M.M.WARBURG & CO
BANK

ECONOMIC SITUATION AND STRATEGY

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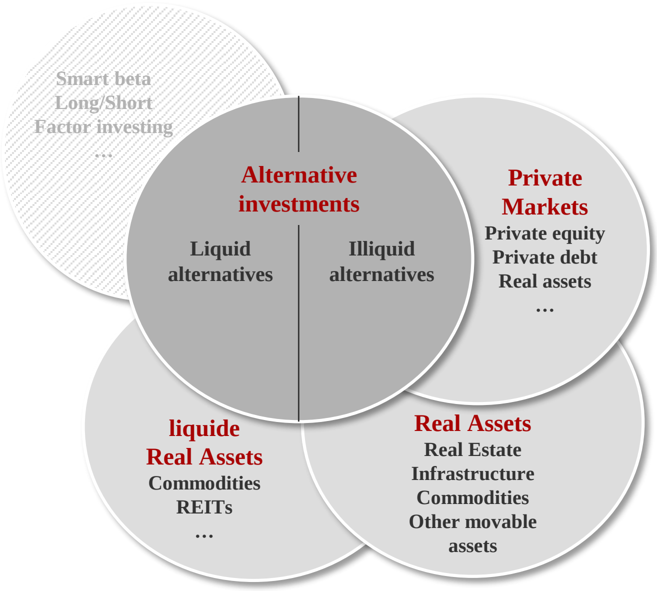
Private markets: Portfolio funds attractive addition for retail investors

After last year's gyrations on the securities markets, investors again face various challenges now. Trade conflicts (e.g., US vs. China), Brexit, and other political and economic imponderables are raising uncertainty and volatility on the exchanges. In addition, there is now the possibility of interest rate cuts in the United States. All these factors mean that a recession can no longer be entirely ruled out. They are reason enough to give some thought to one's own investment strategy. Portfolio diversification continues to be the top priority for countering future risks.

Institutional investors have long, and at times in considerable proportion, added assets not publicly traded ("private markets") to their portfolios. Those include primarily closed-end funds that invest in private equity, real estate, private debt, infrastructure, and raw materials. In recent years, many of these investors have increased their exposure from year to year, with the result that such investments have become more mainstream. According to a McKinsey study, USD 778 billion of fresh capital flowed into these asset classes in 2018, an impressive increase after a record year in 2017. Altogether, assets under management now come to USD 5.8 trillion (2017: USD 5.2 trillion), which is a record amount. According to forecasts, fundraising will increase again in 2019.



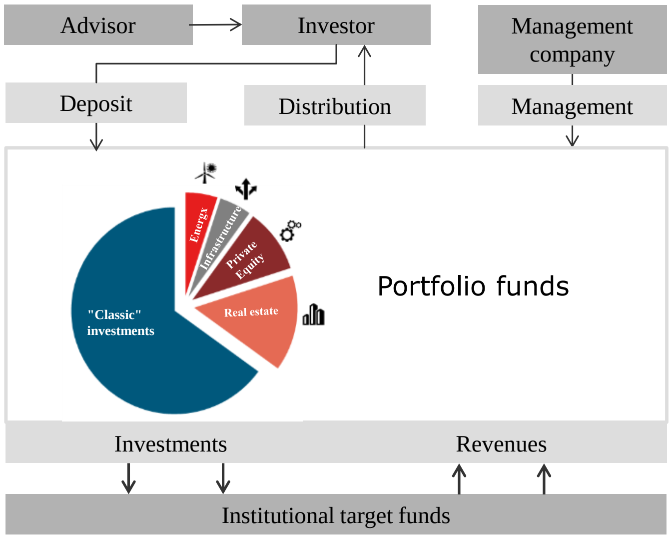
But what are the reasons for investors to put such assets in their portfolios? For one thing, tying up capital for a long time enables them to collect an illiquidity premium, an additional return investors get for taking certain risks. In this case, the risk comes from having little or no ability to trade the underlying assets. This additional source of return increases the portfolio's overall return. Furthermore, investments in private markets, and especially real assets, often benefit from steady income flows, which lead to regular distributions. This is especially important for investors who have to meet regular payment obligations.

Moreover, illiquid alternative investments normally show hardly any correlation with traditional asset classes from public markets. This leads to a positive diversification effect and reduced overall risk and less volatile portfolio development. In addition, investing in these asset classes ensures real value preservation in the current low interest rate environment. Our studies also show that adding illiquid assets to a purely liquid portfolio lends several positive characteristics to the overall portfolio. Volatility, maximum drawdown, and expected worst-case loss decrease appreciably.

