

An analysis of Aston Martin Lagonda Global Holdings PLC company performance during financial years 2020 and 2021, based on financial metrics for said years, available publicly in the annual reports; and compiled to inform potential collaboration related investment .

Report: Collaboration with Aston Martin Lagonda

A Risk Management Assessment

Jo Edwards (2117195)

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Introduction.

Aston Martin Lagonda background

“Aston Martin Lagonda Global Holdings PLC is an English manufacturer of luxury sports cars and grand tourers. Its predecessor was founded in 1913 by Lionel Martin and Robert Bamford. Steered from 1947 by David Brown, it became associated with expensive grand touring cars in the 1950s and 1960s, and with the fictional character James Bond following his use of a DB5 model in the 1964 film Goldfinger. Their sports cars are regarded as a British cultural icon.[3] Aston Martin has held a Royal Warrant as purveyor of motorcars to the Prince of Wales since 1982,[4] and has over 160 car dealerships in 53 countries, making it a global automobile brand.[5] The company is traded at the London Stock Exchange and is a constituent of the FTSE 250 Index.[6] In 2003 it received the Queen's Award for Enterprise for outstanding contribution to international trade.[7] The company has survived seven bankruptcies throughout its history.[8] “ (Wikipedia Contributors, 2019)

Assumptions

Company ABC is specialist car component manufacturer exploring working with Aston Martin Lagonda (ASTON MARTIN LAGONDA GLOBAL HOLDINGS PLC), to enable the collaboration, Company ABC will be required to invest £5m.

The collaboration could be manufacturing parts, parts supply, or automotive retail, any of which activity would require a significant investment from Company ABC.

Objective

The purpose of the financial analysis is to determine the financial health and predict future performance of Aston Martin Lagonda Global Holdings PLC (AML) based on the publicly available financial statements for years ending 31st December 2021 and 31st December 2022 and present a risk analysis to the board of ABC in respect of the proposed investment of £5M, the risk is analysed solely on the merits of the AML's financial robustness and future viability as measured or projected from the financial statements. The differences, as calculated by a range of standard financial ratios, between the two will be discussed and relevance to the business health in a number of categories examined, including a limited comparison to those financial ratios considered average or indicative of the automotive industry in general.

Financial Ratios

Ratio analysis

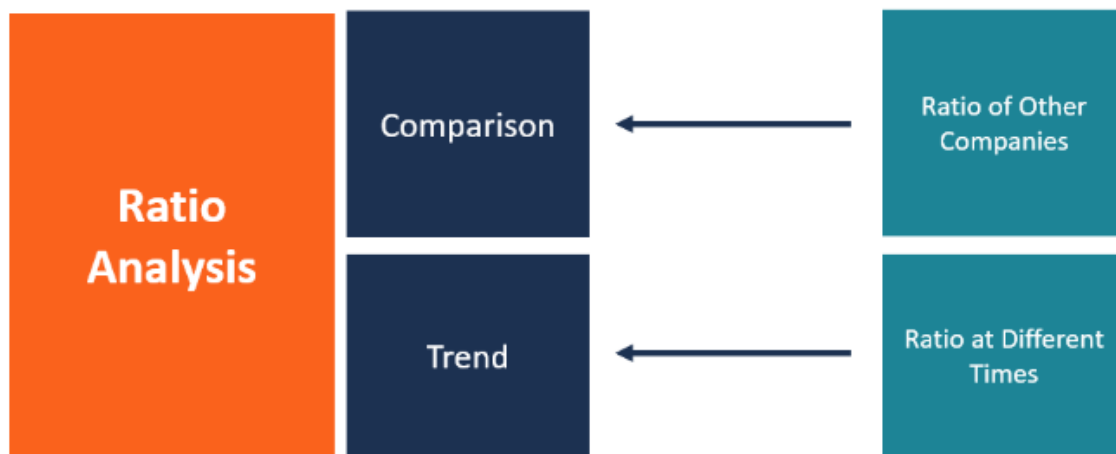


Fig. 1 From (CFI Team, 2022b)

Ratio analysis assists in rapid comparisons of the chronological trends for a company within each ratio category and further compares the financial health and sector specific performance, or potentially for investors seeking opportunities, where the company is positioned within a broad spectrum of investment opportunities.

