ECONOMIC SITUATION AND STRATEGY

May 25, 2018

Why the Italian escapades are a plea for alternative assets

What do the current goings-on in Italy have to do with the point of alternative, or illiquid, investments? At first glance, nothing. But on closer inspection, quite a bit. That is because Italy's government-elect has the potential to cause unrest on the liquid capital markets. First signs of stress on the stock and bond markets are already visible, and this may just be the beginning of a phase of higher market volatility. The reason is obvious. Many of the newly forming government's ideas are so absurd they would be comical, if they were not political reality. That applies, for example, to the demand (now walked back, however) that the ECB waive repayment of about two-thirds of the Italian bonds it has purchased and to the notion of paying part of Italy's bills with some kind of parallel currency. Another entertaining thought is that of distinguishing in future between "good" and "bad" debts and applying various rules and limits only to the "bad" debts. Because the populist coalition's demands and ideas are so far removed from reality, it is difficult to take them seriously. Even if politically driven capital market trends usually have short legs, investors positioned solely in liquid assets need to have nerves of steel in such situations.

What is happening in Italy now is a nearly perfect example of why it makes sense to be invested not only in liquid, but also in illiquid assets. For, while prices of liquid securities are determined anew every split-second by supply and demand and are thus always subject to irrational forces and associated distortions, such influences by definition do not play a decisive role for illiquid assets, since they do not undergo continuous valuation at market prices. In other words, those who are invested in illiquid assets can sit back and relax when the Italians start thinking about rewriting the rules of the euro zone. Moreover, since the investment horizon for illiquid assets is often ten or more years, tactical considerations are largely irrelevant. What is more important than the timing of the investment decision is the basic allocation structure (what share of total funds is invested in private equity or real estate) and the concrete choice of products in which to invest.

What sounds logical at first and actually is logical is nevertheless difficult to prove with empirical data. That lies in the nature of the assets. While a nearly endless amount of data is available for securities and asset classes and portfolio effects can be determined with great precision, that is not true in the case of illiquid assets. For one thing, "the" real estate or "the" private equity investment does not exist. While the statistical properties of a European stock portfolio are sufficiently well-known, a real estate portfolio, for example, can exhibit very different characteristics depending on the region and type of use. In general, the properties of illiquid assets are usually significantly more heterogeneous than those of liquid assets. The selection process must therefore be especially careful in the case of illiquid assets. For another, reliable data on a daily, monthly, or even annual basis often simply do not exist because there is no occasion for continuous valuation. Furthermore, the numbers would only be reliable to a limited extent because no transactions, and hence no actually reliable prices, are available in most cases and at most points in time.

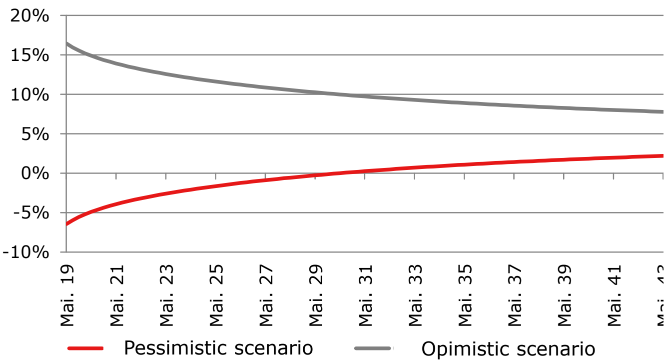
Despite these obstacles, we have considered how we could reliably determine the effect on portfolios of admixing illiquid assets. Our liquid "standard strategy" with 60% stocks and 40% bonds serves as the reference portfolio. Its stocks and bonds are highly diversified and globally positioned. This strategy exhibits an expected return of 5%, with our simulations suggesting that the maximum drawdown in such a portfolio structure would be just under 27% in extreme cases (usually lasting more than one year).

Return and risk figures of a balanced portfolio with 0% illiquid assets		Value
Return		5,0%
Max. Draw Down		-26,6%
Volatility		11,5%
VAR 95% in one year		-12,0%
CVAR		-15,7%

It is also interesting to observe what per-annum returns would be expected in the best and worst cases as a function of the investment horizon. If, for example, a client were to invest in such a portfolio today, our simulations suggest a 90% probability of the return not being below -6% in one year, and a 90% probability of its not being above 17%.

There is accordingly an extremely wide range of possible results over the short investment horizon of one year, which narrows (like the funnel in the chart) with increasing length of time. Anyone who invests, for example, in such a strategy beyond 2040 may expect a per-annum return between 2% and 8%. Our simulations show that in 2029 the time would be reached at which one could at least expect a return of zero even in case of an extremely negative development. The question now is whether these numbers can be improved by admixing illiquid assets. This cannot be answered trivially, since, as we already said, no sufficiently good and representative data are available for illiquid assets with adequate frequency.

