Deutsche Bank Research



Rating Buy

North America **United States**

Industrials **Packaging**

Ball Corporation

Reuters Bloomberg Exchange Ticker BLL.N BLL UN NYS BLL

Date

1 November 2018

Forecast Change

Price at 1 Nov 2018 (USD)	47.62
Price target	51.00
52-week range	47.62 - 35.25

Q3'18 Recap

Market shrugs off NA shortfall; no change to 2019 outlook

Q3 EBITDA of \$471M was modestly below consensus of \$475M, but missed our estimate by \$8M largely due to freight headwinds in North America related to out of pattern shipments. While volume growth of ~3% y/y was encouraging, we weren't sure how investors would respond given the earnings shortfall in North and Central America relative to expectations. Ultimately, materials generally outperformed today. Rigid packaging peers were mostly up mid-single digits and Ball was up ~6.3% (vs. the S&P up ~1.1%). Considering that we expect 2018 and 2019 consensus EBITDA estimates to come down, including ours with this note, we expect pressure on shares of Ball tomorrow relative to peers. So why keep the Buy rating? It is our belief that Ball's multi-year margin expansion story, consistent share repurchase activity and optimism around volume growth (which could accelerate due to sustainability goals of customers) will result in a forward FCF yield in the mid-5% range if more significant volume growth materializes. Thus, we continue to like Ball as a more defensive option when considering risk/ reward of other stocks in our universe.

Three key points.

- Volumes grew ~3% y/y. Earnings, however, would have been more impressive had freight headwinds in the US not been an issue. The company did see \$32M of earnings improvement y/y to \$153M in North and Central America. This improvement was largely driven by lapping ~ \$35M in headwinds from last year's hurricanes. This segment would have been in-line with our estimate if it weren't for ~\$15M of freight headwinds driven by out of pattern shipments, which would have driven margins ~120 bps higher in the segment as well (13.6% vs. 12.4%). Some of the issues that impacted the quarter will likely linger, including the mention of metal supply constraints that the company expects to manage through in Q4 and anticipates alleviating by year-end. As a result, we are reducing our Q4 segment estimate from \$155M to \$146M. Looking to 2019, we see significant earnings improvement in the region driven by the Goodyear plant and specialty can growth.
- Benefit from sustainability a focus on the call. In Ball's prepared remarks, CEO Hayes noted, "We are leading more efforts on our sustainability initiatives to ensure aluminum packages for beverage and aerosol are properly positioned as the environmental solution for our customers' brand portfolios." We believe this focus will start to pick up steam in the coming quarters and could elevate volume growth for

Valuation & Risks

Debbie Jones

Research Analyst

+1-212-250-2956

Kyle White

Research Associate

+1-212-250-7628

Steven Sheeckutz

Research Associate

+1-212-250-9128

Key changes			
EPS (USD)	2.28 to 2.21	\downarrow	-3.0%
Revenue	11,462.1 to	\uparrow	0.7%
(USDm)	11,546.1		
Source: Deutsche Bank	,		

Price/price relative



Performance (%)	1m	3m	12m
Absolute	8.5	21.1	11.5
S&P 500 INDEX	-6.3	-2.6	6.2
Source: Doutsche Bank			

Stock option liquidity data

Market Cap (USDm)	16,415.3
Shares outstanding (m)	344.7
Free float (%)	100
Volume (1 Nov 2018)	735,625
Option volume (und. shrs., 1M avg.)	7,300
Source: Deutsche Bank	

Deutsche Bank Securities Inc.

Distributed on: 02/11/2018 03:06:07 GMT

Deutsche Bank does and seeks to do business with companies covered in its research reports. Thus, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED IN APPENDIX 1. MCI (P) 091/04/2018.



the company, especially in Europe. With the myriad of CPG companies highlighting their sustainability initiatives, our take is that aluminum containers win, especially for beverage vs. PET plastic, which was highlighted as an opportunity on the call. We note that volumes in Europe were up ~10% y/y in the quarter, which we believe had more to do with replenishment of volumes in Russia post the World cup and favorable weather conditions vs. a significant pack mix shift.

■ Tempering our estimates for 2018 primarily due to North and Central America, while 2019 goes lower due to South America. Our 2018 EBITDA goes from \$1,871M to \$1,845M driven by the aforementioned headwinds in the US. Our 2019 EBITDA goes from \$1,967M to \$1,950M as we are tempering our expectations in Brazil driven by a larger estimated impact from the conclusion of the third-party end sales agreement. This is partially offset by higher estimated performance in Europe driven by favorable volume trends and cost savings from G&A reductions. Ball reiterated its 2019 financial targets with EBITDA of \$2B and FCF of \$1B. Consistent with its investor day, management also noted that it expects to repurchase ~\$1B in shares annually beginning in 2019 through 2021 or ~18% of shares outstanding.

