SELL Lenovo (992 HK)

March 2020

Fraud denial falls flat.

Lenovo emailed us saying our recent report "included a number of allegations regarding Lenovo that are, indeed, factually incorrect". We don't have inside information and so we rely on public filings and verifiable data to draw logical conclusions, but there is always room for misunderstanding. However, having checked their published data, our comments and their response, see inside, we have no reason to change our view. Obviously, this could change if disclosure was improved and audited evidence was provided which gave an alternative explanation.

Receivables They explain receivable growth as a by-product of de-factoring. The problem is the factoring + receivable balance appears* to have risen from 50 days (9/14 -12/17) to 90 days (3/19 to 12/19). Their answer doesn't explain why they needed to extend terms, why they believe receivable risk has fallen and why they are so unwilling to disclose their factored balance.

Payables They acknowledge that they are lengthening their payment terms for cashflow management, but this is not "desperately trying to preserve cash". However, it is not clear why they lengthen terms given a modest reported net debt and record profits.

Sub-contractor balances These reportedly fell because Lenovo is bringing more production in-house. The problem is inventory days are largely unchanged, which would seem to undermine this reasoning.

Outlook We thought cash was tight and that Lenovo would need raise capital even before the Coronavirus. Given what has happened, it seems inconceivable that their supply chain and end demand have not been impacted. We now expect revenue and profit to fall in Q4FY20, the question is how much and whether Lenovo will be cashflow negative again.

Valuation Until Lenovo is willing to improve disclosure, slide 13, we remain concerned as to the validity of their revenue, profit and working capital. We therefore maintain our view.

*Estimated using a constant 9% factoring rate.

Copyright 2019 Bucephalus Research Partnership Limited

Account receivables

Receivables have risen dramatically since Q1 FY19

The increase of our trade receivables and notes receivables was mainly due to less AR factored during the quarter. The factoring service provider that had supported Lenovo AR since we acquired IBM's PC division exited the business in 2019.

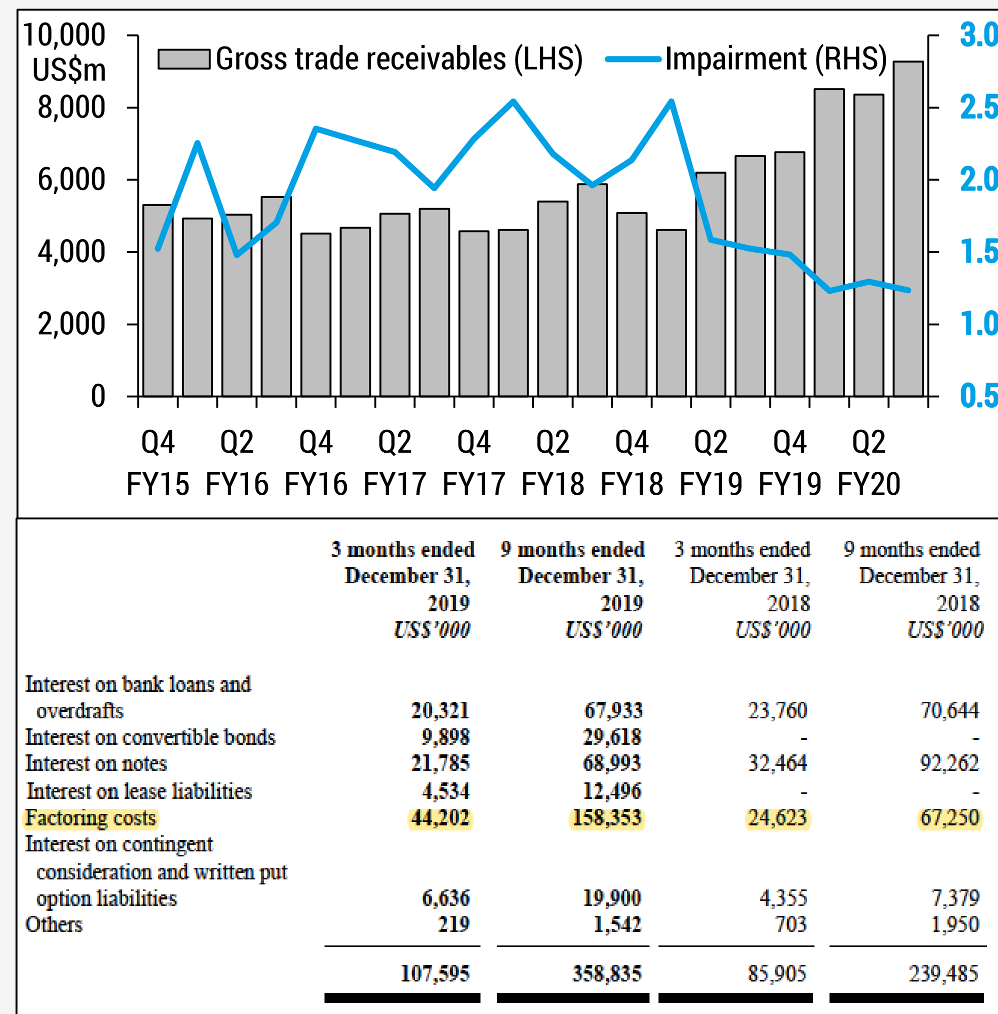
In 1QFY19/20, when we first experienced a notable increase in our AR balance, we discussed the details including the need to replace our factoring partner during our investor webcast. Our new financing partner set up a new vehicle to take over the factoring service operation.

