Lockheed Martin Corp. (LMT)

BUY: $ 557.46 (+12,3%)

Equity Research Division 4th December 2022

Analysts

Andreas Bengtsson
nils.bengtsson@studbocconi.it

Vincent de Naurois
vincent.jacobe@studbocconi.it

Lorenzo Lucicesare
lorenzo.lucicesare@studbocconi.it

Luciano Valerio
luciano.valerio@studbocconi.it

Supervisors

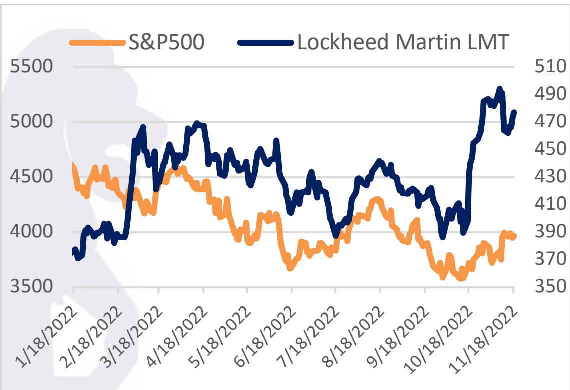
Emanuele Licari, Head of Research
emanuele.licari@studbocconi.it

Luigi Tamburini, Head of Equity Research
luigi.tamburini@studbocconi.it

Dario Scordamaglia, Co-head of Equity Research
dario.scordamaglia@studbocconi.it

Basic Information	
Last Closed Price	$496.23
Target Price	$557.46
+/- Potential	+12.3%
Bloomberg Ticker	LMT:US
GICS Sector	Industrial
GICS Sub-Industry	Industrial Products

YTD Price Performance (Yahoo Finance)



Company Description

Lockheed Martin Corporation is an American aerospace and defense firm. The company is the largest defense contractor in the world, with over half of its annual sales being to the US Department of Defense. Lockheed Martin operates within four business segments: Aeronautics, Missiles and Fire Control, Rotary and Mission Systems, and Space.

.

Key Financials	
Market Cap	$124.92B
Basic Shares O/S	0.26B
52-Wk High	$494.66
52-Wk Low	$328.20
Fiscal Year End	31-Dec-2021

($m)	FY18A	FY19A	FY20A	FY21A
Sales	53,762	59,812	65,398	67,044
EBITDA	9,700	10,838	11,251	11,887
EBIT	8,539	9,649	9,961	10,523
Net Income	6,164	7,368	8,178	7,679

Key Executives	
Mr. James D. Taiclet	Chairman, President, & CEO
Mr. Jesus Malave	Chief Financial Officer
Mr. Frank A. St. John	Chief Operating Officer

2022 Q3 results Highlights

- Net sales of $16.6 billion and net earnings of $1.8 billion, or $6.71 per share
- Cash from operations of $3.1 billion and free cash flow of $2.7 billion
- Returned $2.1 billion of cash to shareholders through share repurchases and dividends
- Increased share repurchase authority by $14.0 billion

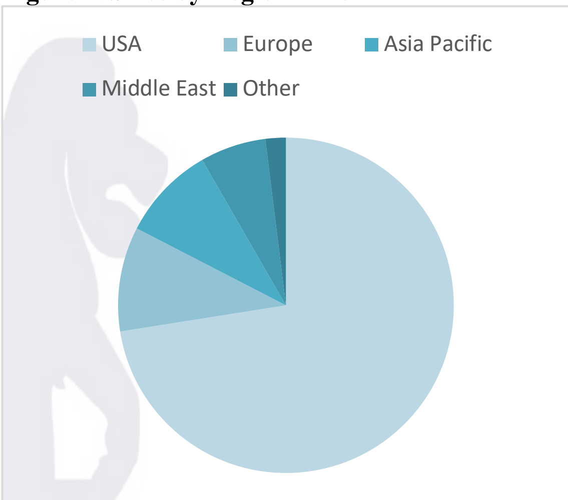
Investment Thesis

After performing our valuations, our recommendation is a "BUY", we view the current market pricing as attractive despite the fact that shares are trading around all-time highs. Driven mainly by a significant pull-forward in defense spending increases following recent geopolitical turmoil, and the growing international demand for F-35 stealth fighter jets, we believe that Lockheed Martin's share price will increase by about 16% in the coming 12 months. The target price has been set to $557.46.

To compute the target price, we performed both an asset-side DCF analysis and a market multiples analysis. The forecasted price from the DCF analysis is $526.55 while the average forecasted price from the market multiple analysis is $620.17. Our target price is derived from a weighted average between the two prices, assigning to the DCF price a weight of ⅔, reflecting our higher reliance on the DCF analysis rather than market multiples, mainly due to the high variability of multiples among the chosen peers, reflective of underlying differences beyond the scope of pure financial metrics.

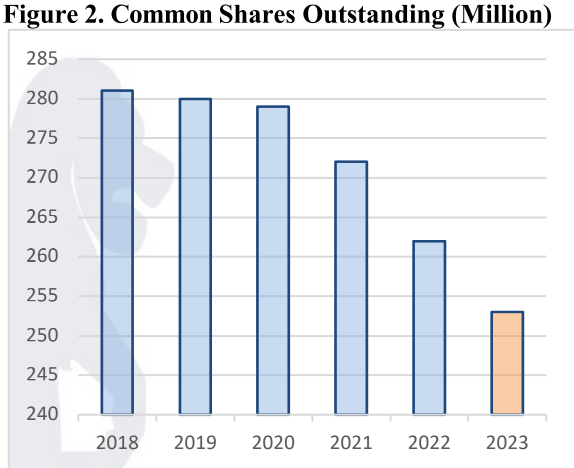
One other aspect that needs to be considered is that during past periods of elevated defense spending, the stock typically traded at high premium to the S&P500 multiple (for example post 9/11 it traded at 67% premium, and 32% premium in 2014, following annexation of Crimea by Russia). Today the stock is in line with market multiples.

