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## ECONOMIC SITUATION AND STRATEGY

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### Smart performance with smart money

A few weeks ago here, we discussed what an innovative timing model for stocks might look like, one that can identify movements of "smart money" and participate in them. The term refers to the money of investors who have a good nose for and superior knowledge of material facts that cannot be broadly classified yet as public. Our ideas have met with such interest among readers that we would like to consider this topic again, but this time from a different angle. While we were first concerned with using this information to improve the timing of stock purchases and sales, we now want to show how one can actually achieve systematic outperformance with this approach such that a market-neutral strategy could be based on it.

For those who have not read the first publication on this topic, here is a quick summary. We generally assume that publicly available information is processed and reflected in prices in comparatively short order and markets are not as irrational in the medium term as they are often supposed to be. But this also means that price movements that cannot be explained by publicly available information might be especially interesting, since they are an indicator that "smart money" is in play and influencing price development.

This is exactly the basis for our idea now. We use a statistical method and a large number of ratios to calculate at each time a (supposedly) fair price for each stock in the STOXX 600. To each of those, we apply a stock-specific regression model with which we try as far as possible to explain the relevant price trend and identify deviations individually based on available data. As far as possible, we have "intercepted" and solved the statistical problems that typically arise in such time series analyses.

For our data, we rely on the global consensus estimates of analysts for a large number of ratios based on the IBES databank. Our hypothesis is that a stock quoting above its statistically derived fair price should be bought because "smart money" evidently is in play and it would therefore be advisable simply to join them and participate in this development.

The procedure thus resembles a momentum strategy where we do not necessarily buy stocks whose prices have advanced, but rather stocks that have advanced more strongly than would have been expected based on available information. Consequently, it actually makes sense to buy stocks that are already overvalued when their valuation is derived solely from publicly available information. That may seem counterintuitive at first sight, since one should rather invest when the valuation appears low, but here exactly the opposite logic applies. Apparently, what happens in such situations is that publicly available information simply is not a sufficient basis for conclusively estimating valuation. It is rather smart money that points the way, which is quite compatible with the efficient market hypothesis, since it is precisely the knowledge and deliberations of these investors that make the market "search-and-discover process" into an efficient information-processing tool. It seems we

have managed by statistical means to render some of these movements visible and participate in them. However, our analysis also shows that the question on which misvaluations one should buy or sell is of considerable importance.

Overall, it turns out that stocks should be bought from the standpoint of performance when they are overvalued according to the regression model by about 15% and should be sold when they fall below that threshold or rise to an overvaluation of more than 25% - as that is where the danger exists of exaggeration and hence correction. On the other hand, systematically buying stocks quoting significantly below fair value is like a "license to destroy money."

We should perhaps clearly reiterate that this method is not concerned with identifying prospective performance potential based on fundamental considerations, but rather with ferreting out at the leading edge those stocks that have recently shown conspicuously good performance even though, for example, estimates of earnings, cash flows, or revenues do not show the slightest peculiarities. Because of its rather short-term view, this approach is also suitable as a timing model.

The question we now have raised is whether this approach can be adapted in a way that entire portfolios can be managed and ideally with such constant outperformance that even a market-neutral strategy could be derived from it. It is clear that the "original" timing model would not be suitable for this purpose because the settings there are selected so that maximum performance can be achieved. That sounds enticing at first, but there's no joy without sorrow. The price of high performance is paid in the form of very high turnover and less constant outperformance. However, in a market-neutral fund aspiring to achieve an absolute return target, highly constant outperformance and manageable turnover would be the more critical considerations. The question therefore arises whether the basic idea of the smart money model can be changed so that these goals can also be achieved. From a theoretical standpoint, that would have to be the case. Financial researcher Richard Grinold<sup>1</sup> already pointed out in 1989 in a publication still much heeded today that the quality of a portfolio, the associated performance, and especially the constancy of outperformance is determined by a small number of factors. Viewed strictly, the information ratio, which describes the relation between the constancy and extent of outperformance and is thus a good measure of whether a strategy is suitable as an absolute return strategy, can only be estimated by means of two factors. One is the information coefficient. It describes how good the forecasts are that the model or the portfolio makes on average. Mathematically, the information coefficient can be derived from the "hit ratio." The more often decisions have proven correct in retrospect, the higher the hit ratio is. From our calculations, we know the hit ratio of our smart money model is comparatively high, so a "green light" can be given from this perspective. The other im-

