

GMT Research Accounting Screen



Short Name	Puma Se	Description:	Relevant GMT Research Reports (please go to our website and login):
GICS Ind Name	Textiles, Apparel & Luxury Goods	Puma SE designs, manufactures, and sells sporting goods and branded apparel. The Company produces running, tennis, training, and basketball shoes and other products. Puma operates Santa Monica concept stores and sells its products worldwide through subsidiaries, distributors, and direct sales.	
GICS Industry	252,030		
Cntry of Dom	DE		
Most Recent Balance Sheet Period	2017 Y		
Ticker	PUM GR		
Latest Period	Y		Short-Seller's Report (for Asian companies only)
Current Fiscal Year	2017		
Well known auditor:	Deloitte		
Numbe of auditors in past 5yrs:	2	Deloitte. Deloitte & T.	Summary of accounting risk for Y/FY17
Country of incorporation:	Country of incorporation (European Union) is same as domicile (European Union).		- Profit manipulation Low risk: Montier.
Country of financials:	Currency of financials (Euro) is same as country of risk (European Union).		- Financial position Strong: Piotroski.
			- General accounting Normal
			- Shenanigans No evidence
			= Accounting risk: Low
Profit Manipulation		Lastest financials for 31/12/2017 incomplete	This spreadsheet expires on 30th June 2018, in 70 days.
Profit Manipulation: Beneish M-Score (See App 1)		Beneish M-Score of -2.61 in Y/FY17 suggests no profit manipulation.	
Cooking the Books: Montier's C-Score (App 2)		A C-Score of 0/6 implies improving financials and unlikely manipulating profit.	
Financial Position			
Strength of Financial Position: Piotroski F-Score (App 3)		An F-Score of 7/9 suggests financials are improving.	
Risk of Default: Altman Z-Score (App 4)		An Altman Z-Score of 6.05 is in the Safe Zone: Financially sound.	
Accounting Shenanigans			
Acquisition Accounting (App 5)	Global screen	No evidence of acquisition accounting.	
Window Dressing (App 6)		No evidence of window dressing.	
Fake Cash Fraud: Overly profitable (App 7)	Global screen	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?: None	
Excess Capital Raising (App 8)	Global screen	Net flows over 5yrs at 1% of Sales are normal.	
Debt Reconciliation (App 9)	Global screen	No material unreconcilable changes in debt in the last 5 years.	
Other Financial Items			
Number of Red Flags (Out of a possible 75)		Triggers 12 red flags in the last financial period which is normal.	
Cash Balance		Cash & STI of EURO.5bn is within normal range.	
Restricted Cash		Restricted Cash of EURObn is within normal range.	
Receivables		Receivables of EURO.5bn are equal to 12% of Sales which is in within normal range.	
Doubtful Debts		Delinquency at 0% of total receivables are within normal range.	
Payables		Large Payables of EURO.7bn equal to 16% of Sales are in the 83%ile relative to peers, can be a sign of hidden debt.	
Inventory		Inventories of EURO.8bn are equal to 19% of Sales which is within normal range.	
Profit Manipulation: Gross Working Capital		No evidence of profit/cash flow manipulation through working capital.	
Cash Extraction Fraud: Prepaid Expenses		Prepaid Expenses of EURObn, equal to 1% of Sales, raise the risk of illegal cash extraction.	
Capitalisation of Expenses		Capitalised expenses relative to pre-tax profits (0.7%) are within normal range.	
Affiliate Investments		Investments in Associates of EURObn are equal to 1% of equity and 1% of OP, within normal range.	
Auditing Costs		No information available	
Deferred Tax Assets		Large Deferred Tax Assets/Sales of 5% in the 92%ile relative to peers, might reflect losses at subsidiaries or of Acquisition Accounting.	
Deferred Tax Liabilities		Deferred Tax Liabilities/Sales of 4% are within normal range.	
Derivatives		Derivatives equal to 2% of equity within normal range.	
Other Large Curious Assets and/or Liabilities		Within normal range.	
Depn & Amort		Within normal range.	
Interest Cover		EBIT Interest Cover of 13.7x is within normal range.	
Leverage		Total Debt/Profit of 1.2x and assets to equity of 1.7x are within normal range.	
Related Party Fraud		No evidence of related party transactions.	
Other Tests:		Warning: Low free float of 13%. No or new CFO. Other comprehensive income is -152% of income which is unusually high. Gross Margin volatility is unusually low at 2.8% in the 18%ile relative to peers which is sometimes a trait of frauds.	

