

Borussia Dortmund

Passing the financial fitness test

Borussia Dortmund's Q221 trading update showed higher profitability year-on-year due to active cost control despite lower revenue in aggregate as a result of COVID-19, and noting that the majority of revenue sources increased. Our recent Outlook note highlighted the attractive financial characteristics of Borussia Dortmund's business, in isolation and versus its peers, in 'normal' times. Therefore, the company should be a prime beneficiary of life returning to normal, with improving momentum in revenue and profitability, subject to sporting results. Our asset-based valuation indicates upside of 144% from the current share price to €12.55.

Year end	Revenue (€m)	EBITDA (€m)	PBT* (€m)	EPS* (€)	P/E (x)	EV/EBITDA (x)
06/19	370.3	116.0	101.5	0.88	5.8	4.9
06/20	370.2	63.0	45.6	0.47	11.0	9.0
06/21e	331.5	39.5	22.9	0.25	20.6	14.4
06/22e	346.6	60.8	43.8	0.43	12.0	9.3

Note: *PBT and EPS are normalised, excluding amortisation of acquired intangibles and exceptional items.

Q221: Improved profit despite lower revenue

The Q221 revenue decline of 3% y-o-y to €120.9m was a significant improvement from Q121's decline of 50%, as three of Borussia Dortmund's five sources of revenue increased year-on-year despite the ongoing challenges caused by COVID-19. This highlights the long-term resilience/growth dynamics of the majority of the revenue base. Coupled with a c 13% reduction in cash operating costs, EBITDA for Q221 of €36.6m was an impressive c 23% higher than the prior year. Lower taxes led to a threefold improvement in profit after tax to c €9.5m. The team's current sixth position in the Bundesliga requires an improvement in on-the pitch results for the rest of the season to ensure qualification for the Champions League in FY22.

Forecasts: No change ahead of Q221 results

Our profit forecasts for FY21 and FY22 are broadly unchanged and will be reviewed further on publication of full financial results for the period. The strong cost control in H121 leads us to assume lower personnel and other operating expenses for FY21 than previously. These are offset by lowering forecasts for revenue from Match Operations as fans are less likely to attend games this season due to COVID-19 than we previously anticipated, and lower net transfer income to reflect the financial uncertainty facing all football clubs.

Valuation: SOTP supports €12.55/share

Our asset-based sum-of-the-parts (SOTP) valuation of €12.55/share points to 144% upside from the current share price of €5.14. The valuation includes the unrealised value in the playing squad and the brand, each of which have an estimated valuation greater than the current share price. The EV/sales multiple for FY21e of 1.7x is broadly in line with the long-run average since FY05 despite the depressed revenues and higher financial gearing, indicating potential for strong share price performance on a recovery in revenue and profitability post COVID-19.

Q221 trading update

Travel & leisure

10 February 2021

Price	€5.14
Market cap	€473m
Net debt (€m) at 30 September 2020 (including finance leases)	94.1

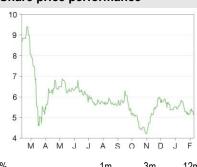
Shares in issue 92.0m
Free float 59.9%

Code BVB

Primary exchange Frankfurt

Secondary exchange N/A

Share price performance



%	1m	3m	12m
Abs	(7.8)	1.6	(40.8)
Rel (local)	(7.6)	(5.1)	(42.9)
52-week high/low		€9.39	€4.21

Business description

The group operates Borussia Dortmund, a leading football club, Bundesliga runners up in 2019/20, DFB Super Cup winners in 2019/20 and DFB Cup winners in 2016/17. The club has qualified for the Champions League in eight of the last 10 seasons.

Next events

Q221 financial report	26 February 2021
Q321 results	14 May 2021

Analysts

Russell Pointon +44 (0)20 3077 5700

Neil Shah +44 (0)20 3077 5715

consumer@edisongroup.com

Edison profile page

Borussia Dortmund is a research client of Edison Investment Research Limited



Q221 results: Strong profit delivery

Borussia Dortmund's Q221 headline results indicated a marked improvement in profitability due to a combination of a sequential quarter-on-quarter improvement in revenue, despite the ongoing disruption from COVID-19 that continues to negatively affect a number of sources of revenue, as well as impressive management of the cost base where possible.