Operational issues naturally need to be resolved before we can return to the efficiency level achieved with our previous service provider, including more than doubling the number of countries covered under the existing service scope. Another issue is a 3-5 day gap in invoice processing speed from our previous factoring program, although we were able to improve the cadence of processing from twice a month to once a week.

As a result of these temporary dynamics, our factoring volume has dropped significantly year-over-year and our AR balance has risen.

Bucephalus
Receivables have risen since Q2FY19, not just since Q1FY20.

Suggestion: Disclose the factored balance



	3 months ended December 31, 2019 US$'000	9 months ended December 31, 2019 US$'000	3 months ended December 31, 2018 US$'000	9 months ended December 31, 2018 US$'000
Interest on bank loans and overdrafts	20,321	67,933	23,760	70,644
Interest on convertible bonds	9,898	29,618	-	-
Interest on notes	21,785	68,993	32,464	92,262
Interest on lease liabilities	4,534	12,496	-	-
Factoring costs	44,202	158,353	24,623	67,250
Interest on contingent consideration and written put option liabilities	6,636	19,900	4,355	7,379
Others	219	1,542	703	1,950
	107,595	358,835	85,905	239,485

Figure 1: Account receivables

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Invoice pattern and channel health

Sales skew in the last quarter of the month

Our sales did indeed skew late in the previous quarter. As discussed in our webcast, this was due to a shortage of a key component which was well known in the industry. While the supplier de-committed its volume and delivery schedule, a disproportionate portion of our supply arrived late in the quarter. Nonetheless, with Lenovo's exceptional supply chain operational excellence, we managed to utilise all available supply and deliver our products to customers towards the end of the quarter. This resulted in more **revenue than usual being booked just before quarter-end**. This was also reflected in our accounts receivable (AR) ageing, with the 0-30-days AR bracket showing the largest year-over-year increase.

