EDISON

Deutsche Beteiligungs

Market sentiment weighing on portfolio value

Deutsche Beteiligungs (DBAG) is making steady progress on its investment agenda, with three new acquisitions and several follow-on funding rounds totalling €40.2m completed in Q119. DBAG's Fund VII has so far been able to allocate 56% of its investment commitments in seven transactions, reflecting solid portfolio ramp-up. Meanwhile, weaker market sentiment has burdened DBAG's portfolio valuation by c €47.8m (or c 14%) vs Q418. Around 17% of the company's current portfolio represents holdings acquired within the last 12 months and still valued at cost.

12 months ending	Share price (%)	NAV (%)	LPX Europe (%)	LPX Europe NAV (%)	SDAX (%)	FTSE All Share (%)
31/01/15	33.3	15.6	20.3	15.4	8.8	17.0
31/12/15*	14.6	15.1	14.0	7.5	18.9	0.3
31/12/16	4.8	8.5	10.3	7.5	4.6	0.8
31/12/17	60.7	22.3	18.9	13.2	24.9	8.8
31/12/18	(26.4)	(0.9)	(12.3)	7.9	(20.0)	(10.5)

Source: Thomson Datastream. Note: *11-month period due to change in financial year end. Discrete rolling total return performance in euros up to last reported NAV.

Lower market multiples affect portfolio value

DBAG's Q119 NAV per share was down 5.1% to €28.05 vs end-September 2018 on a dividend-adjusted basis, largely due to the recent capital markets downturn, which translated into reduced earnings multiples of listed peers used to value part of DBAG's investment portfolio (69% as at end-December 2018). Hence, the achievement of current management guidance (net income higher by up to 20% vs FY18 and 20–40% below five-year average) is largely dependent on the continuation of the capital markets recovery post the reporting date. Q119 net loss stood at €21.4m compared to €10.1m net income in Q118.

Net acquisitions grow portfolio by €16m

In Q119, DBAG continued its active agenda, making investment commitments of more than €56m, and expanding its portfolio through new and follow-on investments amounting to c €40m. DBAG completed the exit from CleanPart at a 2.4x money multiple after a holding period of 3.5 years vs the company's long-term average of 2.7x and 4.8 years, respectively. There were three acquisitions completed in Q119: Kraft & Bauer (a fire extinguishing systems manufacturer); Sero (an electronic components producer) and FLS (a logistics software provider). As a result, net acquisitions added c €16m to DBAG's portfolio value.

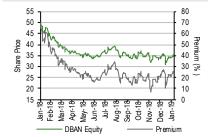
Valuation: Moderate expansion of premium to NAV

DBAG's shares currently trade at a 23.7% premium to last reported NAV of the private equity investments business of €431.6m (as at end-December 2018). This implies an LTM earnings multiple of the fund services business at 12.2x (assuming the market does not apply any discount to DBAG's NAV) or 22.8x (if we assume a discount in line with the broader market represented by the LPX Europe Index). DBAG's shares currently offer a dividend yield of c 4.2% vs the peer average at 3.4%.

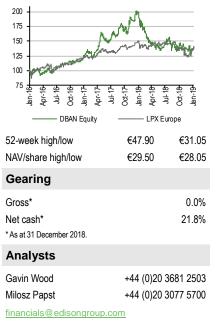
Investment companies

15 February 2019 **Price** €34.70 Market cap €522m NAV* €422m NAV per share* €28.05 Premium to NAV 23.7% * As at 31 December 2018 Yield 4.2% Ordinary shares in issue 15.0m DBAN Code Primary exchange Frankfurt AIC sector Private equity Benchmark N/A

Share price/discount performance



Three-year performance vs index



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Exhibit 1: Deutsche Beteiligungs at a glance

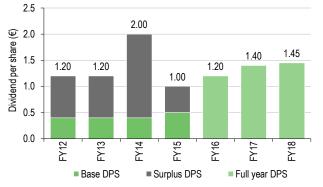
Investment objective and fund background

DBAG is a Germany-based and listed private equity investment and fund management company that invests in mid-sized companies in Germany and neighbouring German-speaking countries via MBO transactions and growth capital financings. There is a focus on growth-driven profitable businesses valued between €50m and €250m. DBAG's core objective is to sustainably increase net asset value.