Trendline analysis helps predict future performance and may also be examined in context of changing market drivers, demand, or geopolitical state changes.

Financial Ratios

Financial Ratios are generally considered in respect to four categories.

Liquidity

Liquidity ratios are calculated by placing the current liabilities of the company in denominator and dividing the liquid assets. A ratio of less than 1 would suggest the company was unable to meet its current liabilities. Ratios greater than 1 suggests the company is able to meet its current financial bills and the larger the ratio, the greater the ability to satisfy liabilities with ease.

Three main liquidity ratios are normally considered;

- Current ratio is the quickest and broadest test, readily available from the financial statements.
- Quick ratio is a stricter test, and considers cash, accounts receivable and any marketable securities assets.
- Cash ratio further ignores the accounts receivable element of the quick ratio assets (the customer may not pay or be slow to pay and hence the immediacy of the asset is not assured) and represents the strictest liquid test, one of immediate or near immediate ability to meet demands for settlement of short-term liabilities.

From an investors point of view, a liquidity ratio of at 1 is desirable, 2 or three preferable, however a significantly higher liquidity ratio may flag improper levels of cash holdings or other highly liquid assets, surplus cash or assets which could and should be if appropriate, be used to grow value in the company for the benefit of the shareholders.

Leverage

Leverage ratios indicate how the business is financed by examining the level of company debt against cashflow, balance sheet or income statement accounts and specify the level of utilisation of debt employed in company operations.

Gearing ratio (also known as Debt/Asset ratio) effectively define the level of long term debt in relation to the company assets, it is generally accepted that a ratio of less than 50% is within the 'safe zone'.

Debt/Equity ratio in contrast to Gearing ratio considers the total debt (including short term debt) in respect of the total equity of the company and reflect the degree of reliance of the company on borrowing or equity financing for its operations, in other words reflecting the company's capital structure. High Debt /Equity is desirable (up to a certain level) as it demonstrates the serviceability of the company debt obligations. Too high a D/E may result in increased cost of borrowing and lead to difficulty in servicing debt.

Long Term Debt/Equity ratio determines how much leverage a company is holding. High LTD/E points to high debt in the financial structure of the company and indicates a financial risk.

Interest coverage is simply an indicator of how easily a company can service the interest payments on its debt. The calculation takes the earnings before interest and tax (EBIT) and divides it by interest expense within accounting period.

Activity

Days Sales Outstanding (DSO) measures how quickly customers pay for the company's goods or services, averaged in days in a particular accounting period. Every business would prefer a low DSO to enable cash flow and reduce working capital borrowing and associated interest.

Days Payable Outstanding (DPO) in contrast to DSO, measures how quickly the company responds to a supplier invoicing, again measured average days in any accounting period. DPO has benefits and adverse effects for the company and supplier, respectively. Benefits include retention of capital, thereby reducing demand for working capital borrowing, the benefits increasing as DSO increases, on the flip side a higher DSO than sector norm spotlights the 'bad citizen', in some sectors this is offset by high competition to become suppliers to the company due to the rewards of being so. The supplier however experiences the negative effects of a high DSO relationship with the company, and the cashflow / potential additional financing burden that entails.

Inventory Turnover is a measure of cost of product or cost of inventory sold in a given accounting period relative to the average stock held in inventory for that period. Sector averages do vary, complexity of product, discount in inventory volume purchase and seasonality in buyer trends may all have an effect on the level of acceptable inventory turnover ratio for any particular sector.

Profitability

Gross Profit Margin is the percentage of sales revenue after deduction of the cost of sales. Simply it is how much profit the company makes after meeting the Cost Of Goods Sold (COGS). At a higher-level Gross

Operating Margin or return on sales is the revenue residual after deducting operational expenses. Operating Margins further deduct operating costs from the Gross Profit Margin.

Net Profit Margin is the percentage of profit after deducting all company expenses or costs from total revenue and dividing that (net profit) by the total revenue, expressed as a percentage.

Return on Assets is an indicator of the efficiency of a company operations or management in utilisation of its available assets, to realise profit for each unit of asset.