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Ratios		Global/Sector/ Country	Puma Se Ratios			Ratio Change		Peer Group Comparison Ratios				Percentiles and Red Flags			Red Flag Comment
			Y/FY17	Y/FY16	Y/FY14	-1yr Chg	-3yr Chg	20th %ile	50th %ile	80th %ile	No of Peers	Y/FY17	-1yr Chg	-3yr Chg	
(0-100%) (+/-50%) (+/-50%)															
Av Cash & Equiv./Sales (%)	GICS Industry	9.9	10.7	15.5	-0.8	-5.6	3.2	10.4	24.0	379	48%	+21%	+37%	Fallen over 3yrs.	
Unrestricted Cash/COGS (%)	GICS Industry	19.0	16.6	25.3	+2.4	-6.3	5.1	16.6	40.3	314	54%	+1%	+11%		
ST Investments/Sales FY (%)	GICS Industry	1.0	0.9	1.9	+0.2	-0.8	0.1	1.6	8.5	172	43%	+13%	-22%	ST Investments/Sales FY (%) present.	
Av. Trade & Notes Rec/Sales (%)	GICS Industry	12.3	13.5	14.7	-1.2	-2.4	7.2	12.1	20.0	356	51%	-35%	-34%		
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	18.8	19.8	19.2	-1.0	-0.4	13.0	19.6	29.8	375	46%	-18%	-12%		
Inventory Days	GICS Industry	125	128	126	-3	-0	62	103	187	314	62%	-20%	-13%		
Finished Goods/Inventory (%)	GICS Industry	0	76	71	-75.8	-71.3	33	60	89	417	na	na	na		
Av. Other ST Assets/Sales (%)	GICS Industry	1.7	2.8	5.2	-1.1	-3.5	2.0	3.6	7.4	376	15%	-36%	-42%		
PPE/Sales (%)	GICS Industry	6.2	6.7	7.3	-0.5	-1.2	9.2	22.8	45.7	360	10%	-10%	-12%	PPE/Sales (%) low.	
Affiliate Inv/Equity (%)	Global	1.0	1.0	0.9	+0.0	+0.1	0.5	3.0	13.1	7,896	30%	+9%	+4%		
LT Inv & Rec/Sales (%)	GICS Industry	1.2	1.1	0.8	+0.1	+0.4	0.2	1.5	10.0	249	46%	+9%	+6%		
Deferred Tax Assets/Sales FY (%)	GICS Industry	5.0	5.5	4.3	-0.5	+0.7	0.2	0.9	2.7	277	92%	-42%	+21%	Deferred Tax Assets/Sales FY (%) high.	
Prepaid Expenses/Sales (%)	GICS Industry	1.0	0.9	0.0	+0.2	+1.0	0.3	1.3	3.4	167	41%	+19%	+34%	Risen over 3yrs.	
Prepaid Expenses/Inventory (%)	GICS Industry	5.5	4.4	0.0	+1.1	+5.5	1.2	3.7	10.7	99	60%	+29%	+42%	Risen over 3yrs.	
Intangibles/Sales FY (%)	GICS Industry	10.0	10.2	9.5	-0.2	+0.5	0.1	1.0	9.2	316	81%	-34%	+16%	Intangibles/Sales FY (%) high.	
Av. Other LT Assets/Sales FY (%)	GICS Industry	0.5	0.8	0.6	-0.2	-0.0	0.4	1.8	5.8	332	23%	-28%	-18%		
Av. Assets/Sales (%)	GICS Industry	68	74	82	-6.3	-13.8	65.5	95.1	139.4	380	21%	-33%	-38%		
Balance Sheet: Liabilities and Equity															
Av. Payables (Trade, Bills, Accr/Sales (%)	GICS Industry	16.5	17.0	16.7	-0.5	-0.2	5.3	10.0	15.5	379	83%	-20%	-6%	Av. Payables (Trade, Bills, Accr/Sales (%) high.	
Trade Payable Days	GICS Industry	100	99	99	+0.8	+0.9	24.5	45.6	81.5	348	88%	+1%	-3%	Trade Payable Days high.	
ST Debt/Total Debt (%)	Global	80	63	100	+16.8	-20.0	13.0	44.2	88.3	13,723	75%	+38%	-34%	ST Debt/Total Debt (%) high. Risen over 1yr.	
Av. Other ST Liabs/Sales (%)	GICS Industry	5.3	6.9	8.0	-1.6	-2.7	3.8	6.8	10.9	380	34%	-39%	-39%		
Av. Deferred Tax Liab/Sales FY (%)	GICS Industry	4.1	5.9	6.0	-1.8	-1.9	0.7	3.6	12.1	256	52%	-48%	-46%		
Av. Other LT Liabs/Sales (%)	GICS Industry	1.7	1.7	1.3	+0.1	+0.4	0.4	1.8	5.1	298	49%	-14%	+7%		
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	1.9	0.9	1.4	+1.0	+0.5	0.3	2.4	11.4	9,628	45%	+34%	+16%	Risen over 1yr.	