Revenue days
0 – 30 days
31 – 60 days
Over 60 days
Sales occuring in month 3
250
200
150
100
50
0
50
40
30
20
10
0
Q4 FY15
Q1 FY16
Q2 FY16
Q3 FY16
Q4 FY16
Q1 FY17
Q2 FY17
Q3 FY17
Q4 FY17
Q1 FY18
Q2 FY18
Q3 FY18
Q4 FY18
Q1 FY19
Q2 FY19
Q3 FY19
Q4 FY19
Q1 FY20
Q2 FY20
Q3 FY20

Bucephalus

Their comment acknowledges the sales skew, but overlooks that the skew happened in the last **four** quarters, not just one

Figure 2: Invoice pattern

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Channel health

Channel stuffing and ever-greening could explain rising receivables

Original Bucephalus comment

Best case, Lenovo is taking on ever more credit risk to drive sales growth and create the illusion of rising margins. Worst case, they are channel stuffing and evergreening invoices.

Lenovo response

We have never engaged in so-called “evergreen invoicing”,

This may or may not be true, but without independent verification cannot be proved either way

and your assertion to this effect is absurd.

We did not assert this, we offered two scenarios to explain the unusual invoicing pattern

We maintain a prudent operational policy to facilitate channel inventory control. We do not allow sell-in to the channel if a customer’s inventory exceeds a certain level. Moreover, our policy would not recognise such sale in our financial statement even if it had taken place.

We don’t understand what this means. Are they saying that if an invoice was raised it wouldn’t be booked because the customer had inventory

As such, there is no incentive for us to “stuff channel” as you inaccurately claimed in your video.

We are unable to follow this logic

Your allegation that our rising AR reflected aggressive sell-in to the channel, and even the use of “evergreen” invoices, is completely without merit.

We didn’t allege we offered it as a possible explanation. Nonetheless, they failed to offer evidence to disprove either

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Factoring costs and credit quality

Rising factoring costs could disguise falling credit quality

Of course we incurred costs in the course of transitioning to a new factoring partner and ramping up new operations. This included additional short-term operation and financing loans, which led to higher finance costs. However, we are starting to see positive impact from our continuous efforts to improve the efficiency of our new factoring vehicle.

Poor disclosure means that this is impossible to verify. If the factored balance and/or the average factoring rate was disclosed, it would remove the need for speculation. Does this mean factoring costs are rising due to reduced credit quality

As a result, our 3QFY19/20 finance costs and factoring costs were reduced by $28.6M and $25.6M quarter-over-quarter, respectively.

Your claim that our higher factoring costs suggested deteriorating quality of debt is, therefore, unfounded.

Poor disclosure means that this is impossible to verify. Factoring costs could have fallen in 3Q due to lower balances. It is impossible for an outsider to confirm that is not because of reduced invoice quality without knowing the factored balance.

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Bad debt provision

“falling” bad debt provision is unwise given rising receivables

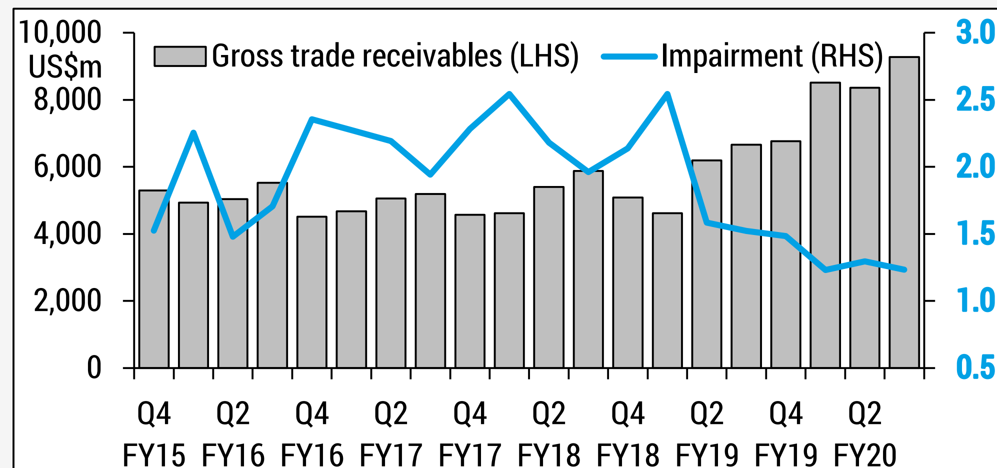
Your assertion that our bad debt provisions “are falling” is also incorrect because it fails to consider AR ageing composition.