Aston Martin Lagonda financial ratios for year end 31st Dec 2020, 31st Dec 2021

				at 31 Dec. 2021 £m	at 31 Dec. 2020 £m	
LIQUIDITY RATIOS	1	Current Ratio	= $\frac{\text{Current Assets}}{\text{Current Liabilities}}$	u	0.96	1.10
	2	Cash Ratio	= $\frac{\text{Current Assets (Cash \& Obligation)}}{\text{Current Liabilities}}$	u	0.46	0.61
	3	Quick Ratio	= $\frac{\text{Current Assets (Cash, Obligation and Account Receivables)}}{\text{Current Liabilities}}$	u	0.74	0.84
	4	Net Working Capital Ratio	= $\frac{\text{Current Assets - Current Liabilities (Net Working Capital)}}{\text{Total Assets}}$	u	-0.01	0.03
LEVERAGE RATIOS	5	Debt Ratio	= $\frac{\text{Total Liabilities}}{\text{Total Equity}}$	u	330.4%	247.5%
	6	Long Term Debt to Equity Ratio	= $\frac{\text{Total Debts (Long Term Liabilities)}}{\text{Total Equity}}$	u	193.3%	147.0%
	7	Equity Ratio	= $\frac{\text{Total Equity}}{\text{Total Assets}}$	u	23.2%	28.8%
	8	Interest Coverage Ratio	= $\frac{\text{Earning Before Interest and Taxes}}{\text{Interest Payments}}$	u	181.1%	566.2%
	9	Gearing Ratio	= $\frac{\text{Non-current liabilities}}{\text{equity + non-current liabilities}}$	u	65.9%	59.5%
ACTIVITY	10	Working Capital Turnover	= $\frac{\text{Sales Revenue}}{\text{Current Assets - Current Liabilities}}$	u	-29.36	7.53

1 1 1 2 1 3	Inventory Turnover	=	$\frac{\text{CoGS}}{\text{Inventory}}$	u	3.82	2.41
	Assets Turnover	=	$\frac{\text{Sales Revenue}}{\text{Total Assets}}$	u	0.39	0.22
	Receivable Turnover	=	$\frac{\text{Sales Revenue}}{\text{Inventory}}$	u	5.57	2.95
	DSO	=	$\frac{\text{Trade and other receivables}}{\text{Av Revenue per Day}}$	u	81.11	106.14
1 4 1 5	DPO		$\frac{\text{Trade and other payables}}{\text{Av. COGs per Day}}$	u	350.14	422.01
1 6 1 7 1 8 1 9 2 0 2 1	Net Profit Margin	=	$\frac{\text{Net Profit}}{\text{Sales Revenue}}$	u	-0.17	-0.67
	Gross Profit Margin	=	$\frac{\text{Gross Profit}}{\text{Sales Revenue}}$	u	0.31	0.18
	Operating Margin	=	$\frac{\text{Gross Profit after Expenses}}{\text{Sales Revenue}}$	u	-0.07	-0.53
	Return on Assets (ROA)	=	$\frac{\text{Net Profit}}{\text{Total Assets}}$	u	-0.29	-0.51
	Return on Equity (ROE)	=	$\frac{\text{Net Profit}}{\text{Total Equity}}$	u	-0.29	-0.51
	Basic Earning Power Ratio	=	$\frac{\text{Gross Profit after Expenses}}{\text{Total Assets}}$	u	-0.12	-0.40

Ratio trends 2020-21

Liquidity ratios show at a base level AML has significantly less liquidity in 2021 than in 2020, all of the ratios reduce by at least 10%, the **Current Ratio** and **Quick Ratio** falling below the accepted safe zone of >1 .

Leverage Ratios indicate substantial jumps in indebtedness in 2021 against 2020. Immediate and long-term debt exposure both rose by about approx. 30% over 2021 levels. **Equity Ratio** decreased by over 5 percentage points showing a decrease in shareholder value. **Interest Coverage Ratio** plummeted by just short of 400% points flagging a drop in headroom to service borrowing, albeit still above the absolute minimum 100% ratio safe level. **Gearing Ratio** increased by approx. 10%.

