



LISBON
SCHOOL OF
ECONOMICS &
MANAGEMENT
UNIVERSIDADE DE LISBOA

MASTER OF SCIENCE IN

FINANCE

MASTERS FINAL WORK

PROJECT

EQUITY RESEARCH:

Lockheed Martin Corporation

JOÃO FILIPE CARVALHO MEDEIROS MORAIS GASPAR

NOVEMBER 2020



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**SUPERVISOR:
PEDRO RINO VIEIRA**

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Abstract

This project represents a detailed valuation of Lockheed Martin Corporation, guided by the structure of ISEG's Master of Finance final work project. It also was written following the recommendations of the CFA Institute. The reason behind choosing LMT lies on, primarily, to my personal interest on the Aerospace & Defense industry, which is becoming more and more relevant nowadays, due to the increasing geopolitical tensions, and secondly due to LMT being the biggest defense player in the USA, and my desire to better understand the organization. This report contemplates only the information available until October 14, 2020, any information or event after this specific date will not be reflected on this valuation. The price target was calculated using the absolute valuation method, the Discounted Cash Flow Method (DCF), and was supplement by the Dividend Discount Method (DDM), Adjusted Present Model (APV) and relative valuation method. It is expected that at the end of 2021 the target price will be \$480,05/sh, representing a potential upside of 23% against the closing price of October 14th of \$390,72/sh. The main risks associated with LMT's operations are the Governance dependence, Covid-19 impact, and Supply Chain disruption. Thus, taking this upside potential in consideration as a medium risk associated with this company, our recommendation is to buy.

JEL Classification: F01, G10, G17, G30, G34, J11

Key Words: Equity Research; Valuation; Lockheed Martin Corporation; LMT; Aerospace & Defense Industry.

Resumo

Este projeto representa uma avaliação detalhada da Lockheed Martin Corporation, obedecendo à estrutura de Trabalho Final de Mestrado, neste caso projeto, do Mestrado de Finanças do ISEG. Este, foi escrito com base nas instruções dadas pelo CFA Institute. Escolher a LMT baseou-se, primeiramente no meu interesse pessoal sobre a indústria aeroespacial & defesa, que atualmente está a ganhar cada vez mais relevância, devido ao aumento das tensões geopolíticas, e secundamente, devido à LMT ser a maior empresa de defesa norte americana, e ao meu desejo de melhor entender como a empresa se organiza. Este relatório contempla informação disponível até 14 de outubro de 2020, e qualquer informação posterior não será refletida nesta avaliação. O preço alvo foi calculado usando o método de avaliação absoluta, o Discount Cash Flow Method (DCF), e sustentado pelo Dividend Discount Model (DDM), Adjusted Present Value (APV) e por métodos de avaliação relativa. É expectável para o fim de 2021 que o preço alvo seja \$480,05, representando um potencial de 23% face ao preço de 14 de outubro, \$390,72. Os maiores riscos associados à LMT são a elevada dependência do Governo, o impacto do Covid-19 e a disrupção da cadeia de abastecimento. Portanto, tendo em conta este potencial de subida como de médio risco, a nossa recomendação é no sentido de compra.

JEL Classification: F01, G10, G17, G30, G34, J11

Palavras-Chave: Equity Research; Avaliação; Lockheed Martin Corporation; LMT; Industria Aeroespacial & Defesa.

Acknowledgments

Doing this project, the Final Master's Work, was the most challenging and enthusiastic project that I have faced during my academic journey. It was required a lot of discipline and effort to finished it in a proper way.

It would not be possible without the support of my family, girlfriend, and friends, who never give up on me, and encouraged me to continue this long journey, even when times were rough. I also, want to show gratitude to my Novo Banco team, who always supported me and constantly asked me at what point of situation.

I also want to thank the Professor Pedro Rino Vieira, who despite my constant delay always supported me and believed in me.

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1. Research Snapshot

Buy is our recommendation for Lockheed Martin Corporation with a 2021YE price target of \$480,05/sh using a DCF Model, implying a 23% upside potential from October 14th, 2020 closing price of \$390,72/sh with medium risk. The Discount Dividend Model, the APV model and multiples valuation support our BUY recommendation. LMT's stock was performing well in the market and increasing since December 2018, however due to the covid-19 pandemic in March 2020, it suffers an abrupt decrease.



Figure 2- Historical Share Price Source: Bloomberg

Covid-19 pandemic The pandemic covid-19 has an impact in all companies, and LMT is no exception. The International Monetary Fund (IMF) forecasts a huge decline in GDP for 2020, approximately 8% for the US GDP, constraining government budgeting and increasing the public debt of all countries. Beside this, with the pandemic most of the factories and facilities are closed, the social distancing measures has shifted the way that companies work, and they must adapt. These events can damage the supply chain by delaying the delivery of components or the development of a new feature, affecting LMT's performance and ability to fulfill their contracts.

Strong portfolio and increasing geopolitical tensions The F-35 program, in aeronautics segment, represented 27% of total net sales in 2019YE and is expected to represent a higher percentage of our sales in future years. In 2019, LMT delivered 134 aircraft, resulting in total deliveries of 491 production aircraft since program started. Also, space-based systems are year after year becoming more relevant in the U.S budget because they are an important tool for supporting and improving military communications, missile defense and navigation capabilities. And finally, being LMT a defense company and tensions in the middle east and countries like China, Russia and India increasing their defense budget, it seems, that in the long run, the defense and military expense will increase all over the world.

Risk Analysis

Low	Medium	High
	Medium	

Figure 1- Risk Profile

Source: Author

Market Profile

Closing Price	\$390,72
52 week range	\$266,35 - \$442,53
Average Volume	1171058
Market Cap.	\$102584 bn
Dividend Yield	2,82%

Table 1- Market Profile

Source: Yahoo Finance

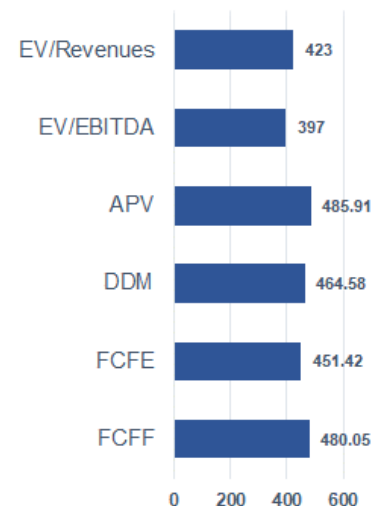


Figure 3- LMT's Target Price

Source: Author

2. Business Description

Lockheed Martin Corporation (LMT) is a global security and aerospace company engaged in research, design, development and manufacture of advanced technology systems, products and services. The company operates mostly with U.S customers, representing 71% of the \$59.8bn in net sales of 2019, being 28% of the net sales allocated to International customers (foreign governments). Its main areas of focus are in defense, space, intelligence, homeland security and information technology, including cybersecurity. LMT operates in four main business segments: Aeronautics with \$23.7bn net sales, accounting for 40% 2019 consolidated sales; Rotatory and Missions Systems (RMS) represents 25% of the company's net sales(\$15.1bn); Missiles and Fire Control (MFC) that recorded \$10.1bn, contributing 17% to the company's net sales, and finally Space Systems with \$10.9bn in revenue, representing 18% of it. Lockheed Martin's 2019YE revenues of \$59.8bn place them as one of the biggest players in the aerospace and defense sector.

Operational Segments

Aeronautics The aeronautics segment accounts for \$23.7bn, representing 40% of total net sales. This business segment is involved in development, manufacture, sustainment, support and upgrade of advanced military aircraft, including combat and air mobility. Aeronautics' major programs include the F-35 Lightning II Fighter, C-30 Hercules, F-16 Fighting Falcon and F-22 Raptor. The major driver to this segment is the F-35 program, accounting for \$16.2bn representing 27% of 2019YE total net sales and 69% of aeronautics' sales for the same period. The segment has grown \$2.5bn, or 12% compared to 2018YE, mostly boosted by the increase in sales of \$2bn for the F-35 program. The operating profit has increased as well \$249m 2019YE, accounting for 11% more compared to 2018YE. The F-35 program contributed with \$210m and the F-16 program with \$50m

Missiles and Fire Control (MFC) The MFC segment accounts for \$10.1bn representing 17% of total net sales. This segment provides air and missile defense systems; tactical missiles and air to ground precision strike weapon systems; fire and control systems. The MFC's major programs include PAC-3, THAAD, Multiple Launch Rocket System (MLRS); Apache; SNIPER; LANTIRN and SOF GLSS. This segment net sales increased \$1.7bn, or 20% compared to 2019YE. This increase was primarily attributable to higher net sales of \$940m in tactical and strike missiles programs; \$465m in the PAC-3 and THAAD programs; and finally, about \$300m in the SOF GLSS and Apache programs. The 2019YE' operating profit is \$1.44bn, increasing \$193m, or 15% compared to 2018YE. The operating profit increased \$100m for integrated air and missiles programs and about \$60m for tactical and strike missile programs.

Rotatory and Mission Systems (RMS) The RMS segment accounts for \$15.1bn, representing 25% total net sales. This segment provides manufacture, service and support for a variety of military and commercial helicopters; sea and land-based missile defense systems; radar systems; simulation and training situations including support to the needs of government customers in cybersecurity and delivering communication and command and control capabilities through complex mission solutions for defense applications. This segment net sales increased \$878m, or 6% compared to 2018YE. The increase was attributable to higher net sales of \$535m in radar surveillance systems and Multi Mission Surface Combatant (MMSC) programs; \$290m in training and logistics (TLS); and \$200m in control, communications, cybersecurity, intelligence and surveillance systems. Despite the decrease of decrease of \$145m for Sikorsky helicopter program, this still represents approximately 9% of net sales with 5.3bn of total net sales 2019YE. The operational profit in 2019 increased \$119m, or 9% compared to 2018YE. The increase of the operational profit in \$105m was attributable to the Sikorsky helicopter program due to better cost performance across the portfolio.