Figure 1. Sales by Region in 2021



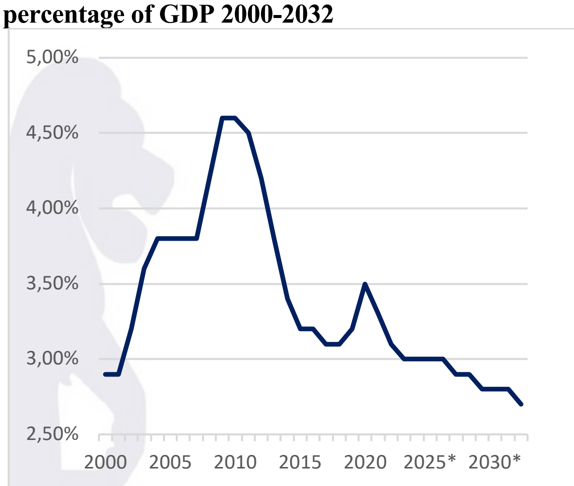
Source: Minerva Investment ManagementSociety Estimates

Figure 2. Common Shares Outstanding (Million)



Source: Minerva Investment ManagementSociety Estimates

Figure 3. U.S. defense outlays and forecast as a percentage of GDP 2000-2032



Source: Statista; The Budget and Economic Outlook Fiscal Years 2022 to 2032, US Congressional Budget Office

Company Overview

Lockheed Martin is a global security and aerospace leader that provides advanced technology systems and products for defense, civil and commercial applications. Headquartered in Maryland, USA with over a hundred thousand employees globally, the majority of Lockheed Martin's business is transacted with the U.S. Department of Defense and U.S. federal government agencies. Shares of the company are listed on the NYSE and are also included in the S&P 500 index, following recent geopolitical developments which have spurred defense spending globally, the stock is currently quoting at around all-time highs.
Lockheed Martin reported sales of $67 billion for 2021, up 3% vs. 2020 and an operating profit of $7.38 billion, up 3% vs. the prior year. The firm's operations are divided into four business segments (all figures refer to 2021A):

1. **Aeronautics**: The largest segment making up about 40% of net sales and 38% of operating profit. Includes tactical aircraft, airlift, sustainment, and aeronautical R&D business lines. Revenue is split 65%-35% between the U.S. govt. agencies and international customers respectively, and the bulk of sales are tied to the F-35 stealth fighter jet program.

2. **Missiles and Fire Control (MFC)**: Makes up approx. 17% of net sales and 22% of operating profit, mainly derived from the U.S. government. agencies (71%), with international customers covering the remaining 29%. Business lines cover everything ranging from air and missile defense systems to energy management solutions, with notable programs such as Patriot Advanced Capability-3, Thermal High Altitude Area Defense (THAAD) and the Hypersonics programs.

3. **Rotary and Mission Systems (RMS)**: Second largest segment at about 25% of net sales and 24% of operating profit, revenue distribution between U.S. govt. agencies and international customers same as for MFC. Most notable contributors are the Sikorsky helicopter programs which include, inter alia, the Black Hawk® and Seahawk® helicopters.

4. **Space**: Represents 18% of net sales and 15% of operating profit, and 92% is attributable to the U.S. govt. agencies while the remaining 8% stem from international sales. Space satellite products and services constitute the majority of revenue for this segment.

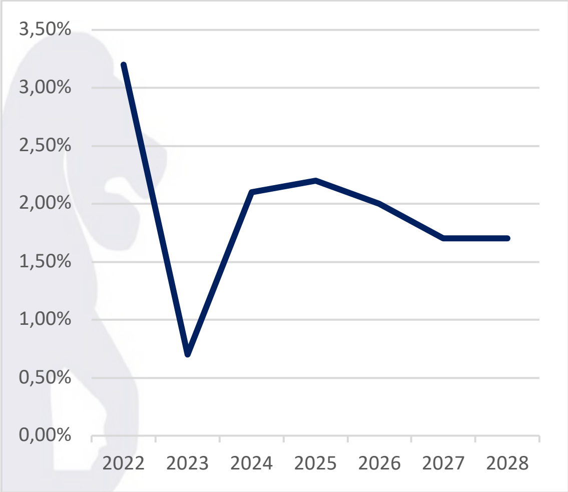
Industry Outlook

Being in a politically driven industry, Lockheed Martin's revenues depend highly upon defense spending, more specifically from the United States government.

United States

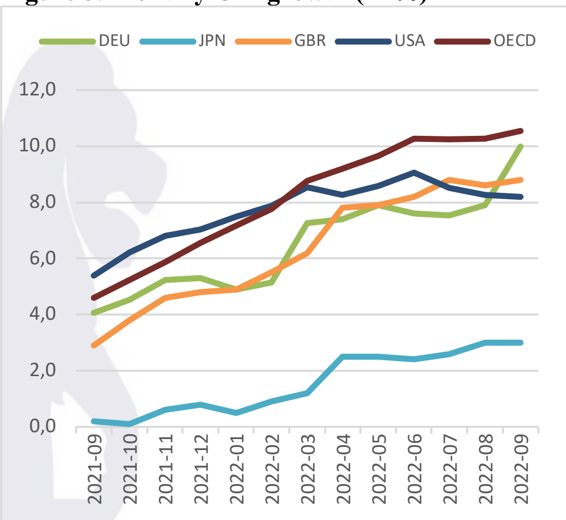
The United States defense outlay is expected to increase in a steady linear trend over the next five to ten years. The United States Senate Armed Services Committee has approved a $817 billion defense budget for the fiscal year 2023, with a $45 billion increase granted by the President's request; approximately half of this increase to consider inflation. In the past decades, military spending as a percentage of GDP has decreased. The forecast predicts $998 billion of defense spending allocation in 2032, equivalent to 2.7% of GDP; a decrease from 3.1% in 2022 and 3.3% in 2021. Reasons for this decrease over the long term are partly political but mainly driven by the GDP growth of the United States as a whole.

