Financial Statement Analysis Paul Dougall

	BALA	NCE SHEET IN	FORMATION		
		Y NAME: E:			
Account Name	2017	2016	% Change	%Common Size 2017	Common Size RMA
Accounts Receivable	6,199,225	7,438,098	-16.7	10.3	21.4
Inventory	12,722,056	8,475,362	50.1	21.2	33.2
Total Current Assets	54,414,170	47,307,194	15.0	90.8	68.3
Net Fixed Assets (PP&E + Land)	1,369,378	1,304,636	5.0	2.3	17.0
Goodwill and Intangibles	255,481	33,308	667.0	0.4	9.7
Total Assets	59,963,527	52,551,987	14.1	100%	100%
Accounts Payable (AKA Trade Payables)	11,010,716	9,384,479	17.3	18.4	10.5
Total Current Liabilities	20,124,216	17,832,612	12.9	33.6	35.9
Total Liabilities	20,124,216	17,832,612	12.9	33.6	49.8
Total Net Worth	39,839,311	34,719,375	14.7	66.4	50.2
Total Liabilities & Net Worth	59,963,527	52,551,987	14.1	100%	100%

	INCOME STATEMENT INFORMATION						
			/ NAME:	ZOO PAUL DOU			
Acco	unt Name	2017	2016	% Changes	%Common Size 20174	Common Size RMA	
Revenue (Sales)	55,522,303	51,242,982	8.4	100%	100%	
- Cost of Go - (or Cost of (If Availab	Sales)	36,265,210	34,464,074	5.2	65.3	63.4	
Gross Prof = (If Availab		19,257,085	16,778,908	14.8	34.7	36.6	
Interest Ex	pense	95,506	44,321	115.5	0.2		
Net Incom	e	2,543,585	1,539,025	65.3	4.6		
+ Tax Expen	ise	670,885	215,890	210.8	1.2		
= Pre Tax In	come	3,214,478	1,754,923	83.2	5.8	6.1	

MAIN SOURCES AND USES OF CASH FROM THE CASH FLOW STATEMENT							
COMPANY NA YOUR NAME:							
	AMOUNT OF SOURCE	AMOUNT OF USE					
TOP 4 SOURCES:	USE THE FOUR LARGEST POSITIVE NUMBERS1						
Depreciation	1,954,750						
Increase in notes and accounts payable	1,638,632						
Proceeds from issuance of common shares	2,999,207						
Profit before income taxes	3,214,478						
TOP 4 USES:		USE THE FOUR LARGEST NEGATIVE NUMBERS1					
Increase in inventories		-4,029,115					
Purchase of plant, property, & equipment		-2,205,190					
Payments of loans receivable		-1,519,942					
Share of profit of entities accounted for using equity method		-1,292,096					

Current Ratio = CA/CL	2017 54,414,170/20,124,216 = 2.7	2016 47,307,194/17,832,612 = 2.7
Average Collection Period = $(Sales/AR)$	<u>360</u> (55,522,303/6,199,225) = 40.2 = 41	<u>360</u> (51,242,982/7,438,098) = 52.3 = 53
360 days	<u>360</u>	<u>360</u>
Days Inventory on Hand = (COS/ Inv)	(36,265,210/12,722,056) = 126.3 =	127 (34,464,074/8,475,362) = 88.5= 89
Sales Fixed Asset Turnover = Net Fixed Assets	$\frac{55,522,303}{1,369,378} = 40.6$	$\frac{51,242,982}{1,304,636} = 39.3$
Sales	<u>55,522,303</u>	<u>51,242,982</u>
Total Asset Turnover = Total Assets	59,963,527 = 0.9	52,551,987 = 1.0
Total Liabilities	20,124,216	17,832,612
Debt/Worth Ratio = Net Worth	39,839,311 = 0.5	34,719,375 = 0.5
NI+ IE + TE 2,543,585 + 95 TIE Ratio= IE 95,506		$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$
$\frac{360}{\text{Days Payable} = (\text{COS/AP})}$ (36,265)	$\frac{360}{5,210/11,010,716} = 109.3 = 110 ($	<u>360</u> 34,464,074/9,384,479) = 98.0 = 98
Pre Tax <u>Net Income</u>	3,214,478	1,754,923
Profit Margin = Sales x 100	55,522,303 x 100 = 5.8%	51,242,982 x 100 = 3.4%
Pre Tax <u>Net Income</u>	3,214,478	<u>1,754,923</u>
Pre Tax ROE = Total Net Worth x 100	39,839,311 x 100 = 8.1%	34,719,375 x 100 = 5.1%
Pre Tax <u>Net Income</u>	<u>3,214,478</u>	<u>1,754,923</u>
Pre Tax ROA = Total Assets x 100	59,963,527 x 100 = 5.4%	52,551,987 x 100 = 3.3%