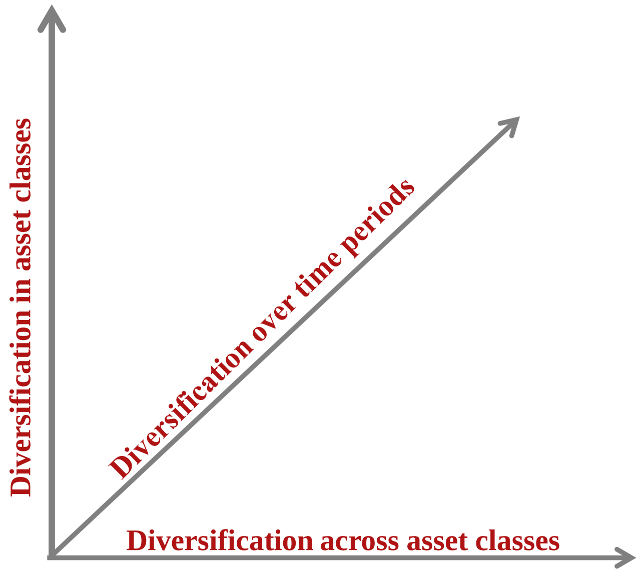
In the current economic environment, not only institutional investors but also private investors should utilize the opportunities of this asset class. But how do private investors get access and what challenges do they have to overcome? Adding private market investments to an existing portfolio is a demanding task and poses a particular challenge. One problem, for example, arises from the products' limited liquidity and in some cases the markets' lack of transparency. The step from strategic asset allocation to actual allocation involves an accumulation phase lasting several years. That is due to the closed-end structures and strategies of the funds. Implementation must integrate the aspects of fundraising, investment and holding phases, and distribution return. A resource-intensive selection of assets on the market is needed to separate the wheat from the chaff. It is advisable to spread that over different asset classes as well as different investment strategies and regions. This can be realized in various ways.

Large institutions invest large amounts on their own in individual alternative investment funds. Depending on target volumes, internal resources, and experience with the relevant asset classes, smaller institutions must effect their allocation externally by way of funds of funds or individually structured mandates. For private investors, such an investment is often even more difficult due to the barrier of large investment sums and the resource-intensive process, and it is often not possible to participate directly in several or even one private market investment. Multi-asset products and mixed funds, for which demand has been strong in recent years, may be the solution. But these so-called portfolio funds offer the possibility for investors to benefit from the advantages also in the segment of closed-end funds and illiquid assets.

But what are portfolio funds? Such funds consist of different asset classes including, for example, real estate, private equity, energy, and infrastructure. They thus offer the possibility of investing in a large number of different asset classes with a single transaction.



Risk diversification is the basic idea of all portfolio funds. We all know the Markowitz theory according to which portfolio risk can be lowered without affecting return, if one only invests broadly enough in assets that are as independent from one another as possible. Portfolio funds have the great advantage that they offer investors a three-dimensional diversification across various asset classes in real estate, business holdings, and infrastructure investment. Additional diversification is also possible within asset classes. In the asset class of real estate, for example, investments in office buildings, housing, and logistics centers are possible. In the case of infrastructure investments, exposure can be spread over renewable energy sources, transportation, and social infrastructure. Moreover, time diversification can be achieved by investing at different points in time. A portfolio fund's investment phase usually extends over several years, thus reducing dependence on economic cycles. This likewise applies to disinvestments, since investment success often also depends on good exit timing.



In addition, portfolio funds in private markets offer the advantages described above, such as regular distributions, the illiquidity premium, and protection against inflation. The main goals of an allocation in private markets, i.e., to diversify risks and seize opportunities for return, can thus be achieved by investing in a portfolio fund. In practice, portfolio funds are often designed as a blind pool. This means the investment strategy and any restrictions are determined before the setup of the portfolio, but the individual investments are not yet identified. This is advantageous to the fund providers since they do not have to pay in advance for investments, thereby reducing placement risk. But for investors, it means that they must trust the fund managers.

It is therefore very important to select the right manager, a partner who has the appropriate experience, market expertise, and especially access to the market. Portfolio funds are often designed as funds of funds and do not invest directly in assets but rather in other target funds. The process of selecting and integrating the individual target funds always involves a thorough examination of the economic, legal, and tax implications. Criteria such as the competence and experience of

the management, the investment strategy, the cost structure, and the legal and tax aspects of the target fund are crucial. Because of their fund-of-funds structure, portfolio funds offer the advantage that they give private investors access to top-rate fund managers and institutional funds like BlackRock, KKR, and EQT, to which investors would otherwise not have direct access – and in some cases already with low minimum investment amounts starting at EUR 10,000.

