

ECONOMIC SITUATION AND STRATEGY

July 6, 2018

Private Equity: Strategic portfolio supplement

The world economic upswing has lasted for nine years now. Valuation on the stock markets is comparatively high, while the yield curve is flat, with generally low returns and accordingly rather disappointing performance prospects. Efficient portfolio diversification is vital in such an environment, and investments in non-liquid asset classes are an important element. Supplementing portfolios with private equity investments is especially popular. In one of our reports a few weeks ago we provided evidence that admixing private equity investments could generate several positive properties for an overall portfolio. For example, volatility and maximum expected drawdown decrease. At the same time, the long-term commitment of capital allows one to collect an *illiquidity premium*, so the overall return even increases slightly. While private equity investments used to be investable only for institutionals, there are now funds that make this asset class accessible to private investors. However, there is another side to adding private equity to the mix. It is, after all, an illiquid asset class with long horizons and high minimums. Not all investors would be willing to tie up their capital for several years with no possibility of intervention or liquidation. Furthermore, private equity is by no means a homogeneous asset class.

Appreciation for the *differentiation of strategies* is important, since investors must heed many factors in the investment and selection process before committing capital for years to come. Good fund selection is thus fundamental to investment success in this asset class. In the following, we wish to illustrate what it particularly

depends on. The common foundation is formed by privately held capital, which in contrast to stocks is invested in companies outside the regulated market. On this basis, individual private equity strategies may best be distinguished from one another with targeted questions: Depending on the stage and size of a company, we distinguish between venture capital and low-risk private equity, although both types of financing are covered under the concept of private equity.

The founding of a company is often financed by *business angels*, who contribute expertise, networks, and other resources to the undertaking in addition to venture capital. Next comes *seed financing* to create the foundations necessary for the subsequent business, e.g., in the form of prototype development. Then, the *start-up* must prove the business model's viability by generating initial sales. In further stages, capital-intensive *market penetration* and *expansion* efforts follow. Depending on the company's development, an *exit* is then prepared or the business model is adjusted. Ultimately, the investors endeavor to sell.

Investment risk declines as the company matures, while cash flow increases and the company becomes established on the market. Towards the end of the growth stage, the company should already be achieving positive cash flow or positive EBITDA. The need of capital grows analogously. Traditional private equity investors invest only in a *proven business model* at this stage and thus make possible a transition from pure venture capital financing to initial additions of outside capital to the company's financing mix. While the company cannot be

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refinanced with outside capital in the early stage because of high risk, majority interests are often financed with *leverage* in the late stage. Higher leverage increases the attainable return on equity for investors, but also raises the investment risk. Obtained outside financing often remains in the company, and not at the level of investors.

Like leverage in transaction financing, the size of the investment also depends on the maturity of the target enterprise. Whether majority or minority investments are acquired therefore depends on the company's stage and the investor's strategy. For, new rounds of financing take place continuously on the way to the exit. Venture capital providers in the early stage should therefore expect *constant dilution* of their business shares. However, they are rewarded by rising valuations upon reaching the next stage. Many venture capital investors therefore maintain reserves for follow-up financing after the initial investment. Because of *the high risk of total loss on an individual investment*, broad diversification over a large number of investments is essential in this segment especially. Early-stage and growth-stage investors therefore mostly acquire *minority interests* in various businesses, while late-stage investors often go for *majority interests* in only a few target businesses.

The added value that causes the investment to appreciate is generated in different ways depending on the strategy. Private equity funds that focus on a buyout or restructuring usually seek an *active role in the enterprise*. The added value is generated to that effect not only by the simple provision of capital, but also by access to networks, consulting services, and active management at the corporate level. They need majority interests to execute their strategy, even if opposed by existing management or previous owners. Conversely, these fund managers are considered "*true stock pickers*," since the initial *due diligence* before a transaction closes largely determines success or failure at the end of the investment period of about 5-10 years. In the framework of this initial analysis, a transparency of information arises that far exceeds disclosure requirements on the regulated stock market and would be classified there as *insider information*. This may be one reason why issued bonds from private equity holdings have a lower default rate than comparable listed companies.

Besides the possibility of building up a certain exposure in the liquid private equity segment by way of listed

stock companies, three commonly accepted investment options are available in the illiquid investment business.