RATIO	2017	2016	% Change	Best RMA	Av. RMA	Worst RMA	Compare to Av.	Compare to Best/Worst
Current Ratio	2.7	2.7	0%	2.7	2.0	1.1	35%	0% Best
Av. Coll. Period	41	53	-22.6%	25	38	56	7.9%	-26.8% Worst
Days Inv. On Hand	127	89	42.7%	60	91	140	39.6%	-9.3% Worst
Fixed Asset Turnover	40.6	39.3	3.3%	45.5	18.6	9.4	118.3%	-10.8% Best
Total Asset Turnover	0.9	1.0	-10%	2.6	2.2	1.4	-59.1%	-35.7% Worst
Debt/Worth Ratio	0.5	0.5	0%	0.6	0.8	2.4	-37.5%	-16.7% Best
TIE Ratio	34.7	40.6	-14.5%	57.6	13.8	2.1	151.5%	-40.0% Best
Days Payable	110	98	12.2%	15	24	32	-358.3%	-243.8% Worst
Pre Tax Profit Margin	5.8%	3.4%	70.6%	Х	6.1%	Х	-4.9%	X
Pre Tax ROE	8.1%	5.1%	58.8%	48.4%	21.8%	10.7%	-62.8%	-24.3% Worst
Pre Tax ROA	5.4%	3.3%	63.6%	27.8%	11.5%	4.8%	-53.0%	12.5% Worst`

Introduction

The company is ZOOM Corporation, they develop and distribute electronic musical devices including recording devices, digital mixers, and digital instruments. They are a Japanese company established in 1983 with North American and United Kingdom affiliates.

Liquidity Analysis

Current Ratio

'17	'16	% Change	Best	Average	Worst
2.7	2.7	0%	2.7	2.0	1.1

ZOOM's current ratio remained the same at 2.7. This is due to a 15% increase in current assets and a 12.9% increase in current liabilities. It's current ratio of 2.7 is 35% above the industry's average of 2.0 and the same as the industry's best of 2.7. This is because ZOOM's common sized current assets of 90.8% are 32.9% higher than the industry average of 68.3%, while ZOOM's common size of current liabilities is 33.6% are 6.4% below the common size RMA of 35.9%.

Average Collection Period

'17	'16	% Change	Best	Average	Worst
41	53	-22.6%	25	38	56

ZOOM's average collection shrunk 22.6% from 53 days to 41 days. This is due to both a 16.7% decrease in accounts receivables and a 8.4% increase in sales. At 41 days, ZOOM is 7.9% worse than the industry average of 38 days but 26.8% better than the industry worst of 56 days. It is worse than average even though the common size of ZOOM's accounts receivables is only 10.3%, which is 51.9% lower than the common size RMA of 21.4%. This indicates that ZOOM probably has proportionately less in credit sales but is slower in collecting them.

Day's Inventory on Hand

'17 [°]	'16	% Change	Best	Average	Worst
127	89	38.3%	60	91	140

ZOOM's days inventory on hand increased 42.7% from 89 days to 127 days. This is due to a 50.1% increase in inventory and despite a 5.2% increase in cost of sales. ZOOM's days inventory on hand is 39.6% worse than the industry average of 91 days, but 9.3% better than the industry worst of 140 days. It is slower than average because ZOOM's cash percentage of total assets of 47.5% is 309.48% higher than the RMA cash percentage of total assets of 11.6% which makes the other assets accounts artificially low. However, it is slower than average despite both ZOOM's common size of inventory of 21.2 being 36.1% lower than the common size RMA of 33.2 and its common size of cost of sales is 65.3 being 3.0% higher than the common size RMA of 63.4.

Asset Analysis

Fixed Asset Turnover

'17	'16	% Change	Best	Average	Worst
40.6	39.3	3.3%	45.5	18.6	9.4

ZOOM's fixed asset turnover increased by 3.3% from 39.3 to 40.6. This is due to a 8.4% increase in sales despite a 5% increase in net fixed assets. At 40.6, ZOOM is 118.3% better than the industry average of 18.6 but 10.8% worse than the industry best of 45.5. It is above the industry average because ZOOM's common size of net fixed assets is 2.3 which is 86.5% below the common size RMA of 17.0.

Total Asset Turnover

'17	'16	% Change	Best	Average	Worst
0.9	1.0	-10.0%	2.6	2.2	1.4

ZOOM's total asset turnover decreased by 10.0% from 1.0 to 0.9. This is because of a 14.1% increase in total assets and despite a 8.4% increase in sales. At 0.9, ZOOM is 59.1% below the industry average of 2.2 and 35.7% below the industry worst of 1.4. The reason the total asset turnover is 59.1% lower than the average but the fixed asset turnover is 118.3% higher than the industry average means that ZOOM is really efficient at turning over their fixed assets but turns over their other assets much less often.