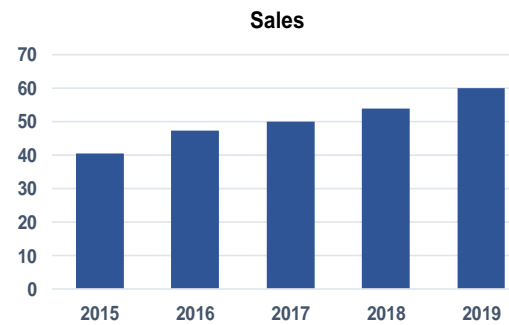


Figure 4- LMT's Sales
Source: LMT's Annual Report

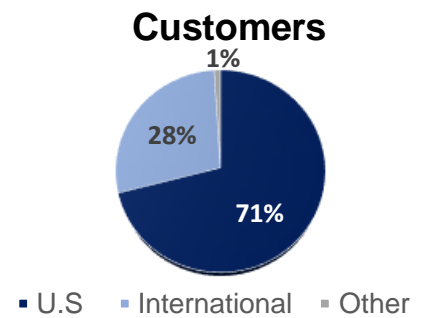


Figure 5- 2019- Client Profile
Source: LMT's Annual Report

Segment Sales

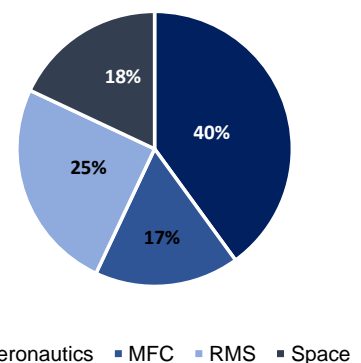


Figure 6- Segment Sales Share
Source: LMT's Annual Report

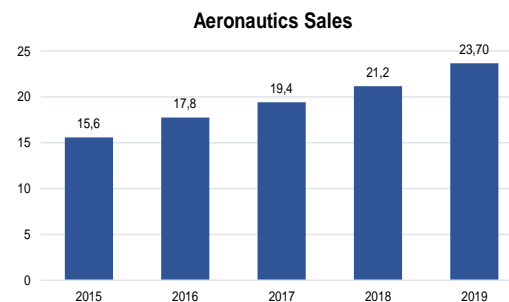


Figure 7- Aeronautics Segment Sales
Source: LMT's Annual Report

Space: The Space segment accounts for \$10.9bn, representing 18% of total net sales. This segment is engaged in the research and development, design, engineering and production of satellites, strategic and defensive missile systems and space transportation systems. Space's major programs include the Trident II D5 Fleet Ballistic Missile (FBM), Orion Multi-Purpose Crew Vehicle (Orion), Space Based Infrared System (SBIRS) and Next Generation Overhead Persistent Infrared (Next Gen OPIR) system, Global Positioning System (GPS) III, Advanced Extremely High Frequency (AEHF), and hypersonic. This segment net sales increased \$1.1bn or 11%, compared to 2018YE, due to higher volume in government satellites and strategic missile defense programs. The operating profits grown 13%, increasing \$136m from \$1.06bn in 2018YE to \$1.19bn in 2019YE. The increase was attributed to higher volume and lower amount of charges recorded for performances matters.

In this segment operating profit is included the share of earnings for the participation in the United Launch Alliance (ULA), which provides expendable launch services to the U.S. Government that in 2019YE represented \$145m, or 12% of the total operating profit of the segment.

Key Drivers of Profitability

Geopolitics tensions| Being LMT mainly a company specialized in defense, it is the most critical importance understand the dynamics around the world relatively to this matter. In 2019, the global military expenditure has been \$1917bn, the highest level since 1988, representing almost 2.2% of the global GDP. With military expenditure of \$732bn, the USA remained the largest spender in the world in 2019, accounting for 38% of global military spending, followed by China with 14%, Russia and India with around 3%. However, since 2010 countries like China, India and Russia increased their budgets by 85%, 37% and 30% respectively, when the USA, on the other hand, decreased their budget for defense proposes by 15%.

F-35 jets| The F-35 Lightning II is a 5th Generation fighter, combining advanced stealth with fighter speed and agility, fully fused sensor information, network-enabled operations and advanced sustainment. Over 3000 are expected to be built, replacing a set of aircraft, including the fleet-leading F-16 and A-10. At over \$400bn to develop and produce the F-35 is the U.S largest weapons program.

Space Funding Accelerates| The elevated U.S defense budget is driven by funding needs for major aircrafts, ships and missile systems, and plays into the capabilities of large defense contractors as the U.S seeks to replace their old systems. Space-based systems are year after year becoming more relevant in the budget because they are an important tool for supporting and improving military communications, missile defense and navigation capabilities.

independence of all directors and reports its findings to the full Board, assuring that there is not conflict of interests.

Company strategy

Investor are increasingly engaged with the performance of environmental, social and governance (ESG) factors that influence companies long term success. In 2018, sustainable investment assets related were about \$30.7trn, a 34% increase from 2016. Investors and debt holders are increasingly concern about sustainability, cybersecurity and human inquietudes, so LMT is committed to do reinforce the confidence in the company not only by investors but also by customers and members of the public as well.

Business Integrity| Advancing standards and controls for ethical business conduct that strengthen customer relationships, suppliers' partnerships and workplace integrity. LMT wants to conduct programs related to governance and

MFC Sales

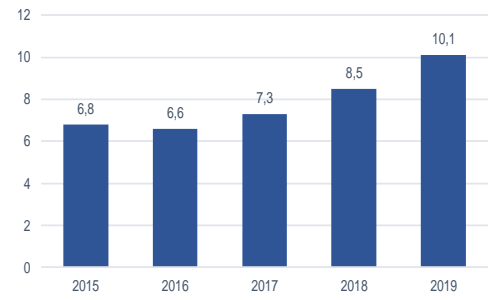


Figure 8- Missile and Fire Control Segment Sales

Source: LMT's Annual Report

RMS Sales

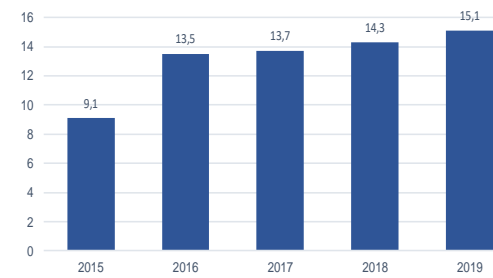


Figure 10- Rotatory and Mission Control Segment Sales

Source: LMT's Annual Report

Space Sales

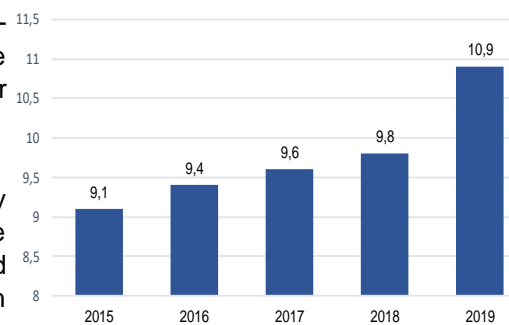


Figure 10- Space Segment Sales

Source: LMT's Annual Report

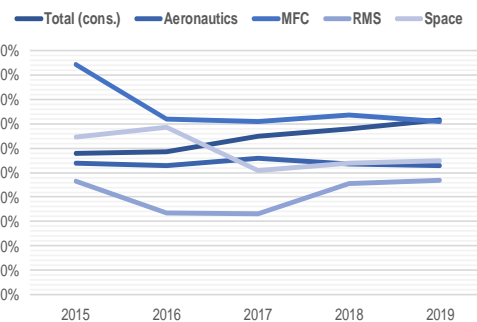


Figure 11- Operational Margin by Segment

Source: LMT's Annual Report

leadership promoting transparency and high ethical standards and policies across the company; prevent bribery and corruption among employees and contractors; programs that help suppliers and sub-contractor's strength management and disclosure on ethical, labor and environmental issues.

Product Impact LMT desires to deliver optimal life-cycle products reducing therefore their costs and improving their reputation among customers. So they intend to achieve \$4bn sales with direct and measurable benefits to energy and infrastructures resiliency; track product failure due to manufacturing process; achieve \$700m in corporate cost and supply chain efficiencies; generate \$1bn of life-cycle cost reductions from manufactured products to the use of resources and impacts in the environment.

Employee Wellbeing LMT wants to create a high performance, inclusive workplace culture that engages employees and creates rewarding career path for the workforce. Promotion of an innovative and inclusive workforce contributes to Lockheed Martin's high-performance and enhances the organizations' competitive advantage. Corresponding sustainability priorities include: workplace safety and wellness, talent recruitment, talent development, and diversity and inclusion.

Resource Efficiency Increasing business resiliency and accelerating carbon reduction through improved energy and water management, materials conservation, and increased renewable energy use, it is what LMT desires to achieve. The company intends to reduce energy use by 25%, emissions by 35% and water use by 30%.

Information Security In a time of near-constant security challenges, Lockheed Martin's ability to protect intellectual property and sensitive employee personal information is integral to mission success and trust. Corresponding sustainability priorities include customer information systems and network security, employee privacy and data protection.