Private investors often tend to prefer fund-of-funds investments because they spread risk and involve smaller investment amounts. They thereby entrust the selection of both managers and investments to a *fund-of-funds management*. In the best case, this results in a risk-diversified portfolio of investments. The diversification should include the following characteristics:

- *Asset manager*
- *Fund strategy*
- *Business stage of target investments*
- *Sector of target investments*
- *Geography*
- *Vintage year*¹

Set against easier access and greater diversification, which leads in turn to *lower default rates*, is an *increased cost structure* and *delayed capital allocation*. The increased cost structure results from the additional management level, which does not actively conduct due diligence for investments of the target funds. Investor capital is allocated and called up more slowly because the fund-of-funds management must first identify target funds and subsequently wait until they find investments and need capital. That also results in a greater distribution over vintage years, which in turn leads to lower cyclical dependence compared with individual procyclically correlated private equity funds.

On the other hand, direct investments in a private equity fund, whether in the venture capital segment or in traditional private equity, are characterized by comparatively fast capital allocation and lower total costs. As in the fund of funds case, a customary *fixed management fee* and *carried interest*² are also charged here. The latter performance fee and the usual *team commitment*³ are incentives to management from which investors also benefit. However, access is difficult for private investors because of *higher investment minimums*. In particular, an adequate diversification over the above-listed risk parameters should be secured. In contrast, a direct investment in a company is not recommended for most traditional private investors.

Another point for investors interested in private equity to focus on is the *J-curve*. It describes the expectation

¹ Launch or investment year

² Performance-dependent compensation of fund manager

³ Share (about 2%) that the fund managements itself invests

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for cash flow development of a closed-end private equity fund. Accordingly, the return is usually not realized until a later phase of the fund's term. Typically, the term of a fund is divided into the *funding phase*, the *investment phase*, and the *holding period*. First, capital is raised. Once funding is completed, no more investments are allowed. Since there is no regulated market with a permanent supply of private equity interests, the investment phase extends over several years in many cases, in which time a portfolio of interests is gradually built up. The investor's capital is thus *called up as needed*. A good fund manager is distinguished by timely capital allocation with quick and high-quality deal sourcing. One calls this an "early and steepest possible J-curve." The interests acquired are subsequently administered until the end of the fund term. From this standpoint, funds of funds feature slower capital allocation with comparatively lower expectations of return, which investors should take into account from the start.

Since the financial crisis, the private equity market has been growing steadily and at the end of 2017 reached not only its pre-crisis level, but also a new record total of USD 2.8 trillion. Mega buy-out funds with volumes exceeding USD 4.5 billion have driven this growth. There is still a flood of liquidity in the market thanks to low-interest-rate policies. In particular, institutional investors are seeking alternative asset classes that can still achieve sufficient returns. So, the new record of over USD 1 trillion in "dry powder"⁴ is not surprising. Consequently, there is a great deal of money on the sidelines. This creates potential for further valuation increases, but is also accompanied by a decline of expected returns. Specifying returns over all private equity strategies and regions helps to formulate possible return expectations of investors for this asset class. Accordingly, the top quartile achieved on average a net internal rate of return (IRR) of just under 24.1%, while the median was 13.5% and the last quartile 5.8%. Even vintage year funds that were launched before the dot-com bubble or Lehman Brothers, i.e., were in the investment stage just before the respective bubbles burst, managed in the median to consistently achieve a positive net IRR of 6-9%.

But one thing should be pointed out here in any case. Although supplementing one's portfolio with private equity appears generally reasonable against the background presented above, the relevant factors should

always be weighed up individually in the context of a personal consultation. It does make a difference whether one invests in a marketable, liquid share in a company or becomes entrepreneurially engaged over a long period by way of a private equity vehicle, without the ability to get out early at instantly-quoted market prices. There is still the prospect of the illiquidity premium after many years, but the popular adage still applies: there is no such thing as a free lunch!