Activity Ratios, both **DSO** and **DPO** reduced indicating AML had improved both paying suppliers and recovering payments however the DPO appears extreme. Inventory Turnover increased by approx. 90% indicating more efficient turnover of goods in 2021 against 2020. Both **Asset Turnover** and **Receivable Turnover** did increase in 2021 showing the return on the invested capital generated significantly more than the previous year.

Profitability Ratios, an improvement was seen in **Net Profit**, **Gross Profit** and **Operating Margins** although the company remains unprofitable in both 2020 and less in 2021, as interpreted through the calculation of the Profitability Ratios.

Ratio Trend Analysis Summary

- Liquidity deteriorated from 2020 to end of 2021.
- Leverage ratios worsened, demonstrated an increase in exposure to debt risk
- Activity ratios show increased inventory turnover so increase in production savings or stock management. Positive trends in DSO and DPO show better payment strategies for both suppliers and customers.
- Profitability ratios collectively improved although it is noted the company is not in profit by 2021, the trend is in an upwards direction.

AML Ratio comparison with the Automotive sector (US based manufacturers).

Financial ratio	Year					
	2021	2020	2019	2018	2017	2016
Solvency Ratios						
Debt ratio	unlock	0.43	0.71	0.66	0.72	0.74
Debt-to-equity ratio	unlock	0.60	1.62	0.93	1.17	0.89
Interest coverage ratio	unlock	1.48	2.68	3.20	6.07	3.13
Liquidity Ratios						
Current Ratio	unlock	2.46	1.51	1.48	1.54	1.22
Quick Ratio	unlock	1.41	0.75	0.96	1.01	0.81
Cash Ratio	unlock	0.96	0.30	0.25	0.31	0.28
Profitability Ratios						
Profit margin	unlock	2.3%	1.6%	3.3%	0.4%	1.5%
ROE (Return on equity), after tax	unlock	-3.6%	0.1%	2.4%	0.1%	5.7%
ROA (Return on assets)	unlock	-0.7%	2.6%	4.6%	1.8%	2%
Gross margin	unlock	17.5%	15.5%	17.9%	17.2%	17.2%
Operating margin (Return on sales)	unlock	7.2%	6.5%	7.7%	5.4%	3.5%
Activity Ratios						
Asset turnover (days)	unlock	623	384	338	411	449
Receivables turnover (days)	unlock	56	39	53	56	58
Inventory turnover (days)	unlock	80	64	70	58	64
Price Ratios						
Dividend Payout Ratio	unlock	0.14	0.18	0.20	0.22	0.26

Fig. 2 from (Ready Ratios, 2022)

While Fig. 2 ratios were not accessible for 2021, a clear comparison between US based Automotive manufacturing companies and AML can be drawn.

(it is noted Fig.2 average ratios are for the US automotive general sector, and AML is a niche luxury car manufacturer selling mainly in the UK and North America, , however the large sample allows a valid sector comparison)

	AML 2020	Average US Auto 2020	Performance
Liquidity ratios			
Quick	0.84	1.41	-
Current	1.10	2.46	-
Cash	0.61	0.96	-
Solvency Ratios			
Debt Ratio	2.47	0.43	-
D/E Ratio	1.47	0.6	-
Interest Coverage	5.66	1.48	+
Profitability Ratios			
Profit margin	-0.067	0.023	-
Gross Margin	0.18	0.175	=
Operating Margin	-0.053	0.072	-
ROE	-0.51	-0.036	-
ROA	-0.51	-0.007	-

Table 1

Table 1 and Chart 1 illustrate AML underperforms in most if not all of the financial ratios against the general US automotive sector in the year 2020.