Revenue declined by c 3% to €120.9m, EBITDA increased by c 23% to €36.6m, and profit after tax increased by more than threefold to €9.5m. Please note that the headline numbers for Q221 and H121 are reported to one decimal place, ie €x.xm, therefore numbers below may vary slightly versus the company's news release due to rounding. Full financial statements for Q221 will be published on 26 February 2021.

Revenue: Sequential improvement from Q121

The revenue decline of c 3% in Q221 was a significant improvement on the decline of 50% reported for Q121, which featured fewer games than is typical in the first quarter of a financial year as the start of the German football season was delayed due to COVID-19. The revenue of €120.9m was more than double Q121's €56.5m.

€m	Q120	Q220	H120	Q121	Q221	H121
Match Operations	8.6	14.0	22.6	0.2	0.4	0.6
Advertising	24.1	26.4	50.5	22.4	29.9	52.3
TV Marketing	51.2	61.9	113.1	23.1	75.6	98.7
Merchandising	9.0	12.1	21.2	8.2	12.3	20.5
Conference, Catering & Miscellaneous	19.4	9.7	29.2	2.5	2.8	5.3
Total revenue	112.4	124.2	236.6	56.5	120.9	177.4
Growth y-o-y%						
Match Operations	(19%)	(16%)	(17%)	(97%)	(97%)	(97%)
Advertising	14%	4%	9%	(7%)	13%	3%
TV Marketing	9%	6%	7%	(55%)	22%	(13%)
Merchandising	38%	4%	17%	(9%)	1%	(3%)
Conference, Catering & Miscellaneous	236%	(7%)	79%	(87%)	(72%)	(82%)
Total revenue	23%	1%	11%	(50%)	(3%)	(25%)
Net transfer income	10.3	0.9	11.2	5.2	(0.7)	4.5
o/w Gross transfer fees	62.8	(2.0)	60.8	9.0	3.9	12.9

It is notable that three of the company's five sources of revenue grew year-on-year, including Borussia Dortmund's two largest revenue streams, Advertising and TV Marketing, which operate with multi-year commitments with partners and rights holders, and represented 71% of group revenue before COVID-19. Advertising increased by 13% y-o-y to €29.9m due to the addition of a new sponsor; TV Marketing increased by 22% to €75.6m due to the phasing of Bundesliga and Champions League; and Merchandising increased by c 1% to €12.3m. Conversely, Match Operations and Conference, Catering & Miscellaneous declined by c 97% and 72% as fan attendance at the stadium was only partially and temporarily permitted during the period given national lockdowns and other restrictions.

As well as lower revenues from a lack of fans at games, the uncertainty created by COVID-19 for the rest of the industry is evidenced by the lower gross transfer fees of €12.9m for H121 compared with the prior year's €60.8m.



Profitability: Active cost control leads to higher profit

It is not unusual for Borussia Dortmund to report volatility in its profitability in the different financial quarters given, mainly the phasing and number of homes games and the level of transfer activity. However, its EBITDA of €36.6m in Q221 and €27.3m in H121 is notable given the lower revenue in a very difficult operating environment. Specifically, for Q221, its EBITDA of €36.6m was higher than Q220's €29.7m despite generating c €3.3m less revenue than the prior year. Further, for H121 the company's revenue declined by c €59.2m y-o-y, but its EBITDA declined by only €27.4m.