By guest analyst Dustin Reichelt

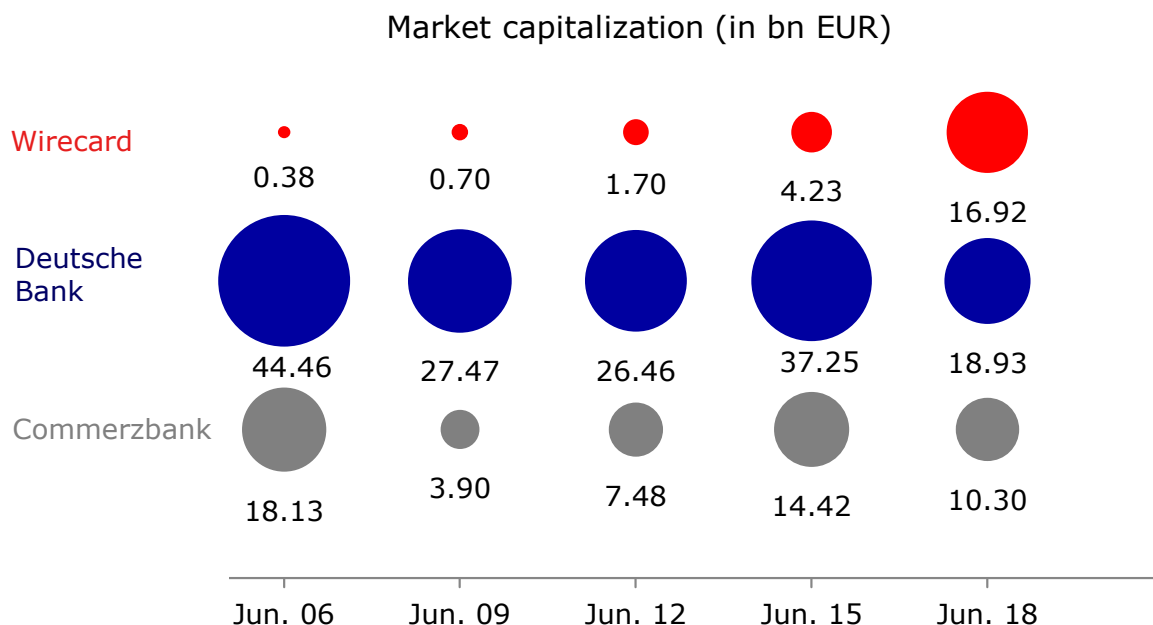
⁴ Raised, but not yet allocated capital for future investments.

Weekly outlook for July 8-13, 2018

	Feb.	Mar.	Apr.	May	June	July	Release
DE: Exports, m/m	-3.1%	1.8%	-0.3%	0.2%			July 9
DE: Trade balance	19.4	21.6	19.4	19.9			July 9
DE: ZEW business climate	17.8	5.1	-8.2	-8.2	-16.1	-13.5	July 12
DE: ZEW current conditions	92.3	90.7	87.9	87.4	80.6	82.7	July 12
DE: Consumer prices, m/m	0.5%	0.4%	0.0%	0.5%	0.3%		July 12
DE: Consumer prices, y/y	1.4%	1.6%	1.6%	2.2%	2.1%		July 12
EUR19: Euro zone Sentix	31.9	24.0	19.6	19.2	9.3	11.2	July 9
EUR19: Industrial production, m/m	-0.8%	0.6%	-0.9%	0.7%			July 12
EUR19: Industrial production, y/y	2.6%	3.2%	1.7%	2.5%			July 12

MMWB estimates in red

Chart of the Week: Banks versus banking



The market cap of Commerzbank has fallen by about a third since January. It is thus becoming increasingly likely that Germany's second-largest bank will drop out of the DAX index of German blue chips in September. The top stock in the financial sector, Deutsche Bank, might also lose its number-one ranking in respect to market capitalization. Wirecard, a relatively unknown company operating in the area of financial technology is the reason for that. Its share price has advanced by about 50% since the beginning of the year. The company has a banking license, but does not pursue the typical banking business model. It has a workforce 5% the size of Deutsche Bank's and views itself primarily as a technology and innovation company competing with the likes of Google, Amazon and Apple. Wirecard began as

a payment service provider in e-commerce and now operates in the background to facilitate most international online payments by credit card. At the same time, its banking license allows it to provide the infrastructure for many fintechs. For example, N26 used this banking license until mid-2016. Wirecard recognized earlier and faster than the established banks that digital user behavior and digital payment flows require digital payment services. Furthermore, with its white label and outsourcing solutions, the company offers a very scalable business model that bears little resemblance to the universal bank model widely practiced in Germany. Could a fintech soon become the number one in the stock market's financial sector? Commerzbank has already been overtaken.

