

Short Name Under Armour-A Description: Relevant GMT Research Reports (please go to our website and login): GICS Ind Name Textiles, Apparel & Luxury Goods Under Armour, Inc. develops, markets, and distributes branded performance GICS Industry products for men, women, and youth. The Company designs and sells a US Cntry of Dom broad offering of apparel and accessories made of synthetic microfibers. Most Recent Balance Sheet Period 2017 Y Ticker **UAA US** Short-Seller's Report (for Asian companies only) Latest Period **Current Fiscal Year** 2017 Well known auditor: Pricewaterho Summary of accounting risk for Y/FY17 Numbe of auditors in past 5yrs: - Profit manipulation High risk: Montier. Country of incorporation: Country of incorporation (United States) is same as domicile (United States). - Financial position Weak: Piotrioski. Country of financials: Currency of financials (US Dollar) is same as country of risk (United States). - General accounting Normal - Shenanigans No evidence = Accounting risk: **Profit Manipulation** Latest financials complete This spreadsheet expires on 30th June 2018, in 70 days. Profit Manipulation: Beneish M-Score (See App 1) Beneish M-Score of -2.51 in Y/FY17 suggests no profit manipulation. Cooking the Books: Montier's C-Score (App 2) A C-Score of 4/6 is slightly worse than average; watch out for: Rising receivables. Rising inventory. Rising OCA. Falling depreciation. **Financial Position** An F-Score of 3/9 suggests financials are deteriorating owing to: ROA. Leverage. Current Ratio. Increase in Shares. Gross Margin. Asset Turnover. Strength of Financial Position: Piotroski F-Score (App 3) Risk of Default: Altman Z-Score (App 4) An Altman Z-Score of 4.35 is in the Safe Zone: Financially sound. **Accounting Shenanigans** Acquisition Accounting (App 5) Possible earnings manipulation through acquisition accounting in FY15 FY13 owing to material acquisitions, goodwill and rising deferred tax assets. Global screen Window Dressing (App 6) No evidence of window dressing. Fake Cash Fraud: Overly profitable (App 7) Scores 0/4 in Y/FY17. 64% of companies score similarly and just 2.4% of frauds. Rest easy. Triggered Fake Cash Flow in last 5yrs?: FY15 FY14 Excess Capital Raising (App 8) Global screen Net flows over 5yrs at 0% of Sales are normal. Debt Reconciliation (App 9) No material unreconcilable changes in debt in the last 5 years. Global screen Other Financial Items Number of Red Flags (Out of a possible 75) Triggers 17 red flags in the last financial period which is normal. Cash Balance Cash & STI of USD0.3bn is within normal range. **Restricted Cash** Restricted Cash of USD0bn is within normal range. Receivables Receivables of USD0.6bn are equal to 12% of Sales which is in within normal range. Doubtful Debts Delinguency at 0% of total receivables are within normal range. Payables of USD0.9bn have been extended by 4ppts relative to Sales over the past year which can be a sign of manufactured cash flow. **Payables** Inventory Inventories of USD1.2bn have been extended by 4ppts relative to Sales over the past year which can be a sign of channel stuffing. **Profit Manipulation: Gross Working Capital** An increase in working capital at 10% of sales owing to higher Inventories and Payables suggests inflated cash flows and/or profit over the past year. Cash Extraction Fraud: Prepaid Expenses Prepaid Expenses of USD0.3bn are large relative to sales (5.2%) and inventory (22.2%), raising the risk of illegal cash extraction fraud. Capitalisation of Expenses Affiliate Investments There are no investments in associates. No information available **Auditing Costs** Large Deferred Tax Assets/Sales of 4% in the 90% ile relative to peers, might refect losses at subsidiaries or of Acquisition Accounting. **Deferred Tax Assets Deferred Tax Liabilities** Deferred Tax Liabilities/Sales of 4% are within normal range. Derivatives equal to 0% of equity within normal range. **Derivatives** Other Large Curious Assets and/or Liabilities Within normal range. Depn & Amort Within normal range. EBIT Interest Cover of 0.8x is low. Interest Cover Leverage Total Debt/Profit of 10.3x and assets to equity of 2x are within normal range. **Related Party Fraud** No evidence of related party transactions. New CFO. Unable to reconcile -29% of other comprehensive income which is unusually high. Other comprehensive income is -29% of income which is unusually high. Gross Margin volatility is unusually Other Tests:

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low at 2.3% in the 13%ile relative to peers which is sometimes a trait of frauds.