Forthcoming		Capital structure
AGM	21 February 2019	FY18 net expense ratio*
Interim results	14 May 2019	Net cash
Year end	30 September	Annual mgmt fee
Dividend paid	Following the AGM	Performance fee
Launch date	December 1985	Company life
Continuation vote	N/A	Loan facilities

Dividend policy and history (financial years)

DBAG's policy is to pay a stable or rising annual dividend. Prior to FY16, a base dividend was paid, supplemented by a surplus dividend based on realised gains.



Concentration of portfolio value by size (as at 31 December 2018)***

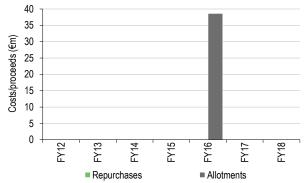
Recent developments

- 7 February 2019: Q118/19 results NAV 1Y TR -0.9% vs LPX Europe NAV TR +7.9%.
- 29 January 2019: DBAG ECF sold its investment in PSS.
- 21 January 2019: DBAG acquires radiology practice to Ranova network.
- 15 January 2019: Unser Heimatbäcker files for insolvency, reflected in end-December portfolio value.

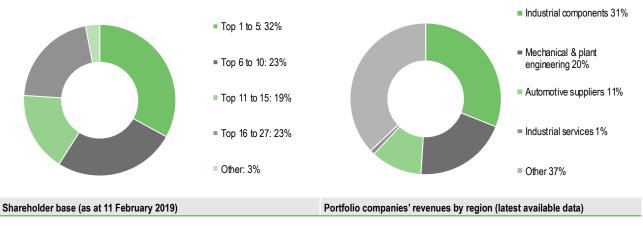
Fund details				
Group	Deutsche Beteiligungs			
Manager	Team managed			
Address	Boersenstrasse 1			
	60313 Frankfurt am Main, Germany			
Phone	+49 69 95787-01			
Website	www.dbag.com			
	Group Manager Address Phone			

Share buyback policy and history (financial years)

Share buybacks and capital increases are used to manage longer-term capital requirements. In FY16, €38.6m was raised through a 10% capital increase.



Portfolio exposure by sector (as at 31 December 2018)***



Rossmann Beteiligungs (20.0%)

Ricardo Portabella (6.7%)

- Anpora Patrimonio SL (5.0%)
- Dimensional Fund Advisors (3.0%)
- Norges Bank (3.0%)
- JP Morgan (2.9%)
 Vanguard Group (1.9%)
- BlackRock (1.1%)
- Other (56.4%)



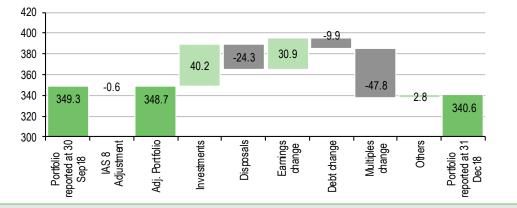
Source: DBAG, Edison Investment Research, Bloomberg, Thomson Reuters. Note: *Based on expenses net of fee income; adjusted for non-recurring items. **Including €27.1m of securities classified as long-term assets. ***Does not include co-investment funds.