Figure 4. EU GDP growth rate



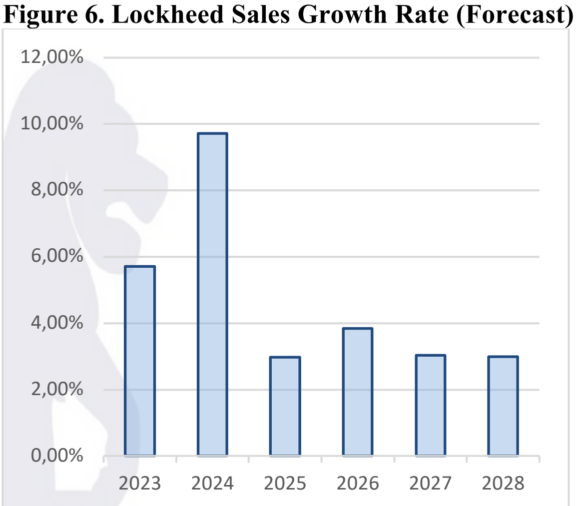
Source: IMF October 2022 Outlook

Figure 5. Monthly CIP growth (in %)



Source: World Bank

Figure 6. Lockheed Sales Growth Rate (Forecast)



Source: Minerva Investment Management Society Estimates

United Kingdom

Former Prime Minister Truss had stated that the United Kingdom would have increased its military budget up to 3% of GDP, higher than the commitment of 2.5% made by her predecessor Boris Johnson. The political turmoil that has arisen in the United Kingdom has not affected the 3% target by 2030 however, as new British finance minister Jeremy Hunt and Defence Secretary Ben Wallace recently affirmed.

European Union

Until the war in Ukraine, European governments were reluctant to achieve the military expenditure target of 2% of GDP. Because of the Russian aggression in late February, EU state members are committed to incrementing defense outlays. An example comes from the German government announcing a €100 billion fund to modernize Germany's military, lifting its military spending to over 2% of GDP, much higher than the 1.3% figure of 2021 (Statista). Most EU countries intend to reach the 2% target within the next year, while Poland recently increased its spending to 3%.

Another trend that is affecting the geopolitical situation in Europe is the strengthening of the military alliance NATO, which Finland and Sweden are committed to shortly joining.

Asia-Pacific

Although for the past decade Japan's defense budget has remained equivalent to approximately 1% of GDP, the ruling Liberal Democratic party has announced that Japan's military spending should reach NATO's target of 2% of GDP. In line with this goal, the defense ministry has requested a ¥5.6tn budget for the year to March 2024, compared with ¥5.4tn for the current fiscal year.

The collapse of the peace process with North Korea in 2020 has prompted South Korea to reinforce its defense spending in past years, notably in a 10.5% increase from 2021 to 2022. South Korea's Ministry of National Defense has announced a budget proposal of ₩57.1 trillion for 2023, or equivalently a 4.6% increase in allocation from 2022. South Korea's defense budget is expected to keep increasing strongly over the next five years, reflecting a likely return of North Korea's hostile attitude against them.

For 2022-23, the consolidated Australian defense spending amounted to $48.6 billion, equivalent to a high nominal growth of 7.4% from 2021-22. Australian defense spending has faced issues in past years, with military projects running over budget thus leaving many unfinished. Currently, at least 28 Australian defense projects are cumulatively 97 years late. This issue, along with Chinese plans to increase influence in the Pacific, serves as an incentive to substantially increase military spending. Australian Defense Minister Richard Marles has indicated Australia's outlays to defense will increase from current levels of 2.11% of GDP over the medium term.

Supply Chain Shortage

Supply chain issues, in particular in the microchip sector, are expected to continue throughout most of next year, with effects likely lasting until 2024. In addition, the labour shortage is causing a slowdown in production, at a moment where Western countries are sending significant orders to replace the weaponry sent to the Ukrainian military. In this scenario, the expected growth in demand for weapons, coming from the increase in the military budget of Western countries, could be partially offset by the reduction in production and higher costs of materials.

SWOT Analysis

Strengths

Government Contracts – Lockheed Martin has consistently been the top US government contractor. In the fiscal year 2021, Lockheed Martin's contracts with the United States government were valued at $40.2 billion, while the second largest contractor Boeing had contracts valued at $22.1 billion.

Political Affluence - Lockheed Martin openly engages in the political and public policy process for its best interests, successfully amassing the largest political action committee in the defense industry. Lockheed has topped lobbying expenditures in the defense industry in past decades, spending $14.4 million in 2021 and so far $10.1 million in 2022. In elections of the past decades, Lockheed has topped the defense industry in political donations, amounting to $6 million in 2020, a notable increase from $3.8 million in 2016. These reasons may partly explain the United States continuously increasing defense outlay which in turn benefits Lockheed Martin.

Research & Development - These market advantages in turn make Lockheed Martin the most competitive firm in the defense industry, an innate advantage that translates into strong R&D. In 2019, Lockheed Martin was the third largest R&D spender in aerospace and defense industries, behind Boeing (which is including R&D expenditures for non-defense business segments, notably commercial), and BAE Systems.

Weaknesses

Client and Product Concentration- Lockheed Martin has a strong client concentration, with just about 70% of its revenues stemming from the US government each year. This poses issues considering the strong dependence between US military spending and contracts and Lockheed's net sales. Furthermore, Lockheed also has a notable product concentration with its F-35 program, accounting for 25% of net sales. This poses further problems, again creating a notable dependence on a sole stream of revenue.

Weak Cybersecurity Segment - Lockheed Martin's cybersecurity segment is uncompetitive in the broader picture. In fact, Lockheed Martin is not a top cybersecurity firm at all, which may pose issues considering the growing need and demand for these services across all governments now and in the future. This leaves room for other smaller firms to grow in the defense industry thanks to their willingness to focus on this, leading to a loss of competitive advantage and loss of market share in this niche.