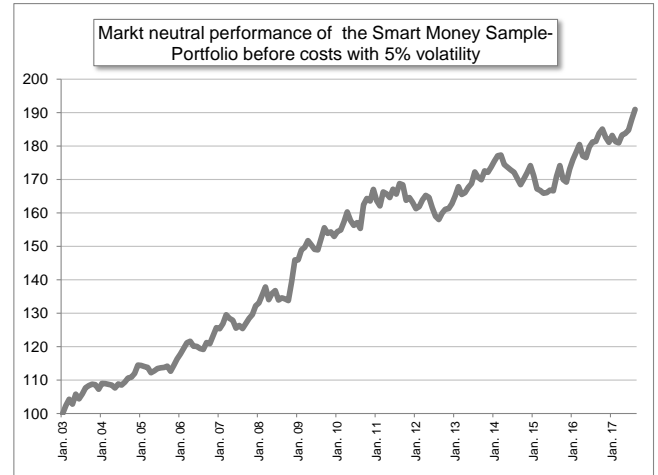
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<sup>1</sup> Grinold 1989: "The fundamental law of active management," *The Journal of Portfolio Management*, Vol. 15, No. 3, pp .30-37.

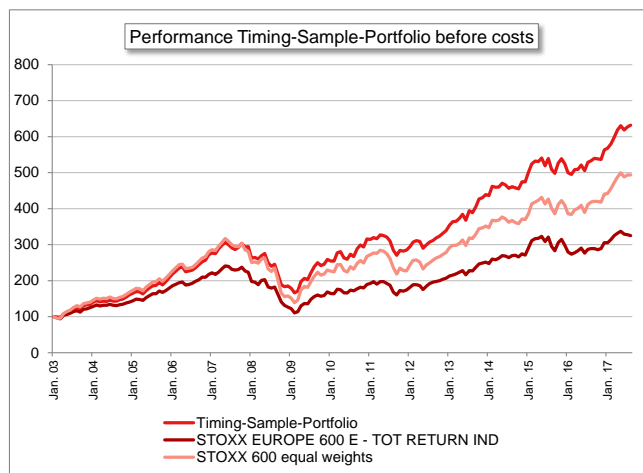
portant factor is the number of decisions made within a period. Here, the advantage of our strategy is especially clear, since a very large universe of stocks can be analyzed with our strategy because it is a computer-based approach. Moreover, this analysis can be performed more frequently, since the technology imposes no limits. From a theoretical perspective, our smart money approach has what it takes to function in a market-neutral construction. But is this also confirmed by back-calculation?

The answer is clearly affirmative. We have made the following changes to the timing model originally presented. To reduce the number of transactions, we have significantly increased the number of stocks and their retention time in the portfolio by already buying stocks as soon as they are only slightly above their statistically derived fair value; stocks are sold when they either fall below fair value or become overvalued by more than 30%. These measures not only reduce the number of transactions, but also increase the constancy of outperformance to the same extent. Absolute performance necessarily declines since the strategy is diluted to a certain degree, but achieving the target each year is more important in a market-neutral strategy with an absolute return target than significantly overattaining the target on average over many years.

The resulting performance of the market-neutral portfolio (smart money portfolio on the long side and complete hedge by way of a sold future on the short side) with about 5% volatility shows extraordinarily good performance before costs. Taking suitable measures in the portfolio design (decreasing country and sector exposures) can further reduce volatility, but at the cost of poorer performance. Moreover, it must be clearly stated that part of the good performance is not directly due to the selection process, but is simply the result of a small cap effect. In the period considered, small caps performed significantly better than large caps, but the latter clearly dominate the index. Since our approach necessarily takes small caps more strongly into account by giving all stocks equal weighting, we benefit from that situation. For this reason, in the chart below, we have also shown the performance of a portfolio in which all stocks in the STOXX 600 are equally weighted, and our portfolio also beats that one.



This proves in principle that our smart money model could be used to manage even a complex, market-neutral portfolio that offers the chance of a positive return even in heavily negative stock market phases because it can, completely detached from stock market development, achieve autonomous performance and hence a real alpha. This ability should continue to become more important in the coming years, since the bond market is likely to drop out more or less as a source of performance and the stock market will presumably no longer achieve the per annum returns observed on average in the last ten years.