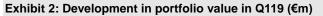


Q119 highlights: Impact of lower market multiples

DBAG reported a \leq 21.4m net loss for Q119 compared to net income of \leq 10.1m a year earlier. The main reason behind this was the negative impact of lower capital market valuations that are used as a reference to value DBAG's private equity investment portfolio. This has translated into a negative impact of \leq 47.8m on the company's accounting profits and portfolio value. Equity per share decreased to \leq 28.05 at end-December 2018 from \leq 29.50 at end-September 2018, the latter value being restated from the previous \leq 29.76 due to accounting adjustments relating to the recognition of irrecoverable interest receivable and income from advising funds, in accordance with IAS 8. This represents a 0.9% y-o-y decrease (after accounting for the \leq 1.45 per share, the equity per share reduction vs end-September 2018 stands at 5.1%.

During Q119, the fair value of DBAG's private equity investment portfolio diminished by €8.1m (or 2.3%) to €340.6m (see Exhibit 2). The reduction was largely driven by the above-mentioned market multiples revision, with 69% of DBAG's portfolio valued using the multiples method at end-December 2018 (vs 63% at end-September 2018), 17% valued at cost. This was largely offset by portfolio additions of €40.2m, including initial investments in FLS, Kraft & Bauer and Sero and follow-on funding rounds in duagon, Frimo, netzkontor, BTV and Telio. The portfolio value was assisted by a positive €30.9m effect arising from increased earnings prospects for portfolio companies in the current year versus 2018, with the effect of the roll-over from 2018 to 2019 accounting for part of the negative effect from lower valuation multiples. Disposals had a €24.3m negative impact on portfolio value and were mostly attributable to the sale of CleanPart. The negotiated sale price was already reflected in DBAG's portfolio value at end-September 2018.





Source: DBAG, Edison Investment Research

The Fund Investment Services division reported fee income of \in 7.6m (up 6.6% y-o-y), which included \in 0.4m of transaction-related fees from DBAG ECF II. On an annualised basis, fees as a percentage of average assets under management in the period stood at 1.68% compared with 1.59% in Q118. The segment's earnings before tax reached \in 1.5m (vs. \in 0.7m in Q118), with the increase in net expenses associated with higher personnel costs more than offset by the lack of a \in 0.9m negative non-recurring effect recognised in Q118. The latter related to an adjustment for remuneration that DBAG had received for the work performed by members of the investment team on supervisory bodies of DBAG Fund V portfolio companies.



New investments: DBAG Fund's VII allocation at 56%

DBAG finalised three new investments alongside DBAG Fund VII and DBAG ECF II in Q119, with another transaction in the radiology area agreed upon after the reporting date where DBAG Fund VII is involved. As a result, the latter fund has already allocated 56% of its investment commitments in six MBO transactions. During the quarter, DBAG took investment decisions amounting to €56m and invested c €40m (including follow-on investments); see below for more detailed elaboration on the deals. DBAG has also completed the sale of CleanPart to Mitsubishi Chemicals Corporation as agreed in Q418, receiving €19.0m and realising a quite attractive 2.4x money multiple after a 3.5-year holding period. This compares with DBAG's historical averages of 2.7x and 4.8 years, respectively. After the reporting date, DBAG ECF sold its minority stake in PSS to the majority shareholder. However, this will not have a material impact on Q219 numbers, given that the sale proceeds are yet to be determined, based on the prospective development of the company.

Kraft & Bauer Holding

In November 2018, DBAG deployed €13m in exchange for a 19% stake in Kraft & Bauer (K&B) and together with DBAG Fund VII (which deployed a further €46m) acquired a majority stake of 84% in the company. Kraft & Bauer's estimated FY18 revenue came in at €26m (c +24% y-o-y), implying an equity/sales multiple of 2.7x. The company was acquired from Invision, a Swiss investment company, which became a majority shareholder in 2013 as part of a succession process. DBAG acquired its stake through an MBO alongside the Bauer family and current Managing Director Frank Foddi.

K&B is a supplier of automated fire extinguishing systems for around 800 types of machine tools. These systems need to be inspected and maintained regularly and hence K&B derives c 30% of its revenues from services. It employs 80 employees in its headquarters in Germany, as well as its production site in Switzerland and 13 service locations in Germany, Switzerland and Italy. The company is targeting international expansion beyond the DACH region and Italy, as well as an increase in revenue generation from services.