Opportunities

Geopolitical Tensions - Given the war in Ukraine and generally increased global geopolitical tensions, governments have started to increase their military budgets more aggressively, this of course represents an opportunity for Lockheed Martin to expand its international relationships. This pull-forward in demand is perhaps most noticeable in Europe, and more specifically among NATO-member states who now aim towards the 2% of GDP in military spending target earlier than previously anticipated.

Technological Advancements - As innovative technologies such as the Hypersonics program are developed, governments must ensure they continuously modernize their existing military materiel as old technologies rapidly become obsolete. This creates a moat for leading incumbents such as Lockheed Martin who, with its stable cashflows, can stay at the forefront of such technological advancements through significant R&D investments.

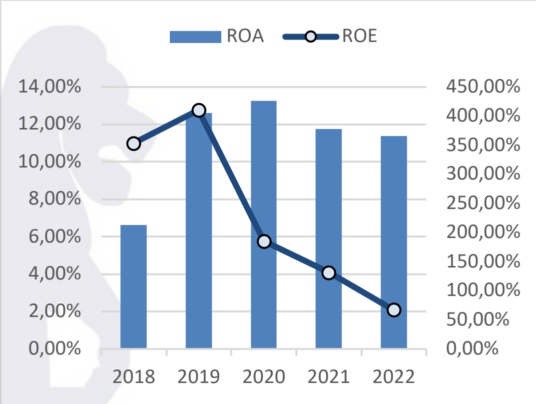
Threats

Geopolitical Tensions - While listed as an opportunity, rising geopolitical tensions are in actuality a double-edged sword for Lockheed Martin. Alongside increased military spending, deteriorating global alliances also raise scrutiny of international military equipment deals, as national security concerns become even more acute. Practically speaking, this would entail limitations in international partnerships or outright bans on the sale of certain, potentially sensitive, military materiel.

Budgetary Reprioritizations – Since Lockheed Martin derives over 70% of its revenues from the U.S. Government, any changes in the Government's priorities that may lead to military budget cuts, would have a material adverse effect on the income of the firm.

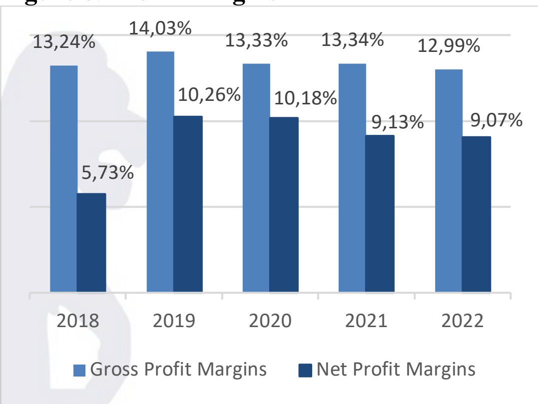
Fighter Jet Competition - Although the scope of Lockheed Martin's products is broad, there is a heavy dependence on the F-35 program which stands for over 25% of net sales. The threat of competition in this specific area, i.e., stealth fighter jets, is therefore of high relevance and maintaining leadership is key to continued success.

Figure 7. Profitability



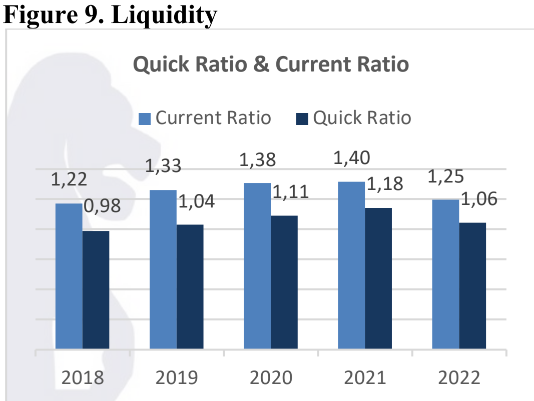
Source: Minerva Investment Management Society Estimates

Figure 8. Profit Margins



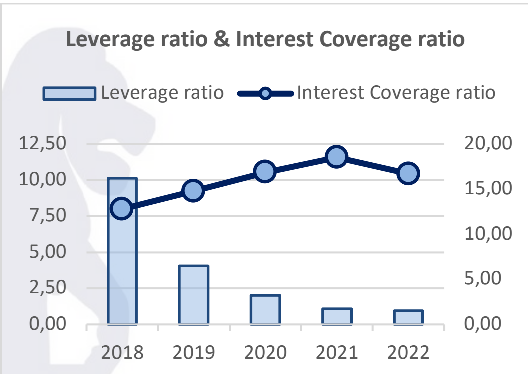
Source: Minerva Investment Management Society Estimates

Figure 9. Liquidity



Source: Minerva Investment Management Society Estimates

Figure 10. Solvency



Source: Minerva Investment Management SocietyEstimates

Financial Analysis

Profitability:

To assess Lockheed Martin's profitability, we first examined ROE and ROA. ROA has seen a net increase in the past 5 years although it peaked in 2020; from 6.63% in 2018 to the current level of 11.39%, reaching a high of 13.27% in 2020, as shown in figure 7. The measure is strongly correlated with net income, which similarly saw a net gain with a peak in 2020 going from $3.05B in 2018 to current levels of $5.87B, peaking at $7.14B in 2020. On the other hand, ROE has drastically decreased in the past 5 years, from 353.58% in 2018 to the current level of 66.93%. This is due to Lockheed Martin's vast and larger than proportional expansion of shareholder equity, increasing from $-.111B (driven by accumulated comprehensive loss item, mainly affected by pension plan deficits) in 2018 to $11.97 billion. Lockheed Martin's gross margins have decreased over the past 5 years from 13.24% to 12.99%, while net margins have increased from 5.73% in 2018 to currently 9.07%, peaking at 10.26% in 2019, as shown in figure 8. All in all, margins and net revenues are showing healthy growth trends, and increasing equity levels are in turn leading to waning ROE levels.

