

## Deutsche Grundstücksauktionen

Real estate

06 June 2017

### As good as it gets

Deutsche Grundstücksauktionen (DGA) is at full throttle as longstanding operational excellence combines with favourable macro factors. Continuous high demand for property is being supplemented by effective promotion of auctions as a distribution channel, higher margin online business and likely growing recurrent income from enhanced public sector contracts. Strong finances (debt-free) should further allow continued generous dividends by a management team evidently sympathetic to investor yield considerations.

### Not standing still

For over more than 30 years, DGA has achieved an enviable profit and dividend record through steady expansion and innovation of its core business. From modest origins in Berlin, it now clearly leads the field with over 60 auctions a year, both live and online, across Germany and with a varied and attractive client base. Such momentum should fuel acceptance of auctions by sellers as well as awareness of their special pricing opportunities for buyers. All credit to management that finances have remained disciplined with, typically, year-end net cash and full profit payout.

### Market blues?

Market conditions of late have been so favourable to DGA that there is inevitable speculation that they may ease. While this may be only a matter of time, there appears to be consensus that the outlook for the foreseeable future remains positive for key determinants: disposable income, employment and interest rates. Short of a material downturn (and in the most recent the company still paid a dividend), we believe that a softening could be accommodated relatively easily, given demographic advantages such as supply shortages, a rising population and internationally low homeownership. The breadth of DGA's offer and clients should also mitigate this.

### Valuation: Attractive valuation supported by yield

With no direct listed peer and a lack of consensus forecasts, we look at the iShares MSCI Germany Small-Cap ETF, which shows historical P/E of 18x (DGA 21x) and yield 1.6% (DGA 4.4%). A flying start to the year and benign conditions may allow apparently cautious guidance to be exceeded and thus an even more generous dividend in line with the company's payout policy.

#### Historical results

Year end	Net commission (€m)	PBT (€m)	EPS (€)	DPS (€)	EV/EBITDA (x)	Yield (%)
12/13	9.2	0.86	0.37	0.39	25.3	2.4
12/14	10.4	1.61	0.66	0.65	14.0	3.9
12/15	10.3	1.65	0.71	0.70	12.7	4.2
12/16	10.6	1.76	0.73	0.72	12.5	4.4

Source: Company accounts

Price **€16.50**  
Market cap **€26m**

#### Share price graph



#### Share details

Code	DGR
Listing	Deutsche Börse Scale
Shares in issue	1.6m
Net cash at December 2016	€3.6m

#### Business description

Deutsche Grundstücksauktionen (DGA) is market leader in the auctioning of properties in Germany. The company was founded in Berlin in 1984.

#### Bull

- Sustained demand for property thanks to favourable economic and interest rate outlook.
- Clear market leader with experienced management and wide client base.
- Sound finances, allowing generous, unbroken dividend record.

#### Bear

- Macroeconomic uncertainties; rising interest rates would diminish yield appeal of property.
- Intensely competitive.
- Potential supply shortage as a result of excess demand and unrealistic seller expectations.

#### Analyst

Richard Finch +44 (0) 20 3077 5700

[financials@edisongroup.com](mailto:financials@edisongroup.com)

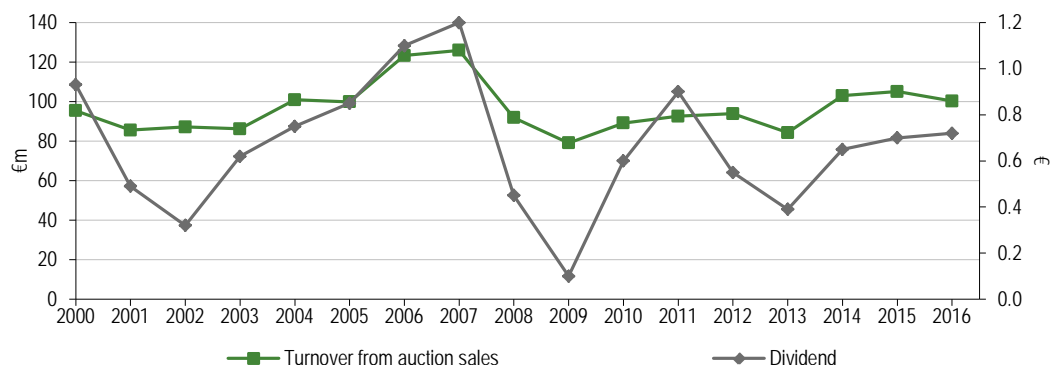
Edison Investment Research provides qualitative research coverage on companies in the Deutsche Börse Scale segment in accordance with section 36 subsection 3 of the General Terms and Conditions of Deutsche Börse AG for the Regulated Unofficial Market (Freiverkehr) on Frankfurter Wertpapierbörse (as of 1 March 2017). Two to three research reports will be produced per year. Research reports do not contain Edison analyst financial forecasts.