We review our provision policy every two years, and we have not changed our bad debt provisioning policy in that period. The policy requires a higher provision rate on older AR meaning, for example, that AR in the 0-30-days bracket would command a lower provision rate than those in the over-90-days bracket. Therefore, assessing the bad debt provision as a percentage of total AR alone does not provide the full picture.

The profile of our AR mix is actually better than a year before with more AR now in the 0-30-days bracket. Consistent with Lenovo’s financial disclosures and contrary to your analysis, our provision dollar **increased** double-digit in 3QFY19/20 as compared to 1QFY19/20 and 3QFY18/19.

Our maths is old school, but provisioning (calculated as provision/31day + invoices) was 3.8% in Dec 2019 vs 4.6, 3.5 and 5.3% in prior periods.

Yes, the provision increased, but slower than the outstanding invoices so as a % it fell.



Customers are generally granted credit term ranging from 0 to 120 days. Ageing analysis of trade receivables of the Group at the balance sheet date, based on invoice date, is as follows:

	December 31, 2019 *US$’000*	March 31, 2019 *US$’000*	**December 31, 2018** ***US$’000***	March 31, 2018 *US$’000*
0 – 30 days	6,237,230	4,560,771	**3,739,233**	3,046,240
31 – 60 days	1,880,846	1,332,471	**1,798,257**	1,169,286
61 – 90 days	612,601	430,207	**510,373**	320,183
Over 90 days	542,962	438,377	**608,760**	545,629
	9,273,639	6,761,826	**6,656,623**	5,081,338
Less: provision for impai	(114,433)	(100,342)	**(101,351)**	(108,616)
Trade receivables – net	9,159,206	6,661,484	**6,555,272**	4,972,722

Figure 3: Bad debt provision

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Independent directors

Are the independent directors prepared to protect minorities?

We are particularly dismayed about your comments regarding our independent directors. Your claim that they would not challenge our company just because they have been serving on our board for a long time is far from the truth.

This assertion is impossible to verify without disclosure with regards to disputed decisions.

According to our readily-available filings with the HK Exchange, two of our independent directors have served on our board for less than 4 years, three (including one re-designated from non-independent to independent) between 6-8 years and the remaining two 9-11 years.

Re-designation is a legal issue. It is hard to imagine/prove that mindset has changed

No independent director has served in this position for more than 12 years. We believe this mix of independent directors assures a depth of experience with Lenovo as well as clear accountability, and it is consistent with industry best practices in corporate governance, ethics and compliance.

Industry best practice is a meaningless phrase. Governance, ethics and compliance practices vary dramatically around the world

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Dividend

Is Lenovo borrowing to fund its dividend?

Lenovo has a consistent dividend policy of paying 30-40% of our pre-tax profit. We strive to maintain this dividend level even at times when fundamental changes affect our business.

The company's cashflow is typically sufficient to generate these dividend payments, with rare exceptions. Your charge that we resorted to additional borrowing to fund dividends is baseless.

Lenovo has raised capital every year since 2015. Money is fungible so it is impossible to state that capital was raised for a specific purpose. However, not paying a dividend would have preserved cash and reduced the need to issue preferred equity and convertibles etc.

Figure 4:Dividends

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Trade payables and other payables

Are payables being delayed to preserve cash?

Bucephalus Research Partnership

Exposing Creative Accounting

We have identified our payment terms, which are currently less favourable than the market average, as an area for improvement. For instance, we are taking appropriate action to **lengthen** our payables days in order to continuously improve cashflow management.