Liquidity:

In order to assess Lockheed Martin's ability to meet short-term debt obligations, we decided to look at both the current ratio and the quick ratio over a five-year period stretching from 2018-2022, where CY ratios are based on figures reported for the third quarter. As illustrated in figure 9, the ratios are both relatively stable throughout the examined period. The current ratio is comfortably above 1 in all years, ranging from 1.22-1.40 while the quick ratio is closer to 1 with a low of 0.98 and a high of 1.16. All-in-all, the ratios demonstrate that Lockheed has healthy liquidity where quickly convertible current assets are sufficient to cover short-term liabilities. Looking closer at the individual components, inventory is essentially flat whilst both contract assets and liabilities have steadily grown in scale (essentially offsetting each other), a sign of growing operations. Lastly, cash and payables show more variability but are relatively small compared to contract assets and liabilities, allowing ratios to hold firm over time.

Solvency:

To evaluate Lockheed Martin's solvency, we considered the equity ratio, the leverage ratio and the interest coverage ratio over the period 2018-2022. As shown in figure 10, the company capital structure is converging into a more solid capital structure, with the leverage ratio dropping to 0.96 in 2022 from the 2018 level of 10.12, while the equity ratio constantly growing over the years considered. This evolution is mainly due to a strong reduction of the accumulated loss and an increase in retained earnings resulting in growing equity.

The interest coverage ratio illustrated in figure 10 recorded a constant growth from 2018 to 2021, before moving back to the 2020 level. Overall, during the period considered, the interest coverage ratio has exceeded 9, showing a strong ability by Lockheed Martin to pay interest on its debt.

Figure 11. Operational Efficiency

Figures in $ millions	2019	2020	2021	2022
Days of inventories outstanding	24	24	21	28
Days receivables oustanding	71	64	66	77
Days payables oustanding	30	26	26	44
Operating Cycle	65	62	61	61

Source: Minerva Investment ManagementSociety Estimates

Figure 12. Assumptions & WACC input

ASSUMPTIONS	
Tax Rate:	21.0%
Perpetual Growth Rate:	2.2%
Exit Multiple EV/EBIT:	12.0x
Current Price:	472.82
NOSH (mln):	253.00
Net Debt:	14,795
Minority Interests:	0.0
Associates:	0.0
Enterprise Value:	134,418
Beta:	1.07
Risk-free Rate:	3.78%
EMRP (US Damodaran):	4.59%
Cost of Equity:	8.68%
Ratings-Based Default Spread (Damodaran):	1.29%
Pre-Tax Cost of Debt:	5.07%
Cost of Debt:	4.01%
Debt/(Debt + Equity):	0.49
Equity/(Debt + Equity):	0.51
WACC:	**6.39%**

Source: Minerva Investment ManagementSociety Estimates

Operational Efficiency:

When analyzing the operational efficiency of Lockheed, we studied the operating cycle and its components in terms of days. As can be seen in figure 11, they have all remained very stable historically. Lockheed manages to keep the cash operating cycle positive, which occurs when the time in inventory and accounts receivable is longer than the time it takes to pay the supplier. The trend tends to be constant even in the long term. The value of the CCC, despite being positive, is in any case low. The positivity of the CCC may also be due to the type of customers that Lockheed supplies, typically institutional subjects who tend to pay later.

Valuation

Valuation Price Target: $557.46

Our analysis followed two main approaches:

- intrinsic valuation through the DCF model (FCFF)
- relative valuation with market multiples of comparable companies

In order to derive the price target, we computed a weighted average of the values obtained from the two analyses, attributing a higher weight to the DCF result because of the more robust underlying analysis.

Free Cash Flow to Firm Approach

Between the different evaluation methods, the DCF asset side is used to conduct the analysis. To assess the expected sales growth of the company for the period 2022-2027 we have considered several assumptions: Sales distribution by geographic area for Lockheed mirrors the sale distribution of the market. We forecasted sales growth of 5.71% for 2023 and 9.72% for 2024, incl. one-off inflation adj. of 2.5% in 2023 and of 5% in 2024. These adj. are made to reflect expected price increases in renegotiated contracts, compensating for input cost increases experienced in the last two years. The effect will be visible as early as of next year but will be more pronounced in 2024 as contract reviews come due. We forecasted the sales growth rate by weighting governments' defense spending with their contribution to current sales, taking into account also the expected GDP growth for these countries moving forward

- According to data taken from Statista, we expect an increase in military spending by the United States for all the years taken as a reference (2022-2027), this suggests an increase in Lockheed sales in the American market, which comprises approx. 70% of total Lockheed sales
- As regards the European data, including those of the United Kingdom, we expect an increase in military spending in all the years considered (3.85% in 2023), assumptions that are reinforced by the Russian-Ukrainian conflict and by the desire to bring to 2% of the GDP the military expenditure of all NATO countries. However, these figures remain relatively modest in terms of impact, as the European market covers only 10% of Lockheed's total sales
- As far as inflation is concerned, Lockheed's growth figures are considered null or even negative for the first part of 2023, with a possible stagnation until the beginning of 2024, the cause of which is mainly due to a possible logistics problem in the market
- For the outstanding number of shares (253.000.000,00) We considered the data provided by Lockheed, which includes a share buyback. These assumptions were used to forecast the unlevered free cash flows for the period 2022-2027. The company's WACC used for discounting the

unlevered free cash flows was determined considering the following elements:

RISK-FREE RATE (3.78%): The 10-year US T-Bond yield.

TAX RATE (21%): The US Federal Corporate Tax rate.

LEVERED BETA (1.05): it represents the risk specifically attached to the company, comparing the market performance with the company's performance. For the Beta computation, firstly we unlevered the average levered Beta of a selected pool of peers by applying the average marginal tax rate and the average Debt to Equity ratios to the Hamada equation. We used the same equation to re-lever the Beta with Lockheed Martin’s marginal tax rate (15.2%) and Debt to Equity ratio (0.96).