## Company description: Auction supremo

For over more than 30 years, DGA has firmly established itself as clear market leader in the auctioning of all types of real estate in Germany. Founded in Berlin in 1984 and known originally as Berlin Grundstücksauktionen, the company expanded actively after its 1999 listing with a network of four regional auction houses – Sächsische (Dresden), Norddeutsche (Rostock), Plettner & Brecht (Berlin) and Westdeutsche (Köln) – as well as an online business. Consequently, it has a nationwide presence although the new federal states following reunification still account for the bulk of turnover from auction sales (c80% in 2016). Live auctions are held quarterly, while online auctions (c12% of 2016 group pre-tax profit) are more frequent (generally, twice a month). Property vendors are notably varied, including private and commercial, the federal government and its institutions, banks and insolvency administrators. Items on offer vary from widely contrasting size and quality of residential and commercial properties to the smallest pieces of land or outbuildings, hence the seemingly modest overall average sales price of €53,000 in 2016. A seller's and buyer's commission is payable as a percentage of the sales revenue. There is also a small brokerage operation within Plettner & Brecht.

The financial performance since listing has been broadly resilient. We highlight below (Exhibit 1) the impact of expansion which the listing spurred, followed by that of the financial crisis and subsequent recovery and stabilisation. Importantly, it shows the company's unbroken ability to pay a dividend and its recent trading buoyancy as its favoured KPI, annual turnover from auction sales, exceeded €100m for the third year in a row for the first time, if still well below the pre-crisis peak.

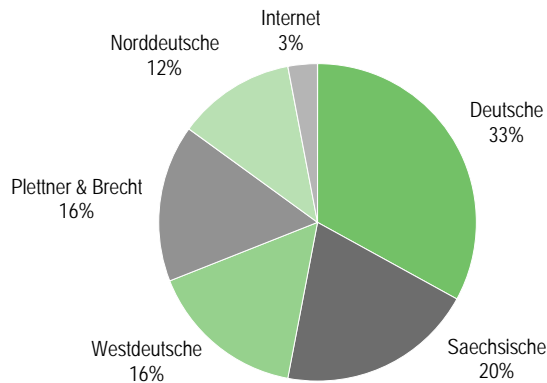
**Exhibit 1: Performance since flotation: turnover from auction sales + dividend payment**



Source: Edison Investment Research

Analysis of individual auction house contributions (Exhibit 2 shows 2016) can be misleading as performance varies year-on-year, so overall group assessment is suggested. However, it is worth noting that Berlin-based parent company, Deutsche, has consistently generated the highest turnover from auction sales, while the four regional houses contribute similar levels of turnover. Although relatively small in turnover terms (3%), the internet business tends to be substantially more profitable than offline.

**Exhibit 2: 2016 turnover from auction sales by auction house**



Source: Edison Investment Research

## Going...going...gone!

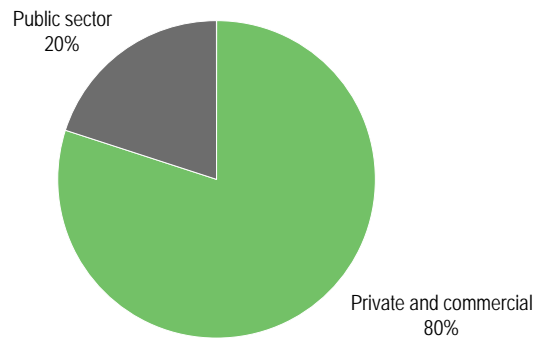
The following applies to all properties submitted for auction:

- **Evaluation and admission for auction sale:** after inspection and a detailed assessment, company staff consider a minimum bid (reserve price) according to market conditions via an evaluation panel. The seller is notified of this minimum bid. Once agreed, an auction sale agreement is drawn up.
- **Presentation in the catalogue:** documentation with text and pictures in a printed edition with a circulation of c 65,000. An additional 45,000 clients receive the catalogue by email. Total readership is estimated by Media-Analyse at c 250,000 across Germany and most of Europe.
- **Marketing:** tailored promotion, ranging from billposting to advertising in regional and national newspapers and in relevant internet portals. A colour poster, promoting the auctions and detailing the most important aspects, is displayed at the site.
- **Property data and viewing:** interested clients have the option to receive further information and to view before the auction.
- **Bidding:** personal attendance, by telephone or online. A written bid offer agreement before the auction is required for telephone bidding and recommended if attending in person to exempt from a bidding security – 10% of the hammer price above €20,000 (20% for foreign citizens) and payment of the purchase price within four weeks of the auction.
- **Auction procedure:** the lots are auctioned in the order they are printed in the catalogue. Printed minimum bids are called and higher bids are requested (by raising the hand) at increases specified by the auction house in advance.
- **Bid acceptance:** the highest bidder buys the property on the third hammer blow. According to § 156 German Civil Code, the contract is concluded with this bid acceptance. Subsequently, ratification in notarial form is required.
- **Costs:** for the purchaser, commission is based on the purchase price: 17.85% (up to €9,999), 11.90% (from €10,000 to €29,999), 9.52% (from €30,000 to €59,999) and 7.14% (from €60,000). For the seller, commission as per the auction sale agreement: 11.90% of purchase price (minimum bid below €50,000) and no commission if sold for minimum bid or, if higher, up to 6% of purchase price (minimum bid above €50,000). There are additional regulatory fees.

## Diversified sales mix

DGA is not reliant on any particular market for its supply, as shown in the chart below and geographically in Exhibit 2.

**Exhibit 3: Vendor mix (approximate share of auction turnover)**

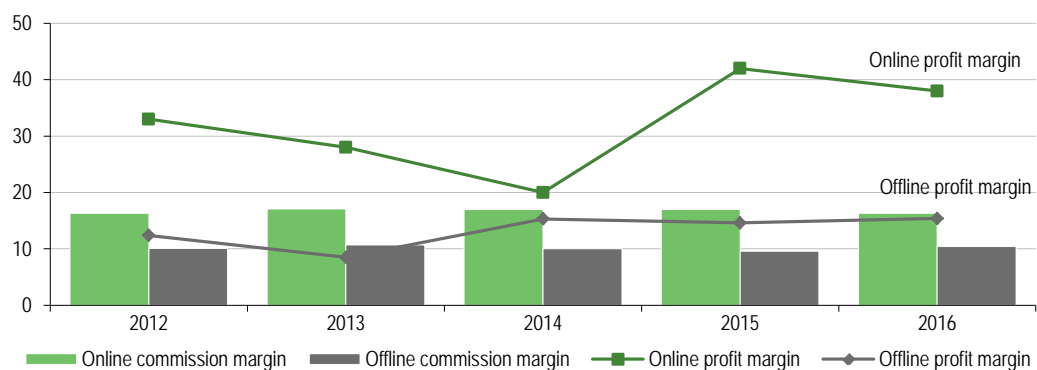


Source: Edison Investment Research

Moreover, within the public sector supplier base strenuous efforts have been made to establish long-term relationships and therefore significant, recurrent sales volume. Prime among these is a four-year exclusive framework contract until 2020 with the Bundesanstalt für Immobilienaufgaben (Institute for Federal Real Estate). With assets of c €21bn, this agency sells real estate, no longer required by the Federal government, through a number of channels, including auctions. DGA's contract win in an EU-wide, open tender reflects its extensive experience since 2003 in working with the Federal government and its companies. Auction turnover for this contract in 2016 was c €7m, similar to the previous year when the agreement was shorter term and not exclusive. There are also framework contracts until 2018 with Deutsche Bahn and BVVG, which is responsible for privatising formerly state-owned agricultural and forest areas of the old GDR. Each extends longstanding relationships and has contributed c €2m auction turnover pa. Total Federal government-related auction turnover was therefore 12% of group auction turnover and management is confident of matching that in 2017.