€m	Q120	Q220	H120	Q121	Q221	H121
Personnel expenses	(55.5)	(55.9)	(111.5)	(48.4)	(53.9)	(102.3)
% of revenue	49.4%	45.0%	47.1%	85.5%	44.6%	57.7%
Other operating expenses	(37.3)	(33.4)	(70.6)	(19.6)	(23.6)	(43.2)
% of revenue	33.2%	26.9%	29.9%	34.6%	19.6%	24.4%
EBITDA	25.0	29.7	54.7	(9.3)	36.6	27.3
Margin	22.2%	23.9%	23.1%	(16.4%)	30.3%	15.4%
Depreciation and amortisation	(25.7)	(23.6)	(49.3)	(26.5)	(26.3)	(52.8)
% of revenue	22.9%	19.0%	20.8%	46.9%	21.8%	29.8%
Profit before tax	(1.5)	6.0	4.5	(36.0)	9.8	(26.2)
Profit after tax	0.0	2.9	3.0	(35.8)	9.5	(26.3)

In descending order of contribution to the improvement in Borussia Dortmund's EBITDA in Q221, other operating expenses fell by c 29% y-o-y to €23.6m, and the less-flexible personnel expenses declined by c 4% to €53.9m. Below EBITDA, the 12% increase in depreciation and amortisation, mostly the non-cash amortisation of the book value of player registrations, offset some of the cash cost savings, and lower taxes of c €200k (versus c €3.0m in Q220) ensured that Borussia Dortmund reported a higher absolute profit after tax of €9.5m (€2.9m in Q220).

Forecasts: FY21 and FY22 profit unchanged

Our profit forecasts for FY21 and FY22 are unchanged ahead of the full financial release of Q221 results on 26 February 2021. However, we make some changes to assumptions for key revenue and cost line items of the income statement following the trading update. Given the strong cost control in H121 we now assume lower personnel expenses and other operating expenses than previously, which add a combined €28m to our prior EBITDA forecast. These are offset by lower revenue from match operations as fans are less likely to attend games this season than we previously anticipated, and lower net transfer income to reflect the financial uncertainty facing all football clubs.

Valuation: SOTP suggests 144% upside

We typically value Borussia Dortmund using an asset-backed SOTP valuation that takes into account the unrealised value of the squad and the brand. Our €12.55 valuation represents a premium of 144% to the current share price of €5.14.



	€m	Per share (€)	Comments
Value of squad	564.1	6.13	Per Transfermarkt.com less discount of 8.3%
Brand value	494.1	5.37	Brand Finance (May 2018) \$587m plus premium of 1%
Stadium	190.2	2.07	Net book value at 30 September 2020
Enterprise value	1,248.4	13.57	
Net cash/ (debt)	(94.1)	(1.02)	At 30 September 2020
Equity value	1,154.3	12.55	·
Shares (m)	92.0		
Current share price		5.14	
Premium to current share price		144%	

The current value of the first team squad according to Transfermarkt.com is €615.2m, a premium of 169% to the balance sheet valuation of €228.3m at the end of June 2020. To this we now apply a discount of 8.3% reflecting the average transfer costs as a percentage of gross transfer fees since the change in accounting for transfer activity in FY20. The valuation of players is subjective and vulnerable to changes in the financial positions of other clubs, but we also highlight that it includes no value for players in the wider footballing squad including the youth team. Management's long-term record in realising gains on player disposals provides comfort that the squad's market value is at a premium to book value. The book value of the squad is equivalent to €2.48/share, and the unrealised gain of €335.8m represents €3.65/share.

The last quoted valuation of the Borussia Dortmund brand by Brand Finance of US\$587m is from May 2018, equivalent to €489m at the current exchange rate of US\$1.20/€. The valuation is more than two years old. As the valuation of brands is outside our field of expertise, we use the change in share prices of the four largest quoted peers (sports franchises and general sports entertainment) since the end of May 2018 as a proxy for the change in Borussia Dortmund's brand, and adjust it accordingly.

	_				
	Currency	Market value (m)	Share price 31 May 2018	Share price 8 February 2021	Change (%)
Manchester United	US\$	2,612	20.95	16.03	(23)
Juventus	€	1,064	0.54	0.81	50
Olympique Lyonnais	€	115	3.07	2.00	(35)
Ajax	€	286	12.05	15.72	30
Average of football clubs					6
Madison Square Garden	US\$	4,246	186.86	176.08	(6)
World Wrestling Entertainment	US\$	3,832	57.89	49.23	(15)
Average of other sports/ entertainment					(10)
Average of four largest companies					1

The share prices of the four largest peers have increased on average by 1% since May 2018, albeit with a wide range of changes. Therefore we inflate Borussia Dortmund's May 2018 brand valuation by 1% to arrive at a current valuation of €494.1m or €5.37/share.