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Ratios	Global/Sector/	Under A Y/FY17	rmour-A Ratios		Ratio Ch -1yr Chg			Comparison 50th %ile		No of Peers		iles and Red Fl	
Balance Sheet: Assets	Country	1/111/	Y/FY16	1/1114	-Tyl Clig	-3yr Chg	ZULII /oile	Julii //ile	outii /oile	NO OI FEEIS	Y/FY17 (0-100%)	-1yr Chg (+/-50%)	-3yr Chg (+/-50%)
Av Cash & Equiv./Sales (%)	GICS Industry	5.7	3.9	15.2	+1.7	-9.6	3.2	10.4	24.0	379	30%	-19%	+43% Fallen over 3yrs.
Unrestricted Cash/COGS (%)	GICS Industry	11.4	9.7	37.7	+1.7	-26.3	5.1	16.6	40.3	314	37%	+2%	+25% Fallett over Syrs.
ST Investments/Sales FY (%)	GICS Industry	0.0	0.0	0.0	+0.0	+0.0	0.1	1.6	8.5	172	na	na	na
Av. Trade & Notes Rec/Sales (%)	GICS Industry	12.4	10.9	7.9	+1.4	+4.4	7.2	12.1	20.0	356	52%	+29%	+36% Risen over 3yrs.
Delinquent AR/AR (%)	Global	0.0	0.0	0.0	+0.0	+0.0	0.9	5.9	22.7	1,912	na	na	na
Av. Inventory/Sales (%)	GICS Industry	23.3	19.0	17.4	+4.3	+5.9	13.0	19.6	29.8	375	63%	+38%	+36% Risen over 1yr. Risen over 3yrs.
Inventory Days	GICS Industry	138	120	117	+18	+22	62	103	187	314	67%	+35%	+26% Risen over 1yr.
Finished Goods/Inventory (%)	GICS Industry	0	0	0	+0.0	+0.0	33	60	89	417	na	na	na
Av. Other ST Assets/Sales (%)	GICS Industry	4.2	3.2	3.9	+1.0	+0.3	2.0	3.6	7.4	376	56%	+28%	+1%
PPE/Sales (%) Affliliate Inv/Equity (%)	GICS Industry Global	17.0 na	13.9 na	8.6 na	+3.1 na	+8.4 na	9.2 0.5	22.8 3.0	45.7 13.1	360 7,896	39% na	+29% na	+32% Risen over 3yrs. na
LT Inv & Rec/Sales (%)	GICS Industry	0.0	0.0	0.0	+0.0	+0.0	0.2	1.5	10.0	249	na	na	na
Deferred Tax Assets/Sales FY (%)	GICS Industry	4.4	4.8	2.7	-0.4	+1.7	0.2	0.9	2.7	277	90%	-39%	+37% Deferred Tax Assets/Sales FY (%) high. Risen over 3yrs.
Prepaid Expenses/Sales (%)	GICS Industry	5.2	3.6	2.8	+1.5	+2.3	0.3	1.3	3.4	167	89%	+43%	+40% Prepaid Expenses/Sales (%) high. Risen over 1yr. Risen over 3yrs.
Prepaid Expenses/Inventory (%)	GICS Industry	22.2	19.0	16.2	+3.2	+5.9	1.2	3.7	10.7	99	92%	+38%	+43% Prepaid Expenses/Inventory (%) high. Risen over 1yr. Risen over 3yrs.
Intangibles/Sales FY (%)	GICS Industry	12.1	12.6	3.0	-0.5	+9.1	0.1	1.0	9.2	316	83%	-38%	+41% Intangibles/Sales FY (%) high. Risen over 3yrs.
Av. Other LT Assets/Sales FY (%)	GICS Industry	2.0	2.2	1.1	-0.3	+0.8	0.4	1.8	5.8	332	52%	-28%	+14%
Av. Assets/Sales (%)	GICS Industry	77	67	60	+9.4	+17.3	65.5	95.1	139.4	380	31%	+26%	+20%
Balance Sheet: Liabilities and Equity													
Av. Payables (Trade, Bills, Accr/Sales (%)	GICS Industry	14.8	10.5	10.7	+4.3	+4.2	5.3	10.0	15.5	379	76%	+45%	+37% Risen over 1yr. Risen over 3yrs.
Trade Payable Days	GICS Industry	59 17	41 3	42	+18.4	+17.6	24.5	45.6	81.5	348	64%	+42%	+31% Risen over 1yr. Risen over 3yrs.
ST Debt/Total Debt (%) Av. Other ST Liabs/Sales (%)	Global GICS Industry	17 0.8	0.9	10 0.9	+13.3 -0.0	+6.4 -0.1	13.0 3.8	44.2 6.8	88.3 10.9	13,723 380	23% 1%	+35%	+20% Risen over 1yr. -8%
Av. Deferred Tax Liab/Sales FY (%)	GICS Industry	3.6	3.7	2.8	-0.0	+0.8	0.7	3.6	12.1	256	49%	-24%	+26%
Av. Other LT Liabs/Sales (%)	GICS Industry	3.3	2.7	1.4	+0.5	+1.9	0.4	1.8	5.1	298	67%	+8%	+35% Risen over 3yrs.