Online business has become increasingly important to DGA, both as a favoured channel of public sector work (80% of turnover) and contributor to overall profit (c 12% in 2016). Auctions are held every two weeks and unlike live operations, are not constrained by time (in the case of competing bids, individual lots may take hours to settle). Compared with live auctions (Exhibit 4), online is clearly higher margin in terms of commission as the average lot price is but a fraction (c €6,000 against c €77,000). This and the relative lack of fixed costs allow predictably an even greater margin disparity at the pre-tax profit level. For 2017, management looks to beat last year's record turnover.

**Exhibit 4: Online/offline auction profitability**



Source: Edison Investment Research

## Out on its own

DGA is the pre-eminent property auctioneer in Germany. With 87% market share, it points only to its nearest competitor with auction turnover of €12m and a regional business in Saxony with turnover of just €3m. This has been the situation for a long time and the company does not foresee it changing in the short term. Indeed, we note the failure of the last major move into the market. The leading US online property auction company, Auction.com, entered with a great fanfare in 2012 only to withdraw within two years after disappointing results. Management is confident that its expertise and reputation, backed by long client relationships and unmatched public sector contracts, provide protection and, of course, the fact that to date auctions have only a small share of total property transactions.

## Recent newsflow and upcoming catalysts

There have been no corporate announcements since the recent (early May) publication of the 2016 Annual Report, which is otherwise reflected in this appraisal. It confirmed the success of the Q117 auctions, as reported in March, and confidence about the full year outturn.

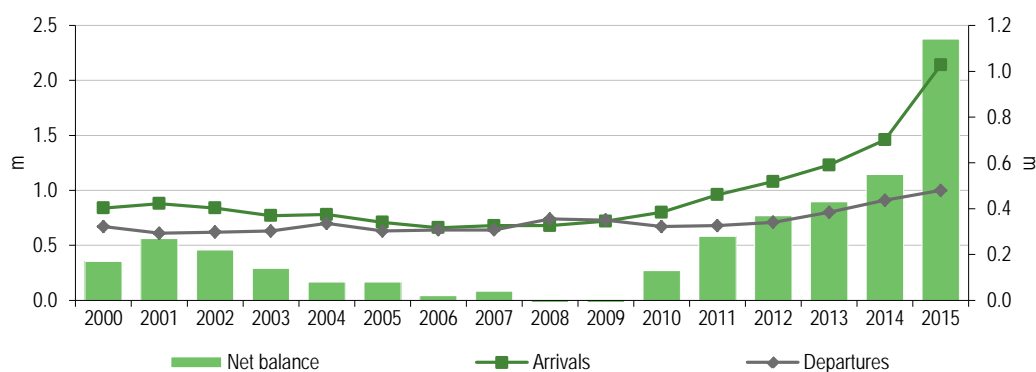
News of Q2 auctions is due at the end of the quarter, with H1 financial results due on 4 September. Thereafter, the company is set to announce Q3 and Q4 auction results and outline guidance for the full year early in 2018.

## Market overview

Positive economic fundamentals have lately underpinned the German property market, so there is reassurance in very recent continued endorsement by the Bundesbank in its latest monthly report (May 2017). The outlook for employment, disposable income and public finances remains good and thus conducive to investment in property. This is reflected in a bumper start to 2017 in terms of transaction volumes in both the commercial and residential sectors, eg +60% and +75% in Q1 respectively, according to JLL.

Nevertheless, favourable demographics, namely a sharply rising population, spurred by inward migration, and increasing homeownership rates, have also been a key stimulant. As evident in Exhibit 5, inward migration was historically insignificant only to peak at 1.14m in 2015. Figures for last year have yet to be reported but are expected still to be substantial, if considerably lower. With the number of completed homes well under 0.3m pa, the gap between supply and demand may only widen with consequent upward pressure on prices.

**Exhibit 5: Migration between Germany and foreign countries**



Source: Destatis

Germany has a much higher population density than the EU average, at 229 residents per km<sup>2</sup>, and a rising level of urbanisation. In addition, renting is more popular in Germany than in most of Europe and there has been notable migration to the cities, especially by the younger generation. This demand has coincided with a lack of supply, following a steady fall in building permits after the reunification boom ended in the mid-1990s.