3. Management and Corporate Governance

Mr. James Taiclet is the president and chief executive officer of Lockheed Martin Corporation. He joined the company in this role in June 2020 and has been a director on the Lockheed Martin board of directors since January 2018. Mr. Taiclet was appointed President and Chief Operating Officer in September 2001; named Chief Executive Officer in October 2003; and selected as Chairman of the Board in February 2004. Previously, Mr. Taiclet served as President of Honeywell Aerospace Services.

Board Structure and remuneration policy

LMT believes good governance is integral to achieving long-term stockholder value. The Board's primary role is to oversee management and represent the interests of stockholders. Directors are expected to attend Board meetings, the meetings of the committees on which they serve and the annual meeting of stockholders. However, all directors are independent under applicable NYSE listing standards. The Governance Committee annually reviews the independence of all directors and reports its findings to the full Board, assuring that there is not conflict of interests.

LMT follows an Anglo-Saxon model and the board of directors is composed by 12 members, being 11 of them independent with no previous relationship with the company. The Board has five standing committees: Audit, Classified Business and Security (CBS Committee), Executive, Management Development and Compensation (Compensation Committee) and Nominating and Corporate Governance (Governance Committee).

The Audit Committee assists the Board in fulfilling its oversight responsibilities relating to the financial condition of the Corporation, the integrity of the financial



Figure 12- Countries with F-35 program

Source: LMT Report



Figure 13- LMT sustainability management plan

Source: LMT's sustainability report

	Tier 1 Factors	Tier 2 Factors
Business Integrity Business Integrity calls for responsible leadership, integrity, and ethical conduct in all aspects of our business.	<ul style="list-style-type: none"> • Anti-Bribery and Corruption Controls • Ethical Governance and Leadership • Responsible Sales • Supplier Conduct 	<ul style="list-style-type: none"> • Conflict Minerals • Human and Labor Rights • Supplier Diversity
Product Impact Product Impact aligns our customers' needs, our product and service portfolio, and global trends.	<ul style="list-style-type: none"> • Counterfeit Parts Prevention • Global Infrastructure Needs • Product Safety • Total Cost of Ownership 	<ul style="list-style-type: none"> • Product Eco-Innovation
Employee Wellbeing Employee Wellbeing reflects our support for people throughout the employee journey and fosters a high-performance, inclusive workplace.	<ul style="list-style-type: none"> • Diversity and Inclusion • Talent Development • Talent Recruitment • Workplace Safety and Wellness 	<ul style="list-style-type: none"> • STEM Education
Resource Efficiency Resource Efficiency harmonizes business resiliency and accelerates carbon reduction through improved energy and water management, materials conservation, and increased renewable energy use.	<ul style="list-style-type: none"> • Energy and Carbon Management 	<ul style="list-style-type: none"> • Hazardous Materials and Chemicals Management • Remediation
Information Security Information Security emphasizes management and measurement of employee and customer data privacy and security.	<ul style="list-style-type: none"> • Customer Information Systems and Network Security • Employee Privacy and Data Protection • Sensitive Data and Intellectual Property 	

Figure 14- LMT strategic plan detailed

Source: LMT's sustainability report

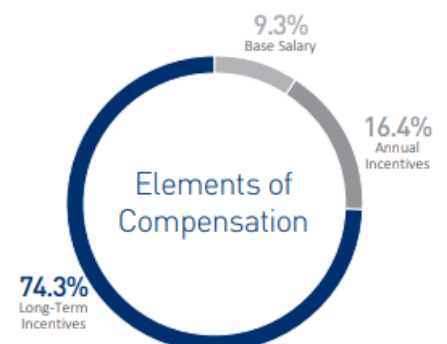


Figure 15- CEO target compensation

Source: LMT's proxy statement

statements and compliance with legal and regulatory requirements. **The CBS Committee** assists the Board in fulfilling its oversight responsibilities relating to the Corporation’s classified business activities and the security of personnel, facilities and data. **The Compensation Committee** reviews and approves the corporate goals and objectives relevant to the compensation of the CEO and other elected officers. **The Governance Committee** develops and implements policies and practices relating to corporate governance, including our Governance Guidelines.

The remuneration policy is mixed. The board members receive a fixed-based salary and, consonant the company performance they receive a variable “bonus” (annual incentive+ long-term incentives). The CEO total salary was only 9.3% fixed base-salary, 16.4% annual incentive and 74.3% long-term incentives (50% Performance Stock Units (PSU), 30% Restricted Stocks Unit (RSU) and 20% cash based long term Incentive Performance (LTIP).

LMT believes good governance is integral to achieving long-term stockholder value. The Board’s primary role is to oversee management and represent the interests of stockholders. Directors are expected to attend Board meetings, the meetings of the committees on which they serve and the annual meeting of stockholders

Shareholders structure | 80.38% of the LMT’s outstanding shares are owned by institutional investors, being the biggest one the State Street Corporation with 15% of the shares outstanding. Lockheed Martin Corporation insiders own under 1% of the company.

4. Industry Overview

Defense Sector | The defense sector has continued its growth in 2019 as security threats have intensified, requiring governments worldwide to continue increasing their defense budgets. Defense expenditure is expected to grow 3.5% in 2020 to reach an estimated \$1.9trn trillion as governments worldwide continue to modernize and recapitalize their militaries. The uncertainty and sustained complexity of the international security environment worldwide is likely to boost global defense spending over the next five years. Global defense spending is expected to grow at a CAGR of about 3% over the 2019–2023 period to reach \$2.1trn by 2023.

Asia

China | China is the second-largest defense spending nation after the United States, with a 14% share in global defense spending. However, China’s 2019 defense spending growth, at 7.5% year over year to \$261 billion, is lower than the 8.1% growth in 2018 and much below the double-digit increases in prior years.

India | India is increasing its defense spending, with a defense budget of \$71bn for 2019–2020, up 9.3% compared to 2018FY. From 2020 to 2025, India plans to spend \$130trn to modernize armed forces and strengthen combat capabilities.

Japan | Japan announced a defense budget of \$48bn for 2019–2020, increasing 1.2% relatively to 2018, marking the eighth consecutive annual increase; however, it remained below 1% of GDP.

Middle East | Defense spending declined 1.9 percent in 2018 to US\$145 billion, despite high levels of arms imports and ongoing military intervention in Yemen by Saudi Arabia, which is the top military spender in the region. Six out of the top ten countries with the highest military expenditure as a percentage of GDP are in the Middle East—Saudi Arabia, Oman, Kuwait, Lebanon, Jordan, and Israel.

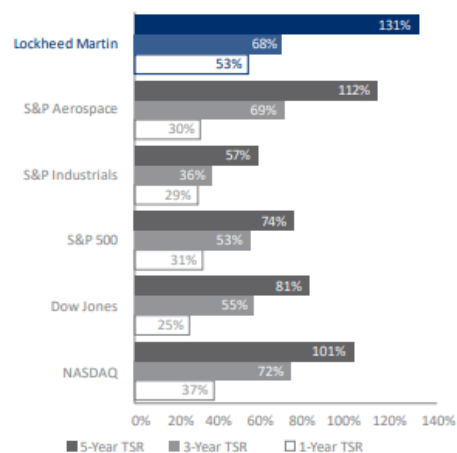


Figure 16- Compensation Based Performance
Source: LMT’s proxy statement

	Equities	%
SSgA Funds Management, Inc.	42,435,377	15.2%
The Vanguard Group, Inc.	21,069,095	7.54%
Capital Research & Management Co.	16,595,630	5.94%
Putnam LLC	14,876,263	5.32%
Wellington Management Co. LLP	10,758,413	3.85%
Capital Research & Management Co.	8,338,200	2.98%
BlackRock Fund Advisors	5,967,810	2.13%
TCI Fund Management Ltd.	5,696,062	2.04%
Managed Account Advisors LLC	4,746,638	1.70%
Geode Capital Management LLC	4,094,244	1.46%

Table 2- Shareholder structure
Source: Bloomberg

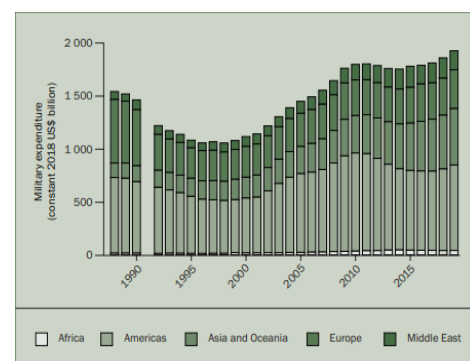


Figure 17- Global defense expenditure evolution

Source: SIPRI Fact sheet

Military Expenditure 2019

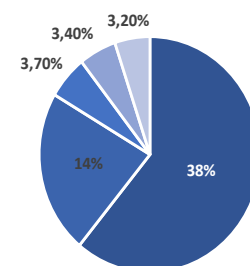


Figure 18- Share of Military Expenditure 2019
Source: SIPRI Database

Europe

In Europe, NATO members, are reportedly targeting to increase defense spending as the United States constantly encourages NATO countries to increase military spending to 2% of GDP.

France France allocated \$50bn to the 2019 defense budget, which is a 4.7% year-over-year increase and 1.8% of its GDP. France plans to boost its defense spending by 40 percent by 2025 as it aims to meet the NATO target of 2% of GDP spent on defense.

Germany Germany increased the 2019 defense budget by 10 % over 2018 to \$49bn, the largest increase since the Cold War. The country expects to further increase its budget to \$56.4bn for 2020, however, falling short of the 2 percent NATO target.

United Kingdom (UK) The UK's defense budget of \$49bn stood slightly above 2% of GDP and has declined from about 4% at the end of the Cold War era. However, the UK's defense committee has been recommending increasing the budget to 3% of GDP to strengthen the country's armed forces.