Forecasts and ratios				
Year End Dec 31	2017A	2018E	2019E	2020E
1Q EPS	0.38	0.50A	_	_
2Q EPS	0.53	0.58A	_	_
3Q EPS	0.52	0.56A	_	_
4Q EPS	0.60	0.56	_	-
FY EPS (USD)	2.03	2.21	2.63	2.93
OLD FY EPS (USD)	2.03	2.28	2.70	3.01
% Change	0.0%	-3.0%	-2.6%	-2.7%
Dividend yield (%)	0.9	0.8	0.8	0.8
Revenue (USDm)	10,983.0	11,546.1	11,532.5	11,931.0
Source: Deutsche Bank estimates, company data				

Page 2

Price = \$47.62													DB Rating =	BUY	DB P	rice Target = \$	51
	2015	2016	2017	1Q18	2Q18	3Q18	4Q18E	2018E	2019E	2020E	2014	2015	2016	2017	2018E	2019E	2020E
SUMMARY P&L											Growth YoY						
Sales	\$7,997	\$9,117	\$10,983	\$2,785	\$3,101	\$2,946	\$2,714	\$11,546	\$11,533	\$11,931	1%	-7%	14%	20%	5%	0%	3
Global Beverage Packaging (reporting post Rexam)		7,129	8,854	2,246	2,507	2,663	2,413	9,829	10,224	10,426	4%	-100%	N/A	24%	11%	4%	2'
Beverage Packaging, North and Central America		3,613	4,178	1,035	1,241	1,237	1,114	4,627	4,851	4,924	N/A	N/A	N/A	16%	11%	5%	11
Beverage Packaging, South America		1,014	1,692	459	379	391	513	1,742	1,775	1,828	N/A	N/A	N/A	67%	3%	2%	3'
Beverage Packaging, Europe		1,971	2,360	609	703	683	554	2,549	2,531	2,582	4%	-100%	N/A	20%	8%	-1%	2
Other		531	624	143	184	352	233	912	1,067	1,092	N/A	N/A	N/A	18%	46%	17%	2
Food and Aerosol Packaging	1,297	1,170	1,138	275	304	0	0	579	0	0	-3%	-14%	-10%	-3%	-49%	-100%	N/
Aerospace	810	818	991	264	290	283	301	1,138	1,308	1,505	4%	-13%	1%	21%	15%	15%	159
Gross Profit	1,537	1,851	2,266	548	617	584	549	2,298	2,402	2,476	5%	-8%	20%	22%	1%	5%	39
Adj. EBITDA	1,085	1,366	1,752	436	490	471	448	1,845	1,950	2,009	2%	-10%	26%	28%	5%	6%	39
Adj. EBIT	800	977	1,220	300	352	340	315	1,307	1,415	1,474	5%	-13%	22%	25%	7%	8%	49
Global Beverage Packaging (reporting post Rexam)		782	1,020	252	296	314	280	1,142	1,280	1,319	31%	-100%	N/A	30%	12%	12%	39
Beverage Packaging, North and Central America		470	533	113	157	153	146	569	647	655	N/A	N/A	N/A	13%	7%	14%	19
Beverage Packaging, South America		185	333	98	66	71	81	316	308	323	N/A	N/A	N/A	80%	-5%	-3%	59
Beverage Packaging, Europe		217	233	60	75	84	64	283	308	319	22%	-100%	N/A	7%	21%	9%	49
Other	(93)	(90)	(79)	(19)	(2)	6	(11)	(26)	17	21	11%		-3%	-12%	-67%	-164%	279
Food and Aerosol Packaging	108	108	102	23	32	32	28	115	116	119	-13%	-30%	0%	-6%	12%	1%	29
Aerospace	82	87	98	25	24	26	35	110	135	155	17%	-13%	6%	13%	12%	23%	159
Net Income - Adjusted	490	564	727	180	207	197	191	775	872	916	13%	-11%	15%	29%	7%	12%	59
Diluted shares	281.9	161.4	358.0	357.6	354.9	349.7	344.2	351.6	332.1	313.4	-5%	-1%	-43%	122%	-2%	-6%	-69
Headline EPS	\$1.74	\$1.74	\$2.03	\$0.50	\$0.58	\$0.56	\$0.56	\$2.21	\$2.63	\$2.93	18%	-10%	0%	17%	9%	19%	119