Expected p.a. return of a balanced portfolio with 0% illiquid assets



To arrive nevertheless at sensible answers, we had to make assumptions. They included not only return expectations for the asset classes used, but also assumptions regarding price volatility (as if the assets were valued daily on the market) and the correlations of these prices to liquid asset classes. In the case of private equity, for example, we assumed an extremely high correlation with stocks and high volatility, but in the case of real estate, a lower correlation to other asset classes and lower volatility.

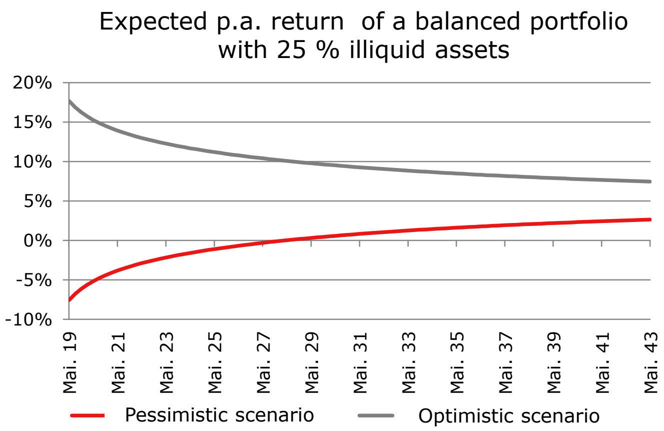
Based on these assumptions, we simulated and evaluated many thousands of possible performance "paths." Our first step was to lower our liquid "standard portfolio" to a weighting of 75% in the overall portfolio and admixed 15% real estate, 5% (classic) private equity, and 5% venture capital. The result may be seen in the table below.

The return increases marginally, volatility declines slightly, and the maximum expected drawdown decreases appreciably. The "usual" risk ratio describing a worst-case scenario within a 12-month period (VaR with 95% confidence interval) also drops noticeably. Critics may object here that this ratio must be taken with a grain of salt, since it covers only 95% of all cases and thus makes no statement about what happens if one becomes involved with the other 5% of cases that turn out worse. After all, no customer would buy a car that exhibits the warranted characteristics only 95 out of 100 days, but has extreme breakdowns 5 out of 100 days.

For this reason, we have enlisted another figure known as conditional value at risk (CVaR). It describes the expected value for a price setback within 12 months for the eventuality that one actually becomes involved with the extreme cases in which practically everything goes wrong. The year 2008, in which the economic and financial crises coincided, may serve as an example here. But also in terms of CVaR, the portfolio with a moderate admixture of illiquid assets again performs better.

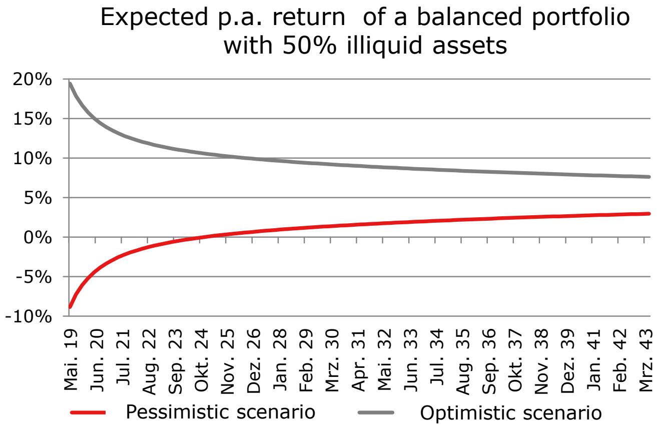
Return and risk figures of a balanced portfolio with 25 % illiquid assets		Value
Return		5,1%
Max. Draw Down		-23,2%
Volatility		10,6%
VAR 95% in one year		-10,7%
CVAR		-14,1%

A look at the funnel chart is also interesting. Admixing makes the funnel become narrower. Admixing illiquid assets thus leads to higher "reliability" and predictability in attaining a long-term target return.



If a 25% admixture of illiquid assets has such a positive effect, how much sense would a 50% admixture make? Our procedure is also well suited to answer this question. To that end, we reduced the liquid balanced standard portfolio to 50%, expanded the real estate share to 30%, and doubled the private equity holdings and the venture capital investments to 10% each. As we see, the return and risk ratios improve once again. That is also reflected in the funnel chart, with the funnel becoming even narrower. Even in the worst-case scenario, an expected zero return is attained already in 2024, and not in 2031, which would be the case in a purely liquid portfolio.