Russia Russia's defense spending decreased 3.5% in 2019 to \$65bn, which led to Russia drop out of the top five defense-spending nations for the first time since 2006. Defense spending as a percentage of GDP was at 3.9% in 2019.

Covid-19

NATO defense spending NATO members have boosted defense spending over the past few years yet plans for even more expansion may not be realized as governments wrestle with economic risks and funding stimulus program, due to covid 19 pandemic. Since 2014, the NATO members are committed to improve their contributions and most of them already fulfil the guideline for 2% of their countries GDP, however European Nations and Canada spend less than 2% of GDP collectively, well below the U. S's 3.2%.



Figure 19- Changes in military expenditure, 2018-2019

Source: SIPRI Fact sheet

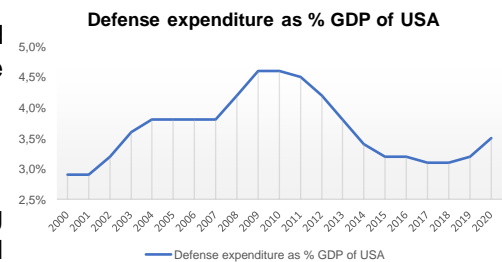


Figure 20-USA defense expenditure, 2000-2020

Source: SIPRI Database

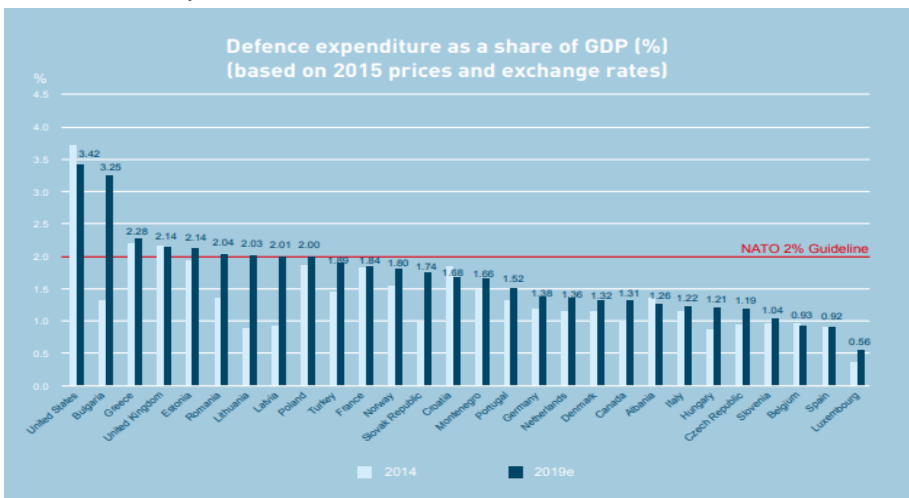


Figure 23-Nato countries defense expenditure as share of GDP Source: NATO report

Economic outlook The 2020 coronavirus pandemic has brought about widespread economic disruption. To mitigate the contagion, governments, taken measures to limit in-person interactions. Collectively referred to as social distancing, those measures include reducing social activities and travel, curtailing the activity of schools and business, and working from home. The pandemic and associated social distancing ended the longest economic expansion and triggered the deepest downturn in output and employment since World War II. The global GDP will decrease abruptly, around 5%, and the deficit of the governments will be aggravated. This will force governments to rearrange the budgets for the coming years, and, probably, in the short term, areas like defense will be put aside for areas like health and social measures related.

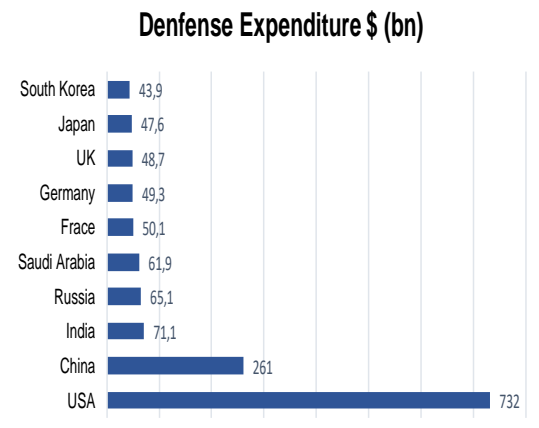


Figure 21-Top 10 countries in defense expenditure - 2019

Source: SIPRI Database

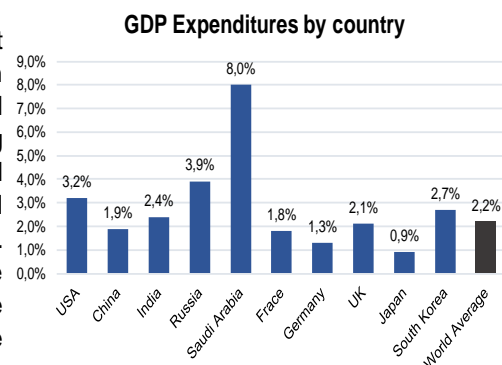


Figure 22- Defense expenditure by country as share of GDP

Source: SIPRI Database

American Elections | The U.S. defense spending faces pressure in the coming years regardless of who wins the presidential election, given the growing deficits and the need to repair the economy. The re-election of President Donald Trump could be a best-case scenario to the industry. But even if Mr. Biden wins the election, it may not result in deep cuts in the budget in the long run. Even if Mr. Biden is more prone to social efforts, geopolitics risk and the need to support domestic manufacturing remains.

PESTEL Analysis

Political / Economic | The Aerospace & Defense industry is directly linked to political tensions around the world, as well as, economic growth. Most of the companies in the industry have a global presence, given that they are exposed geopolitics and economic conditions.

In addition, geopolitical events, trade wars, diplomatic tensions, can influence defense expenditures worldwide. On the other hand, a decelerating economy can affect demand in Aerospace and Defense industry, as countries will decrease their defense spends.

Another trend in the industry, that will impact the years to come, is the demand for defense equipment's and devices, which is increasing, as well as the demand for space technology in economies like China and India will play a huge role in the future of the A&D industry.

Social | In the A&D industry, social issues can also be related with data security. Companies in the industry have access to highly classified information. Furthermore, with the increase of technological parts in aircrafts, companies become susceptible targets to cyber-attacks.

As technology improves, global security data threats accelerate. Due to this, cybersecurity concerns increase and the industry in general must be well positioned to deal with cyber-attacks, protecting themselves, employees, information and their customers.

Technological | For Aerospace and Defense, R&D plays a major role in the industry, being extremely important. In terms of innovation, it is expected as a future trend for R&D investments to increase leading to new innovative technologies, upgraded processes, safety improvements and, considering environmental concerns, new fuel-efficient engines/mechanisms.

Environmental | The A&D industry depends on energy as a key production input. The tendency nowadays is to give more importance to the environment and to have a sustainable performance. However, this industry is still one of the few that create more environmental externalities, producing greenhouse gases, soil and water pollution that can have ecological impacts. As a result, regulations are getting stricter, leading companies to handle the risk around hazardous waste and CO₂ production, reducing the impact of their operations in the environment.

Legal | Intellectual Property can be a key factor, along with others, to succeed in the market, protecting their new innovative aircraft components, software, new devices, manufacturing or assemble procedures that will ultimately make companies more competitive and efficient.

Evolution of Defense Expenditures

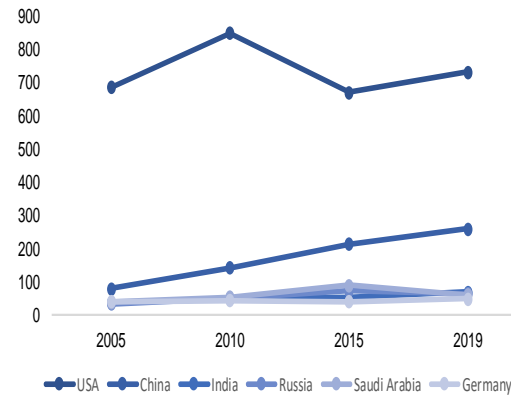


Figure 25- Major players defense expenditure evolution

Source: SIPRI Database

GDP Evolution

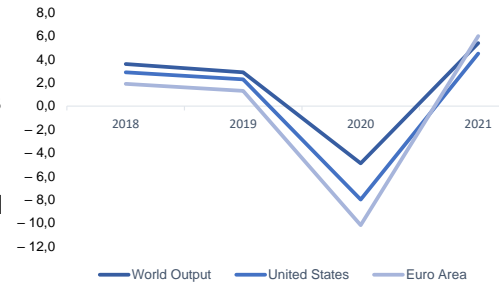


Figure 25-GDP forecasted

Source: IMF

IMF Scenarios GDP

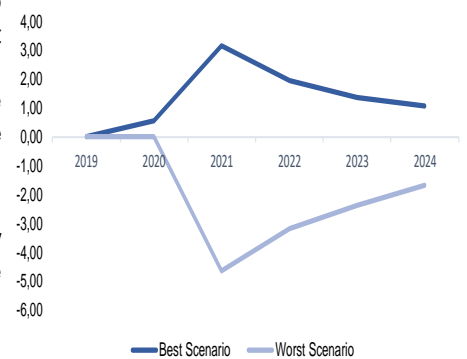


Figure 26- GDP forecasted - Best and Worst scenario

Source: IMF

Demand drivers

Geopolitical and Economic Events Geopolitical events have a positive impact in the demand of this industry, as the existence of conflicts between the different governments will drive the military needs of those countries. An increase of the defense spending from one major economy, will lead to a response from other economies, increasing their defense spending as well.

An economic instability has the opposite effect on demand, it will have a negative impact on it. If world's economies are facing difficulties, governments will have to reduce budgets and with that reduce the defense budget.