Assets/Equity (x)	GICS Industry	1.7	1.6	1.6	+0.1	+0.1	1.4	1.8	2.6	373	45%	+28%	+21%		
Balance Sheet: Other															
Av. GFA/D&A (yrs)	GICS Industry	8.0	9.0	9.5	-1.0	-1.5	8.4	14.3	22.8	371	17%	-31%	-33%		
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	70	78	80	-8	-10	70.6	110.2	186.0	312	19%	-30%	-20%		
Av. Gross Working Capital/Sales (%)	GICS Industry	56.0	60.8	62.9	-4.8	-7.0	40.4	53.6	72.2	379	54%	-36%	-35%		
Contingent Liab/Equity (%)	GICS Industry	30.3	29.6	61.8	+0.7	-31.5	2.0	13.6	59.2	253	68%	+14%	-41%		
Pension Liabilities/Equity (%)	Global	1.8	1.8	1.6	-0.0	+0.2	0.7	2.8	10.0	7,570	38%	-6%	+8%		
Net Derivatives/Equity (%)	Global	1.5	3.8	0.0	-2.3	+1.5	-1.4	0.0	1.1	2,405	82%	-39%	+25%		
Return on Production Assets (%)	GICS Industry	24.6	13.9	17.0	+10.7	+7.6	4.5	14.9	33.7	382	69%	-43%	-33%	Risen over 1yr. Risen over 3yrs.	
Non-Prod. Assets/COGS FY (%)	GICS Industry	73.7	72.5	1.2	+1.2	+72.5	34.6	67.1	132.2	299	54%	+14%	-39%	Risen over 3yrs.	
Gross Debt/Profit (x)	GICS Industry	1.2	0.6	0.3	+0.5	+0.9	0.9	4.0	13.7	306	23%	+11%	+9%		
Income Statement															
(0-100%) (+/-50%) (+/-50%)															
Sales/Employee (US\$)	GICS Industry	419,881	349,208	350,428	+70,672	+69,453	56,779	148,854	359,649	286	83%	-44%	-40%	Sales/Employee (US\$) high. Risen over 1yr. Risen over 3yrs.	
Gross Margin (%)	GICS Industry	47.3	45.7	46.6	+2	+1	15	30	52	322	73%	-5%	-3%		
GM Volatility 5yrs (%)	GICS Industry	2.8					2.9	6.3	20.0	303	18%			GM Volatility 5yrs (%) low.	
Other Op Y/Op Y (%)	GICS Industry	6.5	12.3	15.2	-5.8	-8.7	1.8	6.4	20.7	119	50%	-38%	-41%		
D&A/Sales T12M (%)	GICS Industry	1.7	1.7	1.7	+0.1	+0.0	1.4	2.8	4.7	376	74%	-2%	+6%		
Operating Margin T12M (%)	GICS Industry	5.9	3.5	4.3	+2.4	+1.6	2.8	7.2	14.9	374	42%	-36%	-20%	Risen over 1yr.	
Non-Op Y/Op Y (%)	GICS Industry	6.8	12.8	4.3	-6.0	+2.5	2.9	10.4	36.5	329	38%	-28%	+7%		
EFF Int Rate less MLR (ppt)	Country	16.3	47.0	37.6	-30.7	-21.3	0.8	2.9	6.8	231	91%	-49%	-49%	EFF Int Rate less MLR (ppt) high.	
Cash Return less Policy Rate (ppt)	Country	-1.9	-2.0	-1.5	+0.1	-0.4	-2.5	-1.5	2.0	221	40%	-2%	-21%		
Affil Y/Op Y (%)	Global	0.7	0.9	1.0	-0.3	-0.4	0.3	2.2	11.9	6,391	28%	-14%	-13%		
Eff Tax Rate (%)	Country	27.3	25.7	30.4	+1.7	-3.0	21.2	29.3	35.9	227	38%	+13%	-21%		
CF Tax/IS Tax (%)	GICS Industry	67.4	134.4	143.8	-67.0	-76.4	64.9	98.7	151.1	285	79%	+37%	+39%	Fallen over 1yr. Fallen over 3yrs.	
X Items/Op Y (%)	Global	0.0					0.8	6.2	37.4	1,297	na				
Minority Int/Profit B4 MI (%)	Global	19.2	29.4	24.5	-10.2	-5.3	-0.1	1.8	12.8	8,362	85%	-43%	-32%	Minority Int/Profit B4 MI (%) high.	
Net Income Margin (%)	GICS Industry	3.3	1.7	2.2	+1.6	+1.1	1.3	4.7	11.2	383	63%	-29%	-18%		
Capitalised Int/PTP (%)	Global	na	na	0.0	na	na	0.0	0.0	0.0	13,642	na	na	na		
Cap of Intang. Assets/PTP (%)	Global	0.7	0.0	0.0	+0.7	+0.7	0.9	4.0	16.7	728	16%				
EBIT Interest Cover (x)	GICS Industry	13.7	9.5	13.1	+4.2	+0.7	1.7	7.4	41.1	351	38%	-28%	-6%		