SERO Schröder Elektronik Rohrbach

In November 2018, the company and DBAG Fund VII jointly acquired a 100% stake in Sero for €50.9m, with DBAG alone investing €11.4m in exchange for a 22.4% stake. With a revenue of €87m in 2018 (c +10% y-o-y), this implies an equity/sales multiple of 0.6x. The business was acquired from the Schröder family, with the company's founder Armin Schröder leaving the management.

Sero is a development partner and manufacturing service provider for electronic components, with a particular focus on the automotive sector, which makes up 80% of the company's revenue. Sero's products are also used in various metrology equipment and microphones. The ever-increasing number of electronic components used in the production of automobiles has helped Sero to post an 18% revenue CAGR since 2015. Although the industry currently suffers from the uncertainty linked to the Worldwide Harmonised Light Vehicle Test Procedure (WLTP) roll out, it is expected to remain Sero's main growth driver, with autonomous driving being the next big step for the industry. Prospective priorities for the company include capacity expansion and international expansion (particularly into North America and China).

FLS (Fast Lean Smart)

DBAG invested in FLS in October 2018, acquiring in total a 39.3% stake alongside DBAG ECF II. DBAG itself provided €9.5m (for a 16.3% stake) and the fund contributed a further €13.7m. With an estimated €10m in revenues in 2018 (c +11% y-o-y) the deal valuation implies a 5.8x equity/sales



multiple. The company was acquired through an MBO alongside its founder Thomas Brechtel and current management.

FLS provides real-time route optimisation software and operates a SaaS (software-as-a-service) model. It has developed a proprietary algorithm, PowerOpt, that it implements across a wide variety of businesses, for clients including Allianz, Royal Mail and Sky. The real-time solutions optimisation enables its clients to significantly improve travel costs, lead times or productivity of field employees.

Other portfolio developments

After the reporting date, a radiology practice was acquired as an addition to the Ranova network, in which DBAG's investment has yet to close. The transaction (ie acquisition and merger of several radiology practices) was initially agreed in March 2017, when DBAG committed to invest \in 15m for an 11% stake (translating into a 56% combined stake with DBAG Fund VII) in a newly formed group, which at that time delivered c \in 54m in revenues annually. With the new investment the group revenues should total c \in 77m annually.

Also after the reporting date, Unser Heimatbäcker filed for insolvency. However, this will not affect Q219 results as DBAG recorded a further impairment in Q119 (which reduced earnings by €1.6m). DBAG ECF also sold its minority stake in PSS in January 2019 and the negotiated price was reflected in the fair value of the portfolio as at end-December 2018.

Follow-on investments totalling c €6m (Edison estimate) were made in portfolio companies including duagon, Frimo, netzkontor and Telio, with funding provided for the acquisition of major competitor Anedis Management by BTV Multimedia (DBAG contributed €2.2m to the transaction).

Valuation: Premium remaining at c 10–30% to NAV

As discussed in our previous update notes, DBAG's reported NAV is exclusively attributable to the value of its private equity investment portfolio and does not account for the fair value of its fund services business, which currently represents third-party assets under management of $c \in 1.4$ bn and generates considerable recurring fee income. In contrast, DBAG's market value reflects the value of both its fund services business and its private equity investments. Consequently, there is an inherent premium when comparing DBAG's share price with its reported NAV, which disguises any underlying premium or discount that the market may be applying to the value of DBAG's private equity investment portfolio. We believe that this is the primary reason why the company's shares have traded at a premium to NAV for nearly all of the last three years (currently at 23.7%), as illustrated in Exhibit 3.





Source: Thomson Datastream, Edison Investment Research. Note: Positive numbers indicate a premium, negative numbers a discount.