As noted in your video this initiative has indeed improved our cashflow management – but you attributed this improvement to "delaying payments to suppliers"

Delaying payments, apologies poor wording on our part. We agree it should have been lengthening payments terms. We suspect their suppliers think it means the same thing.

and "desperately trying to preserve cash", which is patently untrue.

Patently untrue seems to conflict with continuously improve cashflow management

Meanwhile, you may not be aware that we operate a hybrid model in our supply chain, i.e., a mix of both in-house manufacturing and subcontractors. Our non-trade payables actually **decreased** year-over-year mainly due to higher in-house manufacturing – reflecting our investments for greater efficiency and operational excellence.

The reference in your video to an **increase** in non-trade payables is not accurate.

Accruals, billing adjustments and other payables all rose. Our reference is accurate as can be seen in the box on the right.

Provisions, other payables and accruals

(a) Details of other payables and accruals are as follows:

	December 31, 2019 *US$'000*	March 31, 2019 *US$'000*
Accruals	2,318,150	1,969,914
Allowance for billing adjustments (i)	2,064,570	1,650,226
Contingent consideration (Note 10(a))	116,824	-
Other payables (ii)	6,068,314	5,322,196
	10,567,858	8,942,336

Notes:

(i) Allowance for billing adjustments relates primarily to allowances for future volume discounts, price protection, rebates, and customer sales returns.

(ii) Majority of other payables are obligations to pay for finished goods that have been acquired in the ordinary course of business from subcontractors.

(iii) The carrying amounts of other payables and accruals approximate their fair values.

Figure 5: Trade payables

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Decision making at Lenovo

Relationship with Legend, the largest shareholder

Likewise, your argument that we declared a dividend simply because our largest shareholder demanded it is just wrong.

This can neither be proved or disproved without access to board papers etc.

Our investors and analysts who have taken time to understand our dividend policy know otherwise.

Know, as in have factual evidence, or have been told?

You also assert that Legend's cash demands are driving Lenovo's decision-making.

While we cannot comment on how Legend runs its business, we can assure you that our leadership is focused on what is best for Lenovo and our full range of investors. Your speculation to the contrary is misguided.

This can neither be proved or disproved without access to board papers etc. However, it is fair to note that if Legend collapses, it is highly likely that its stake in Lenovo would be sold and management would change. It is hard to imagine that the directors would not take this into account in their decision making.

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Growth

Organic or acquisition driven

All of Lenovo's growth over the last twelve months was organic.

We wonder if they have forgotten buying FCCL?

This completed in May 2018. 9M to Dec 18 would have only included 6 months revenue. If the deal accounted for a large part of the $1.8bn growth in AP, Simply completing the deal would have generated another $0.9bn in 9M to Dec 19.

In 3QFY19/20, our PC shipments increased 12-30% year-on-year in APAC ex-China, EMEA, LA and North America, again, reflecting strong organic growth.

Is this adjusted for FCCL?

Are Lenovo's margins lower than peers?

Is Lenovo getting paid

As for our mobile business, we have communicated consistently that our focus is on strategic geographies such as Latin America and the US – and it was careless of you to comment without understanding the company's strategic intent.

We are not commenting on Lenovo's strategic intent, only their ability to generate value creating returns for shareholders and how performance is communicated with shareholders

Business combination

On May 2, 2018, the Group acquired 51% of FCCL. FCCL is principally engaged in manufacturing and distribution of PC products.

Immediately following completion, the Company, Fujitsu Corporation ("Fujitsu"), and Development Bank of Japan ("DBJ") respectively own 51%, 44%, and 5% of the interest in FCCL.

The acquisition provides the Group with efficiencies and economies of scale to benefit the development, manufacture and distribution of Fujitsu-branded personal computer products, while enabling improved global penetration of the Fujitsu personal computer brand for the benefit of both consumer and enterprise market customers.