Dividends per share	\$0.26	\$0.26	\$0.37	\$0.30	\$0.10	\$0.10	\$0.10	\$0.40	\$0.40	\$0.40	0%		0%	40%	10%	0%	09
Dividend yield (annualized)	0.7%	0.5%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%		14,000 ¬	0 /8		y Segment	10%	0 /6	07
MARGINS															■ Aeros	pace	
Gross margin	19.2%	20.3%	20.6%	19.7%	19.9%	19.8%	20.2%	19.9%	20.8%	20.8%	12,000 -						
EBITDA margin	13.6%	15.0%	16.0%	15.7%	15.8%	16.0%	16.5%	16.0%	16.9%		40.000				Food	and Aerosol Pack	aging
EBIT margin	10.0%	10.7%	11.1%	10.8%	11.4%	11.5%	11.6%	11.3%	12.3%	12.4%	10,000 -						
Global Beverage Packaging (reporting post Rexam)	N/A	11.0%	11.5%	11.2%	11.4%	11.8%	11.6%	11.6%	12.5%	12.4%	8,000 -				Other		
Beverage Packaging, North and Central America	N/A	13.0%	12.8%	10.9%	12.7%	12.4%	13.1%	12.3%	13.3%	13.3%	8,000				Other		
0 0	N/A	18.2%	19.7%	21.4%	17.4%	18.2%	15.1%	18.2%	17.4%	17.7%	6,000 -		_				
Beverage Packaging, South America				9.9%							0,000				■ Bever	age Packaging, E	ırope
Beverage Packaging, Europe	N/A	11.0%	9.9%		10.7%	12.3%	11.5%	11.1%	12.2%	12.4%	4,000 -						
Other	N/A	-16.9%	-12.7%	-13.3%	-1.1%	1.7%	-4.8%	-2.9%	1.6%	2.0%	.,000					age Packaging, So	outh
Food and Aerosol Packaging	8.3%	9.2%	9.0%	8.4%	10.5%	N/A	N/A	19.8%	N/A	N/A	2,000 -				Amer	ca	
Aerospace	10.1%	10.6%	9.9%	9.5%	8.3%	9.2%	11.5%	9.6%	10.3%	10.3%	,				■ Bever	age Packaging, N	orth and
Net Income margin	6.1%	6.2%	6.6%	6.5%	6.7%	6.7%	7.1%	6.7%	7.6%	7.7%	0 +				Centr	I America	
FCF, CapEx & D&A											2	017 20	18E 2019	E 2020E			
Cap ex	\$528	\$606	\$556	\$242	\$202	\$172	\$84	\$700	\$525	\$525							
Capex/D&A	1.8x	1.6x	1.0x	1.8x	1.5x	1.3x	0.6x	1.3x	1.0x	1.0x	1,800 ¬		EDIT	by Segment			
D&A	286	389	532	136	138	131	133	538	535	535	.		LOII	-, sepe.	■ Aeros	nace	
% of sales	3.6%	4.3%	4.8%	4.9%	4.5%	4.4%	4.9%	4.7%	4.6%		1,600 -				= Aeius	Jucc.	
D&A (including customer-related intangibles from REX)	286	453	729	180	178	171	133	662	535	535	1,400						
% of sales	3.6%	5.0%	6.6%	6.5%	5.7%	5.8%	4.9%	5.7%	4.6%	4.5%	1 200				Food	and Aerosol Pack	aging
Net Debt	2,753	6,935	6,523	6,991	6,798	6,075	5,979	5,979	6,137	6,284	1,200						
Net Leverage	2.5x	4.5x	3.7x	3.8x	3.6x	3.2x	3.2x	3.2x	3.1x	3.1x	1,000 -				■ Other		
Free cash flow	558	(426)	922	(316)	306	421	391	802	975	979	800 -						
FCF per Share	\$1.98	-\$2.64	\$2.58	-\$0.88	\$0.86	\$1.20	\$1.14	\$2.28	\$2.94	\$3.12					■ Bever	age Packaging, E	ırope
FCF Yield	4.7%	-3.4%	5.4%					4.8%	6.2%	6.6%	600 -						
											400				Rover	age Packaging, So	outh
															Amer		Juli
											200 -						
											0				Centr	age Packaging, N Il America	orth and
											(200) 20	17 201	.8E 2019	E 2020E			