PRETAX COST OF DEBT (5.07%): It is the sum of the risk-free rate chosen and the rating-based Default Spread for A- companies (Source: Damodaran).

CAPITAL STRUCTURE: Weight of Debt 0.51, Weight of Equity 0.49.

The resulting WACC is 6.36%.

Figure 13. Sensitivity Analysis

	WACC:								
	4.50%	5.00%	5.50%	6.00%	6.39%	7.00%	7.50%	8.00%	8.50%
1.40%	618	578	547	523	507	486	472	459	449
1.60%	634	589	555	528	511	489	473	460	449
1.80%	652	601	563	534	515	492	475	462	450
2.00%	673	615	573	541	521	495	478	463	451
Terminal Growth Rate: 2.20%	699	632	584	549	**527**	499	481	465	452
2.40%	730	651	597	558	533	503	484	467	453
2.60%	768	675	613	568	541	509	487	470	455
2.80%	816	703	630	580	550	515	492	473	457
3.00%	877	737	652	594	561	521	497	476	460

Source: Minerva Investment Management Society Estimates

We derived the terminal value through Gordon Perpetuity Growth model with a perpetual growth rate of 2.2%, which represents the long-run US GDP growth rate forecasted by the FOMC. We then calculated the Price per Share of Lockheed Martin by summing the Present Value of the unlevered free cash flows with the present value of the terminal value, subtracting the Net Debt, and dividing the result by the number of shares outstanding. Other components were negligible. The fair-value PPS based on this DCF-analysis is $526.55.

We subsequently subtracted Net Debt and Minorities, added back Associates and then divided the result by NOSH. Lastly, to highlight the effect changes in our estimated WACC and the perpetual growth rate applied have on our final DCF fair value, a sensitivity analysis was made. The sensitivity table in figure 13 clearly illustrates how changes in these two parameters affect the resulting fair value, given the volatility of rates, it’s especially interesting to consider the effect slight changes in the risk-free rate would have on the WACC and PPS.

Figure 14. Comparables’ Multiples

Comparables	EV/Sales	EV/EBIT	P/E
Northrop Grumman	2.76	28.22	14.93
Raytheon Technologies	3.41	35.16	31.49
L3Harris Technologies	3.20	33.70	40.36
General Dynamics Corp	2.22	20.67	20.48
BAE Systems PLC*	1.94	15.73	23.84
Peer Mean	**2.71**	**26.70**	**26.22**
Peer Median	**2.76**	**28.22**	**23.84**

Figures are LTM
**BAE Systems based on H2 2021 + H1 2022 (latest figures)*

Source: Minerva Investment Management Society Estimates

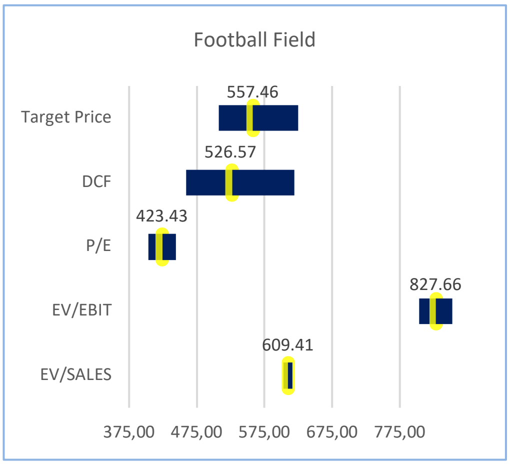
Market Multiples Approach

Peers Group

In selecting the peer group, we decided to incorporate companies that solely focus on defense products and military aviation to parallel Lockheed Martin’s activities. This consequently led to the exclusion of Airbus and Boeing which run significant commercial aviation businesses, presenting incomparable differences within the companies’ streams of revenue and overall valuations. We have also decided to focus on companies whose revenues are largely dealt to the United States government, given Lockheed Martin’s substantial customer concentration.

Raytheon Technologies Corp. is an American aerospace and defense conglomerate headquartered in Arlington, Virginia. The company also receives a significant portion of its revenues from the US government, being its 3rd largest contractor behind Lockheed and Boeing. Raytheon’s size is similar to that of Lockheed Martin, producing $64.39B in revenues in 2021. While managing a more developed intelligence sector, Raytheon’s product focus is the same as Lockheed Martin’s. This paired with its size similarity makes it the strongest comparable company.

Figure 15. Football Field



Source: Minerva Investment Management Society Estimates

Northrop Grumman Corp. is an American aerospace and defense company headquartered in West Falls Church, Virginia. The company is the 5th largest contractor to the United States government. Producing $35.67B of revenue in 2021, Northrop Grumman is a significantly smaller firm than Lockheed Martin. Northrup Grumman's business sectors are Aeronautics Systems, Defense Systems, Mission Systems, and Space Systems, which match Lockheed Martin's business segments. Northrop Grumman is a principal partner of Lockheed's F-35 Lightning II program along with BAE Systems.

General Dynamics Corp. is an American aerospace and defense corporation headquartered in Reston, Virginia, producing $38.47B in revenues in 2021. General Dynamic's business segments are Aerospace, Marine Systems, Combat Systems, and Technologies, which mirror Lockheed Martin's business sectors. General Dynamics is the US government's 4th largest contractor.

BAE Systems PLC is a British arms, security, and aerospace company headquartered in London, England. It is the largest defense contractor in Europe and its American subsidiary, BAE Systems Inc., contributes over a third of the company's revenues. BAE Systems' product focus is also the same as Lockheed Martin's, although a smaller firm, producing £19.52B of revenues in 2021. Along with Northrop Grumman, it is a principal partner of Lockheed's F-35 Lightning II program.