Debt Analysis

Debt/Worth Ratio

'17	'16	% Change	Best	Average	Worst
0.5	0.5	0%	0.6	0.8	2.4

ZOOM's debt to worth ratio remained the same at 0.5. This is due to a 14.7% increase in total net worth and a proportional 12.9% increase in total liabilities. ZOOM's debt to worth ratio is 37.5% better than the average of 0.8 and 16.7% better than the industry best of 0.6. It is better than even the industry best because ZOOM's common size of net worth is 66.4 which is 32.3% higher than the common size RMA of 50.2 and their common size of liabilities is 33.6 which is 32.5% lower than the common size RMA of 49.8.

TIE Ratio

'17	'16	% Change	Best	Average	Worst
34.7	40.6	-14.5%	57.6	13.8	2.1

ZOOM's TIE ratio decreased by 14.5% from 40.6 to 34.7. This is due to a 115.5% increase in interest expense and despite a 65.3% increase in pre-tax net income and a 210.8% increase in tax expense. At 34.7, ZOOM's TIE ratio is 151.5% better than the industry average of 13.8 and 40.0% worse than the industry best of 57.6. ZOOM's common size of pre-tax net income is 4.6, their common size of interest expense is 0.2, and their common size of tax expense is 1.2.

Days Payable

'17	'16	% Change	Best	Average	Worst
110	98	12.2%	15	24	32

ZOOM's days payable increased 12.2% from 98 days to 110 days. This is due to a 17.3% increase in accounts payable and despite a 5.2% increase in cost of sales. At 110, ZOOM's days payable is 358.3% slower than the industry average of 24 and 243.8% slower than the industry worst of 32. ZOOM's days payable is significantly slower than even the industry's worst because its common size of accounts payable of 18.4 is 75.2% higher than the common size RMA of 10.5 and despite its common size of cost of sales of 65.3 being 3.0% higher than the common size RMA of 63.4.

Profitability Analysis

PRE TAX Profit Margin

'17	'16	% Change	Best	Average	Worst
5.8	3.4	70.6%	NA	6.1	NA

ZOOM's pre-tax profit margin increased 70.6% from 3.4 to 5.8. This is due to a 83.2% increase in pre-tax net income despite a 8.4% increase in sales. ZOOM's gross profit margin increased 6.1% from 32.7% to 34.7% because gross profit increased by 14.8% despite sales increasing 8.4%. At 5.8, ZOOM is 4.9% below the industry average of 6.1. It thus makes sense that ZOOM's common size of gross profit margin of 34.7 is 5.2% below the common size RMA of 36.6.

PRE TAX ROE

'17	'16	% Change	Best	Average	Worst
8.1	5.1	58.8%	48.4	21.8	10.7

ZOOM's pre-tax ROE increased by 58.8% from 5.1 to 8.1. This is because of a 83.2% increase in pre-tax net income despite a 14.7% increase in total net worth. At 8.1, ZOOM's pre-tax ROE is 62.8% below the industry average of 21.8 and 24.3% below the industry worst of 10.7. ZOOOM's pre-tax ROE is even below the worst because ZOOM's common size of pre-tax net

income of 5.8 is 4.9% below the common size RMA of 6.1 and their common size of net worth of 66.4 is 32.3% higher than the common size RMA of 50.2.

PRE TAX ROA

'17	'16	% Change	Best	Average	Worst
5.4	3.3	63.6%	27.8	11.5	4.8

ZOOM's pre-tax ROA increased 63.6% from 3.3 to 5.4. This is because of a 83.2% increase in net income and despite a 14.1% increase in total assets. At 5.4, ZOOM is 53% below the industry average of 11.5, but 12.5% above the industry worst of 4.8. ZOOM's pre-tax ROA is below the industry average because the pre-tax net income of 5.8 is 4.9% below the common size RMA of 6.1.

Cash Flow Analysis

MAIN SOURCES AND USES OF CASH (2017 Only (Unless doing 2018, then 2018 only.) FROM THE CASH FLOW STATEMENT				
	COMPANY NAME: ZOOM YOUR NAME: PAUL DOUGALL			
	AMOUNT OF SOURCE	AMOUNT OF USE		
TOP 4 SOURCES:	USE THE FOUR LARGEST POSITIVE NUMBERS1			
Profit before income taxes	3,214,478			
Proceeds from issuance of common shares	2,999,207			
Depreciation	1,954,750			
Increase in notes and accounts payable	1,638,632			
TOP 4 USES:		USE THE FOUR LARGEST NEGATIVE NUMBERS1		
Increase in inventories		-4,029,115		
Purchase of plant, property, & equipment		-2,205,190		
Payments of loans receivable		-1,519,942		
Share of profit of entities accounted for using equity method		-1,292,096		