Source: Deutsche Bank estimates, Company Filings, FactSet





Appendix 1

Important Disclosures

*Other information available upon request

Disclosure checklist	,		
Company	Ticker	Recent price*	Disclosure
Ball Corporation	BLL.N	44.80 (USD) 31 Oct 2018	1, 7, 8, 14, 15

*Prices are current as of the end of the previous trading session unless otherwise indicated and are sourced from local exchanges via Reuters, Bloomberg and other vendors. Other information is sourced from Deutsche Bank, subject companies, and other sources. For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please set the most recently published company report or visit our global disclosure look-up page on our website at https://research.db.com/ Research/Disclosures/CompanySearch. Aside from within this report, important risk and conflict disclosures can also be found at https://research.db.com/Research/Topics/Equities? topicId=RB0002. Investors are strongly encouraged to review this information before investing.

Important Disclosures Required by U.S. Regulators

Disclosures marked with an asterisk may also be required by at least one jurisdiction in addition to the United States. See Important Disclosures Required by Non-US Regulators and Explanatory Notes.

- Within the past year, Deutsche Bank and/or its affiliate(s) has managed or co-managed a public or private offering for this company, for which it received fees.
- 7. Deutsche Bank and/or its affiliate(s) has received compensation from this company for the provision of investment banking or financial advisory services within the past year.
- 8. Deutsche Bank and/or its affiliate(s) expects to receive, or intends to seek, compensation for investment banking services from this company in the next three months.
- 14. Deutsche Bank and/or its affiliate(s) has received non-investment banking related compensation from this company within the past year.
- 15. This company has been a client of Deutsche Bank Securities Inc. within the past year, during which time it received non-investment banking securities-related services.

Important Disclosures Required by Non-U.S. Regulators

Disclosures marked with an asterisk may also be required by at least one jurisdiction in addition to the United States. See Important Disclosures Required by Non-US Regulators and Explanatory Notes.

- 1. Within the past year, Deutsche Bank and/or its affiliate(s) has managed or co-managed a public or private offering for this company, for which it received fees.
- 7. Deutsche Bank and/or its affiliate(s) has received compensation from this company for the provision of investment banking or financial advisory services within the past year.

For disclosures pertaining to recommendations or estimates made on securities other than the primary subject of this research, please see the most recently published company report or visit our global disclosure look-up page on our website at https://research.db.com/Research/Disclosures/CompanySearch

Analyst Certification

The views expressed in this report accurately reflect the personal views of the undersigned lead analyst(s) about the subject issuer and the securities of the issuer. In addition, the undersigned lead analyst(s) has not and will not receive any compensation for providing a specific recommendation or view in this report. Debbie Jones

1 November 2018

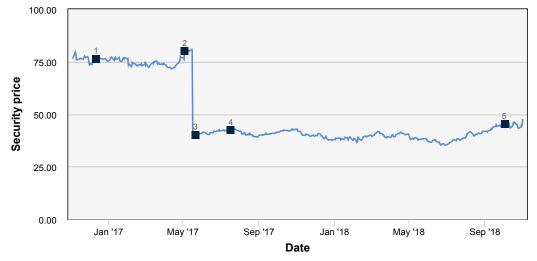
Packaging

Ball Corporation



Historical recommendations and target price. Ball Corporation (BLL.N)





Current Recommendations

Buy Hold Sell Not Rated Suspended Rating

** Analyst is no longer at Deutsche Bank

- 1. 12/12/2016
- Buy, Target Price Change USD 86.00 Debbie Jones
- 2. 05/05/2017

3.

- Buy, Target Price Change USD 88.00 Debbie Jones Buy, Target Price Change USD 44.00 Debbie Jones
- 4. 07/18/2017
- Buy, Target Price Change USD 47.00 Debbie Jones
- 5. 10/04/2018
- Buy, Target Price Change USD 51.00 Debbie Jones

Equity Rating Key

05/22/2017

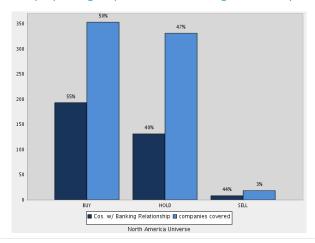
Buy: Based on a current 12- month view of total share-holder return (TSR = percentage change in share price from current price to projected target price plus pro-jected dividend yield), we recommend that investors buy the stock.

Sell: Based on a current 12-month view of total share-holder return, we recommend that investors sell the stock.

Hold: We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

Newly issued research recommendations and target prices supersede previously published research.