Return and risk figures of a balanced portfolio with 50 % illiquid assets		Value
Return		5,3%
Max. Draw Down		-21,0%
Volatility		9,3%
VAR 95% in one year		-9,0%
CVAR		-12,5%



Anyone still seeking an attractive return in times of extremely low interest rates cannot get around illiquid assets, if considerations of risk also play a role. For, admixing alternative assets increases the expected return slightly, and the probability of attaining that return with only little diversification rises dramatically. If the amount of funds involved is very large, one could therefore expect an admixture of up to 50% in alternative assets to be sensible in some cases. Anyone inclined to criticize a greater admixture of illiquid assets should look at the allocation of large foundations and sovereign wealth funds in this connection, where a trend of admixing illiquid assets has long existed. There, too, in addition to slightly increasing the expected return, the motivation is mainly at the risk level. The aim is to smooth out performance and achieve the desired return in the long term with a higher hit ratio.

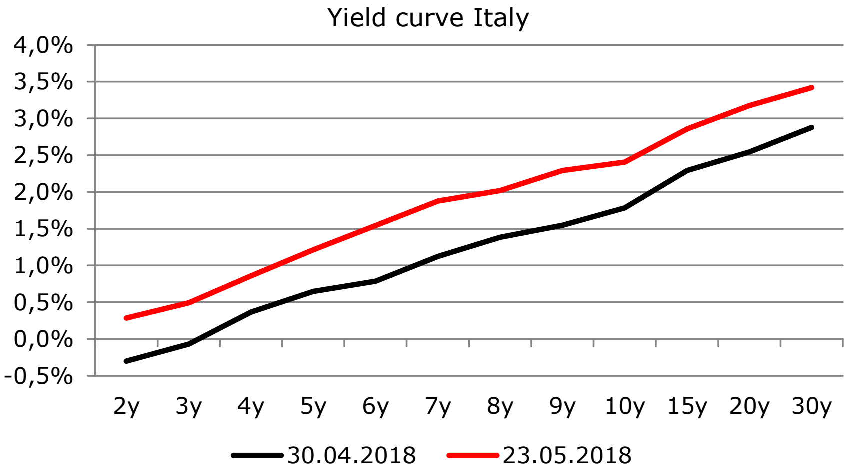
Of course, we cannot emphasize enough that not every type of admixture of illiquidity assets makes sense. Moreover, selecting suitable products is crucial for success in the case of illiquid assets. It is therefore advisable for investors to work together with experienced partners in this area. Then, the way will be clear to a well-balanced portfolio of liquid and illiquid assets.

Weekly outlook for May 18-June 1, 2018

	Dec.	Jan.	Feb.	Mar.	Apr.	May	Release
DE: Retail sales, m/m	-1.0%	-0.6%	-0.2%	-0.6%	0.4%		May 30
DE: Inflation rate, m/m - flash	0.6%	-0.7%	0.5%	0.4%	0.0%	0.3%	May 30
DE: Inflation rate, y/y - flash	1.7%	1.6%	1.4%	1.6%	1.6%	2.0%	May 30
DE: Unemployed, change in k	-29	-24	-21	-18	-7	-15	May 30
DE: Unemployment rate	5.5%	5.4%	5.4%	5.3%	5.3%	5.3%	May 30
DE: PMI, manufacturing - final	63.3	61.1	60.6	58.2	58.1	56.8	June 1
EUR19: M3 money supply, y/y	4.6%	4.6%	4.2%	3.7%	3.9%		May 29
EUR19: Business climate	1.6	1.56	1.48	1.44	1.35	1.3	May 30
EUR19: Economic confidence	115.3	115.1	114.4	112.7	112.7	112.2	May 30
EUR19: Consumer confidence - final	0.5	1.4	0.1	0.1	0.3	0.2	May 30
EUR19: Industrial confidence	9.6	9.8	8.8	7	7.1	6.9	May 30
EUR19: Inflation rate, y/y – flash	1.4%	1.3%	1.1%	1.3%	1.2%	1.5%	May 31
EUR19: Unemployment rate, s.a.	8.6%	8.6%	8.5%	8.5%	8.4%		May 31
EUR19: PMI, manufacturing – final	60.6	59.6	58.6	56.6	56.2	55.5	June 1

MMWB estimates in red

Chart of the Week: Flight from Italy



Investors are rushing to get out of Italian government bonds. At the beginning of May, the yield on 2-year Italian bonds, for example, was still below -0.3%, but it now stands at just over +0.2%. Bonds with 10-year residual maturities were yielding about 1.75% at the beginning of the month, but they now bring about 2.3%. This flight from Italian government bonds was triggered by reporting on coalition negotiations between the country's two populist parties. The word was spread that the League and the Five Star Movement had talked about both debt forgiveness and an EU exit. Representatives of the two parties immediately denied this, but failed to calm market participants. The realization appears to be setting in that the coalition of left and right populists poses considerable risks in respect to domestic and Europe policy. Against this background, we believe it is important to think about Italy's political future. Different scenarios may be developed having different impacts on the Italian bond market. However, we consider it dubious to assign probabilities to the various scenarios and thus develop a baseline scenario using currently available information. But it is necessary to note that yields on Italian gilts may rise even further, if the parties continue to pursue confrontation and generate negative newsflow from Italy. We therefore advise risk-averse investors with current exposure in Italian government bonds to part with their positions even after the latest sharp decline of prices.