Innovation Companies must gain some market over their competitors through creating innovative products that meet their customer's needs. Developing newer and safer IT systems, in order to combat the risks involved with cybersecurity, or creating new military equipment are some examples of what companies can do. It is through this Innovation that the players of this industry will gain more contracts with their customers in the future.

Supply Drivers

M&A activity One of the main barriers for the growth of this industry is the supply chain. Companies need to improve their production rates, but they are faced with the problem that their suppliers are having trouble meeting the demanding needs of the industry. The rise in M&A activity in the industry, mainly in the supply chain, is allowing some vertical integration to happen, and, therefore, creating bigger suppliers with bigger capacity to meet the industry desired production rates.

Porter's 5 Forces Framework

Threat of New Entrants: Medium-Low (2)

Within the A&D industry we consider the threat of new entrants in the market to be Medium-Low. High initial capital requirements, difficulty in managing the supply chain, establishing a track record, inflow of orders and getting the certifications needed are just some of the barriers that companies entering the market will have to face. However, the fact is that there are companies, namely Chinese and Russian, that are managing to enter the market, despite all those initial problems.

Bargaining Power of Suppliers: High (5)

The supply chain and its management are one of the challenges that companies of this industry are facing nowadays, mainly because a ramp up in production can only happen if the suppliers meet the needs of the companies. Several M&As over the past years also enhanced the vertical integration in the supply chain, therefore there are fewer and larger suppliers, giving those suppliers more bargaining power.

Bargaining Power of Buyers: High (5)

Within the defense segment of the industry there is one main customer, the U.S. government, that is also one of the regulators of this industry. Furthermore, the fact that most of the revenues come from the government, and are, therefore, subject to the yearly budget, gives this buyer a big power over the manufacturers.

Threat of Substitute Products: Medium-Low (2)

Due to the high barriers to entry the industry, the fact that the products the companies in the industry produce take long periods of time to develop and complete, there are no feasible substitute products.

Rivalry Among Competitors: Medium-high (4)

In the defense segment, rivalry is also high, but for different reasons. Defense companies immensely depend on their ability to land contracts with the government, and it is done through bidding wars, which increase the competition between the major players.

Year	Acquisition	Value
2012	Chandler/May Procerus Tech, Inc	\$259m
2013	Amor Group	\$269
2014	Systems Made Simple Zeta Associates Industrial Defender, Inc	\$898m
2015	Sikorsky Aircraft	\$9bn

Table 3- LMT last acquisitions

Source: Coompany's Data

Porter's 5 forces

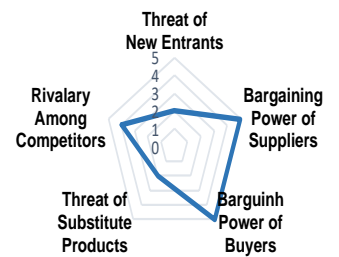


Figure 27- Porter's 5 forces

Source: Author

	Revenues(bn)	EBITDA Margin(%)
Boeing Co (BA)	76	-
Raytheon Tech	77	14,6%
Northrop Grumman	33,8	16,5%
General Dynamics	39,4	13,4%
L3Harris Tech	17	14,9%

Figure 28- LMT peers

Source: Bloomberg

A&D Industry

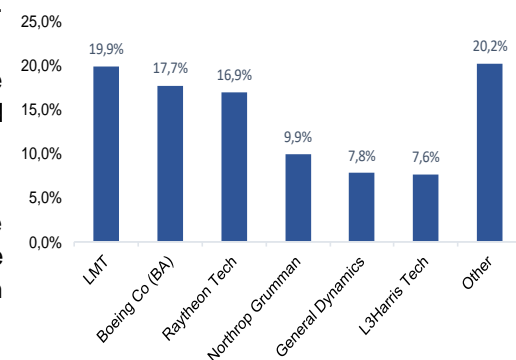


Figure 29- Aerospace and Defense market share by company

Source: Bloomberg

Peers

The peer group is composed by 4 big companies that operate in the Aerospace & Defense Industry. Besides LMT, there are the Northrup Group, General Dynamics, Boeing Co and Raytheon.

Analyze Swot



Figure 30- SWOT analysis Source: Author

Taget Price all Models	2021YE (\$)	Upside
FCFF	480.05	23%
FCFE	451.42	16%
DDM	464.58	19%
APV	485.91	24%
EV/EBITDA	397	2%
EV/Revenues	423	8%
Average	450.32	15%
Price14 out 20	390.72	

Table 4- LMT's target price by model Source: Author

5. Investment Summary

Our recommendation on Lockheed Martin Corporation is to **BUY** with a price target of \$480.05/sh 2021YE based on a DCF model with a Free Cash Flow to the Firm (FCFF), with a 37% upside potential from October 14th, 2020, closing price of \$390.72.

Key drivers for our recommendations

Covid-19 risks| The pandemic covid-19 has an impact in all companies, and LMT is no exception. The International Monetary Fund (IMF) forecasts a huge decline in GDP for 2020, approximately 8% for the US GDP. However, they expect the recovery to be faster than in previous crises (2008), taking almost two years to return to the 2019 GDP, and then growing almost 4.5% YoY.

Supply Chain Risk| With the pandemic most of the factories and facilities are closed, the social distancing measures has shifted the way that companies work and they have to adapt. These events can damage the supply chain by delaying the delivery of components or the development of a new feature. LMT is assuring that normal function of all activities and the priority is to pay their suppliers in advance, in order to allow them to be able to conclude and deliver in time their orders. The US government and the defense department are anticipating payments, to help all LMT fulfill its obligations.

Backlog| The backlog of the company is enough to support the company's activity for 3-4 years even if contracts with the government fail or the defense budget is reduced. In 2019FY, the backlog was \$144.0 bn compared with \$130.5 billion 2018FY, representing an increase of almost 10%.

US Government| LMT depend heavily on contracts with the US Government. Almost 71% of the company's net total sales derive from the US Government, including 61% form de Department of Defense (DoD). Those contracts are conditioned upon the continuing availability of funds and approval by the congress. The president's FY 2020 budget request for defense was \$718bn, representing 2.8% real growth over the FY 2019 enacted budget. For the 2021 FY the President requested \$740.5bn, being \$705bn for the DoD. The DoD five-year program settles at \$747bn in FY 2024.

F-35 program showing the way| The F-35 program primarily consists of production contracts, sustainment activities, and new development efforts. Production of the aircraft is expected to continue for many years given the U.S. Government's current inventory objective of 2,456 aircraft for the U.S. Air Force, U.S. Marine Corps, and other international partners. The F-35 program

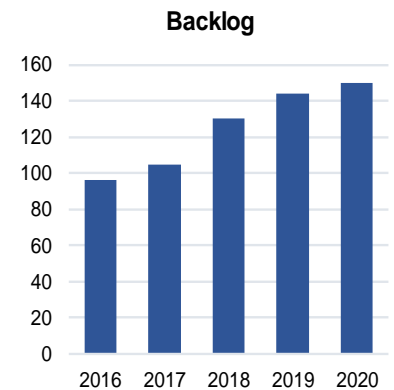


Figure 31- LMT's backlog Source: LMT's report

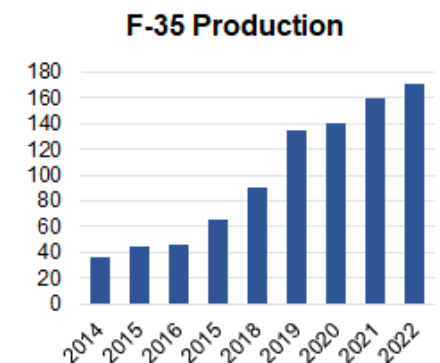


Figure 32-F-35 jets produced Source: Company Data

represented 27% of total net sales in 2019YE and is expected to represent a higher percentage of our sales in future years. In 2019, LMT delivered 134 aircraft, resulting in total deliveries of 491 production aircraft since program started. The company has a backlog of 374 aircrafts, that intends to deliver within the next 12 to 24 months.

Foreign Sales risk | The risk of lower international sales as result of possible sanctions that U.S government could set for other countries like, for instance Turkey, could impact significantly the revenues of LMT as well disrupt the operational chain. On other hand, the potentially lower military spending, could be the recipe for lower profit margins, since overseas defense sales are typically higher-margin than domestic ones. As LMT has approximately 30% of revenues as overseas revenues these factors can be materially significant for the company.

Geopolitical tensions | Being LMT mainly a company specialized in defense, it is of paramount importance to understand the dynamics around the world relatively to this matter. In 2019, the global military expenditure has been \$1917bn, the highest level since 1988, representing almost 2.2 percent of the global GDP. With tensions in the middle east and countries like China, Russia and India increasing their defense budget, it seems, that in the long run, the defense and military expense will increase all over the world.

Valuation | We used a DCF model based on FCFF by segments to achieve a price target of \$480,05/sh. To complement our analysis, we run alternative valuation methods, all of them yielding price targets with upside. First, a FCFE approach with upside to \$451,72/sh. Also, the DDM because of the company's focus on the dividend policy. The dividend approach points to a price target of \$464.58/sh. Also, to support our analysis, we used the APV model which gave us a target price of \$485.91/sh. As relative valuation we used the multiple valuation that holds our recommendation as a buy.

Forecast Analysis

Revenues | Total Revenue is the sum between the four segments: Aeronautics, MFC, RMS and Space.