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Ratios		Global/Sector/ Country	Puma Se Ratios			Ratio Change		Peer Group Comparison Ratios				Percentiles and Red Flags			Red Flag Comment
			Y/FY17	Y/FY16	Y/FY14	-1yr Chg	-3yr Chg	20th %ile	50th %ile	80th %ile	No of Peers	Y/FY17	-1yr Chg	-3yr Chg	
Cash Flow												(0-100%)	(+/-50%)	(+/-50%)	
CFO/Net Profit (x)		GICS Industry	1.7	2.2	2.0	-0.6	-0.4	0.3	1.1	2.2	1,697	29%	+23%	+18%	
Cash Interest Exp./CFO (%)		GICS Industry	5.1	8.3	7.2	-3.2	-2.1	0.2	4.8	25.8	271	50%	-21%	-14%	
Capex/Sales (%)		GICS Industry	3.0	2.3	2.4	+0.6	+0.5	1.4	3.2	7.2	371	46%	+18%	+12%	
Decrease Investments/Sales (%)		GICS Industry	0.0	0.0	0.0	+0.0	+0.0	0.0	0.5	4.8	141	na			
Other Investing Activities/Sales (%)		GICS Industry	0.0	0.2	0.3	-0.2	-0.3	0.1	1.1	4.4	292	8%			
Debt Repay/ST Debt -1FY (%)		Global	47	0	0	+47.1	+47.1	20.0	88.4	210.9	10,373	34%	+29%	+26%	
Free Cash Flow Margin (%)		GICS Industry	2.6	1.5	2.0	+1.0	+0.6	-4.2	2.4	8.7	377	49%	-3%	+1%	
FCF-Divs/Sales (%)		Global	2.3	1.3	1.7	+1.0	+0.6	-7.2	0.9	6.8	10,563	41%	-6%	+0%	
No. of Mat. Capital Inc -5yrs		Global	0					0.0	0.0	1.0	9,451	na			
Other Fin. Activities/Sales (%)		GICS Industry	0.5	0.6	0.4	-0.0	+0.1	0.0	0.3	1.4	329	61%			
Corporate Governance												(0-100%)	(+/-50%)	(+/-50%)	
Auditing Exp/Sales (bp)		GICS Industry	na					2.5	6.3	13.2	179	na			
RPT Balances/Equity (%)		Global	0.0					0.3	1.9	11.0	1,434	na			
Number of Acq&Disp -5yrs		Global	2					0.0	3.0	5.0	12,251	46%			
Acq&Disp Con./Sales Av. -5yrs (%)		Global	0.0					0.2	1.4	6.9	12,251	5%			
Executive Comp/Sales (bp)		GICS Industry	na					7.4	22.6	73.1	84	na			
Executive Comp/PTP (bp)		GICS Industry	na					67.6	188.6	669.0	84	na			
CEO Tenure (yrs)		Global	4.8					1.4	4.5	10.8	5,466	52%			
CFO Tenure (yrs)		Global	na					1.1	3.3	8.3	716	na			
Av. Executive Tenure (yrs)		Global	3.9					4.1	7.4	11.9	3,291	18%			Av. Executive Tenure (yrs) low.
Av. Board Tenure (yrs)		Global	5.5					3.9	6.4	9.9	3,672	39%			