Market data overview

Stock marktes	As of 25.05.2018 14:41	Change versus 18.05.2018 -1 week	24.04.2018 -1 month	23.02.2018 -3 months	29.12.2017 YTD
Dow Jones	24812	0,4%	3,3%	-2,0%	0,4%
S&P 500	2728	0,5%	3,5%	-0,7%	2,0%
Nasdaq	7424	1,0%	6,0%	1,2%	7,5%
DAX	12932	-1,1%	3,0%	3,6%	0,1%
MDAX	26700	-0,5%	2,7%	1,4%	1,9%
TecDAX	2824	0,6%	7,5%	8,5%	11,7%
EuroStoxx 50	3521	-1,5%	0,3%	2,3%	0,5%
Stoxx 50	3119	-1,2%	1,9%	2,0%	-1,8%
SMI (Swiss Market Index)	8791	-1,7%	-0,1%	-1,8%	-6,3%
Nikkei 225	22451	-2,1%	0,8%	2,5%	-1,4%
Brasilien BOVESPA	80122	-3,6%	-6,3%	-8,2%	4,9%
Russland RTS	1168	-0,5%	1,2%	-10,2%	1,2%
Indien BSE 30	34925	0,2%	0,9%	2,3%	2,5%
China Shanghai Composite	3142	-1,6%	0,4%	-4,5%	-5,0%
MSCI Welt (in €)	2118	0,8%	6,5%	4,2%	3,4%
MSCI Emerging Markets (in €)	1135	0,7%	2,9%	-1,7%	0,7%
Bond markets					
Bund-Future	163,14	447	538	366	146
Bobl-Future	132,00	92	134	99	39
Schatz-Future	112,09	15	24	14	11
3 Monats Euribor	-0,32	0	0	0	1
3M Euribor Future, Dec 2017	-0,29	0	2	-3	0
3 Monats $ Libor	2,32	-1	-4	36	63
Fed Funds Future, Dec 2017	2,15	-7	-4	8	0
10 year US Treasuries	2,95	-13	-4	7	53
10 year Bunds	0,42	-16	-21	-18	-1
10 year JGB	0,04	-2	-2	-1	-1
10 year Swiss Government	0,03	-7	-12	-1	16
US Treas 10Y Performance	558,20	0,7%	0,1%	-0,3%	-4,0%
Bund 10Y Performance	609,23	1,0%	1,6%	1,9%	0,3%
REX Performance Index	482,45	0,8%	0,8%	1,2%	0,4%
US mortgage rate	0,00	0	0	0	0
IBOXX AA, €	0,80	-4	-7	6	12
IBOXX BBB, €	1,55	1	9	21	32
ML US High Yield	6,54	1	6	5	38
JPM EMBI+, Index	797	1,3%	-1,7%	-1,9%	-4,7%
Convertible Bonds, Exane 25	7429	0,0%	0,5%	1,1%	0,4%
Commodities					
CRB Spot Index	444,76	0,0%	-0,3%	0,3%	2,8%
MG Base Metal Index	352,38	0,2%	-0,9%	-2,3%	-1,8%
Crude oil Brent	76,93	-2,9%	2,4%	14,8%	15,5%
Gold	1305,50	1,1%	-1,7%	-1,7%	0,2%
Silver	16,64	1,3%	-0,5%	0,6%	-2,2%
Aluminium	2280,25	0,6%	2,3%	5,1%	1,1%
Copper	6857,75	0,5%	-1,6%	-2,9%	-4,8%
Iron ore	66,36	-1,0%	1,7%	-13,9%	-6,9%
Freight rates Baltic Dry Index	1109	-12,9%	-16,6%	-6,4%	-18,8%
Currencies					
EUR/ USD	1,1672	-0,9%	-4,4%	-5,1%	-2,7%
EUR/ GBP	0,8749	0,2%	0,0%	-0,6%	-1,4%
EUR/ JPY	127,68	-2,3%	-3,9%	-2,7%	-5,4%
EUR/ CHF	1,1594	-1,5%	-2,9%	0,8%	-0,9%
USD/ CNY	6,3889	0,2%	1,3%	0,8%	-1,8%
USD/ JPY	109,26	-1,4%	0,4%	2,2%	-3,0%
USD/ GBP	0,75	1,0%	4,7%	4,8%	1,4%

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