The current share price of \in 5.14 is lower than the individual valuations of the playing squad (\in 6.13/share) and the brand (\in 5.37/share).



Borussia Dortmund's long-term valuation

For FY21 and FY22, Borussia Dortmund's EV/sales multiples are broadly in line with the long-term average of 1.6x since FY05, despite revenue being depressed by the effects of COVID-19, highlighting good scope for share price appreciation on a return to revenue growth post COVID-19. The higher EV/EBITDA multiples of 14.4x and 9.3x represent the near-term COVID-19-depressed profitability.

Exhibit 5: Borussia Dortmund's EV/sales multiple

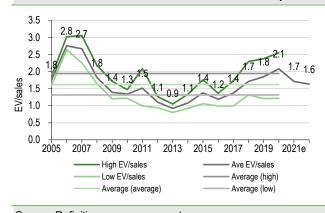
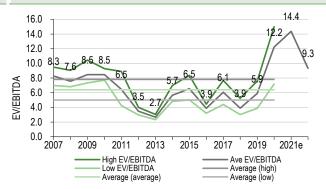


Exhibit 6: Borussia Dortmund's EV/EBITDA multiple



Source: Refinitiv, company accounts

Source: Refinitiv, company accounts



	€'k 2014	2015	2016	2017	2018	2019	2020	2021e	202
30-June	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFRS	IFF
NCOME STATEMENT									
Revenue	256,280	263,601	281,261	328,375	313,310	370,256	370,196	331,475	346,6
Cost of Sales	(15,857)	(8,237)	69,322	51,388	202,639	(21,273)	(22,392)	(17,066)	(19,38
Gross Profit	240,423	255,364	350,583	379,763	515,949	348,983	347,804	314,408	327,2
EBITDA	49,132 40,976	55,594 46,025	86,668 75,798	74,073 62,597	137,306 126,150	115,983 103,160	62,992 49,050	39,446 25,152	60,8 46,3
Normalised operating profit Amortisation of acquired intangibles	(22,523)	(32,865)	(31,899)	(51,939)	(66,814)	(65,850)	(88,285)	(94,972)	(107,0
Exceptionals	(22,323)	(32,003)	(7,469)	(31,939)	(20,362)	(13,809)	(3,903)	(94,972)	(107,0
Reported operating profit	18,453	13,160	36,430	10,658	38,974	23,501	(43,138)	(69,820)	(60,7
Net Interest	(3,889)	(7,159)	(2,104)	(1,567)	(4,336)	(1,705)	(3,444)	(2,233)	(2,4
Joint ventures & associates (post tax)	27	0	8	28	13	13	(1)	0	(=, 1
Profit Before Tax (norm)	37,114	38,866	73,702	61,058	121,827	101,468	45,605	22,918	43,8
Profit Before Tax (reported)	14,591	6,001	34,334	9,119	34,651	21,809	(46,583)	(72,053)	(63,2
Reported tax	(2,621)	(469)	(4,898)	(910)	(2,946)	(4,418)	2,630	0	(4,3
Profit After Tax (norm)	30,447	35,828	63,188	54,965	111,469	80,913	43,030	22,918	39,4
Profit After Tax (reported)	11,970	5,532	29,436	8,209	31,705	17,391	(43,953)	(72,053)	(67,6
Minority interests	(310)	(281)	(245)	0	0	0	0	0	
Net income (normalised)	30,137	35,547	62,943	54,965	111,469	80,913	43,030	22,918	39,4
Net income (reported)	11,660	5,251	29,191	8,209	31,705	17,391	(43,953)	(72,053)	(67,6
Average number of shares outstanding (m)	61.4	92.0	92.0	92.0	92.0	92.0	92.0	92.0	9
EPS - normalised (c)	49.06	38.64	68.42	59.74	121.16	87.95	46.77	24.91	42
EPS - diluted normalised (€)	0.49	0.39	0.68	0.60	1.21	0.88	0.47	0.25	C
EPS - basic reported (€)	0.19	0.06	0.32	0.09	0.34	0.19	(0.48)	(0.78)	(0
Dividend (€)	0.10	0.05	0.06	0.06	0.06	0.06	0.00	0.00	(
Revenue growth (%)	1.1	2.9	6.7	16.8	(-4.6)	18.2	(-0.0)	(-10.5)	
Gross Margin (%)	93.8	96.9	124.6	115.6	164.7	94.3	94.0	94.9	(
EBITDA Margin (%)	19.2	21.1	30.8	22.6	43.8	31.3	17.0	11.9	1
Normalised Operating Margin	16.0	17.5	26.9	19.1	40.3	27.9	13.2	7.6	•