Source: GMT Research, Bloomberg

Summary of financials in Y/FY17

		Result: Scores within normal range. Number of red flags normal.	Explanation
Average Ratio Percentile Score (0 is good, 100 is bad)	48%	In Y/FY17, Puma Se recorded an average percentile score (0 is good, 100 is bad) of 48% across all 75 financial ratios listed below. This places it in a percentile of 39 relative to around 379 GICS industry peers globally, which is a moderate result.	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.
- Percentile vs Industry Peers (0% is good, 100% is bad)	39%	The company triggered a total of 12 red flags out of 75 placing it in a percentile of 51 relative to our sample of 16,000 companies globally, which is a moderate result.	
Number of Red Flags (Out of a possible 75)	12		
- Percentile vs Global Peers (0% is good, 100% is bad)	51%		

Summary of change in financials over 1 year

		Result: Number of red flags normal.	Explanation
Number of Red Flags (Out of a possible 62)	6	Over the financial year prior to Y/FY17, Puma Se triggered a total of 6 red flags out of 62 placing it in a percentile of 36 relative to our sample of 16,000 companies globally, which is a moderate 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.
- Percentile vs Global Peers (0% is good, 100% is bad)	36%		

Summary of change in financials over 3 yrs

		Result: Number of red flags normal.	Explanation
Number of Red Flags (Out of a possible 62)	7	Over the 3 financial years prior to Y/FY17, Puma Se triggered a total of 7 red flags out of 62 placing it in a percentile of 52 relative to our sample of 16,000 companies globally, which is a moderate 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.
- Percentile vs Global Peers (0% is good, 100% is bad)	52%		