In the **aeronautics** segments, we expect for 2020F an increase of 8% YoY due to a rise in the volume on production of the F-35 program. Until 2024F, we forecasted an increase of 6.5% representing the compound annual growth rate (CAGR) between 2017FY-2019FY. In the **MFC** segments, we expect for 2020F an increase of 12% YoY due to a high volume in PAC-3 and THAAD program. During 2021-2024F we expect a slightly decrease in sales to 11.6% YoY. In the **RMS** segment, it expected to grow 5% according to the company target to 2020FY due to the Sikorsky Helicopter Program. For the remaining years forecasted we assume that the growth YoY will be 3.5%, representing the CAGR between 2017FY-2019FY. Relatively to the **Space** segment we assume the company will increase their sales by 5% compared to the previous year due driven by the hypersonic products. For 2021F-2024F we assume that the company will increase by 4.2% YoY, slightly below the 4.5% GDP growth for that same period.

Regarding the sales growth we took a conservative approach due to the unknown impact of the covid-19 pandemic. The global GDP will decrease, and the IMF estimates for the 2020 a drop of 8% in the USD GDP, returning to the level prior Covid-19 only in 2022. Another fact to be counted is, since around 71% of the revenue of the company comes from contracts with the US Government, a decrease in the DoD budget will have some impact in the company's operations. And, as we are taking a conservative approach, we assume that this one will decrease in the next year reducing the pace of growing of the company.

Costs of Sales | In the past 3 years, the Cost of Sales accounted for an average of 87% of Revenues. In this item are costs related to cost of sales, for both products and services, consist of materials, labor, subcontracting costs, an allocation of indirect costs. So, we predict that the costs will remain 87% of the

F-35 Unit Cost

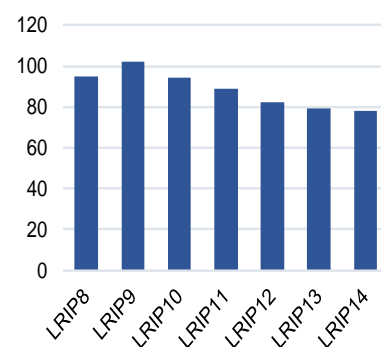


Figure 33- F-35 Unit Cost

Source: Company Data

Total Sales

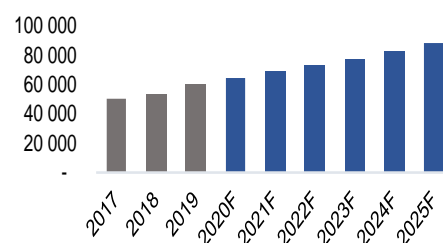


Figure 34- Forecast of Total sales

Source: Author estimates

Segment Sales

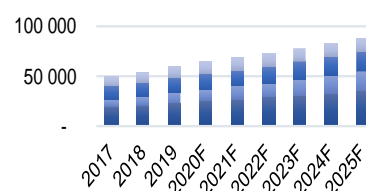


Figure 36- Forecasted Sales by Segment

Source: Author estimates

Cost of Sales

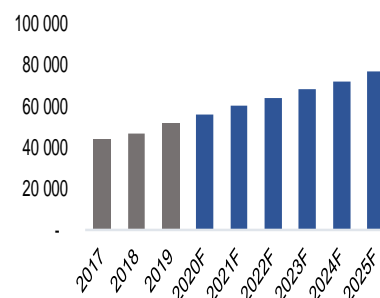


Figure 35- Cost of Sales Forecasted

Source: Author estimates

sales for the period 2020F-2024F, except for 2021F where it will be 89% of the revenues and 2022F where it will be 88% of revenues. We assume that in these years the costs will be higher due to the late impact of the Covid-19 pandemic: keeping the supply chain working at full speed and probably rearrange the terms of the individual contracts.

Debt We do not expect the company to issue debt in the forecasted period due to their strong operational cash flow. In 2019FY the total debt was \$12.6bn and at the end of 2024F we expect it to be \$8.8bn, decreasing about 30%. This reduction in the total debt is due to the schedule payment of the principal of the issued notes. Also, these reductions put the levels debt to 2015YE values, prior to the company emission of \$7.7bn to complete the acquisition of Sikorsky Aircraft Corporation.

Capital expenditures For CAPEX we assume LMT to continue its investments in equipment, facility infrastructures and technology to support all new and existing programs across all business segment. For the forecasted period we expect Capex to growth at the same pace as the revenue do.

Dividends LMT is committed to return their profits to the shareholders paying dividends in the last 2 years, at a payout ratio of 0.45. For the forecasted period we expect LMT to keep this practice increasing their dividends 10% every year. This represents an average of 55% of pay-out ratio for the 5 years period.

Repurchase Shares LMT is committed to accelerate the repurchase plan so in the last 3 years it spent about \$2bn, \$1.5bn and \$1.2bn, 2017, 2018 and 2019 respectively. For the forecasted period we assume that in each year they will spend \$1bn in share repurchase. This represents an average of 17% of the total net income.

Net working Capital Since we predict that current assets will be higher than current liabilities, we predict a positive variation of NWC.

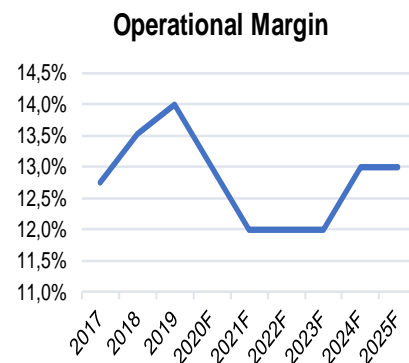


Figure 37- Operational Margin Forecasted

Source: Author estimates

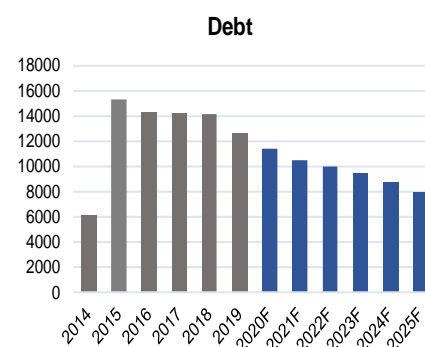


Figure 38- Total debt Forecasted

Source: Author estimates

6. Valuation

Models

The company is evaluated through Discounted Cash Flow Method (DCF), Dividend Discount Model (DDM) and Adjusted Present Value (APV).

DCF Method

For this method we used two approaches: **Free Cash Flow to the Firm (FCFF)** and **Free Cash Flow to the Equity (FCFE)**.

The **FCFF** measures the company's profitability after all expenses and reinvestments, and can be calculated using the formula below:

$$FCFF = EBIT(1-Tax) + Depreciations and Amortizations - Changes in NWC - CAPEX$$

FCFF USD	2020F	2021F	2022F	2023F	2024F	2025F	Terminal
EBIT*(1-Tc)	6 736	6 618	7 037	7 488	8 627	9 195	
D&A	1 400	1 489	1 586	1 689	1 801	1 922	
ΔNWC	910	664	238	6	221	45	
CAPEX	1 541	1 640	1 746	1 860	1 983	2 116	
FCFF			6 638	7 311	8 224	8 956	9 010

Table 5- DCF- FreeCash Flow to the Firm Source: Author estimates

The **FCFE** is a measure of how much cash is available to the equity shareholders of a company after all expenses, reinvestment, and debt are paid. FCFE is a measure of equity capital usage.

$$FCFE = Net Income + Depreciations and amortizations - CAPEX - Changes in NWC + Net Borrowing$$

	2020F	2021F	2022F	2023F	2024F	2025F	Terminal Value
Net Income	5 555	5 491	5 894	6 317	7 361	7 900	
D&A	1399,91	1489,36	1585,64	1689,35	1801,16	1921,79	
CAPEX	1541,34	1639,83	1745,84	1860,03	1983,13	2115,95	
DNWC	910	664	238	6	221	45	
Net borrowing	-1 250	-900	-500	-500	-750	-750	
FCFE	3 253,25	3 776,42	4 995,26	5 639,90	6 208,16	6 910,90	6 952,36
Re	6,77%	6,77%	6,77%	6,77%	6,77%	6,77%	

Table 6- DCF - Free Cash Flow to the Equity Source: Author estimates

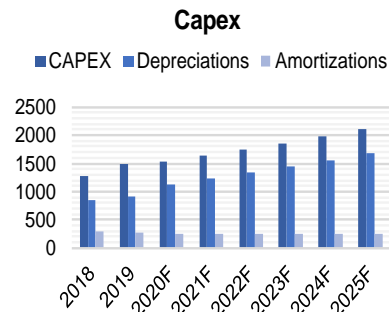


Figure 39- Capital Expenditures Forecasted

Source: Author estimates

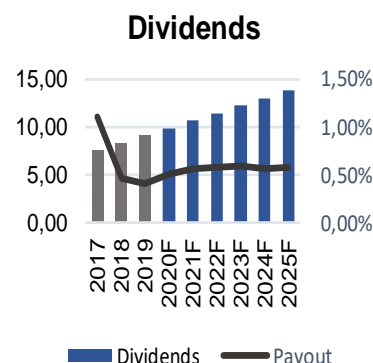


Figure 40- Dividends Forecasted

Source: Author estimates

DCF Assumptions

The discounted rate applied to the future cash flow is the one that results from LMT Weighted Average Cost of Capital (WACC). The WACC is the rate that a company is expected to pay on average to all its security holders to finance its assets. This rate value was different every year due to changes in company's capital structure. The WACC rate was estimated using the following formula:

$$WACC = k_e * (E / (E+D)) + k_d * (D / (E+D)) * (1 - Tax)$$

k_e = Cost of Equity

k_d = Cost of Debt

E = Equity

D = Debt

Tax = Marginal Tax Rate

Wacc Assumptions

Cost of Debt (kd), is the effective rate that a company pays on its Debt. We reached the cost of debt by dividing total interest expense by total Debt. For 2021F we computed the value of 5% as the effective cost of debt, which is slightly above the cost of debt reached by the **gurufocus** 4.9%.