Preferred Equity/Equity (%)	Global	0.0	0.0	0.0	+0.0	+0.0	0.2	5.1	20.7	908	na	na	na
Minority/Total Equity (%)	Global	0.0	0.0	0.0	+0.0	+0.0	0.3	2.4	11.4	9,628	na	na	na
Assets/Equity (x)	GICS Industry	2.0	1.8	1.6	+0.2	+0.4	1.4	1.8	2.6	373	58%	+35%	+36% Risen over 1yr. Risen over 3yrs.
Balance Sheet: Other													
Av. GFA/D&A (yrs)	GICS Industry	7.5	7.0	6.4	+0.5	+1.2	8.4	14.3	22.8	371	15%	-3%	-15%
Restricted Cash/Equity (%)	GICS Industry	0.0	0.0	0.0	+0.0	+0.0	0.1	0.3	5.9	60	na	na	na
Cash Conversion Cycle (Days)	GICS Industry	124 53.3	119 43.3	104 39.7	5 +10.0	20 +13.6	70.6 40.4	110.2	186.0 72.2	312 379	57% 49%	+6%	+27%
Av. Gross Working Capital/Sales (%) Contingent Liab/Equity (%)	GICS Industry GICS Industry	128.0	103.7	100.5	+24.2	+27.5	2.0	53.6 13.6	59.2	253	93%	+43%	+30% Risen over 1yr. Risen over 3yrs. +40% Contingent Liab/Equity (%) high. Risen over 1yr. Risen over 3yrs.
Pension Liabilities/Equity (%)	Global	0.0	0.0	0.0	+0.0	+0.0	0.7	2.8	10.0	7,570	na	na	na
Net Derivatives/Equity (%)	Global	0.3	0.7	0.0	-0.4	+0.3	-1.4	0.0	1.1	2,405	69%	-23%	+6%
Return on Production Assets (%)	GICS Industry	1.6	31.0	48.9	-29.4	-47.2	4.5	14.9	33.7	382	12%	+46%	+46% Return on Production Assets (%) low. Fallen over 1yr. Fallen over 3yrs.
Non-Prod. Assets/COGS FY (%)	GICS Industry	74.1	72.7	1.4	+1.4	+72.7	34.6	67.1	132.2	299	54%	+14%	-39% Risen over 3yrs.
Gross Debt/Profit (x)	GICS Industry	10.3	3.8	1.4	+6.5	+9.0	0.9	4.0	13.7	306	73%	+38%	+36% Risen over 1yr. Risen over 3yrs.
Income Statement											(0-100%)	(+/-50%)	(+/-50%)
Sales/Employee (US\$)	GICS Industry	314,972	317,456	288,259	-2,485	+26,713	56,779	148,854	359,649	286	74%	+8%	-31% Risen over 3yrs.
Gross Margin (%)	GICS Industry	45.0	46.4	49.0	-1	-4	15	30	52	322	70%	+18%	+19%
GM Volatility 5yrs (%)	GICS Industry	2.3		><_		><_	2.9	6.3	20.0	303	13%		GM Volatility 5yrs (%) low.
Other Op Y/Op Y (%)	GICS Industry	0.0 3.5	0.0 3.0	0.0	+0.0	+0.0	1.8 1.4	6.4 2.8	20.7 4.7	119	na 36%	na -31%	na -34%
D&A/Sales T12M (%) Operating Margin T12M (%)	GICS Industry GICS Industry	0.6	8.7	2.3 11.5	+0.5 -8.1	+1.2 -10.9	2.8	7.2	14.9	376 374	9%	+47%	+45% Operating Margin T12M (%) low. Fallen over 1yr. Fallen over 3yrs.
Non-Op Y/Op Y (%)	GICS Industry	226.0	8.8	3.6	-6.1 +217.3	+222.4	2.8	10.4	36.5	329	96%	+47%	+47% Non-Op Y/Op Y (%) high. Risen over 1yr. Risen over 3yrs.
EFF Int Rate less MLR (ppt)	Country	2.9	3.2	2.6	-0.3	+0.3	3.5	5.2	7.7	1,652	13%	-6%	+29% EFF Int Rate less MLR (ppt) low.
Cash Return less Policy Rate (ppt)	Country	-1.2	-0.5	-0.1	-0.7	-1.1	0.1	0.7	3.5	1,091	0%	-34%	-33% Cash Return less Policy Rate (ppt) low. Fallen over 1yr. Fallen over 3yrs.
Affil Y/Op Y (%)	Global	0.0	0.0	0.0	+0.0	+0.0	0.3	2.2	11.9	6,391	na	na	na
Eff Tax Rate (%)	Country	na	33.8	39.2	na	na	17.9	32.0	38.0	1,931	na	na	na
CF Tax/IS Tax (%)	GICS Industry	97.3	103.5	77.0	-6.3	+20.3	64.9	98.7	151.1	285	52%	+11%	-14%
X Items/Op Y (%)	Global	0.0		200			0.8	6.2	37.4	1,297	na		