	9 months ended December 31, 2019 US$'000	9 months ended December 31, 2018 US$'000	9 months ended December 31, 2017 US$'000	9 months ended December 31, 2016 Revenue from external customers US$'000	9 months ended December 31, 2016 Adjusted pre-tax income/ (loss) US$'000	9 months ended December 31, 2015 Revenue from external customers US$'000	9 months ended December 31, 2015 Adjusted pre-tax income/ (loss) US$'000
China	8,854,350	9,929,812	9,083,649	9,514,093	475,262	10,007,462	456,274
AP	8,965,759	7,231,652	5,416,097	5,278,216	(22,588)	5,570,221	75,960
EMEA	9,478,596	9,567,406	9,434,617	8,563,349	(216,558)	9,316,481	120,240
AG	12,838,273	12,598,794	10,777,271	10,100,374	97,272	10,885,181	(128,472)
	40,136,978	39,327,664	34,711,634	33,456,032	333,388	35,779,345	524,002

Figure 7: Growth, organic or acquisition

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Growth

Revenue performance in China and in the data centre group

Bucephalus Research Partnership
Exposing Creative Accounting

Growth was driven on a global basis and not by a single location. Your accusation that our growth derived from acquisition is inaccurate.

As to your remarks about our China business, we believe you would have concluded differently had you studied the overall PRC market environment.

China & EMEA revenue has fallen, only AP has really grown

Our Personal Computer & Smart Device business performance was in line with the market while our Data Center business grew significantly during the quarter.

Data centre revenue is down 9m vs 9m and flat 3m vs 3m YoY. In other words the last QoQ was a reversal of an earlier collapse. We think it is too early to assume it is a new long term growth rate.

	9 months ended December 31, 2019 US$'000	9 months ended December 31, 2018 US$'000	9 months ended December 31, 2017 US$'000	9 months ended December 31, 2016 Revenue from external customers US$'000	9 months ended December 31, 2016 Adjusted pre-tax income/(loss) US$'000	9 months ended December 31, 2015 Revenue from external customers US$'000	9 months ended December 31, 2015 Adjusted pre-tax income/(loss) US$'000
China	8,854,350	9,929,812	9,083,649	9,514,093	475,262	10,007,462	456,274
AP	8,965,759	7,231,652	5,416,097	5,278,216	(22,588)	5,570,221	75,960
EMEA	9,478,596	9,567,406	9,434,617	8,563,349	(216,558)	9,316,481	120,240
AG	12,838,273	12,598,794	10,777,271	10,100,374	97,272	10,885,181	(128,472)
	40,136,978	39,327,664	34,711,634	33,456,032	333,388	35,779,345	524,002

The Group adopts segments by business group as the reporting format. Segments by business group comprise Intelligent Devices Group ("IDG") and Data Center Group ("DCG"). Segment revenue and pre-tax income/(loss) for reportable segments are as follows:

	3 months ended December 31, 2019 Revenue from external customers US$'000	3 months ended December 31, 2019 Pre-tax income/(loss) US$'000	3 months ended December 31, 2018 Revenue from external customers US$'000	3 months ended December 31, 2018 Pre-tax income/(loss) US$'000
IDG	12,502,275	687,050	12,434,761	586,313
DCG	1,600,561	(46,546)	1,600,369	(54,594)
Segment total	14,102,836	640,504	14,035,130	531,719

	9 months ended December 31, 2019 Revenue from external customers US$'000	9 months ended December 31, 2019 Pre-tax income/(loss) US$'000	9 months ended December 31, 2018 Revenue from external customers US$'000	9 months ended December 31, 2018 Pre-tax income/(loss) US$'000
IDG	35,849,817	1,835,835	34,554,496	1,380,305
DCG	4,287,161	(149,716)	4,773,168	(178,051)
Segment total	40,136,978	1,686,119	39,327,664	1,202,254