The advantages of adding private markets are obvious. So, the question rather is why one should not make such an investment. Portfolio funds offer many advantages to anyone who wants to track the actions of institutional investors and diversify their portfolio in these turbulent times while seizing opportunities for returns, and they are a good way of achieving those objectives.

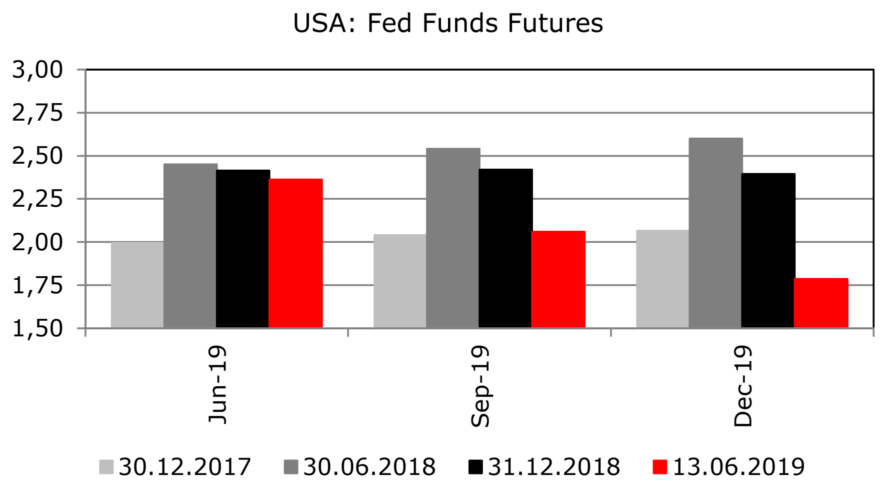
We thank our Advisory Office colleague Charlotte Höntschke for her friendly support.

Weekly Outlook for June 17-21, 2019

	Jan.	Feb.	Mar.	Apr.	May	June	Release
DE: Producer prices, m/m	0.4%	-0.1%	-0.1%	0.5%	0.2%		June 18
DE: Producer prices, y/y	2.6%	2.6%	2.4%	2.5%	2.2%		June 18
DE: ZEW economic expectations	-15	-13.4	-3.6	3.1	-2.1	-1.5	June 18
DE: ZEW current conditions	27.6	15	11.1	5.5	8.2	7.2	June 18
DE: PMI, manufacturing – flash	49.7	47.6	44.1	44.4	44.3	44.9	June 21
DE: PMI, services – flash	53.0	55.3	55.4	55.7	55.4	55.5	June 21
EUR19: Consumer prices, y/y – final	1.4%	1.5%	1.4%	1.7%	1.2%		June 18
EUR19: Core inflation rate, y/y – final	1.1%	1.0%	0.8%	1.3%	0.8%		June 18
EUR19: Consumer confidence – flash	-7.4	-6.9	-6.6	-7.3	-6.5	-5.9	June 20
EUR19: PMI, manufacturing – flash	50.5	49.3	47.5	47.9	47.7	48.1	June 21
EUR19: PMI, services – flash	51.2	52.8	53.3	52.8	52.9	53.0	June 21

MMWB estimates in red

Chart of the Week: Fed as insurer



The prospect of US tariffs being expanded on Chinese and possibly Mexican imports has prompted the Fed to debate an appropriate monetary policy response. That focuses on the risks of recession, while largely ignoring the risks of inflation likely to result from the tariffs. The markets are also looking primarily at the growth risks arising from demands for and expectations of falling interest rates. An interest rate cut is now priced in for July, and three further steps down might be taken by the end of 2020. After keeping a very low profile following its policy about-face in March regarding possible rate cuts, the Fed has recently changed its rhetoric. According to Fed Chair Jerome Powell, the US central bank "will act as appropriate to sustain the expansion, with a strong labor market and inflation near our symmetric 2% objective." The markets have taken this as a promise to act quickly in case growth slows further. Vice Chair Richard Clarida has even more clearly expressed the intention to ignore initial inflation tendencies for the most part and focus on continuing growth near its underlying trend. Since growth has recently been below trend, this argues for an interest rate cut in the near future even if import tariffs cause inflation to rise. Clarida sees parallels between this monetary policy "insurance" against an economic downswing and what happened in 1995. At that time, the Fed under Alan Greenspan lowered interest rates in three steps in view of similar growth risks. The result was a soft landing for the economy, which Greenspan described as one of the Fed's greatest accomplishments in his nearly 20 years in office.