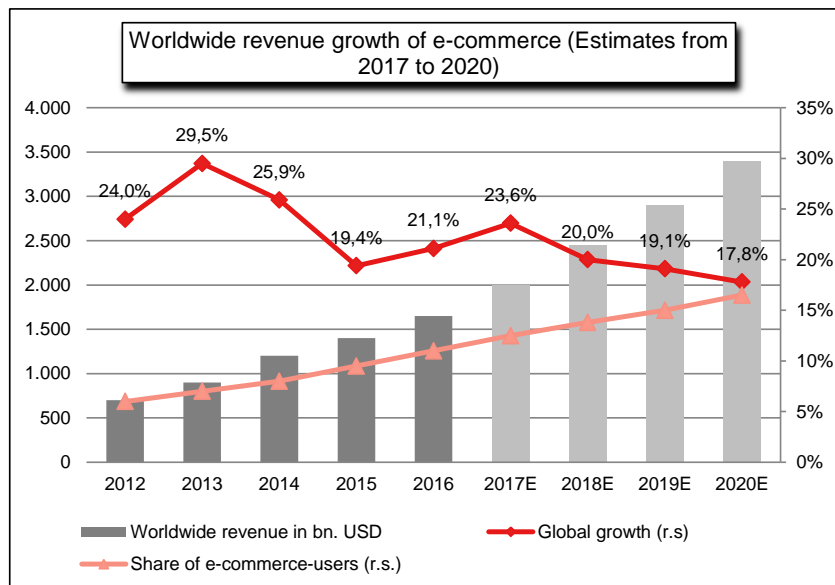


Weekly outlook for November 13-17, 2017

	June	July	Aug.	Sept.	Oct.	Nov.	Release
DE: ZEW economic expectations	18.6	17.5	10	17	17.6	17.4	November 14
DE: ZEW current conditions	88	86.4	86.7	87.9	87	87.3	November 14
DE: Consumer prices, m/m, final	0.2%	0.4%	0.1%	0.1%	0.0%		November 14
DE: Consumer prices, y/y, final	1.6%	1.7%	1.8%	1.8%	1.6%		November 14
DE: Core inflation, m/m, final	0.3%	0.5%	0.1%	-0.1%	0.0%		November 14
DE: Core inflation, y/y, final	1.6%	1.7%	1.6%	1.5%	1.4%		November 14
EUR19: Industrial production, m/m	-0.6%	0.3%	1.4%	-0.9%			November 14
EUR19: Industrial production, y/y	2.7%	3.7%	3.5%	2.9%			November 14
EUR19: Consumer prices, y/y, final	1.3%	1.3%	1.5%	1.5%	1.4%		November 16
EUR19: Core inflation rate, y/y, final	1.1%	1.2%	1.2%	1.1%	1.0%		November 16
	Q1 17		Q2 17		Q3 17		
DE: GDP, q/q, s.a.	0.7%		0.6%		0.6%		November 14
DE: GDP, y/y, s.a.	1.9%		2.1%		2.4%		November 14
EUR19: GDP, q/q, s.a.	0.5%		0.7%		0.6%		November 14
EUR19: GDP, y/y, s.a.	2.0%		2.3%		2.5%		November 14

MMWB estimates in red

Chart of the Week: Unbridled momentum in e-commerce



Electronic commerce has grown rapidly in recent years. The global e-commerce market grew at a rate of 21% (on a USD basis) last year alone. The emerging economies showed the strongest growth. For example, the Alibaba Group, an internet giant from China, generates five times as much sales on its Singles Day, now the world's biggest online shopping day, than all US online companies together do on Cyber Monday, their version of Singles Day. Moreover, global growth rates of more than 20% are a realistic prospect in the next few years. Analysts estimate that the emerging countries will continue to drive future growth. China is expected to achieve rates of 30% p.a. or more, and India rates above 40%. As more developed markets, Europe and Japan will presumably expand more slowly at about 10% p.a. Growth rates for e-commerce should also remain double-digit in Germany. But what are the causes of this dynamic growth? For one thing, it is easier to compare products on the internet and the expense of ordering online is much lower compared with bricks-and-mortar shopping, while

delivery to customers is becoming faster. For another, bills for goods can be paid easily today with a smart phone, tablet, or sometimes even a fingerprint. In addition, more and more purchases are being made with mobile devices by customer on the go. Many online vendors are already generating more than 50% of their sales this way. And the industry is staying innovative with virtual digital assistants or smart speakers like the Amazon Echo. The system is still in the beginning phase, but it has the potential to achieve a significant share of online orders in the years ahead. However, the strong growth of e-commerce is affecting bricks-and-mortar business. Operators of shopping centers are one of the main groups of businesses suffering from e-commerce. According to a recent analysis by Credit Suisse, about 20%-25% of major shopping centers in the United States are going to close in the next five years. But the clothing business is affected even more, with 55% of outlets expected to close.