As an example, the Berlin market has seen steady population growth, with migration adding 40,000-50,000 residents a year. The density has reached 4,000 residents per km<sup>2</sup> as a result, compared with 1,500/km<sup>2</sup> in London. It has also attracted start-up capital and employment opportunities, which give it a broader appeal for residents. This has pushed up median rents from as low as €5.50 per m<sup>2</sup> per month in 2008 to approximately €9.50 by the end of last year. Purchase prices have also more than doubled over the same period. Similarly, North Rhine Westphalia, which is the most heavily populated federal state, has a population density that is double the rest of the country after recent migration. As a result, median rents and purchase prices in cities like Cologne and Düsseldorf have seen significant increases in the past five years.

CBRE research has shown that, despite an improvement in building permits and housing completions in multi-storey residential, supply remained insufficient to meet demand in 2016. The result was a further 35% increase in purchase prices to an average of €93,000 per unit and €1,490 per m<sup>2</sup>. CBRE expects this supply deficit to continue in 2017, with the effect that the competition for the best property locations will intensify and prices will increase again. CBRE expects this to be exacerbated by international investors, who are attracted by the stable economic and political environment in Germany. As a result, CBRE forecasts transaction volumes in portfolios of over 50 units to be at a similar level to last year's €13.7bn.

Another important trend is the low returns in the bond markets, relative to property in its core markets. This has generated significant investment appetite from both European and North American investors and saw investment volumes exceed the previous 2008 peak in 2016. As a result, of the \$66bn raised for closed-end real estate funds in the first nine months of 2016, 29% was raised for Europe. In a recent survey of investor intentions, Europe was expected to exceed North America as a regional investment target over the next 12 months.

## Management, organisation and corporate governance

---

### Supervisory board and management board

German companies are required to have a clear separation of management and supervisory functions. The management board is responsible for managing the company and representing it in dealings with third parties. It is overseen by the supervisory board, which also appoints its members. Members of the supervisory board may generally not be involved in the day-to-day management of the company, but their prior consent must be obtained on decisions or actions having a fundamental impact on the assets, financial or profit situation of the company. DGA's supervisory board has been chaired by **Michael Siegmund**, a lawyer, since 2012. Other members of the supervisory board are **Christian Ansorge** (from 2012; partner in a long-established Berlin estate agency) and **Manfred Krüger** (appointed 2010). Their families were co-founders of the auction house.

### Management team

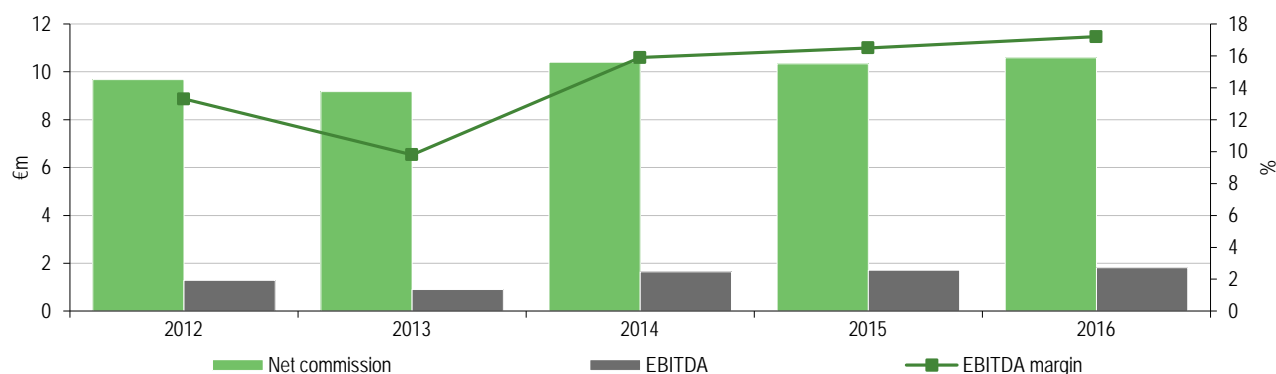
**Michael Plettner** (CEO) and **Gerd Fleischmann** are both senior property auctioneers and have worked for the company since 1990.