Minority Int/Profit B4 MI (%)	Global	na -1.0	0.0 5.3	0.0 6.7	na -6.3	na -7.7	-0.1	1.8 4.7	12.8 11.2	8,362 383	na 92%	na +45%	na +43% Net Income Margin (%) low Fallen over 1vr. Fallen over 3vrs
Net Income Margin (%) Capitalised Int/PTP (%)	GICS Industry Global	-1.0 na	0.5	0.1	-6.3 na	-7.7 na	1.3 0.0	0.0	0.0	13,642	92% na	+45% na	+42% Net Income Margin (%) low. Fallen over 1yr. Fallen over 3yrs.
Cap of Intang. Assets/PTP (%)	Global	Loss making	0.0	0.0	na	na	0.9	4.0	16.7	728	na		
EBIT Interest Cover (x)	GICS Industry	0.8	14.7	59.7	-13.9	-59.0	1.7	7.4	41.1	351	88%	+38%	+41% EBIT Interest Cover (x) low. Fallen over 1yr. Fallen over 3yrs.
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B	Global/Sector/	Under Ar	mour-A Ratios		Ratio Ch	ange	Peer Grou	Comparison	Ratios		Percent	tiles and Red F	lags	Red Flag Comment
Ratios	Country	Y/FY17	Y/FY16	Y/FY14	-1yr Chg	-3yr Chg	20th %ile	50th %ile	80th %ile N	lo of Peers	Y/FY17	-1yr Chg	-3yr Chg	
Cash Flow											(0-100%)	(+/-50%)	(+/-50%)	
CFO/Net Profit (x)	GICS Industry	Loss	1.4	1.1	na	na	0.3	1.1	2.2	1,697	na	na	na	
Cash Interest Exp./CFO (%)	GICS Industry	12.7	5.9	1.9	+6.8	+10.8	0.2	4.8	25.8	271	66%	+26%	+27%	
Capex/Sales (%)	GICS Industry	5.7	8.0	4.6	-2.3	+1.1	1.4	3.2	7.2	371	71%_	-34%	+23%	
Decrease Investments/Sales (%)	GICS Industry	0.0	0.6	0.0	-0.6	+0.0	0.0	0.5	4.8	141	na	\geq	$\geq <$	
Other Investing Activities/Sales (%)	GICS Industry	0.0	0.1	0.4	-0.1	-0.4	0.1	1.1	4.4	292	na	\geq	$\geq \leq$	
Debt Repay/ST Debt -1FY (%)	Global	2,463	2,788	113	-324.5	+2,349.9	20.0	88.4	210.9	10,373	95%	-43%		Debt Repay/ST Debt -1FY (%) high. Risen over 3yrs.
Free Cash Flow Margin (%)	GICS Industry	-1.0	-0.5	2.5	-0.5	-3.5	-4.2	2.4	8.7	377	68%	+8%	+23%	
FCF-Divs/Sales (%)	Global	na	-0.5	na	na	na	-7.2	0.9	6.8	10,563	na	na	na	
No. of Mat. Capital Inc -5yrs	Global	0	\geq	><	\geq	><	0.0	0.0	1.0	9,451	na	\geq	$\geq \leq$	
Other Fin. Activities/Sales (%)	GICS Industry	0.1	0.4	0.2	-0.3	-0.1	0.0	0.3	1.4	329	28%	\sim	><	
Corporate Governance											(0-100%)	(+/-50%)	(+/-50%)	
Auditing Exp/Sales (bp)	GICS Industry	na	><	\sim	\geq	><	2.5	6.3	13.2	179	na	\geq	><	
RPT Balances/Equity (%)	Global	0.0	\geq	\sim	$\geq \leq$	><	0.3	1.9	11.0	1,434	na	\geq	><	
Number of Acq&Disp -5yrs	Global	3	\geq	\sim	$\geq \leq$	><	0.0	3.0	5.0	12,251	55%	\geq	$\geq <$	
Acq&Disp Con./Sales Av5yrs (%)	Global	4.1	><	\sim	$\geq \leq$		0.2	1.4	6.9	12,251	70%		$\geq \leq$	
Executive Comp/Sales (bp)	GICS Industry	60.9		\leq	$\geq \leq$		7.4	22.6	73.1	84	76%		$\geq \leq$	
Executive Comp/PTP (bp)	GICS Industry	na		\sim	$\geq \leq$	$\geq \leq$	67.6	188.6	669.0	84	na		$\geq \leq$	
CEO Tenure (yrs)	Global	22.3	\geq	\leq	$\geq \leq$	$\geq \leq$	1.4	4.5	10.8	5,466	95%			CEO Tenure (yrs) high.
CFO Tenure (yrs)	Global	0.9		\sim	$\geq \leq$	$\geq \leq$	1.1	3.3	8.3	716	15%		$\geq \leq$	CFO Tenure (yrs) low.
Av. Executive Tenure (yrs)	Global	5.0		\leq	$\geq \leq$		4.1	7.4	11.9	3,291	28%	\geq	$\geq \leq$	
Av. Board Tenure (yrs)	Global	9.9	><	\sim	><	\sim	3.9	6.4	9.9	3,672	80%	><	><	Av. Board Tenure (yrs) high.