	As of	Change versus			
	13.11.2017 13:44	06.11.2017 -1 week	10.10.2017 -1 month	10.08.2017 -3 months	30.12.2016 YTD
<b>Stock markets</b>					
Dow Jones	23422	-0,5%	2,6%	7,2%	18,5%
S&P 500	2582	-0,3%	1,2%	5,9%	15,3%
Nasdaq	6751	-0,5%	2,5%	8,6%	25,4%
DAX	13012	-3,4%	0,5%	8,3%	13,3%
MDAX	26239	-2,6%	1,6%	6,6%	18,3%
TecDAX	2463	-5,0%	-1,4%	10,3%	36,0%
EuroStoxx 50	3558	-3,4%	-1,1%	3,6%	8,1%
Stoxx 50	3156	-2,6%	-1,2%	3,0%	4,8%
SMI (Swiss Market Index)	9124	-1,8%	-1,5%	1,9%	11,0%
Nikkei 225	22381	-0,7%	7,5%	13,4%	17,1%
Brasilien BOVESPA	71974	-3,1%	-6,4%	7,4%	19,5%
Russland RTS	1150	3,6%	1,3%	11,7%	-0,2%
Indien BSE 30	33034	-2,1%	3,5%	4,8%	24,1%
China Shanghai Composite	3449	1,8%	1,9%	5,7%	11,1%
MSCI Welt (in €)	2040	-0,9%	2,2%	5,9%	5,4%
MSCI Emerging Markets (in €)	1128	-0,8%	2,7%	7,6%	18,4%
<b>Bond markets</b>					
Bund-Future	163,14	0	166	-97	-101
Bobl-Future	131,73	-19	45	-93	-190
Schatz-Future	112,27	-3	11	13	-2
3 Monats Euribor	-0,33	0	0	0	-1
3M Euribor Future, Dec 2017	-0,33	0	-1	-1	0
3 Monats \$ Libor	1,41	2	6	10	42
Fed Funds Future, Dec 2017	1,29	0	2	6	0
10 year US Treasuries	2,38	6	3	17	-7
10 year Bunds	0,39	5	-5	5	18
10 year JGB	0,05	2	-1	-1	0
10 year Swiss Government	-0,09	1	-4	5	11
US Treas 10Y Performance	579,52	-0,9%	-0,5%	-1,2%	1,8%
Bund 10Y Performance	610,85	-0,7%	0,4%	0,1%	0,2%
REX Performance Index	483,73	-0,2%	0,2%	0,3%	-0,3%
US mortgage rate	0,00	0	0	0	0
IBOXX AA, €	0,68	7	-7	-3	0
IBOXX BBB, €	1,15	8	-13	-11	-35
ML US High Yield	6,21	17	23	6	-24
JPM EMBI+, Index	823	-0,8%	-1,8%	-0,3%	6,5%
Convertible Bonds, Exane 25	7366	0,0%	1,4%	3,0%	6,5%
<b>Commodities</b>					
CRB Spot Index	431,36	0,3%	0,8%	-2,2%	2,0%
MG Base Metal Index	344,73	-1,5%	0,9%	6,2%	23,2%
Crude oil Brent	63,47	-0,5%	11,7%	20,6%	11,9%
Gold	1278,11	0,3%	-1,1%	-0,6%	10,4%
Silver	16,87	-1,9%	-1,8%	-1,2%	5,1%
Aluminium	2084,50	-3,1%	-2,5%	2,6%	22,3%
Copper	6753,75	-2,6%	0,7%	5,6%	22,3%
Iron ore	61,79	-1,5%	2,7%	-17,5%	-22,5%
Freight rates Baltic Dry Index	1464	-0,6%	3,2%	34,1%	52,3%
<b>Currencies</b>					
EUR/ USD	1,1653	0,5%	-1,2%	-0,7%	10,5%
EUR/ GBP	0,8897	0,8%	-0,5%	-1,6%	4,2%
EUR/ JPY	132,02	-0,2%	-0,4%	2,5%	7,0%
EUR/ CHF	1,1585	-0,1%	0,5%	2,2%	7,9%
USD/ CNY	6,6392	0,1%	0,9%	-0,2%	-4,5%
USD/ JPY	113,54	-0,1%	1,0%	4,0%	-2,9%
USD/ GBP	0,76	0,2%	0,9%	-0,8%	-5,6%

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