## Shareholders and free float

There are four longstanding major shareholders (founders and family), accounting for c 40%. The free float is c 60%.

## Financials

**Exhibit 6: Revenue and EBITDA margin progression**



Source: Edison Investment Research

## Income statement

The financial statements are in accordance with HGB. DGA, the parent company, is influenced to a considerable extent by the results of its fully owned subsidiaries but is not obliged to present consolidated accounts and management reports. As a result of profit transfer agreements with its five subsidiaries, the total result of the group is therefore shown in the statements of the parent company.

Consequently, for the sake of clarity we show (shaded below) both gross turnover (auction sale proceeds) and net commission at the group level, as these drive the transferred profits. They are also regarded by management as key indicators. However, they are, of course, only proxies for the subsidiaries' revenue, which is not disclosed, so accurate top-line analysis is not possible.

**Exhibit 7: Financial summary**

	€m	2012	2013	2014	2015	2016
Year end 31 December		HGB	HGB	HGB	HGB	HGB
<b>Income Statement</b>						
<b>Group:</b>						
Turnover from auction sales		93.89	84.25	103.00	105.06	100.28
Net commission		9.68	9.18	10.40	10.34	10.59
Revenue + other operating income		4.46	3.73	4.24	4.01	4.16
EBITDA		1.29	0.90	1.65	1.71	1.82
Parent company profit		0.46	(0.16)	0.14	0.14	0.06
Profit from subsidiaries		0.82	1.02***	1.50	1.51	1.70
Pre-Tax Profit - Adjusted		1.29	0.86	1.61	1.65	1.76
Exceptional		1.21*	-	-	-	-
Profit Before Tax - Reported		2.49	0.86	1.61	1.65	1.76
Net Income - Reported		2.09	0.59	1.05	1.13	1.17
EPS - Adjusted (€)		0.55	0.37	0.66	0.71	0.73
Dividend per share (€)		0.55 + 0.75**	0.39	0.65	0.70	0.72
<b>Balance Sheet</b>						
Net Assets		9.58	8.08	8.51	8.60	8.65
Net Cash		5.05	3.62	3.27	4.61	3.57

Source: Company accounts. Notes: \*gain on sale of PBV; \*\*special dividend post-PBV; \*\*\*including Westdeutsche for the first time.

With 2012 not including Westdeutsche and subject to an exceptional item, as highlighted above, we believe that it is more helpful to use 2013 as a starting-point for analysis of the P&L. At once we see a doubling of EBITDA by 2016, driven by a 19% rise in turnover from auction sales at stable margin. While impressive, it is also important to appreciate that with gross turnover showing more measured growth or even decline, as of late, the nature of the company's commission fee-based model can allow profit resilience. For example, the mix of lots on offer and negotiating skills of the auction staff can mitigate apparent pressure at the gross level. 2016 saw turnover from auction sales down by 4%, yet commission (effectively, revenue in terms of company accounts) was up 2%. Of course this works in reverse as the previous year's 2% gross turnover increase converted to marginally lower commission. It is nonetheless arguable that turnover might have been expected not to have flattened, given the aforementioned positive factors and the scale of shortfall on pre-crisis levels.