Source: GMT Research, Bloomberg

Summary of financials in Y/FY17		Result: Very poor score. Number of red flags normal.	Explanation
Average Ratio Percentile Score (0 is good, 100 is bad) - Percentile vs Industry Peers (0% is good, 100% is bad) Number of Red Flags (Out of a possible 75) - Percentile vs Global Peers (0% is good, 100% is bad)	56% 82% 17 79%		Each of the 50 financial ratios listed below is percentile ranked relative to an appropriate peer group drawn from 16,000 companies globally between 2010 and 2015. In general, low percentile scores are good while high scores are poor. Red flags are mainly triggered when a company's ratio is above the 80th percentile; however, for certain ratios a red flag is triggered when it is below the 20th percentile. Red flags are highlighted below in red.
Summary of change in financials over 1 year		Result: High number of red flags.	Explanation
Number of Red Flags (Out of a possible 62) - Percentile vs Global Peers (0% is good, 100% is bad)	17 92%	Over the financial year prior to Y/FY17, Under Armour-A triggered a total of 17 red flags out of 62 placing it in a percentile of 92 relative to our sample of 16,000 companies globally, which is a very unusual result.	Red flags are normally triggered by a score between +30 and +50 which suggests an aggressively deteriorating financial ratio. These are highlighted in red below.
Summary of change in financials over 3 yrs		Result: High number of red flags.	Explanation
Number of Red Flags (Out of a possible 62)	24	Over the 3 financial years prior to Y/FY17, Under Armour-A triggered a total of 24	Red flags are normally triggered by a score between +30 and +50 which suggests an aggressively