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Appendices

Appendix 1: Beneish M-Score

	Calculation	FY13	FY14	FY15	FY16	FY17	Y/FY17	Index Calculation	Comments on latest period
Days Sales in Receivables Index	$+(0.92 \times 0.91)$	0.98	0.94	0.94	0.98	0.91	0.91	$(\text{Net Receivables}_t / \text{Sales}_t) / (\text{Net Receivables}_{t-1} / \text{Sales}_{t-1})$	Receivables of 45 days have fallen by 4 days YoY
Gross Margin Index	$+(0.528 \times 0.97)$	1.04	1.00	1.03	1.00	0.97	0.97	$[(\text{Sales}_{t-1} - \text{COGS}_{t-1}) / \text{Sales}_{t-1}] / [(\text{Sales}_t - \text{COGS}_t) / \text{Sales}_t]$	12m Trailing Gross Margin of 47.3% has improved by 1.6ppts YoY
Asset Quality Index	$+(0.404 \times 0.92)$	0.96	1.00	1.06	1.01	0.92	0.92	$[1 - (\text{Curr Ass}_t + \text{PP\&E}_t + \text{Sec}_t) / \text{Assets}_t] / [1 - (\text{Curr Ass}_{t-1} + \text{PP\&E}_{t-1} + \text{Sec}_{t-1}) / \text{Assets}_{t-1}]$	Other LT Assets/Total Assets of 24.8% has fallen by 2.2ppts YoY
Sales Growth Index	$+(0.892 \times 1.14)$	0.91	1.00	1.14	1.07	1.14	1.14	$\text{Sales}_t / \text{Sales}_{t-1}$	12m Trailing Sales have risen 14% YoY
Depreciation Index	$+(0.115 \times 0.90)$	1.24	1.10	0.93	1.03	0.90	0.90	$(\text{Depr}_{t-1} / (\text{PP\&E}_{t-1} + \text{Depr}_{t-1})) / (\text{Depr}_t / (\text{PP\&E}_t + \text{Depr}_t))$	12m Trailing Depreciation/Sales of 21.3% has risen by 2.1ppts YoY
SG&A Index	$-(0.172 \times 1.02)$	1.01	1.05	1.00	1.01	1.02	1.02	$(\text{SG\&A Expense}_t / \text{Sales}_t) / (\text{SG\&A Expense}_{t-1} / \text{Sales}_{t-1})$	12m Trailing SG&A/Sales of 41.7% have fallen by 0.9ppts YoY
Total Accruals to Total Assets	$+ (4.679 \times 0.03)$	-0.01	-0.02	0.02	-0.03	-0.03	-0.03	$\text{Profit from Continuing Ops}_t - \text{Cash Flows from Ops}_t / \text{Total Assets}_t$	Total Accruals (Net Profit less CFO)/Total Assets are -3%
Leverage Index	$-(0.327 \times 0.86)$	1.06	0.93	0.96	1.02	0.86	0.86	$[(\text{Curr Liab}_t + \text{Total LT Debt}_t) / \text{Total Ass}_t] / [(\text{Curr Liab}_{t-1} + \text{Total LT Debt}_{t-1}) / \text{Total Ass}_{t-1}]$	LT Debt + Current Liabilities/Total Assets of 38% have risen by 5.2ppts YoY
Beneish M-Score for Y/FY17	-4.84 =	-2.60	-2.63	-2.27	-2.57	-2.61	-2.61	An M-Score of >-2.22 signals that the company is likely to be a manipulator	Beneish M-Score of -2.61 in Y/FY17 suggests no profit manipulation

Appendix 2: Montier C-Score

	FY13	FY14	FY15	FY16	FY17	Y/FY17	Point Calculation	Comments
Profit	0	1	1	0	0	0	A growing divergence between Profit and Operating Cash Flow (1 point)	12m Trailing Accruals Margin of 2.3% has improved from 2.1% YoY
Receivables	0	0	0	0	0	0	Receivable Days are increasing (1 point)	Receivables of 44 days have fallen by 4 days YoY
Inventory	1	1	1	1	0	0	Inventory Days are increasing (1 point)	Inventory of 19 days has fallen by 1 days YoY
Other current assets	1	1	0	0	0	0	Other Current Assets to Sales are increasing (1 point)	Other Current Assets/Sales of 3.8% have fallen by 0.5ppts YoY
Depreciation	1	1	0	1	na	na	Depreciation relative to PPE jobs usfa bs	na
Asset growth	0	1	0	0	0	0	High asset growth in excess of 10% (1 point)	Asset growth of 3% is below 10%
Montier's C-Score	3	5	2	2	0	0	Score 0-1 is good; 2-4 is average, 5-6 is bad	A C-Score of 0/6 implies improving financials and unlikely manipulating profit

Appendix 3: Piotroski F-Score

	FY13	FY14	FY15	FY16	FY17	Y/FY17	Point Calculation	Comments
Net Income Score	1	1	1	1	1	1	Positive Return on Assets in the current year (1 point)	12m Trailing Return on Assets of 4.8%
Operating Cash Flow Score	1	1	0	1	1	1	Positive Operating Cash Flow in the current year (1 point)	12m Trailing CFO Margin of 5.5%
Return on Assets Score	0	0	0	1	1	1	Higher Return on Assets than previous year (1 point)	12m Trailing ROA has risen to 4.8% from 2.3% YoY
Quality of Earnings Score	1	1	0	1	1	1	Operating Cash Flow are greater than ROA (1 point)	12m Trailing CFO Margin of 5.5% is above Net Profit Margin of 3.3%
Long-Term Debt to Assets Score	1	1	1	0	0	0	Lower ratio of Long Term Debt than previous year (1 point)	LT Debt/Total Assets has risen to 5% from 1% YoY
Current Ratio Score	1	0	0	1	0	0	Higher Current Ratio this year compared to the previous year (1 point)	Current Ratio has fallen to 1.78x from 1.97x YoY
Shares Outstanding Score	1	1	1	1	1	1	No new shares were issued in the last year (1 point)	Number of shares remains unchanged
Gross Margin Score	0	1	0	1	1	1	A higher Gross Margin compared to the previous year (1 point)	12m Trailing Gross Margin of 47.3% has improved by 1.6ppts YoY
Asset Turnover Score	0	0	1	1	1	1	A high Asset Turnover ratio compared to the previous year (1 point)	Asset turnover has risen to 1.47x from 1.35x YoY
Piotroski F-Score	6	6	4	8	7	7	Score 0-1 weak and deteriorating; 8-9 strong and improving	An F-Score of 7/9 suggests financials are improving