**Exhibit 8: Analysis of revenue and profit**

	€m	2012	2013	2014	2015	2016
Year end 31 December		HGB	HGB	HGB	HGB	HGB
<b>Parent company</b>						
Auction turnover (€m)		39.1	31.8	42.2	41.9	32.7
Net commission (€)		3.36	2.68	3.15	2.86	2.96
Net commission rate		8.6%	8.4%	7.5%	6.8%	9.1%
Profit (€'000)		463	(161)	140	138	55
Margin		14%	-	4%	5%	2%
<b>Subsidiaries</b>						
Auction turnover (€m)		44.1*	52.5	60.8	63.2	67.6
Net commission (€)		5.20*	6.50	7.25	7.48	7.63
Net commission rate		11.8%	12.4%	11.9%	11.8%	11.3%
Profit (€'000)		821	1 022	1 465	1 511	1 699
Margin		16%	16%	20%	20%	22%
<b>Sächsische:</b>						
Auction turnover (€m)		16.4	18.8	20.0	19.0	20.2
Net commission (€)		2.66	2.93	2.92	2.68	2.96
Net commission rate		16.2%	15.6%	14.6%	14.1%	14.7%
Profit (€'000)		616	750	688	565	760
Margin		23%	26%	24%	21%	26%
<b>Norddeutsche:</b>						
Auction turnover (€m)		9.8	8.5	10.5	13.5	12.3
Net commission (€)		1.20	1.19	1.46	1.90	1.45
Net commission rate		12.2%	14.0%	13.9%	14.1%	11.8%
Profit (€'000)		23	55	192	505	101
Margin		2%	5%	13%	27%	7%
<b>Westdeutsche:</b>						
Auction turnover (€m)		10.7	9.9	16.1***	12.9	15.7****
Net commission (€)		1.12	1.08	1.59	1.31	1.60
Net commission rate		10.5%	10.9%	9.9%	10.2%	10.2%
Profit (€'000)		128	94	447	148	547
Margin		11%	9%	28%	11%	34%
<b>Internet:</b>						
Auction turnover (€m)		2.70	2.45	2.18	3.11	3.49
Net commission (€)		0.44	0.42	0.37	0.53	0.57
Net commission rate		16.3%	17.1%	17.0%	17.0%	16.3%
Profit (€'000)		144	119	72	222	215
Margin		33%	28%	20%	42%	38%
<b>Plettner &amp; Brecht:</b>						
- Auctions		6.9	7.1	8.6	9.8	10.4
- Brokerage		8.3	5.7	3.4	4.9	5.5
Auction / brokerage turnover (€m)		15.2**	12.8	12.0	14.7	15.9
Net commission (€)		0.90	0.89	0.91	1.06	1.05
Net commission rate		5.9%	7.0%	7.6%	7.2%	6.6%
Profit (€'000)		38	4	68	70	75

Source: Company accounts. Note: \*Excluding Westdeutsche as not subject to profit transfer agreement; \*\*including €5m from ex-subsidiary PBV office \*\*\*including €5m from Rheinufer villa \*\*\*\*including €2m from former Indonesian embassy.



Exhibit 8 confirms the volatility of individual auction houses but also how they tend to compensate for each other, as reflected in the subsidiaries' composite performance, which is encouragingly resilient. Westdeutsche, for example, was boosted in 2014 and 2016 by the sale of certain high-value items, while 2015 saw Norddeutsche benefit from additional auctions, greater market awareness and particularly effective cost control. The apparently low profitability of the parent business is attributed to its effective status as a holding company with associated central costs.

As for the outlook, in the absence of consensus forecasts, we rely on reported management guidance. This has been consistently upbeat following Q1 auctions, where gross turnover rose by 36% to €26.4m and commission by 15% to €2.46m. Westdeutsche stole the show (auction turnover more than trebled) as its transaction of premium properties in Q416, including the former Indonesian embassy in Bonn, led to improved market awareness and more attractive deliveries. Westdeutsche apart, group gross turnover was up 8%.

While still early in the year, management's goal of reaching the average gross turnover of the last three years, ie just 2% ahead of 2016 (€102.8m) appears undemanding, given the strong start, confirmation of unbroken high demand and the growth potential of key clients.

## Balance sheet and cash flow

Finances have remained sound throughout the period of our review, as detailed above. Surplus cash (the company has no debt) allows profit to be distributed almost entirely by way of dividend (see Exhibit 1). Similarly, DGA was able to return to shareholders the proceeds of the 2012 PBV disposal.

Management expresses pride in its dividend record as proof of the company's flexibility and success. It is also well aware of investor demand for sustained and attractive dividend yield at a time of low interest rates.

## Valuation

---

With no direct peer listed on the Frankfurt Stock Exchange, we look at the iShares MSCI Germany Small-Cap ETF, which seeks to track the investment results of an index composed of small-cap German equities. This shows historical P/E ratio of 18x (DGA 21x) and 12-month trailing yield of 1.6% (DGA 4.4%). As noted above, the history of a sustained and attractive dividend should lend support to the shares.

Given that we are not producing our own forecasts or model, using a DCF has too much subjectivity to be of much value.