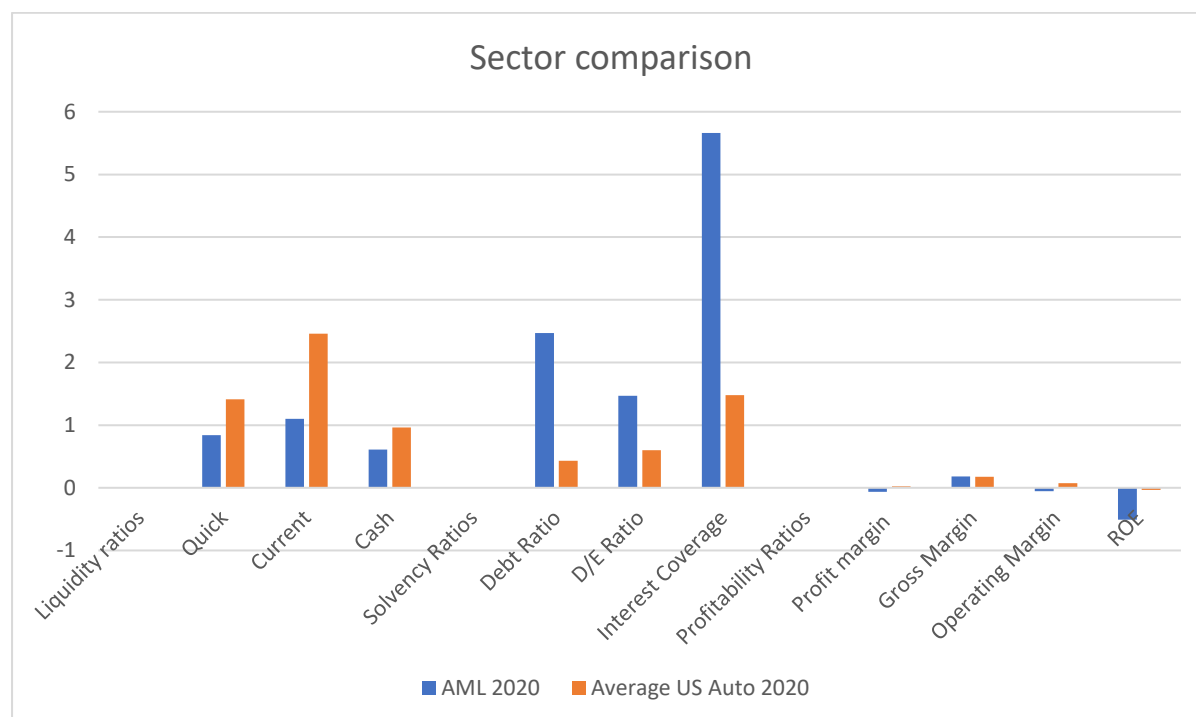


Chart 1

AML, Structure, Stock price History and significant events

AML is a holding company incorporated July 2018 and is a non-trading business (as defined by SIC 74990)

The Aston Martin company has had a turbulent history avoiding bankruptcy on seven occasions (News, 2018).

While the company's press releases are bullish, the market analysts and investors are often less so, as seen in chart 2; as recently as Sept. 2022 the share price plummeted from approx.. 500 to 220GBP compounding an already painful steady drop from the annual high of 902.60 GDP per share.



Chart 2 From (MarketScreener, 2023b)

Market intelligence projects that the company will not be in profit by 2024, continuing its loss-making track record as may be seen in charts 3 and 4. Although this is a marked turnaround from 2020.