Appendix 4: Altman Z-Score

	FY13	FY14	FY15	FY16	FY17	Y/FY17	Altman Z-Score for a manufacturing company	Comments
Solvency	0.51	0.48	0.44	0.45	0.41	0.41	Working Capital (Current Assets less Current Liabilities)/Tangible Assets	Ability to meet short term obligations
Cumulative profitability	1.03	0.95	0.95	0.93	0.90	0.90	Retained Earnings/Tangible Assets	Determines cumulative historic profitability
Profitability	0.11	0.20	0.14	0.18	0.33	0.33	EBIT/Tangible Assets	Measures earnings away from the effects of taxes and leverage
Market confidence	2.60	1.66	1.78	2.15	2.72	2.72	Market Capitalisation/Total Liabilities	Whether a firm's value able to cover liabilities
Efficiency	1.54	1.38	1.53	1.55	1.69	1.69	Sales/Tangible Assets	An asset turnover metric to measure efficiency
Leverage	na	na	na	na	na	na	Book Value of Equity/Total Liabilities	Leverage
Altman Z-Score for Y/FY17	5.79	4.67	4.83	5.25	6.05	6.05	Anything <1.81 for a manufacturer or <1.11 for other companies is problematic	Safe Zone: Financially sound

Appendix 5: Acquisition Accounting

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	Point Calculation	FY13	FY14	FY15	FY16	FY17	Y/FY17	Point Calculation	Comments
Material acquisition?	1 point	0	0	0	0	0	0	An acquisition in excess of 5% of sales.	No recent material acquisitions (>5% sales)
Rise in intangible assets -1yr?	1 point	0	1	1	1	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 10% are in the 81%ile
Rise in deferred tax assets -1yr?	1 point	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 5% is in the 92%ile relative to industry peers
Acquisition Accounting		2	2	2	2	2	2	A score of 3 suggests possibility of acquisition accounting to inflate profits	No evidence of acquisition accounting.

GMT Research Accounting Screen



Appendix 6: Debt Window Dressing

	FY13	FY14	FY15	FY16	FY17	Y/FY17	Point Calculation	Comments
Has high debt repayment/ST debt?	0	0	0	0	0	0	Debt Repayment relative to the ST Debt one year prior is in excess of 130%	Debt Repayment/ST Debt -1FY of 47% is in the 34%ile relative to global peers
Has high effective interest rate?	1	1	1	1	1	1	Effective Interest Rate is in excess of the 80%ile relative to country peers	Effective Int Rate of 18.2% is in the 91%ile relative to country peers
Has moderate debt?	0	0	0	0	0	0	If Debt to Sales >15%ile of industry peers	Debt/Sales of 4% is in the 10%ile relative to industry peers
Window Dressing	1	1	1	1	1	1	A score of 3 suggests strong likelihood of window dressing	Unlikely to be debt window dressing

Appendix 6a: Investment Window Dressing

	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	0	0	0	0	If Invest Repay in excess of 100% of previous year's Investments	Investment Repayment/Investment -1FY of 0%
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