Figure 8: Growth, China and the data centres

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Disclosure

Topics to be covered

Factored balance	Data quarterly and with history going back to 2015
Growth vs acquisition	Revenue & profit contribution from M&A in particular FCCL in FY19 and FY20
Regional breakdown	Operating profit
Product breakdown	Separate IDG and MBS
Directors	10 year maximum term, no conversion from non-independent to independent
Dividends	Dividends to be funded out of post capex, post capital cost cashflow
Non controlling interests	Note in the accounts to explain
ZJSB transaction	Why was this bought by a related company in a transaction guaranteed by Lenovo
Debt covenants	What are Lenovo's limits

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2019 Bucephalus Research Partnership Limited

Bucephalus, exposing creative accounting

- When the business reality diverges from management's presentations & the accounts.
- Where incentives, behaviours and outcomes are being obscured from investors.

Our proprietary **G**overnance, **A**ccounting and **P**erformance reviews combine statistical analysis of reported data with careful reading of company statements and management reports.

Helping clients manage risk and improve outcomes

We work with equity and fixed income investors covering the largest 4,000 companies in the Americas, Europe and Asia.

Risk oversight

We help our clients avoid reputational damage, accounting scandals and risk of permanent capital losses. Clients use Bucephalus to look at whole portfolios as well as individual holdings.

Ideas

We look for high returns when management presentations, market perceptions and business realities diverge.

Due diligence

We investigate governance, accounting and performance issues even if companies are outside our core coverage.

Stewardship

Clients ask us to review corporate resolutions and provide recommendations to encourage best practice. We assess management incentivises versus the interests of all shareholders.

https://www.buceph.com/about.html

Source: Bloomberg, company filings and Bucephalus Research Partnership

Copyright 2018 Bucephalus Research Partnership Limited

DISCLAIMER

This document is published by Bucephalus Research Partnership Limited (Bucephalus) as a reflection of our journalistic opinion. All information is taken from publicly published sources and we have relied on the veracity of these sources. We have taken reasonable efforts to check that any facts stated in this document are correct but we offer no guarantee that they are. All of our opinions are supported by facts and information that are already in the public domain.

This document and our opinions should not be used to make investment decisions. This document is merely a reflection of our opinion on the date it is published. Anyone reading this document should seek appropriate advice elsewhere before making any decision about investments or otherwise. Information, markets and our opinion can, and do, change on a daily basis and we do not undertake to update our opinions, research or this document to reflect any such changes. This document is not an advertisement for investment, trading or financial services, nor is it a solicitation to offer for the purchase or sale of investment, trading or financial instruments. Bucephalus produces this report and its opinions solely for the benefit of its clients. Bucephalus makes no warranty, guarantees, or commitments of any kind as to the accuracy of this information, or of the opinions, conclusions or recommendations provided herein. Bucephalus, its directors, employees, agents, contractors and representatives disclaim any and all liability for losses, including but not limited to investment losses, errors or damages arising from use of the opinions, comments and information contained in our research. The employee(s) of Bucephalus, or any related party, whether by family, business, acquaintance or any other means, may or may not, at the time this report is issued, or prior to, or after, own or be short securities or derivatives of the company discussed in this report.

The information provided in this publication is private, privileged, and confidential. It is licensed for your sole individual use as a subscriber. Bucephalus reserves all rights to the content of this publication and related materials. Forwarding, copying, disseminating, or distributing this report in whole or in part, including substantial quotation of any portion the publication or any release of specific investment recommendations, is strictly prohibited. Participation in such activity is grounds for immediate termination of all subscriptions of registered subscribers deemed to be involved at Bucephalus' sole discretion, may violate the copyright laws of Hong Kong, the United States and elsewhere, and may subject the violator to legal prosecution. Bucephalus reserves the right to monitor the use of this publication without disclosure by any electronic means it deems necessary and may change those means without notice at any time.

For more info visit: www.Buceph.com
or email: Research@buceph.com

Copyright 2019 Bucephalus Research Partnership Limited