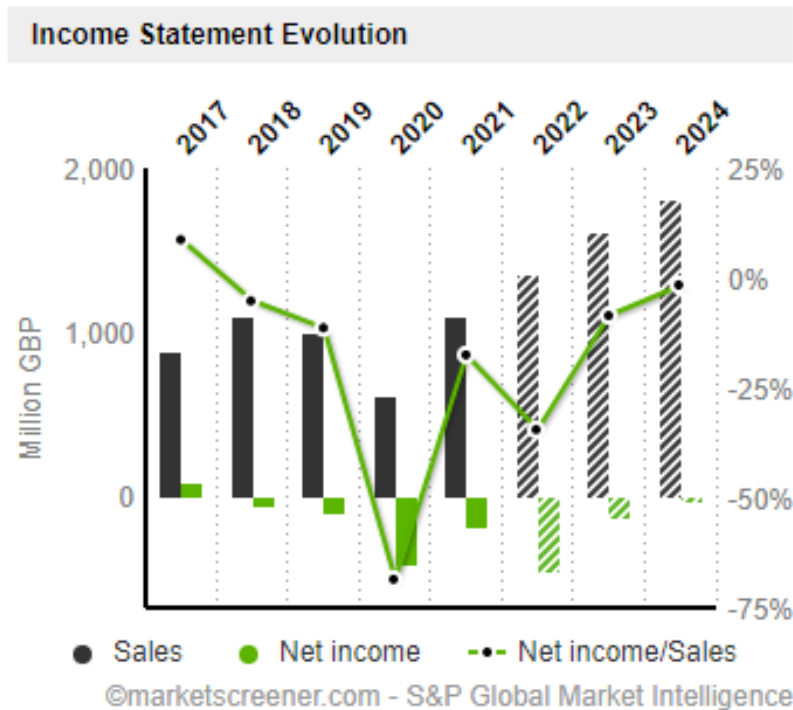


Chart 3 From (MarketScreener, 2023a)

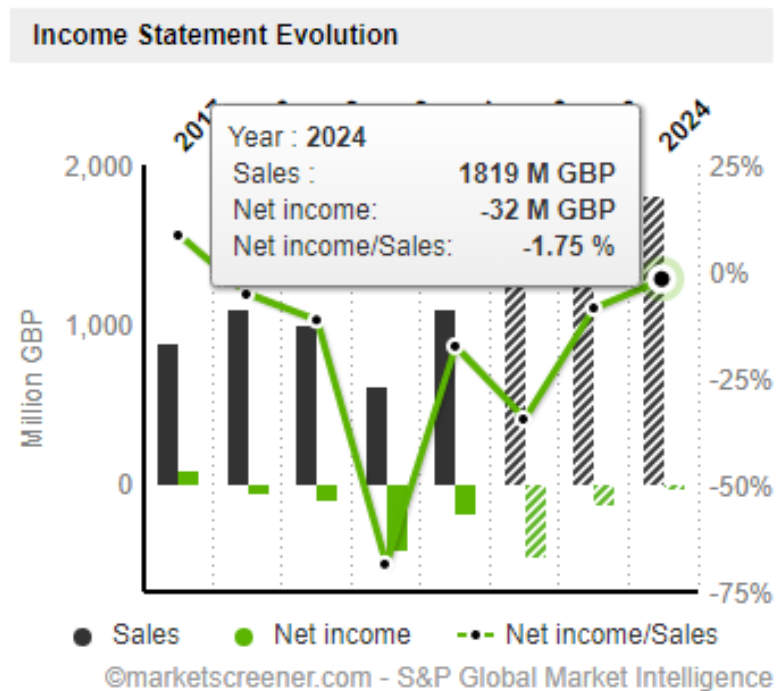


Chart 4 From (MarketScreener, 2023a)

Conclusion

Cons.

- Under performance against industry sector financial ratios
- Poor profitability ratios (not in profit and not projected to be)
- High gearing
- Liquidity ratios mainly below safe zone
- Poor debt ratios
- Poor DPO
- Very recent avoidance of insolvency /bankruptcy 2018
- Most likely buoyed by strong brand value.
- Most significant interest coverage ratio high in 2020 but dropping sharply in 2021 by approx. 60% of 2020 levels

Pros.

- AML appear to be staging a significant recovery.
- Acceptable interest coverage.
- Prestigious brand for ABC to be associated with.

Performance and Market View

AML's company history, narrowly avoiding insolvency repeatedly does infer creditors may have suffer a reduced premium on outstanding amounts. The rapid growth in production and sales AML is striving for requires significant investment and borrowing, the D/E ratio increased significantly from a less than ideal 247% to 330% over 2021, indicating a jump in debt burden. AML do not have a profit-making history therefore its safe to assume for a company as a whole over the Aston Martin lifetime, investors and lenders have suffered losses as AML phoenixed through the decades. More recently FTSE250 have not been favourable with AML trading at 167GDP on 20Jan 2023, less than 20% of the 2022 high, and even the current share price is a bounce from the Sept 2022 90% plummet.

Recommendations.

It is not recommended that Company ABC invest 5M GDP in a venture with AML.

The perceived risks presented include low expectancy of acceptable payment terms being met, exposure to AML's financial stability as demonstrated in the financial ratios, not least the D/E ratio, and AML's turbulent history of near solvency events.

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