## Sensitivities

---

- **Macroeconomic conditions:** the robust economy in Germany has been positive for the labour market, disposable incomes and thus the demand for properties. Similarly, very low sustained interest rates have boosted the appeal of potentially higher yielding real estate. While this may change, the effect on the relationship between supply and demand should be mitigated by systemic stock shortage. Also, the short-term prospect of lower prices can be beneficial to DGA if it opens up the market by spurring profit-taking and making starting prices more attractive.
- **Competition:** the company's dominance of the domestic auctions market may be challenged but recent entrants have failed and, in any case, there is intense competition from alternative distribution channels.
- **Variable costs:** unsold auction items represent a significant expense as dealing costs, eg inspection and marketing, are borne upfront by the company. However, the unsold quota is

consistently low at c 10%, confirming the success of its process of evaluating deliveries through formal review and agreement of the minimum bid with sellers.

- **Vendor dependence:** a very broad client base minimises reliance on certain high-profile public sector contracts and in any case the company's relationships remain strong. While lower inward migration may curb the Federal government's demand for emergency accommodation, management is optimistic that the agencies' commitment to the auction channel will engender long-term growth.
- **Reputation:** the company invests heavily in promoting greater acceptance by sellers of private real estate auctions and the special pricing opportunities for buyers. Although there is clear upside, there is also execution risk.

Edison is an investment research and advisory company, with offices in North America, Europe, the Middle East and AsiaPac. The heart of Edison is our world renowned equity research platform and deep multi-sector expertise. At Edison Investment Research, our research is widely read by international investors, advisors and stakeholders. Edison Advisors leverages our core research platform to provide differentiated services including investor relations and strategic consulting. Edison is authorised and regulated by the Financial Conduct Authority. Edison Investment Research (NZ) Limited (Edison NZ) is the New Zealand subsidiary of Edison. Edison NZ is registered on the New Zealand Financial Service Providers Register (FSP number 247505) and is registered to provide wholesale and/or generic financial adviser services only. Edison Investment Research Inc (Edison US) is the US subsidiary of Edison and is regulated by the Securities and Exchange Commission. Edison Investment Research Limited (Edison Aus) [46085869] is the Australian subsidiary of Edison and is not regulated by the Australian Securities and Investment Commission. Edison Germany is a branch entity of Edison Investment Research Limited [4794244]. [www.edisongroup.com](http://www.edisongroup.com)

#### DISCLAIMER

Any Information, data, analysis and opinions contained in this report do not constitute investment advice by Deutsche Börse AG or the Frankfurter Wertpapierbörse. Any investment decision should be solely based on a securities offering document or another document containing all information required to make such an investment decision, including risk factors.

Copyright 2017 Edison Investment Research Limited. All rights reserved. This report has been commissioned by Deutsche Börse AG and prepared and issued by Edison for publication globally. All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report. Opinions contained in this report represent those of the research department of Edison at the time of publication. The securities described in the Investment Research may not be eligible for sale in all jurisdictions or to certain categories of investors. This research is issued in Australia by Edison Aus and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act. The Investment Research is distributed in the United States by Edison US to major US institutional investors only. Edison US is registered as an investment adviser with the Securities and Exchange Commission. Edison US relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. As such, Edison does not offer or provide personalised advice. We publish information about companies in which we believe our readers may be interested and this information reflects our sincere opinions. The information that we provide or that is derived from our website is not intended to be, and should not be construed in any manner whatsoever as, personalised advice. Also, our website and the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. This document is provided for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research. Edison has a restrictive policy relating to personal dealing. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report. Edison or its affiliates may perform services or solicit business from any of the companies mentioned in this report. The value of securities mentioned in this report can fall as well as rise and are subject to large and sudden swings. In addition it may be difficult or not possible to buy, sell or obtain accurate information about the value of securities mentioned in this report. Past performance is not necessarily a guide to future performance. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (ie without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision. To the maximum extent permitted by law, Edison, its affiliates and contractors, and their respective directors, officers and employees will not be liable for any loss or damage arising as a result of reliance being placed on any of the information contained in this report and do not guarantee the returns on investments in the products discussed in this publication. FTSE International Limited ("FTSE") © FTSE 2017. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data. No further distribution of FTSE Data is permitted without FTSE's express written consent.