Appendices									
Appendix 1: Beneish M-Score									
	Calculation	FY13	FY14	FY15	FY16	FY17	Y/FY17	Index Calculation	Comments on latest perios
Days Sales in Receivables Index	+(0.92*1.13)	0.98	0.96	1.13	1.22	1.13	1.13	(Net Receivables _t / Sales _t) / Net Receivables _{t-1} / Sales _{t-1})	Receivables of 45 days have increased by 5 days YoY
Gross Margin Index	+(0.528*1.03)	0.98	0.99	1.02	1.04	1.03	1.03	$[(Sales_{t-1} - COGS_{t-1}) / Sales_{t-1}] / [(Sales_t - COGS_t) / Sales_t]$	12m Trailing Gross Margin of 45% has deteriorated by 1.4ppts YoY
Asset Quality Index	+(0.404*0.81)	2.27	0.80	2.52	0.83	0.81	0.81	$[1-(Curr Ass_t+PP\&E_t+Sec_t)/Assets_t]/[1-((Curr Asss_{t-1}+PP\&E_{t-1}+Sec_{t-1})/Assets_{t-1})]$	Other LT Assets/Total Assets of 19.5% has fallen by 4.5ppts YoY
Sales Growth Index	+(0.892*1.03)	1.27	1.32	1.28	1.22	1.03	1.03	Sales, / Sales, 1	12m Trailing Sales have risen 3% YoY
Depreciation Index	+(0.115*0.93)	1.04	0.96	1.21	1.03	0.93	0.93	$(Depr_{t-1}/(PP\&E_{t-1} + Depr_{t-1})) / (Depr_t / (PP\&E_t + Depr_t))$	12m Trailing Depreciation/Sales of 16.4% has risen by 1.1ppts YoY
GG&A Index	-(0.172*0.85)	0.98	1.00	0.99	1.00	0.85	0.85	(SG&A Expense, / Sales,) / (SG&A Expense, 1 / Sales, 1)	12m Trailing SG&A/Sales of 44.4% have risen by 6.6ppts YoY
Total Accruals to Total Assets	-+(4.679*0.04)	0.03	-0.01	0.08	-0.04	-0.04	-0.04	Profit from Continuing Ops, - Cash Flows from Ops,) / Total Assets,	Total Accruals (Net Profit less CFO)/Total Assets are -4%
everage Index	-(0.327*0.89)	0.88	0.93	0.84	0.95	0.89	0.89	[(Curr Liab _t +Total LT Debt _t)/Total Ass _{t-1} /[(Curr Liab _{t-1} +Total LT Debt _{t-1})/Total Ass _{t-1}]	LT Debt + Current Liabilities/Total Assets of 46% have risen by 5.1ppts YoY
Beneish M-Score for Y/FY17	-4.84 =	-1.58	-2.32	-1.04	-2.31	-2.51	-2.51	An M-Score of >-2.22 signals that the company is likely to be a manipulator	Beneish M-Score of -2.51 in Y/FY17 suggests no profit manipulation
Appendix 2: Montier C-Score									
		FY13	FY14	FY15	FY16	FY17	Y/FY17	Point Calculation	Comments
Profit		1	0	1	0	0	0	A growing divergence between Profit and Operating Cash Flow (1 point)	12m Trailing Accruals Margin of 5.7% has improved from 2.2% YoY
Receivables		0	0	1	1	1	1	Receivable Days are increasing (1 point)	Receivables of 45 days have increased by 5 days YoY
nventory		1	0	1	0	1	1	Inventory Days are increasing (1 point)	Inventory of 23 days has risen by 4 days YoY
Other current assets		1	1	0	0	1	1	Other Current Assets to Sales are increasing (1 point)	Other Current Assets/Sales of 4.3% have risen by 0.9ppts YoY
Depreciaton		1	0	1	1	1	1	Depreciation relative to PPE jobs usfa bs	Depreciation of 7.5yrs has risen by 0.5yrs YoY
Asset growth		1	1	1	1	0	0	High asset growth in excess of 10% (1 point)	Asset growth of 10% is below 10%
Montier's C-Score		5	2	5	3	4	4	Score 0-1 is good; 2-4 is average, 5-6 is bad	A C-Score of 4/6 is slightly worse than average
Appendix 3: Piotroski F-Score								*	
		FY13	FY14	FY15	FY16	FY17	Y/FY17	Point Calculation	Comments
et Income Score		1	1	1	1	1	1	Positive Return on Assets in the current year (1 point)	12m Trailing Return on Assets of 2.3%
Operating Cash Flow Score		1	1	1	1	1	1	Positive Operating Cash Flow in the current year (1 point)	12m Trailing CFO Margin of 4.7%
Return on Assets Score		0	0	0	0	0	0	Higher Return on Assets than previous year (1 point)	12m Trailing ROA has fallen to 2.3% from 6.5% YoY
Quality of Earnings Score		0	1	0	1	1	1	Operating Cash Flow are greater than ROA (1 point)	12m Trailing CFO Margin of 4.7% is above Net Profit Margin of 1.8%
ong-Term Debt to Assets Score		0	0	0	1	0	0	Lower ratio of Long Term Debt than previous year (1 point)	LT Debt/Total Assets has risen to 23% from 22% YoY
Current Ratio Score		0	1	0	0	0	0	Higher Current Ratio this year compared to the previous year (1 point)	Current Ratio has fallen to 2.2x from 2.87x YoY
Shares Outstanding Score		0	0	0	0	0	0	No new shares were issued in the last year (1 point)	Increased number of shares by 0.8%
Gross Margin Score		1	1	0	0	0	0	A higher Gross Margin compared to the previous year (1 point)	12m Trailing Gross Margin of 45% has deteriorated by 1.4ppts YoY
Asset Turnover Score		0	0	0	0	0	0	A high Asset Turnover ratio compared to the previous year (1 point)	Asset turnover has fallen to 1.3x from 1.48x YoY
Piotroski F-Score		3	5	2	4	3	3	Score 0-1 weak and deteriorating; 8-9 strong and improving	An F-Score of 3/9 suggests financials are deteriorating
Appendix 4: Altman Z-Score									
		FY13	FY14	FY15	FY16	FY17	Y/FY17	Altman Z-Score for a manufacturing company	Comments
olvency		1.07	0.79	0.56	0.51	0.45	0.45	Working Capital (Current Assets less Current Liabilities)/Tangible Assets	Ability to meet short term obligations
Cumulative profitability		0.64	0.62	0.68	0.58	0.49	0.49	Retained Earnings/Tangible Assets	Determines cumulative historic profitability
Profitability		0.61	0.60	0.61	0.46	0.03	0.03	EBIT/Tangible Assets	Measures earnings away from the effects of taxes and leverage
Market confidence		10.57	11.70	8.73	4.74	1.93	1.93	Market Capitalisation/Total Liabilities	Whether a firm's value able to cover liabilities
Efficiency		1.63	1.59	1.80	1.60	1.46	1.46	Sales/Tangible Assets	An asset turnover metric to measure efficiency
everage		na	na	na	na	na	na	Book Value of Equity/Total Liabilities	Leverage
Altman Z-Score for Y/FY17		14.52	15.29	12.37	7.89	4.35	4.35	Anything < 1.81 for a manufacturer or < 1.11 for other companies is problematic	Safe Zone: Financially sound
Appendix 5: Acquisition Account	ting							·	Get global so
	Point Calculation	FY13	FY14	FY15	FY16	FY17	Y/FY17	Point Calculation	Comments
Material acquisition?	1 point	1	0	1	0	0	0	An acquisition in excess of 5% of sales.	No recent material acquisitions (>5% sales)
Rise in intangible assets -1yr?		1	1	1	0	0	0	Either a rise in Intangible Assets over 1 year	na
Material intangibles on balance sheet?	1 point	1	1	1	1	1	1	Or Intangibles are >=50%ile relative to peers	Intangible Assets/Sales of 12% are in the 83%ile
Rise in deferred tax assets -1yr?	A market	1	1	1	1	0	0	Either a rise in Deferred Tax Asset over 1 year	na
Large deferred tax assets	1 point	1	1	1	1	1	1	Or a large Deferred Tax Asset in the 80%ile relative to industry peers	DTA/Sales of 4.4% is in the 90%ile relative to industry peers
		3	2	3	2	2	2	A score of 3 suggests possibility of acquisition accounting to inflate profits	Possible earnings manipulation through acquisition accounting