Equity rating dispersion and banking relationships



Deutsche Bank Securities Inc. Page 5



Additional Information

The information and opinions in this report were prepared by Deutsche Bank AG or one of its affiliates (collectively "Deutsche Bank"). Though the information herein is believed to be reliable and has been obtained from public sources believed to be reliable, Deutsche Bank makes no representation as to its accuracy or completeness. Hyperlinks to third-party websites in this report are provided for reader convenience only. Deutsche Bank neither endorses the content nor is responsible for the accuracy or security controls of those websites.

If you use the services of Deutsche Bank in connection with a purchase or sale of a security that is discussed in this report, or is included or discussed in another communication (oral or written) from a Deutsche Bank analyst, Deutsche Bank may act as principal for its own account or as agent for another person.

Deutsche Bank may consider this report in deciding to trade as principal. It may also engage in transactions, for its own account or with customers, in a manner inconsistent with the views taken in this research report. Others within Deutsche Bank, including strategists, sales staff and other analysts, may take views that are inconsistent with those taken in this research report. Deutsche Bank issues a variety of research products, including fundamental analysis, equity-linked analysis, quantitative analysis and trade ideas. Recommendations contained in one type of communication may differ from recommendations contained in others, whether as a result of differing time horizons, methodologies, perspectives or otherwise. Deutsche Bank and/or its affiliates may also be holding debt or equity securities of the issuers it writes on. Analysts are paid in part based on the profitability of Deutsche Bank AG and its affiliates, which includes investment banking, trading and principal trading revenues.

Opinions, estimates and projections constitute the current judgment of the author as of the date of this report. They do not necessarily reflect the opinions of Deutsche Bank and are subject to change without notice. Deutsche Bank provides liquidity for buyers and sellers of securities issued by the companies it covers. Deutsche Bank research analysts sometimes have shorter-term trade ideas that may be inconsistent with Deutsche Bank's existing longer-term ratings. Some trade ideas for equities are listed as Catalyst Calls on the Research Website (https://research.db.com/Research/), and can be found on the general coverage list and also on the covered company 's page. A Catalyst Call represents a high-conviction belief by an analyst that a stock will outperform or underperform the market and/or a specified sector over a time frame of no less than two weeks and no more than three months. In addition to Catalyst Calls, analysts may occasionally discuss with our clients, and with Deutsche Bank salespersons and traders, trading strategies or ideas that reference catalysts or events that may have a near-term or medium-term impact on the market price of the securities discussed in this report, which impact may be directionally counter to the analysts' current 12-month view of total return or investment return as described herein. Deutsche Bank has no obligation to update, modify or amend this report or to otherwise notify a recipient thereof if an opinion, forecast or estimate changes or becomes inaccurate. Coverage and the frequency of changes in market conditions and in both general and company-specific economic prospects make it difficult to update research at defined intervals. Updates are at the sole discretion of the coverage analyst or of the Research Department Management, and the majority of reports are published at irregular intervals. This report is provided for informational purposes only and does not take into account the particular investment objectives, financial situations, or needs of individual clients. It is not an offer or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy. Target prices are inherently imprecise and a product of the analyst 's judgment. The financial instruments discussed in this report may not be suitable for all investors, and investors must make their own informed investment decisions. Prices and availability of financial instruments are subject to change without notice, and investment transactions can lead to losses as a result of price fluctuations and other factors. If a financial instrument is denominated in a currency other than an investor's currency, a change in exchange rates may adversely affect the investment. Past performance is not necessarily indicative of future results. Performance calculations exclude transaction costs, unless otherwise indicated. Unless otherwise indicated, prices are current as of the end of the previous trading session and are sourced from local exchanges via Reuters, Bloomberg and other vendors. Data is also sourced from Deutsche Bank, subject companies, and other parties.

The Deutsche Bank Research Department is independent of other business divisions of the Bank. Details regarding our organizational arrangements and information barriers we have to prevent and avoid conflicts of interest with respect to our research are available on our website (https://research.db.com/Research/) under Disclaimer.