The marginal tax rate (tax), we considered to be the United States' corporate tax rate 21%.

The cost of equity (k_e), is the rate of return that stakeholders require for a company. For 2021F, we predict a cost of equity of 6.76%. It was calculated based on **Capital Asset Pricing Model (CAPM)**, which is a model that describes the relationship between systemic risk and expected return for assets. We do not include the Country Risk premium because it is null for United State of America.

$$k_e = R_f + B_L * MRP$$

k_e = Cost of Equity

R_f = Risk free rate

B_L = Beta levered

MRP = Market Risk Premium

For Risk Free Rate (Rf), we use the 10y US Treasury Bond, which is established as a reasonable proxy for a risk-free rate for an organization with its operations mainly in the US. We use for Risk Free Rate the value of 0.75%.

The **levered Beta** was estimated using the following formula:

$$B_L = B_u * ((1 + D/E) * (1 - Tax))$$

For the **Beta Unlevered** we used the Aswath Damodaran's calculation as in September 2020 of 0.85.

For the **Terminal Value (TV)**, we follow the Perpetuity Growth Model approach. We computed it assuming a **Perpetuity WACC of 6.48%**, and a **Perpetual Growth Rate (g) of 0.6%**, which is supported by our computation of reinvestment growth rate. (Appendix 13)

$$TV = (FCFF * (1 + g)) / (WACC - g)$$

$$TV = (FCFE * (1 + g)) / (k_e - g)$$

When using **DCF method based on the FCFF**, our recommendation is to **BUY**, reaching a target price of \$480,05/sh for 2021 YE, with an upside potential of 23%. When using the same method **based on the FCFE**, our recommendation is still a **BUY**, reaching the target price of \$451,72 with an upside potential of 16%.

Share Repurchase

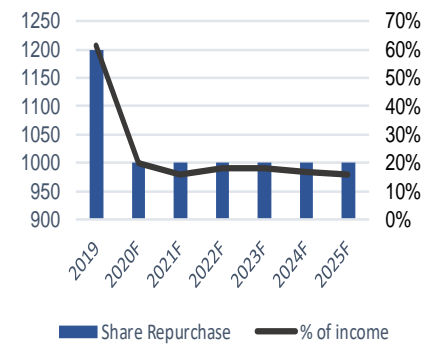


Figure 41- Share Repurchase Forecasted

Source: Author estimates

NWC

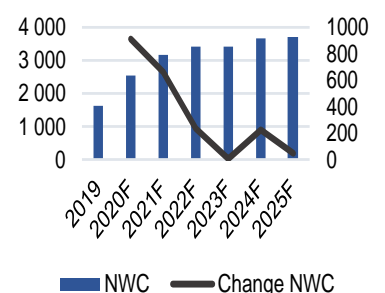


Figure 42-Net Working Capital Forecasted

Source: Author estimates

Risk free rate	0,75%
Unlevered beta	0,85
Market Risk Premium	6,01%
Cost of debt	5,00%
Marginal tax rate	21%
Levered beta	1,00

Table 7- WACC Assumptions

Source: Author estimates

Price Target (FCFF)	2021F
Enterprise Value	142505
Net Debt	8092
Equity Value	134414
No. of Outstanding Shares	280
Equity Value per Share	480,05
Price at 14 Oct 2020	390,72
Upside Potential	23%

Table 8- Price Target using FCFF

Source: Author estimates

Price Target (FCFE)	2021F
Equity Value	126397
No. of Outstanding Shares	280
Equity Value per Share	451,42
Price at 14 Oct 2020	390,72
Upside Potential	16%

Table 9- Price Target using FCFE

Source: Author estimates

DDM Model

The dividend discount model (DDM) is a quantitative method used for predicting the price of a company's stock based on the theory that its present-day price is worth the sum of all of its future dividend payments when discounted back to their present value.

$$TV = \text{Dividends Expected} / (\text{Ke} - \text{dividend growth})$$

Dividend Discount Model	2019E	2020F	2021F	2022F	2023F	2024F	2025F	Terminal Value
Dividends Paid	2 556	2 812	3 093	3 402	3 742	4 116	4 528	4 528
PV of Dividends		18 200	16 430	14 239	11 570	8 358	4 528	
PV of Terminal Value		107 209	113 652	120 483	127 724	135 400	143 538	

Table 11- Dividend Discount Model Source: Author estimates

As **perpetual dividend growth** we assume a value of 3,5% representing the expect GDP growth for the world in the long term.

When using the DDM Model we reached a target price of \$464,58/sh for 2021YE, representing an upside potential of 18,9%.

APV model

When using the **Adjusted Present Value (APV)**, we reached a target price of \$485.91/sh for 2021FY, representing an upside potential of 24%. With this method we have in consideration the impact of the debt oscillations and tax shields. As perpetual debt growth we assume 0.6% since we expect the capital structure of the company to stay stable for a long period of time and it represents the reinvestment growth rate

APV	2020F	2021F	2022F	2023F	2024F	2025F	TV
FCFF	5 685	5 803	6 638	7 311	8 224	8 956	9 010
Cumulative PV	36 487	32 624	28 408	23 058	16 680	8 956	
Discounted TV	117 786	124 756	132 139	139 959	148 241	157 014	166 306
PV							
Interest Paid	-601	-548	-513	-488	-456	-419	-7 772
ITS	-126	-115	-108	-102	-96	-88	-1 632
PV ITS (cumulative)	-1 648	-1 582	-1 525	-1 473	-1 425	-1 382	-1 345

Table 12- APV Model Source: Author estimates

Multiples valuation

To acquire the target price by the multiple's valuation, we used the multiples Enterprise Value/EBITDA (EV/EBITDA), Enterprise Value/Revenue (EV/REV).

For **EV/EBITDA** we reached a price target of \$397,4/sh for 2021YE representing an upside potential of 2% upside.

For **EV/REV** the target price is \$422/sh for 2021YE, representing an upside potential of 8% (Appendix 14)

7. Financial Analysis

Current Ratio During the forecasted period, LMT seems to be less liquid than its peers. Between 2020-2025, the average current ratio of the company is 1.48 which is below the industry average of 1.55. However, in 2024FY and 2025FY the current ratio will be higher than this average, being 1.57 and 1.69.

EBIT Margin Since 2017 to 2019 the EBIT Margin increased about 1%, due to higher volume of sales in the F-35 program and higher margins in the MFC segment. However, during the forecasted period this margin decreased due to the slower growth of revenue and higher costs. The EBIT Margin recovers in 2025FY.

Debt-to-Equity In 2018FY the debt-to-equity ratio was 9.73 and in 2019FY it was only 3.99 due to a repayment of \$1.5bn in debt and the equity doubling in value due to a good performance during that period. During that period, we assume the company will continue the same politics, so, at 2025FY, the debt-to-

Terminal Growth Rate	3,50%
Dividends	
Terminal Cost of Equity	6,77%
PV of Dividends	16 429,7
PV Terminal Value	113 652,5
Equity Value	130 082,2
Number of Shares Outstanding	280
Equity Value per Share	464,58
Upside Potencial	18,90%

Table 10- Price target using DDM Model

Source: Author estimates

Price target	
Enterprise Value	137 326
Adjustments	8 092
Equity Value	145 418
PV (ITS)	-9 362
Equity Value + PV (ITS)	136 056
Shares Outstanding	280.0
Price per Share	485.91
Upside	24%

Table 13- Price target using APV model

Source: Author estimates

	2021FY
EV/EBITDA Peers	12,1
EBITDA LMT	9867
EV LMT	119360
NetDebt	8092
N0. Shares	280
Target Price	397,4
Upside Potencial	2%

Table 14- EV/EBITDA price target

Source: Author estimates

	2021FY
EV/Sales Peers	1,85
Sales LMT	68326
EV LMT	126404
NetDebt	8092
N0. Shares	280
Target Price	422,5
Upside Potencial	8%

Table 15- EV/Sales price target

Source: Author estimates

equity ratio is 1.00. This value is near the target Capital Structure Value where the company it is 50% financed by debt and 50% by equity. At 2021FY, the long-term debt is 8% of revenues, representing a decreasing of 9% compared to 2019FY. Also, the financial expenses will be largely covered by operational activity, with the company's interest cover ratio evolving positively, reaching 27.78 2025YE.

EPS| The company earnings per share is increasing since 2015FY, from \$11.46 per share to \$22.25 in 2019FY. To 2020F, the EPS will decrease around 25%, to \$19.94/sh, due to the lower operational margins described before. From that year forward the EPS will increase being in 2025F \$27,01/sh.

Return on Equity (ROE)| The return-on-equity experienced a sharp decrease from 2018FY to 2019FY, from 348% to 196%. Thereafter, it began to slowly decrease until the end of the valuation period due to the decrease in ROA and Leverage Ratio. Follows the Dupont Analysis:

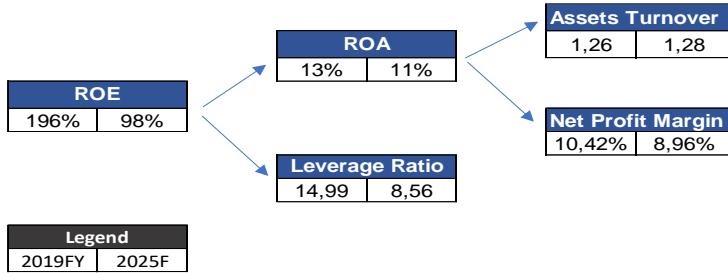


Figure 44- Analyse Dupont

Source: Author estimates

8. Investment Risks

Market & Economic Risk| Governance Dependence (MER1)

In the defense segment, most revenues come from several branches of the U.S. governments and its allies. This represents one of the bigger risks the companies in this industry face, because it makes them hugely dependent on the government's defense budget. LMT depend heavily on contracts with the US Government. Almost 71% of the company's net total sales derive from the US Government, including 61% form de Department of Defense (DoD). So, any delay on the budget approval, budget reduction or release of payments is an uncertainty companies are faced with and have a major impact in companies' financial results.