BALANCE SHEET									
Fixed Assets	249,492	289,509	302,765	354,858	351,405	371,715	441,455	390,189	329.
ntangible Assets	61,602	96,340	65,278	141,521	120,342	163,710	229,667	189,695	137,
Tangible Assets	184,502	189,518	188,423	184,664	180,693	184,001	193,037	181,742	173,
nvestments & other	3,388	3,651	49,064	28,673	50,370	24,004	18,751	18,751	18,
Current Assets	42,803	97,030	121,780	123,739	134,207	128,356	76,512	67,769	69,
Stocks	5,921	9,376	10,158	8,978	5,588	4,569	6,754	5,148	5,
Debtors	14,923	29,680	51,072	48,776	22,981	30,061	36,520	32,700	34,
Cash & cash equivalents	17,852	53,739	51,722	49,297	59,464	55,865	3,317	0	
Other	4,107	4,235	8,828	16,688	46,174	37,861	29,921	29,921	29,
Current Liabilities	(71,014)	(61,627)	(78,811)	(140,912)	(119,026)	(125,388)	(122,609)	(134,652)	(143,9
Creditors	(59,927)	(58,327)	(69,587)	(128,707)	(113,949)	(119,779)	(110,188)	(86,173)	(86,8
Tax and social security	(571)	(803)	(5,212)	(732)	(1,962)	(811)	(40)	(40)	(50.
Short term borrowings	(8,889)	(2.407)	(2.640)	(10.205)	(1.000)	(2.427)	(8,031)	(44,090)	(52,6
Finance leases Other	(1,627)	(2,497)	(2,640)	(10,295)	(1,969)	(3,127)	(4,350)	(4,350)	(4,3
Long Term Liabilities	(76,032)	(38,834)	(1,372)	(1,178)	(1,146) (23,001)	(1,671)	(89,911)	(89,911)	(89,9
Long term borrowings	(32,139)	(30,034)	(30,132)	(23,303)	(23,001)	(13,704)	(03,311)	(03,311)	(03,
Finance leases	(20,142)	(21,630)	(18,990)	(8,695)	(6,726)	(8,381)	(20,054)	(20,054)	(20,0
Other long term liabilities	(23,751)	(17,204)	(17,202)	(16,688)	(16,275)	(11,383)	(69,857)	(69,857)	(69,8
Net Assets	145,249	286,078	309,542	312,302	343,585	354,919	305,447	233,394	165
Minority interests	(334)	(305)	0	0 .2,552	0	0	0	0	,
Shareholders' equity	144,915	285,773	309,542	312,302	343,585	354,919	305,447	233,394	165
CASH FLOW									
Op Cash Flow before WC and tax	45,270	48,435	84,572	72,534	132,983	111,914	59,547	37,213	58.
Vorking capital	(6,672)	(20,851)	29,052	31,488	(9,402)	5,673	(18,011)	(18,589)	(1,
Exceptional & other	(4,649)	(3,193)	(76,641)	13,868	52,171	(84,587)	(38,877)	(13,767)	(47,
Гах	(3,879)	(200)	(320)	(5,476)	(1,723)	(2,834)	305	0	(4,3
Operating cash flow	30,070	24,191	36,663	112,414	174,029	30,166	2,964	4,857	4,
Capex	(10,923)	(10,399)	(9,442)	(8,139)	(7,195)	(9,872)	(6,143)	(3,000)	(6,
Net investment in intangibles	2,058	(61,682)	(20,038)	(96,526)	(135,556)	(13,643)	(44,646)	(39,000)	(5,0
Acquisitions/disposals	0	0	(500)	(45)	0	0	0	0	
Vet interest	(3,644)	(7,244)	(1,435)	(2,002)	(3,668)	(1,456)	(3,326)	(2,233)	(2,4
Equity financing	5	140,708	1	0	0	0	0	Ó	
Dividends	(6,523)	(6,451)	(5,124)	(5,519)	(5,519)	(5,519)	(5,519)	0	
Other	(5,727)	(43,236)	(2,142)	(2,608)	(11,924)	(3,275)	4,122	10,000	
Net Cash Flow	5,316	35,887	(2,017)	(2,425)	10,167	(3,599)	(52,548)	(29,376)	(8,5
Opening net debt/(cash)	53,932	44,945	(29,612)	(30,092)	(30,307)	(50,769)	(44,357)	29,118	68,
Other non-cash movements	3,671	38,670	2,497	2,640	10,295	(2,813)	(20,927)	(10,000)	
Closing net debt/(cash)	44,945	(29,612)	(30,092)	(30,307)	(50,769)	(44,357)	29,118	68,494	77.