Macroeconomic fluctuations often account for most of the risks associated with exposures to instruments that promise to pay fixed or variable interest rates. For an investor who is long fixed-rate instruments (thus receiving these cash flows), increases in interest rates naturally lift the discount factors applied to the expected cash flows and thus cause a loss. The longer the maturity of a certain cash flow and the higher the move in the discount factor, the higher will be the loss. Upside surprises in inflation, fiscal funding needs, and FX depreciation rates are among the most common adverse macroeconomic shocks to receivers. But counterparty exposure, issuer creditworthiness, client segmentation, regulation (including changes in assets holding limits for different types of investors), changes in tax policies, currency convertibility (which may constrain currency conversion, repatriation of profits and/or liquidation of positions), and settlement issues related to local clearing houses are also important risk factors. The sensitivity of fixedincome instruments to macroeconomic shocks may be mitigated by indexing the contracted cash flows to inflation, to FX depreciation, or to specified interest rates – these are common in emerging markets. The index fixings may – by construction - lag or mis-measure the actual move in the underlying variables they are intended to track. The choice of the proper fixing (or metric) is particularly important in swaps markets, where floating coupon rates (i.e., coupons indexed to a typically short-dated interest rate reference index) are exchanged for fixed coupons. Funding in a currency that differs from the currency in which coupons are denominated carries FX risk. Options on swaps (swaptions) the risks typical to options in addition to the risks related to rates movements.

Derivative transactions involve numerous risks including market, counterparty default and illiquidity risk. The appropriateness of these products for use by investors depends on the investors' own circumstances, including their tax position, their regulatory environment and the nature of their other assets and liabilities; as such, investors should take expert legal and financial advice before entering into any transaction similar to or inspired by the contents of this publication. The risk of loss in futures trading and options, foreign or domestic, can be substantial. As a result of the high degree of leverage obtainable in futures and options trading, losses may be incurred that are greater than the amount of funds initially deposited – up to theoretically unlimited losses. Trading in options involves risk and is not suitable for all investors. Prior to buying or selling an option, investors must review the "Characteristics and Risks of Standardized Options", at http://www.optionsclearing.com/about/publications/character-risks.jsp. If you are unable to access the website, please contact your Deutsche Bank representative for a copy of this important document.

Participants in foreign exchange transactions may incur risks arising from several factors, including the following: (i) exchange rates can be volatile and are subject to large fluctuations; (ii) the value of currencies may be affected by numerous market factors, including world and national economic, political and regulatory events, events in equity and debt markets and changes in interest rates; and (iii) currencies may be subject to devaluation or government-imposed exchange controls, which could affect the value of the currency. Investors in securities such as ADRs, whose values are affected by the currency of an underlying security, effectively assume currency risk.

Unless governing law provides otherwise, all transactions should be executed through the Deutsche Bank entity in the investor's home jurisdiction. Aside from within this report, important conflict disclosures can also be found at https://research.db.com/Research/ on each company 's research page. Investors are strongly encouraged to review this information before investing.

Deutsche Bank (which includes Deutsche Bank AG, its branches and affiliated companies) is not acting as a financial adviser, consultant or fiduciary to you or any of your agents (collectively, "You" or "Your") with respect to any information provided in this report. Deutsche Bank does not provide investment, legal, tax or accounting advice, Deutsche Bank is not acting as your impartial adviser, and does not express any opinion or recommendation whatsoever as to any strategies, products or any other information presented in the materials. Information contained herein is being provided solely on the basis that the recipient will make an independent assessment of the merits of any investment decision, and it does not constitute a recommendation of, or express an opinion on, any product or service or any trading strategy.

The information presented is general in nature and is not directed to retirement accounts or any specific person or account type, and is therefore provided to You on the express basis that it is not advice, and You may not rely upon it in making Your decision. The information we provide is being directed only to persons we believe to be financially sophisticated, who are capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies, and who understand that Deutsche Bank has financial interests in the offering of its products

Deutsche Bank Securities Inc. Page 7



and services. If this is not the case, or if You are an IRA or other retail investor receiving this directly from us, we ask that you inform us immediately.

In July 2018, Deutsche Bank revised its rating system for short term ideas whereby the branding has been changed to Catalyst Calls ("CC") from SOLAR ideas; the rating categories for Catalyst Calls originated in the Americas region have been made consistent with the categories used by Analysts globally; and the effective time period for CCs has been reduced from a maximum of 180 days to 90 days.

United States: Approved and/or distributed by Deutsche Bank Securities Incorporated, a member of FINRA, NFA and SIPC. Analysts located outside of the United States are employed by non-US affiliates that are not subject to FINRA regulations.

Germany: Approved and/or distributed by Deutsche Bank AG, a joint stock corporation with limited liability incorporated in the Federal Republic of Germany with its principal office in Frankfurt am Main. Deutsche Bank AG is authorized under German Banking Law and is subject to supervision by the European Central Bank and by BaFin, Germany 's Federal Financial Supervisory Authority.

United Kingdom: Approved and/or distributed by Deutsche Bank AG acting through its London Branch at Winchester House, 1 Great Winchester Street, London EC2N 2DB. Deutsche Bank AG in the United Kingdom is authorised by the Prudential Regulation Authority and is subject to limited regulation by the Prudential Regulation Authority and Financial Conduct Authority. Details about the extent of our authorisation and regulation are available on request.