Market Data Overview

Stock marktes	As of 17.06.2019 10:48	Change versus 10.06.2019 -1 week	14.05.2019 -1 month	14.03.2019 -3 months	14.06.2018 -1 year	31.12.2018 YTD
Dow Jones	26090	0,1%	2,2%	1,5%	3,6%	11,8%
S&P 500	2887	0,0%	1,9%	2,8%	3,8%	15,2%
Nasdaq	7797	-0,3%	0,8%	2,2%	0,5%	17,5%
DAX	12086	0,3%	0,8%	4,3%	-7,8%	14,5%
MDAX	25245	0,6%	-0,7%	0,9%	-7,1%	16,9%
TecDAX	2793	0,2%	-0,7%	5,3%	-5,1%	14,0%
EuroStoxx 50	3382	-0,1%	0,5%	1,2%	-4,1%	12,7%
Stoxx 50	3131	0,1%	1,6%	1,2%	0,3%	13,4%
SMI (Swiss Market Index)	9859	1,1%	4,8%	4,0%	13,4%	17,0%
Nikkei 225	21124	0,0%	0,3%	-0,8%	-7,1%	5,5%
Brasilien BOVESPA	98040	0,6%	6,5%	-0,6%	37,3%	11,6%
Russland RTS	1341	0,4%	8,0%	13,5%	17,5%	25,8%
Indien BSE 30	39076	-1,8%	4,7%	3,5%	9,8%	8,3%
China Shanghai Composite	2888	1,2%	0,1%	-3,4%	-5,1%	15,8%
MSCI Welt (in €)	2131	0,6%	1,6%	2,4%	4,1%	15,5%
MSCI Emerging Markets (in €)	1015	0,1%	0,2%	-2,5%	-5,7%	7,3%
Bond markets						
Bund-Future	171,78	67	519	765	1107	824
Bobl-Future	134,11	10	70	169	264	159
Schatz-Future	112,18	6	14	33	17	23
3 Monats Euribor	-0,32	0	-1	-1	0	-1
3M Euribor Future, Dec 2017	-0,41	-3	-8	-13	-34	0
3 Monats $ Libor	2,40	-3	-12	-21	7	-41
Fed Funds Future, Dec 2017	1,77	-3	-36	-57	-93	-1
10 year US Treasuries	2,10	-4	-32	-53	-84	-58
10 year Bunds	-0,26	-4	-18	-34	-69	-50
10 year JGB	-0,12	0	-7	-8	-16	-12
10 year Swiss Government	-0,48	13	-3	-10	-48	-24
US Treas 10Y Performance	619,07	0,5%	3,2%	5,3%	10,9%	6,6%
Bund 10Y Performance	661,86	0,4%	1,8%	3,3%	8,2%	5,5%
REX Performance Index	496,69	0,1%	0,8%	1,4%	3,2%	1,8%
US mortgage rate	0,00	0	0	0	0	0
IBOXX AA, €	0,37	-3	-8	-22	-47	-51
IBOXX BBB, €	1,24	-4	-12	-36	-35	-82
ML US High Yield	6,64	-3	-8	-15	25	-137
JPM EMBI+, Index	865	0,6%	3,6%	3,9%	10,4%	9,3%
Convertible Bonds, Exane 25	7288	0,0%	0,0%	2,2%	-2,8%	5,7%
Commodities						
CRB Spot Index	412,08	0,3%	0,4%	-1,5%	-8,6%	0,7%
MG Base Metal Index	288,80	0,6%	-2,5%	-9,0%	-20,5%	-2,0%
Crude oil Brent	61,89	-2,0%	-13,3%	-8,1%	-18,6%	16,5%
Gold	1334,86	0,4%	2,9%	3,1%	2,2%	4,2%
Silver	14,93	1,4%	0,8%	-1,8%	-13,3%	-3,7%
Aluminium	1732,75	-0,7%	-4,5%	-7,7%	-23,4%	-7,0%
Copper	5797,75	-1,1%	-3,3%	-9,6%	-19,2%	-2,5%
Iron ore	104,33	5,1%	11,1%	21,3%	59,1%	50,8%
Freight rates Baltic Dry Index	1085	-3,6%	4,0%	60,3%	-24,3%	-14,6%
Currencies						
EUR/ USD	1,1215	-0,8%	-0,1%	-0,7%	-4,4%	-2,1%
EUR/ GBP	0,8912	-0,1%	2,7%	4,7%	2,0%	-0,7%
EUR/ JPY	121,74	-0,8%	-1,0%	-3,4%	-5,7%	-3,3%
EUR/ CHF	1,1199	0,0%	-1,0%	-1,3%	-3,3%	-0,6%
USD/ CNY	6,9253	-0,1%	0,7%	3,0%	8,2%	0,7%
USD/ JPY	108,57	0,1%	-0,9%	-2,8%	-1,9%	-0,9%
USD/ GBP	0,79	0,9%	2,7%	5,6%	6,0%	1,2%

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