General disclaimer and copyright

This report has been commissioned by Borussia Dortmund and prepared and issued by Edison, in consideration of a fee payable by Borussia Dortmund. Edison Investment Research standard fees are £49,500 pa for the production and broad dissemination of a detailed note (Outlook) following by regular (typically quarterly) update notes. Fees are paid upfront in cash without recourse. Edison may seek additional fees for the provision of roadshows and related IR services for the client but does not get remunerated for any investment banking services. We never take payment in stock, options or warrants for any of our services.

Accuracy of content: 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 and have not sought for this information to be independently verified. Opinions contained in this report represent those of the research department of Edison at the time of publication. 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.

Exclusion of Liability: To the fullest extent allowed by law, Edison shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out or in connection with the access to, use of or reliance on any information contained on this note.

No personalised advice: The information that we provide should not be construed in any manner whatsoever as, personalised advice. Also, 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 securities described in the report may not be eligible for sale in all jurisdictions or to certain categories of investors.

Investment in securities mentioned: Edison has a restrictive policy relating to personal dealing and conflicts of interest. 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, subject to Edison's policies on personal dealing and conflicts of interest.

Copyright: Copyright 2021 Edison Investment Research Limited (Edison).

Australia

Edison Investment Research Pty Ltd (Edison AU) is the Australian subsidiary of Edison. Edison AU is a Corporate Authorised Representative (1252501) of Crown Wealth Group Pty Ltd who holds an Australian Financial Services Licence (Number: 494274). This research is issued in Australia by Edison AU and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by Edison AU is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument.

New Zealand

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. 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 (i.e. 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.

United Kingdom

This document is prepared and provided by Edison 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.

This Communication is being distributed in the United Kingdom and is directed only at (i) persons having professional experience in matters relating to investments, i.e. investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "FPO") (ii) high net-worth companies, unincorporated associations or other bodies within the meaning of Article 49 of the FPO and (iii) persons to whom it is otherwise lawful to distribute it. The investment activity to which this document relates is available only to such persons. It is not intended that this document be distributed or passed on, directly or indirectly, to any other class of persons and in any event and under no circumstances should persons of any other description rely on or act upon the contents of this document.

This Communication is being supplied to you solely for your information and may not be reproduced by, further distributed to or published in whole or in part by, any other person

United States

Edison 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. This report is a bona fide publication of general and regular circulation offering impersonal investment-related advice, not tailored to a specific investment portfolio or the needs of current and/or prospective subscribers. As such, Edison does not offer or provide personal advice and the research provided is for informational purposes only. No mention of a particular security in this report constitutes a recommendation to buy, sell or hold that or any security, or that any particular security, portfolio of securities, transaction or investment strategy is suitable for any specific person.