Hong Kong: Distributed by Deutsche Bank AG, Hong Kong Branch or Deutsche Securities Asia Limited (save that any research relating to futures contracts within the meaning of the Hong Kong Securities and Futures Ordinance Cap. 571 shall be distributed solely by Deutsche Securities Asia Limited). The provisions set out above in the "Additional Information" section shall apply to the fullest extent permissible by local laws and regulations, including without limitation the Code of Conduct for Persons Licensed or Registered with the Securities and Futures Commission.

India: Prepared by Deutsche Equities India Private Limited (DEIPL) having CIN: U65990MH2002PTC137431 and registered office at 14th Floor, The Capital, C-70, G Block, Bandra Kurla Complex Mumbai (India) 400051. Tel: + 91 22 7180 4444. It is registered by the Securities and Exchange Board of India (SEBI) as a Stock broker bearing registration nos.: NSE (Capital Market Segment) - INB231196834, NSE (F&O Segment) INF231196834, NSE (Currency Derivatives Segment) INE231196834, BSE (Capital Market Segment) INB011196830; Merchant Banker bearing SEBI Registration no.: INM000010833 and Research Analyst bearing SEBI Registration no.: INH000001741. DEIPL may have received administrative warnings from the SEBI for breaches of Indian regulations. The transmission of research through DEIPL is Deutsche Bank's determination and will not make a recipient a client of DEIPL. Deutsche Bank and/or its affiliate(s) may have debt holdings or positions in the subject company. With regard to information on associates, please refer to the "Shareholdings" section in the Annual Report at: https://www.db.com/ir/en/annual-reports.htm.

Japan: Approved and/or distributed by Deutsche Securities Inc.(DSI). Registration number - Registered as a financial instruments dealer by the Head of the Kanto Local Finance Bureau (Kinsho) No. 117. Member of associations: JSDA, Type II Financial Instruments Firms Association and The Financial Futures Association of Japan. Commissions and risks involved in stock transactions - for stock transactions, we charge stock commissions and consumption tax by multiplying the transaction amount by the commission rate agreed with each customer. Stock transactions can lead to losses as a result of share price fluctuations and other factors. Transactions in foreign stocks can lead to additional losses stemming from foreign exchange fluctuations. We may also charge commissions and fees for certain categories of investment advice, products and services. Recommended investment strategies, products and services carry the risk of losses to principal and other losses as a result of changes in market and/or economic trends, and/or fluctuations in market value. Before deciding on the purchase of financial products and/or services, customers should carefully read the relevant disclosures, prospectuses and other documentation. "Moody's", "Standard & Poor's", and "Fitch" mentioned in this report are not registered credit rating agencies in Japan unless Japan or "Nippon" is specifically designated in the name of the entity. Reports on Japanese listed companies not written by analysts of DSI are written by Deutsche Bank Group's analysts with the coverage companies specified by DSI. Some of the foreign securities stated on this report are not disclosed according to the Financial Instruments and Exchange Law of Japan. Target prices set by Deutsche Bank's equity analysts are based on a 12-month forecast period..



Korea: Distributed by Deutsche Securities Korea Co.

South Africa: Deutsche Bank AG Johannesburg is incorporated in the Federal Republic of Germany (Branch Register Number in South Africa: 1998/003298/10).

Singapore: This report is issued by Deutsche Bank AG, Singapore Branch or Deutsche Securities Asia Limited, Singapore Branch (One Raffles Quay #18-00 South Tower Singapore 048583, +65 6423 8001), which may be contacted in respect of any matters arising from, or in connection with, this report. Where this report is issued or promulgated by Deutsche Bank in Singapore to a person who is not an accredited investor, expert investor or institutional investor (as defined in the applicable Singapore laws and regulations), they accept legal responsibility to such person for its contents.

Taiwan: Information on securities/investments that trade in Taiwan is for your reference only. Readers should independently evaluate investment risks and are solely responsible for their investment decisions. Deutsche Bank research may not be distributed to the Taiwan public media or quoted or used by the Taiwan public media without written consent. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation to trade in such securities/instruments. Deutsche Securities Asia Limited, Taipei Branch may not execute transactions for clients in these securities/instruments.