ZOOM's highest cash inflow came from profit before income taxes in the amount of \$3.2 million. The best source of cash is income from continuing operations which consists of net income (net profit) and related cash receipts so profit before income taxes is a great highest cash inflow. The second highest cash inflow came from proceeds from issuance of common stock in the amount of \$3.0 million which makes sense since ZOOM went public on the Tokyo Stock Exchange in March of 2017. The third highest inflow came from depreciation in the amount of \$2.0 million. This is not a great third highest source of cash because ZOOM only has a small investment in PP&E as compared to their total assets. This means ZOOM's depreciation expenses should not be as large as they are. The fourth highest inflow came from increase in notes and accounts payable in the amount of \$1.6 million. This is a would be a good source of cash considering the large investment the company just made in increasing their inventory, however, ZOOM's days payable of 110 days is 243.8% slower than even the industry worst days payable of 32. This then means it will take a long time for ZOOM to pay off their debt. However, if it is not creating any problems with their creditors then this very high days payable allows ZOOM to have that cash available for longer periods of time which could allow them to use the cash for an opportunity that arises during the time between the sale and payment to the seller.

ZOOM's highest cash outflow came from increase in inventories in the amount of \$4.0 million. This will be a bad highest cash outflow if sales do not increase in the upcoming years. Sales increased marginally this year as opposed to how much ZOOM increased their inventory and if sales do not increase by a large amount soon, then ZOOM will end up with a large amount of inventory that they will not be able to sell as it becomes more and more outdated. The second highest cash outflow came from purchase of plant, property, & equipment in the amount of \$2.2 million. This would normally be an understandable use of cash for an expanding business, however, it is a little concerning that such a large investment was made in PP&E and yet ZOOM's common size of net fixed assets of 2.3 are relatively small when compared to their total assets and the RMA common size net fixed assets of 17.0. The third highest cash outflow came from payments of loans receivable in the amount of \$1.5 million. This is an expense that cannot be avoided and is understandable for an expanding company that recently invested a lot in both PP&E and inventory. The fourth highest cash outflow came from share of profit entities accounted for using equity method in the amount of \$1.3 million. This means ZOOM has a decent sized investment in a company (20-50% usually) which has made a profit and this profit is being

distributed to ZOOM, however this amount is already included in Net Income which is why it has to be deducted.

Conclusion

Our loan decision on ZOOM will be evaluated based on its primary strengths and weaknesses, starting with weaknesses.

ZOOM's largest weakness is by far their days payable which is 243.8% worse than the industry worst. Which is a result of ZOOM having a common size of accounts payable 75.2% higher than the common size RMA. This either suggests that ZOOM is struggling to pay back its creditors or that ZOOM receives really good credit terms. ZOOM's total asset turnover is 35.7% worse than the industry worst. This probably means that ZOOM either has a large amount of old inventory in storage or is overproducing. Since total assets increased 50.1% from the previous year, it is probable that ZOOM overproduced in the past year and that sales are not what they expected them to be. All three of ZOOM's profitability ratios are below the industry average and their ROE is even worse than the industry worst by 24.3%. These tell us that the company is not creating as large a profit as the industry average, however, ZOOM is still a relatively young company compared to some of their larger competitors and ZOOM recently went through some changes including going public on the stock market as well as making a decent sized investment in PP&E and a large investment in inventory. These changes and large investments help to explain and justify ZOOM's smaller profits as compared to the industry. ZOOM's average collection period and days inventory on hand are both below average. The days inventory on hand is a result of cash being 47.5% of total assets as opposed to the RMA of 11.6.

It should be taken into consideration that Japan is known for having slightly more lenient credit terms as a nation than average, however, this does not make up for such a large difference

between the industry average days payable of 24 and ZOOM's days payable of 110 and the industry average day's inventory on hand of 91 and ZOOM's days inventory on hand of 127.

ZOOM's strengths are their fixed asset turnover, their debt/worth, and their TIE. Their fixed asset turnover is 118.3% above the industry average which means the company effectively uses their fixed assets such as plant, property, & equipment. ZOOM's debt to worth ratio is 16.7% better than even the industry best due to their below average liabilities and above average net worth. ZOOM's TIE ratio is also 151.5% above the common size RMA for the industry. ZOOM's largest source of cash was their profit before income tax and their largest costs were on increasing inventory and purchasing fixed assets which will most likely lead to increased value in the company and increased productivity.

Based on this information, I would recommend finding out if ZOOM is struggling to pay their creditors or if they are just receiving really good credit terms. If they are struggling to pay I would recommend against lending to ZOOM, however, if this is not the case then I would recommend in favor of lending to ZOOM.