L3Harris Technologies is an American technology, defense, and information technology provider headquartered in Melbourne, Florida. The company's revenues were $17.81B in 2021, making it substantially smaller than Lockheed Martin. The company focuses on mission systems, surveillance solutions, communications, electronic warfare, and space and airborne systems, which encompass the focus of Lockheed Martin's Rotary and Mission Systems and Space business segments.

Computation

In complementing the intrinsic valuation performed through the use of a DCF model, we also carried out a relative valuation by means of a market multiples approach. We decided to use both equity and asset side multiples to have a more complete view on the value of the company. For the equity-side multiples, we chose to examine the P/E-ratio to better understand the market sentiment with respect to the bottom line. The multiple was deemed appropriate since the peer group consisted of mature firms with relatively similar capital structures, accounting standards (except for BAE Systems) and efficient listing exchange. These factors help avoid potentially large valuation discrepancies due to technical factors.

We also looked at EV/S as this measure is relatively void of any accounting differences that could be present in our comparable group, especially since revenue recognition principles are aligned within the peer group. Lastly, we looked at EV/EBIT as EBIT is a good proxy for the underlying unlevered free cash flows of a given firm that also doesn't consider the volatile effective tax item. Although it does consider D&A, which could also differ due to accounting standards, we view the peers as mature companies where CapEx should be comparable (relative to size). Additionally, as compared to EV/EBITDA, it largely removes comparability issues caused by the different treatments of leases between US GAAP and IFRS, both of which are present in our peer group and have a material impact. We take the market multiples of the set of comparables mentioned above and compute the average and median of the LTM multiples, as you can see in Figure 15.

To derive the implied PPS of Lockheed Martin based on the asset side multiples, we first multiply our average and median values from the peer table with Lockheed Martin's LTM Sales and EBIT respectively, we then subtract Net Debt and divide the result by NOSH (other EV items n.m.). For the equity side multiple, we simply multiply the average and median P/E ratio with the LTM EPS of Lockheed Martin. To get a range of values for the football field chart, we use the LTM average and median of the multiples as the upper and lower bound, respectively.

A weighted average among the three midpoints for the estimated ranges of EV/Sales, EV/EBIT and P/E, namely $609.41, $827.66 and $423.43 (given a total weight of 33%), and the point estimate PPS of our DCF at $525.55 (given a weight of 67%), we arrive at a final target price of $557.46, which is about 16% above the share price of Lockheed Martin (LMT:US) as of closing 2022-11-22.

Investment Risks

Space Domain and Recent Investments. The various investments made by Lockheed Martin in recent years in the space sector coincide with a partial saturation of this market. Although the company is currently among the first in the world in this sector, the new companies that appear are likely to erode the market share of Lockheed, which in recent years has had to collaborate with Boeing, which is one of its major competitors.

Economy and Political Environment. Being an aerospace and defense corporation, Lockheed is more exposed than other companies to global macroeconomic and political scenarios. The war in Ukraine and the tensions in the Middle East can therefore now play in favor of the American company, which is in an advantageous position over other competitors thanks to the agreements with the United States government.

Pension Funding and Costs. Many of Lockheed employees and retirees participate in defined benefit pension plans, retiree medical and life insurance plans, and other post-employment plans. The impact of these plans on their earnings may be volatile because the calculations are sensitive to changes in several key economic assumptions. In recent years, they have taken actions to mitigate the risk related to their defined benefit pension plans through pension risk transfer transactions whereby they purchase group annuity contracts (GACs) from insurance companies using assets from the pension trust and expect to continue to evaluate such transactions in the future, but they remain responsible for paying benefits under the plans to covered retirees and beneficiaries and are subject to the risk that the insurance company will default on its obligations to reimburse the pension trusts.

Specialized Business. Due to the specialized nature of their business, their performance is dependent upon their ability to identify, attract and retain a workforce with the requisite skills in multiple areas. A substantial portion of their workforce is nearing retirement. Additionally, competitors grow at a faster rate or face fewer costs and product pricing constraints, they may be able to offer more attractive compensation and other benefits to candidates. Beginning with the pandemic, a significant portion of their workforce began working remotely and they expect a significant portion to continue working remotely greater than 50% of the time. While there may be many benefits to remote and hybrid work and have adopted new tools and processes to support the workforce, if they are unable to effectively adapt to this hybrid work environment long term, then they may experience a less cohesive workforce, reduced program performance and less innovation.

Appendix A - Valuation

Figures in $ millions	Actual					Forecast					
Year:	2017A	2018A	2019A	2020A	2021A	2022E	2023E	2024E	2025E	2026E	2027E
Period:						0.125	1.125	2.125	3.125	4.125	5.125
Sales:	49,960	53,762	59,812	65,398	67,044	65,250	68,974	75,682	77,937	80,936	83,391
Growth:		*7.6%*	*11.3%*	*9.3%*	*2.5%*	*-2.7%*	*5.7%*	*9.7%*	*3.0%*	*3.8%*	*3.0%*
(-) COGS:	42,544	45,164	50,256	55,427	56,583	55,789	58,628	63,573	65,857	68,391	70,465
Gross Margin:	*14.8%*	*16.0%*	*16.0%*	*15.2%*	*15.6%*	*14.5%*	*15.0%*	*16.0%*	*15.5%*	*15.5%*	*15.5%*
EBITDA:	8,777	9,700	10,838	11,251	11,887	9,461	10,346	12,109	12,080	12,545	12,926
Margin %	*17.6%*	*18.0%*	*18.1%*	*17.2%*	*17.7%*	*14.5%*	*15.0%*	*16.0%*	*15.5%*	*15.5%*	*15.5%*
(-) D&A:	1,195	1,161	1,189	1,290	1,364	1,206	1,246	1,246	1,246	1,246	1,246
EBIT:	7,582	8,539	9,649	9,961	10,523	8,255	9,100	10,863	10,834	11,299	11,679
Margin %	*15.2%*	*15.9%*	*16.1%*	*15.2%*	*15.7%*	*12.7%*	*13.2%*	*14.4%*	*13.9%*	*14.0%*	*14.0%*
NOPAT:	5,852	7,520	8,485	8,552	9,065	7,241	7,462	8,799	8,667	8,926	9,227
(-) CapEx:	1,522	1,766	1,484	1,278	1,177	1,246	1,246	1,246	1,246	1,246	1,246
(+) D&A	1,195	1,161	1,189	1,290	1,364	1,206	1,246	1,246	1,246	1,246	1,246
(+/-) Change in NWC		506	914	-278	610	522	-88	1,026	402	851	394
Unlevered Free Cash Flow:		**6,409**	**7,276**	**8,842**	**8,642**	**6,679**	**7,550**	**7,773**	**8,265**	**8,075**	**8,833**
			13.5%	21.5%	-2.3%	-22.7%	13.0%	3.0%	6.3%	-2.3%	9.4%
PV of UFCF:						**6,628**	**7,041**	**6,814**	**6,810**	**6,254**	**6,430**
Sum of PVs:	**39,977**										
PV of TV Perpetual:	**90,709**										
PV of TV Exit Multiple:	**125,362**										
EV (Perpetual):	**130,686**										
EV (Exit Multiple):	**165,338**										
Equity Value (Perpetual):	**115,891**										
Equity Value (Exit Multiple):	**150,543**										
Intrinsic PPS:	**$ 526.55**										
Δ Current Price:	**9.8%**										