Market data overview

	As of	Change versus			
	06.07.2018 11:12	22.06.2018 -1 week	28.05.2018 -1 month	28.03.2018 -3 months	29.12.2017 YTD
Stock markets					
Dow Jones	24357	-0,9%	-1,6%	2,1%	-1,5%
S&P 500	2737	-0,7%	0,6%	5,1%	2,4%
Nasdaq	7504	-2,5%	0,9%	8,0%	8,7%
DAX	12484	-0,8%	-2,9%	4,6%	-3,4%
MDAX	25957	-1,7%	-2,5%	2,4%	-0,9%
TecDAX	2763	-1,3%	-2,5%	11,3%	9,3%
EuroStoxx 50	3449	0,2%	-1,0%	3,5%	-1,6%
Stoxx 50	3070	-0,3%	-1,1%	3,9%	-3,4%
SMI (Swiss Market Index)	8671	0,6%	-1,2%	-1,0%	-7,6%
Nikkei 225	21788	-3,2%	-3,1%	3,6%	-4,3%
Brasilien BOVESPA	74553	5,5%	-1,1%	-11,1%	-2,4%
Russland RTS	1161	3,1%	-0,6%	-5,4%	0,6%
Indien BSE 30	35772	0,2%	1,7%	8,5%	5,0%
China Shanghai Composite	2746	-5,0%	-12,4%	-12,0%	-17,0%
MSCI Welt (in €)	2096	-1,4%	-1,1%	8,3%	2,0%
MSCI Emerging Markets (in €)	1054	-3,6%	-7,8%	-4,0%	-6,8%
Bond markets					
Bund-Future	163,14	104	121	383	146
Bobl-Future	132,19	4	-29	100	58
Schatz-Future	112,07	-2	-12	11	10
3 Monats Euribor	-0,32	0	0	1	1
3M Euribor Future, Dec 2017	-0,29	-1	-2	2	0
3 Monats \$ Libor	2,33	0	2	3	64
Fed Funds Future, Dec 2017	2,18	-1	5	10	0
10 year US Treasuries	2,83	-6	-10	6	42
10 year Bunds	0,30	-4	-4	-20	-13
10 year JGB	0,03	0	-1	1	-2
10 year Swiss Government	-0,10	-6	-4	-7	3
US Treas 10Y Performance	564,82	0,6%	0,8%	0,0%	-2,9%
Bund 10Y Performance	618,25	0,2%	0,3%	1,9%	1,8%
REX Performance Index	484,77	0,0%	0,2%	0,7%	0,9%
US mortgage rate	0,00	0	0	0	0
IBOXX AA, €	0,77	2	5	-1	9
IBOXX BBB, €	1,64	10	14	24	41
ML US High Yield	6,59	16	5	-4	44
JPM EMBI+, Index	785	-0,5%	-1,8%	-3,8%	-6,1%
Convertible Bonds, Exane 25	7328	0,0%	-1,1%	0,9%	-1,0%
Commodities					
CRB Spot Index	437,20	-1,3%	-1,7%	0,3%	1,1%
MG Base Metal Index	340,10	-1,7%	-4,0%	0,7%	-5,2%
Crude oil Brent	77,31	3,5%	1,2%	10,5%	16,1%
Gold	1254,75	-1,2%	-3,4%	-5,7%	-3,7%
Silver	16,00	-2,5%	-3,3%	-1,9%	-5,9%
Aluminium	2170,50	-0,4%	-3,7%	8,1%	-3,8%
Copper	6628,50	-2,4%	-3,4%	-0,1%	-8,0%
Iron ore	63,06	-2,8%	-4,8%	-9,7%	-11,5%
Freight rates Baltic Dry Index	1612	20,2%	49,7%	49,3%	18,0%
Currencies					
EUR/ USD	1,1714	0,6%	0,6%	-5,5%	-2,3%
EUR/ GBP	0,8845	0,9%	1,2%	1,0%	-0,4%
EUR/ JPY	129,56	1,0%	1,8%	-1,6%	-4,0%
EUR/ CHF	1,1620	0,7%	0,4%	-1,5%	-0,7%
USD/ CNY	6,6418	2,1%	3,8%	5,5%	2,1%
USD/ JPY	110,50	0,5%	1,0%	3,4%	-1,9%
USD/ GBP	0,76	0,2%	0,5%	6,5%	2,2%

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