Qatar: Deutsche Bank AG in the Qatar Financial Centre (registered no. 00032) is regulated by the Qatar Financial Centre Regulatory Authority. Deutsche Bank AG - QFC Branch may undertake only the financial services activities that fall within the scope of its existing QFCRA license. Its principal place of business in the QFC: Qatar Financial Centre, Tower, West Bay, Level 5, PO Box 14928, Doha, Qatar. This information has been distributed by Deutsche Bank AG. Related financial products or services are only available only to Business Customers, as defined by the Qatar Financial Centre Regulatory Authority.

Russia: The information, interpretation and opinions submitted herein are not in the context of, and do not constitute, any appraisal or evaluation activity requiring a license in the Russian Federation.

Kingdom of Saudi Arabia: Deutsche Securities Saudi Arabia LLC Company (registered no. 07073-37) is regulated by the Capital Market Authority. Deutsche Securities Saudi Arabia may undertake only the financial services activities that fall within the scope of its existing CMA license. Its principal place of business in Saudi Arabia: King Fahad Road, Al Olaya District, P.O. Box 301809, Faisaliah Tower - 17th Floor, 11372 Riyadh, Saudi Arabia.

United Arab Emirates: Deutsche Bank AG in the Dubai International Financial Centre (registered no. 00045) is regulated by the Dubai Financial Services Authority. Deutsche Bank AG - DIFC Branch may only undertake the financial services activities that fall within the scope of its existing DFSA license. Principal place of business in the DIFC: Dubai International Financial Centre, The Gate Village, Building 5, PO Box 504902, Dubai, U.A.E. This information has been distributed by Deutsche Bank AG. Related financial products or services are available only to Professional Clients, as defined by the Dubai Financial Services Authority.

Australia and New Zealand: This research is intended only for "wholesale clients" within the meaning of the Australian Corporations Act and New Zealand Financial Advisors Act, respectively. Please refer to Australia-specific research disclosures and related information at https://australia.db.com/australia/content/research-information.html Where research refers to any particular financial product recipients of the research should consider any product disclosure statement, prospectus or other applicable disclosure document before making any decision about whether to acquire the product. In preparing this report, the primary analyst or an individual who assisted in the preparation of this report has likely been in contact with the company that is the subject of this research for confirmation/clarification of data, facts, statements, permission to use company-sourced material in the report, and/or site-visit attendance. Without prior approval from Research Management, analysts may not accept from current or potential Banking clients the costs of travel, accommodations, or other expenses incurred by analysts attending site visits, conferences, social events, and the like. Similarly, without prior approval from Research Management and Anti-Bribery and Corruption ("ABC") team, analysts may not accept perks or other items of value for their personal use from issuers they cover.

Deutsche Bank Securities Inc. Page 9

Provided for the exclusive use of Research Research at Provisional Access on 2018-11-02T05:59+00:00. DO NOT REDISTRIBUTE

1 November 2018PackagingBall Corporation



Additional information relative to securities, other financial products or issuers discussed in this report is available upon request. This report may not be reproduced, distributed or published without Deutsche Bank's prior written consent. Copyright © 2018 Deutsche Bank AG



David Folkerts-Landau

Group Chief Economist and Global Head of Research

Pam Finelli Global Chief Operating Officer Research

Michael Spencer Head of APAC Research

Steve Pollard Head of Americas Research Global Head of Equity Research

Anthony Klarman Global Head of Debt Research

Kinner Lakhani Head of EMEA **Equity Research**

Joe Liew Head of APAC **Equity Research**

Jim Reid Global Head of Thematic Research

Francis Yared Global Head of Rates Research

George Saravelos Head of FX Research

Peter Hooper Global Head of **Economics Research**

Andreas Neubauer Head of Germany Research

Spyros Mesomeris Global Head of Quantitative and QIS Research

International Production Locations

Deutsche Bank AG

Deutsche Bank Place

Level 16

Corner of Hunter & Phillip Streets

Sydney, NSW 2000

Australia

Tel: (61) 2 8258 1234

Deutsche Bank AG London

1 Great Winchester Street London EC2N 2EQ United Kingdom

Tel: (44) 20 7545 8000

Deutsche Bank AG

Mainzer Landstrasse 11-17 60329 Frankfurt am Main

Deutsche Bank Securities Inc.

Germany

Tel: (49) 69 910 00

60 Wall Street

New York, NY 10005

Tel: (1) 212 250 2500

United States of America

Deutsche Bank AG

Filiale Hongkong International Commerce Centre, 1 Austin Road West, Kowloon,

Hong Kong

Tel: (852) 2203 8888

Deutsche Securities Inc.

2-11-1 Nagatacho Sanno Park Tower Chiyoda-ku, Tokyo 100-6171

Japan

Tel: (81) 3 5156 6770