Append	ix 6:	Debt	Wind	low I	Dressi	ing
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	FY13	FY14	FY15	FY16	FY17	Y/FY17	Point Calculation	Comments
Has high debt repayment/ST debt?	0	0	1	1	1	1	Debt Repayment relative to the ST Debt one year prior is in excess of 130%	Debt Repayment/ST Debt -1FY of 2463% is in the 95%ile relative to global peers
Has high effective interest rate?	0	0	0	0	0	0	Effective Interest Rate is in excess of the 80%ile relative to country peers	Effective Int Rate of 4.3% is in the 18%ile relative to country peers
Has moderate debt?	Ō	1	1	1	1	1	If Debt to Sales >15%ile of industry peers	Debt/Sales of 18% is in the 43%ile relative to industry peers
Window Dressing	0	1	2	2	2	2	A score of 3 suggests strong likeihood of window dressing	Unlikely to be debt window dressing
Willdow Diessing	U						A score of 3 suggests strong likelihood of willdow dressing	Officery to be debt willdow dressing

Appendix 6a: Investment Window Dressing

Appendix od: Investment window bressing								
	FY13	FY14	FY15	FY16	FY17	Y/FY17	Point Calculation	Comments
High level of investment repayment/sales?	0	0	0	0	0	0	If Invest Repay/Sales in excess of the 80%ile relative to industry peers	na
High inv. repay./investments -1FY?	0	0	1	1	0	0	If Invest Repay in excess of 100% of previous year's Investments	na
Window Dressing Investments	0	0	0	0	0	0	A score of 2 suggests a strong possibility of window dressing	Unlikely to be window dressing investments

Appendix 7: Fake Cash Flow

Appendix 7. Fake Cash Flow									det global screen
	Point Calculation	FY13	FY14	FY15	FY16	FY17	Y/FY17	Point Calculation	
High operating margin	Critical criterea: 1	0	0	0	0	0	0	Operating Margin >80%ile relative in industry peers	A 12m Trailing Operating Margin of 1% is in the 9%ile
High return on production assets	point	1	1	1	0	0	0	Op Profit/(PPE + Inv) in the >80%ile relative to industry peers	A 12m Return on Production Assets of 2% is in the 12%ile
High level of non-production assets	1 point	0	1	1	1	0	0	(Total Assets-Production Assets)/(COGS or Sales) >80%ile versus peers	Non Production Assets/COGS (or Sales) of 74% is in the 54%ile
Build-up of non-production assets	1 point	0	0	0	0	0	0	Increase in Non Prod Assets rel to Sales or COGS >80%ile peers	Non Production Assets/COGS (or Sales) changed by -3% over 1 year
Low dividends and buybacks	1 point	1	1	1	1	1	1	Dividends and Buybacks are less than 30% profit	Dividends and buybacks of 0%
A relatively unknown auditor		0	0	0	0	0	0	Relatively obscure auditor	Well known auditor: Pricewaterho
Incorporation and Domicile	1pt if >1	0	0	0	0	0	0	Different country of incorporation vrs domicile	Country of incorporation (United States) is same as domicile (United States).
Debt structure	1pt ii >1	0	0	0	0	0	0	If Short Term Debt >75% Total Debt, or no debt at all	Short term debt is 17% of total debt
Sector		1	1	1	1	1	1	Operates in sector prone to fraud	Textiles, Apparel & Luxury Goods industry is prone to fraud.
Fake Cash Flow Fraud	Max 4pts	2	3	3	0	0	0	A score of 3 or 4 is problematic and requires further investigation	64% of companies score similarly and just 2.4% of frauds