Appendix B – Revenue Forecast

Year	US	UK	EU	APAC	Inflation Adj	Lockheed Sales Outlook
2023	4.6%	4.9%	3.7%	8.72%	2.50%	5.71%
2024	2.4%	5.0%	5.0%	5.35%	5%	9.72%
2025	3.4%	6.6%	5.0%	5.13%		2.98%
2026	2.5%	6.3%	4.8%	5.82%		3.85%
2027	2.5%	5.4%	4.4%	5.66%		3.03%

Note: Figures are based on military budget forecasts and GDP growth, weighted according to revenue contribution

Appendix C – Historical Income Statement & Balance Sheet

Income Statement						
	2017	**2018**	**2019**	**2020**	**2021**	**3Q 2022**
Sales	49,960	53,762	59,812	65,398	67,044	46,993
Growth		7.6%	11.3%	9.3%	2.5%	
(+) D&A	1,195	1,161	1,189	1,290	1,364	965
Cost of goods sold	42,544	45,164	50,256	55,427	56,583	40,043
Growth		6.2%	11.3%	10.3%	2.1%	
Gross Margin	14.8%	16.0%	16.0%	15.2%	15.6%	14.8%
Other Operating Expense (Income)	-166	59	-93	10	-62	-70
%Sales	0.33%	0.11%	0.16%	0.02%	0.09%	0.15%
EBITDA	8,777	9,700	10,838	11,251	11,887	7,985
EBITDA Margin	*17.6%*	*18.0%*	*18.1%*	*17.2%*	*17.7%*	*17.0%*
D&A	1,195	1,161	1,189	1,290	1,364	965
EBIT	7,582	8,539	9,649	9,961	10,523	7,020
Net Interest Expense	651	668	653	591	569	421
Non-Interest Financial Income (Expense)	150	-67	0	0	0	0
Other Non-Operating Income (Expense)	-640	-709	-651	182	431	-1144
Non-Recurring Income (Expense)	0	-96	34	-27	-1,471	0
Income before tax	6,441	6,999	8,379	9,525	8,914	5,455
Income tax	1,470	835	1,011	1,347	1,235	670
tax rate (US federal corporate tax)	*23%*	*12%*	*12%*	*14%*	*14%*	*12%*
Share of profit of associates	0	0	0	0	0	0
Net Income	4,971	6,164	7,368	8,178	7,679	4,785
Net Income per share	6.82	17.74	22.09	24.40	22.85	14.36

Balance Sheet

	2017	2018	2019	2020	2021
Cash & Short-Term Investments	2,861	772	1,514	3,160	3,604
Loans & Receivables - Net - Short-Term	10,257	11,916	11,431	11,523	12,542
Inventories - Total	2,878	2,997	3,619	3,545	2,981
Other Current Assets - Total	1,509	418	531	1,150	688
Total Current Assets	17,505	16,103	17,095	19,378	19,815
Investments in Associates	0	1,200	0	0	0
Property, Plant & Equipment - Net - Total	5,775	6,124	7,591	7,213	8,897
Other Non-Current Assets - Total	8,736	7,186	9,025	10,301	8,642
Intangible Assets - Total - Net	14,604	14,263	13,817	13,818	13,519
Total Non-Current Assets	29,115	28,773	30,433	31,332	31,058
Total Assets	**46,620**	**44,876**	**47,528**	**50,710**	**50,873**
Trade Accounts Payable & Accruals - Short-Term	3,252	4,524	3,747	4,043	3,888
Short-Term Debt & Current Portion of Long-Term Debt	750	1,500	1,250	500	6.0
Operating Lease Liabilities - Current Portion/Short-Term	0	0	245	255	300
Other Current Liabilities - Total	8,911	8,374	8,730	9,135	9,803
Total Current Liabilities	12,913	14,398	13,972	13,933	13,997
Debt - Long-Term - Total	13,513	12,604	11,404	11,669	11,670
Operating Lease Liabilities - Long-Term	0	0	855	841	1,100
Other Non-Current Liabilities - Total	20,970	16,425	18,126	18,229	13,147
Total Non-Current Liabilities	34,483	29,029	30,385	30,739	25,917
Total Liabilities	**47,396**	**43,427**	**44,357**	**44,672**	**39,914**
Shareholders' Equity - Attributable to Parent Shareholders	-850	1,394	3,127	6,015	10,959
Minority Interest - Equity	74	55	44	23	0
Total Shareholders' Equity - including Minority Interest	-776	1,449	3,171	6,038	10,959
Total Liabilities & Equity	**46,620**	**44,876**	**47,528**	**50,710**	**50,873**

Disclaimer