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	Point Calculation	FY13	FY14	FY15	FY16	FY17	Y/FY17	Point Calculation	
High operating margin	Critical criteria: 1 point	0	0	0	0	0	0	Operating Margin >80%ile relative to industry peers	A 12m Trailing Operating Margin of 6% is in the 42%ile
High return on production assets		0	0	0	0	0	0	Op Profit/(PPE + Inv) in the >80%ile relative to industry peers	A 12m Return on Production Assets of 25% is in the 69%ile
High level of non-production assets	1 point	0	0	0	0	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		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 -7% 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 8%
A relatively unknown auditor		0	0	0	0	1	0	Relatively obscure auditor	Well known auditor: Deloitte
Incorporation and Domicile		0	0	0	0	0	0	Different country of incorporation vrs domicile	Country of incorporation (European Union) is same as domicile (European Union).
Debt structure	1pt if >1	1	1	1	0	1	1	If Short Term Debt >75% Total Debt, or no debt at all	Short term debt is 80% 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	0	0	0	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

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(EURm)	FY13	FY14	FY15	FY16	FY17	FY13-17
Sales	+2,985	+2,972	+3,387	+3,627	+4,136	+17,107
- OPCF	+116	+131	(30)	+140	+229	+586
- Capex	(54)	(60)	(55)	(83)	(112)	(364)
- Dividends (incl MI at subs)	(16)	(24)	(50)	(27)	(25)	(141)
- Buybacks	+0	+0	+0	+0	+0	+0
- (Acquisitions)/disposals	+0	+0	(1)	(7)	+0	(7)
= Net internal cash generation	+46	+48	(135)	+23	+92	+74
Externally generated cash flows						
- Debt issuance, net	(9)	(10)	+78	(34)	+3	+29
- Equity issuance	+0	+0	+0	+0	+0	+0
= Net external financing	(9)	(10)	+78	(34)	+3	+29
Net surplus/(deficit)	+37	+38	(57)	(11)	+96	+102
Net flows/Sales (%)	+1	+1	(2)	(0)	+2	1
Relative to Global Sector (%ile):						30%
Av. cash balance/sales (%)	15	16	13	11	10	
Relative to Global Sector (%ile)	62%	65%	59%	51%	48%	
Core cash required (10% of Sales):					48	
Surplus cash at year end (cash balance less core cash):					411	
Possible fake cash flow over past 5yrs (only if 5yr surplus is greater than zero):					102	
Possible fake cash/excess cash balance (%):					25	
Normal amounts of cash flow generated.						

Appendix 9: Debt Reconciliation

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(EURm)	FY13	FY14	FY15	FY16	FY17	FY13-17
Balance sheet (BS) debt YE	29	20	14	41	155	
Change in debt: BS	(15)	(9)	(6)	+27	+114	+111
Change in debt: Cash flow (CF)	(9)	(10)	78	(34)	3	+29
Unrec chg BS and CF debt	(6)	+1	(84)	+61	+111	+82
Unrec chg/total debt (%)	(21)	+4	(601)	+150	+72	53
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	
Corporation	94	Free Float (%)	13
Investment Advisor	5	No. Instit. Owners	104
Sovereign Wealth Fund	1	Institutional (%)	5
Insurance Company	0	- Passive Instit. (ETFs) (%)	1
Hedge Fund Manager	0	- Active Instit. (%)	4
Other	0		

Appendix 11: Insiders (latest Bloomberg data)

		Comment
Insider Shares O/S (%)	0.00	
Chg Insider Hldgs -6m (%)	0.00	Changes in insider holdings can be due to options, etc. as opposed to actively buying or selling shares
Number of Insider Shares Purchased (m)	+0.0	
Number of Insider Shares Sold (m)	+0.0	
Average Purchase Price of Insider Shares	0.00	Current share price is EUR405
Average Sell Price of Insider Shares	0.00	
Shares Outstanding (m)	15	
Insider Shares Traded -6m/Total Shares (%)	0.00	

Appendix 12: Comprehensive Income (latest Bloomberg data)

	(EURm)	Comment
Comprehensive Income	(71)	
Less:		
Net Income/Net Profit (Losses)	136	
Other comprehensive income comprised of:		
Foreign Currency Trans. Adj.	(115)	Other comprehensive income is -152% of income which is unusually high. Able to reconcile all but 2% of other comprehensive income which is within the normal range.
Change In Fair Value of Derivatives	(55)	
Other Comprehensive Income	(41)	
Pension Related Adjustments	1	
na	na	
na	na	
na	na	
Amount unable to reconcile:	3	