Appendix 8: Excess Capital Raising					Get	global screen		
(USDm)	FY13	FY14	FY15	FY16	FY17	FY13-17		
Sales	+2,332	+3,084	+3,963	+4,825	+4,977	+19,182		
- OPCF	+120	+219	+15	+364	+234	+952		
- Capex	(88)	(141)	(301)	(388)	(283)	(1,200)		
- Dividends (incl MI at subs)	+0	+0	+0	(3)	+0	(3)		
- Buybacks	+0	+0	+0	+0	+0	+0		
- (Acquisitions)/disposals	(148)	(11)	(539)	+0	+0	(698)		
= Net internal cash generation	(116)	+68	(826)	(26)	(49)	(950)		
Externally generated cash flows								
- Debt issuance, net	+95	+131	+385	+157	+98	+865		
- Equity issuance	+32	+53	+10	+0	+9	+104		
= Net external financing	+127	+184	+395	+157	+107	+970		
Net surplus/(deficit)	+11	+252	(431)	+131	+58	+20		
Net flows/Sales (%)	+0	+8	(11)	+3	+1	0		
Relative to Global Sector (%ile):						26%		
Av. cash balance/sales (%)	15	15	9	4	6			
Relative to Global Sector (%ile)	63%	64%	45%	23%	30%			
Core cash required (10% of Sales):					33			
Surplus cash at year end (cash balance less core cash):					280			
Possible fake cash flow over past 5yrs (only if 5yr surplus is greater than zero):								
Possible fake cash/excess cash balance (%):					7			
Normal amounts of cash flow generated.								

Annendix 9: Deht Reconciliation

Appendix 3. Debt Reconciliation					<u>Ge</u>	t giobai screen
(USDm)	FY13	FY14	FY15	FY16	FY17	FY13-17
Balance sheet (BS) debt YE	153	284	666	817	917	
Change in debt: BS	+91	+131	+382	+151	+100	+855
Change in debt: Cash flow (CF)	95	131	385	157	98	+865
Unrec chg BS and CF debt	(3)	+0	(3)	(6)	+2	(10)
Unrec chg/total debt (%)	(2)	+0	(0)	(1)	+0	(1)
Possible reason:	ok	ok	ok	ok	ok	
No material unreconcilable changes in debt in the last 5 years.						
Reasons:						

- Assets paid with debt (such as operating leases) is a non-cash item. Capex should be restated.

- Proceeds raised from convertible bonds (CBs) are sometimes regarded as equity, not debt.

- Large acquisitions can lead to difficulties in reconciling debt.

- If no reason is found, further work is needed.

Appendix 10: Ownership Type (latest Bloomberg data)

	(%)	Active Versus Passive	
Investment Advisor	89	Free Float (%)	99
Hedge Fund Manager	4	No. Instit. Owners	731
Bank	3	Institutional (%)	111
Pension Fund (ERISA)	2	- Passive Instit. (ETFs) (%)	33
Government	1	- Active Instit. (%)	78
Other	2		

Appendix 11: Insiders (latest Bloomberg data)

		Comment
Insider Shares O/S (%)	0.87	
Chg Insider Hldgs -6m (%)	0.19	Changes in insider holdings can be due to options, etc. as opposed to actively buying or selling
Number of Insider Shares Purchased (m)	+0.0	shares
Number of Insider Shares Sold (m)	-0.0	
Average Purchase Price of Insider Shares	0.00	Current share price is USD16.1
Average Sell Price of Insider Shares	16.79	
Shares Outstanding (m)	442	
Insider Shares Traded -6m/Total Shares (%)	0.00	

Appendix 12: Comprehensive Income (latest Bloomberg data)

	(USDm)	Comment
Comprehensive Income	(34)	
Less:		
Net Income/Net Profit (Losses)	(48)	
Other comprehensive income comprised of:		
na	na	Other comprehensive income is -29% of income which is unusually high. Unable to reconcile -
na	na	29% of other comprehensive income which is unusually high.
na	na	
Amount unable to reconcile:	14	