DBAG's reported NAV as at end-December 2018 stood at €422.0m, which represents a decline of €21.8m (or by 4.9%) versus end-September 2018 (and a 5.5% decrease from end-December 2017). As already discussed, this was largely the result of lower earnings multiples of listed peers that are used to value portfolio companies, following the recent market sell-off. This compares with DBAG's current market capitalisation of €514.2m. If we assume that the market is valuing the company's private equity business in line with its last reported NAV, this implies a value attached to the fund services business at around €83.0m. Based on the LTM earnings before tax of the latter segment, this translates into an earnings multiple of 12.2x. However, in this context it is important to note that 17% of DBAG's current portfolio is valued at acquisition cost and will be moved to the multiples method basis 12 months after the acquisition date. Alternatively, if we assume that the private equity investments business is valued at a discount to NAV in line with the current discount of the LPX Europe index (16.9%), the multiple for the fund services business goes up to 22.8x. Please note that we have not adjusted the multiple for the transaction-based fees earned by DBAG over the last 12 months.

Peer group comparison

We have compared DBAG with other listed private equity investment companies with a prime focus on Europe in Exhibit 4. However, we acknowledge that DBAG is the only company in the group that targets mid-sized companies in the German-speaking countries. Moreover, unlike all the peers except 3i in the UK, DBAG also manages third-party funds. As discussed earlier, we see the value of DBAG's fund service business as the main reason that its shares trade at a premium to its reported NAV. This is in contrast to its peers that do not manage third-party funds, some of which are trading at a wide discount to NAV. DBAG's 4.2% dividend yield is among the highest in the peer group (average of 3.6%).

% unless stated	Region	Market cap £m	NAV TR 1 year	NAV TR 3 years	NAV TR 5 years		Price TR 1 year	Price TR 3 years	Price TR 5 years	Price TR 10 years	Premium/ (discount)	Dividend vield
Deutsche Beteiligungs	Europe	454.3	(0.0)	60.4	96.5	145.2	(25.7)	51.3	113.7	307.7	23.7	4.2
3i	Global	8,836.3	20.3	124.2	216.1	57.6	(11.8)	79.8	145.1	383.1	14.4	4.1
HgCapital Trust	UK	754.0	10.2	61.9	107.3	191.2	3.5	76.8	110.6	258.8	(3.3)	2.3
ICG Enterprise Trust	UK	570.0	13.2	57.3	69.4	168.5	3.0	49.7	54.9	419.5	(20.3)	2.5
Oakley Capital Investments	Europe	393.2	6.4	34.7	34.7	149.5	8.8	29.0	(1.3)	192.6	(25.2)	2.3
Princess Private Equity	Global	588.4	8.0	63.4	92.7	92.1	(15.1)	55.3	98.9	342.4	(11.1)	5.7
Standard Life Private Equity	Europe	528.1	10.6	58.8	92.2	132.7	(2.8)	68.4	87.3	499.5	(18.5)	3.7
Average		1,732.0	9.8	65.8	101.3	133.8	(5.7)	58.6	87.0	343.4	(5.8)	3.6
Rank in peer group		6	7	4	3	4	7	5	2	5	1	2

Exhibit 4: Listed private equity investment companies peer group as at 8 February 2019*

Source: Morningstar, Edison Investment Research. Note: *Performance to end-December 2018. TR=total return. Net gearing is total assets less cash and equivalents as a percentage of net assets (100 = ungeared).

DBAG's NAV total return in sterling terms marginally underperformed the peer group average over three and five years to 31 December 2018, ranking fourth and third out of eight, respectively. The company's one-year NAV TR performance was broadly flat, compared with average peer performance at 9.6%. However, the company was slightly ahead of peers over the last 10 years, posting a total return of 145.2% vs peer average at 133.8%. Despite the marked relative weakness over one year, DBAG's share price return is only modestly below the peer group average over three years and is ahead of peers over five years.



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