0,5%	6,1%	25,5%	14,1%
DAX	12372	1,3%	-1,4%	-4,7%	1,6%	-4,2%
MDAX	26764	1,5%	0,9%	0,2%	7,4%	2,1%
TecDAX	2973	3,2%	3,0%	6,3%	31,1%	17,5%
EuroStoxx 50	3426	1,6%	-0,8%	-3,3%	-0,4%	-2,2%
Stoxx 50	3073	0,4%	-0,7%	-2,0%	1,1%	-3,3%
SMI (Swiss Market Index)	9049	0,5%	1,0%	2,9%	1,0%	-3,5%
Nikkei 225	22602	1,5%	0,9%	-0,4%	16,3%	-0,7%
Brasilien BOVESPA	75634	-0,5%	-3,0%	-6,5%	7,3%	-1,0%
Russland RTS	1045	-0,7%	-7,5%	-11,0%	0,0%	-9,5%
Indien BSE 30	38243	0,8%	4,2%	11,3%	21,1%	12,3%
China Shanghai Composite	2729	2,3%	-4,6%	-13,9%	-17,0%	-17,5%
MSCI Welt (in €)	2149	-0,9%	1,8%	2,6%	13,0%	6,0%
MSCI Emerging Markets (in €)	1048	1,0%	-0,6%	-6,3%	-0,5%	-6,1%
Bond markets						
Bund-Future	163,14	-53	104	338	-171	146
Bobl-Future	132,22	-32	35	66	-78	61
Schatz-Future	111,99	-9	2	-4	-25	1
3 Monats Euribor	-0,32	0	0	0	1	1
3M Euribor Future, Dec 2017	-0,29	-1	1	-1	-9	0
3 Monats \$ Libor	2,31	0	-2	-2	99	62
Fed Funds Future, Dec 2017	2,22	1	0	6	82	0
10 year US Treasuries	2,83	-5	-13	-18	66	42
10 year Bunds	0,34	4	0	-16	4	-8
10 year JGB	0,10	1	2	5	6	5
10 year Swiss Government	-0,11	2	-7	-17	4	2
US Treas 10Y Performance	567,26	0,5%	1,3%	1,8%	-3,6%	-2,4%
Bund 10Y Performance	620,74	-0,4%	0,7%	2,2%	1,9%	2,2%
REX Performance Index	485,18	-0,3%	0,1%	0,8%	0,4%	0,9%
US mortgage rate	0,00	0	0	0	0	0
IBOXX AA, €	0,71	6	-7	-11	2	3
IBOXX BBB, €	1,60	5	-1	3	34	37
ML US High Yield	6,50	-5	-9	-4	35	35
JPM EMBI+, Index	786	0,4%	-1,6%	-1,1%	-5,5%	-6,0%
Convertible Bonds, Exane 25	7412	0,0%	0,3%	-0,3%	3,5%	0,2%
Commodities						
CRB Spot Index	412,51	-0,3%	-4,5%	-7,3%	-5,4%	-4,6%
MG Base Metal Index	305,33	1,2%	-3,6%	-12,7%	-8,5%	-14,9%
Crude oil Brent	75,33	4,7%	1,8%	-4,7%	43,7%	13,1%
Gold	1190,00	0,9%	-2,8%	-8,0%	-7,7%	-8,7%
Silver	14,60	-0,5%	-5,3%	-11,0%	-14,2%	-14,2%
Aluminium	2052,75	2,4%	-0,2%	-9,3%	-2,3%	-9,0%
Copper	5967,00	1,3%	-2,1%	-12,8%	-8,7%	-17,2%
Iron ore	67,54	-0,7%	6,0%	1,8%	-9,7%	-5,2%
Freight rates Baltic Dry Index	1709	-0,8%	-0,5%	47,1%	39,9%	25,1%
Currencies						
EUR/ USD	1,1557	1,5%	-1,4%	-1,3%	-2,1%	-3,6%
EUR/ GBP	0,9019	0,7%	1,0%	2,8%	-2,3%	1,6%
EUR/ JPY	128,80	2,4%	-1,1%	0,1%	0,1%	-4,6%
EUR/ CHF	1,1376	0,3%	-2,0%	-1,9%	-0,1%	-2,8%
USD/ CNY	6,8796	0,0%	1,2%	7,7%	3,3%	5,7%
USD/ JPY	111,30	0,7%	0,0%	1,1%	2,1%	-1,2%
USD/ GBP	0,78	-0,5%	2,4%	4,2%	-0,1%	5,6%

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