Market & Economic Risk|Covid-19 economic impact (MER2)

The 2020 coronavirus pandemic has brought about widespread economic disruption. The pandemic and associated social distancing ended the longest economic expansion and triggered the deepest downturn in output and employment since World War II. The global GDP will decrease abruptly, around 5%, and the deficit of the governments will be aggravated, restraining the budget amount allocated to the defense sector. LMT will be affected by it, but due to their strong performance in the recent years, it cannot be so severe as in other sectors.

Political Risk| U.S sanctions (PR1)

The U.S. government always have troubled relationships with their foreign partners, and lately they have imposed international sanctions on products prevenient by China and their relationship with Turkish government have aggravate. This sanction can have huge impact on LMT revenues and mostly their supply chain.

Market & Economic| Exchange rate (MER3)

Since LMT has international sales and subcontractors, it means that it is exposed to the risk of unfavorable exchange rates. These exchange rates have some

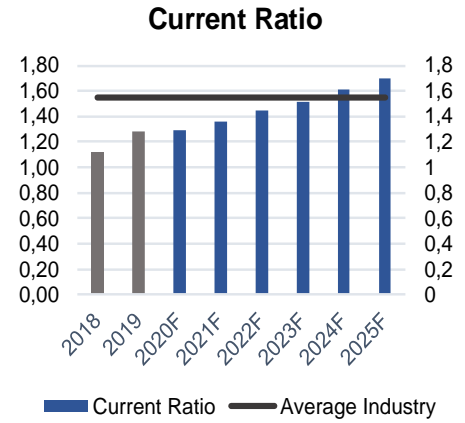


Figure 43- Current Ratio

Source: Author estimates

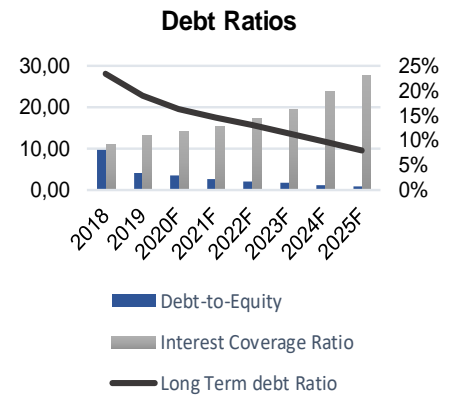


Figure 45- Debt Ratios

Source: Author estimates

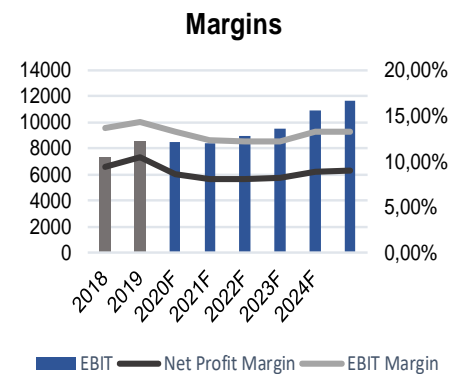


Figure 46- EBIT, Net Profit Margin and Ebit Margin

Source: Author estimates

impact on the company's results. However, this risk has not a big probability of occurrence due to LMT hedging politics.

Market & Economic| Taxation (MER4)

The corporate taxes applied by U.S government has a huge impact on the net results of LMT. Since 2018, the corporate tax is 21% but previous it was 35%, with represents a gain for LMT. However, with current economic situation (big deficits) and American elections, the corporate tax can change again.

Operational Risk| Supply Chain (OR1)

One of the main objectives of companies in this industry is to increase their production rates and reduce costs, but for that to happen their suppliers need to have the needed supplies, if not, the production ramp up cannot occur. Suppliers not being able to deliver the required parts on a bigger scale and on time, while maintaining the same quality and precision, will cause delays and costs overruns. It is one of the major risks companies are facing nowadays and can have a major impact in companies' financial results. Whith the pandemic most of the factories and facilities are closed, the social distancing measures has shifted the way that companies work, and they must adapt. These events can damage the supply chain by delaying the delivery of components or the development of a new feature.

Other relevant risks are detailed in Appendix 11.

Sensitivity Analysis

The calculation of the sensitivity analysis allows us to observe the impact of the main risks of investment in the target price.

The DCF model is highly sensitive to the terminal growth rate and to the terminal WACC. An increase in the WACC percentage would do the price target to decrease. This is not unlikely, as the company may reduce its costs of debt through better sources of financing. On the other hand, an increase in the terminal growth rate would lead to an increase in the target price.

		WACC						
		480,05	3,0%	4,0%	5,0%	6,5%	7,0%	8,0%
terminal growth rate	0,00%	1002,02	739,55	583,53	442,64	408,08	354,40	313,27
	0,10%	1034,39	756,79	593,98	448,36	412,84	357,83	315,81
	0,20%	1069,10	774,95	604,88	454,27	417,75	361,35	318,41
	0,30%	1106,41	794,11	616,25	460,39	422,82	364,98	321,08
	0,40%	1146,60	814,34	628,14	466,71	428,05	368,71	323,82
	0,50%	1190,04	835,76	640,56	473,26	433,45	372,55	326,64
	0,60%	1237,12	858,45	653,57	480,04	439,03	376,50	329,52
	0,70%	1288,32	882,54	667,19	487,07	444,80	380,57	332,49
	0,80%	1344,21	908,14	681,48	494,36	450,76	384,76	335,54
	0,90%	1405,44	935,43	696,48	501,91	456,93	389,07	338,67
	1,00%	1472,83	964,55	712,25	509,76	463,32	393,52	341,88
	1,50%	1945,11	1145,44	804,85	553,89	498,91	417,97	359,38

Table 16- Sensitivity Analysis - Wacc and Terminal Growth Source: Author estimates

We also performed a sensitivity analysis to determined if the DCF model is sensitivity to the tax rate or levered beta. We conclude that the price target is not so sensitive to the change of the tax rate as the levered beta is.

		Tax Rate							
		480,05	18%	20%	21%	22%	24%	26%	28%
levered beta	0,70	702,07	685,45	677,11	668,75	651,97	635,11	618,17	601,15
	0,75	657,88	642,17	634,28	626,38	610,53	594,60	578,60	562,53
	0,80	618,77	603,87	596,39	588,90	573,87	558,78	543,62	528,40
	0,85	583,92	569,75	562,64	555,52	541,23	526,89	512,49	498,03
	0,90	552,69	539,17	532,40	525,61	512,00	498,33	484,61	470,84
	0,95	524,55	511,63	505,16	498,67	485,67	472,62	459,52	446,37
	1,00	498,58	486,23	480,04	473,83	461,40	448,91	436,39	423,83
	1,05	475,90	464,04	458,09	452,14	440,20	428,22	416,20	404,15
	1,10	454,76	443,36	437,64	431,92	420,45	408,94	397,39	385,81
	1,15	435,39	424,41	418,91	413,40	402,36	391,28	380,17	369,03
	1,20	417,58	407,00	401,69	396,38	385,73	375,06	364,35	353,62

Table 17- Sensitivity Analysis - Levered beta and Tax rate Source: Author estimates

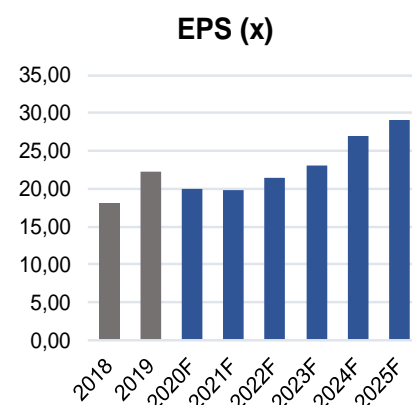


Figure 47- Earning per Share Forecasted

Source: Author estimates

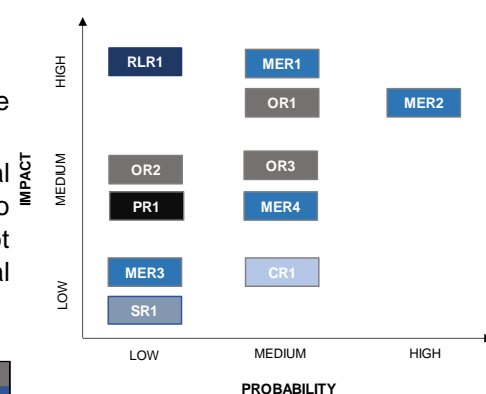


Figure 48- Risk Matrix Source: Author

Monte Carlo Simulation

To complement our analysis, we run a 100.000 trials Monte Carlo Simulation, using the Crystal Ball software. The variables in study were the terminal growth rate (g) and the WACC, and we conclude that the price is very sensitive to both variables, as we have seen in the sensitivity analysis. The results generated a mean price of \$487,03 which is marginally higher than our estimated target price of \$480,05. However, it supports our BUY recommendation.

Monte Carlo Output	
N. of Trials	100 000
Base Price	\$480,05
Mean	\$487,03
Standard Deviation	\$59,49

Table 18- Monte Carlo Output

Source: Author

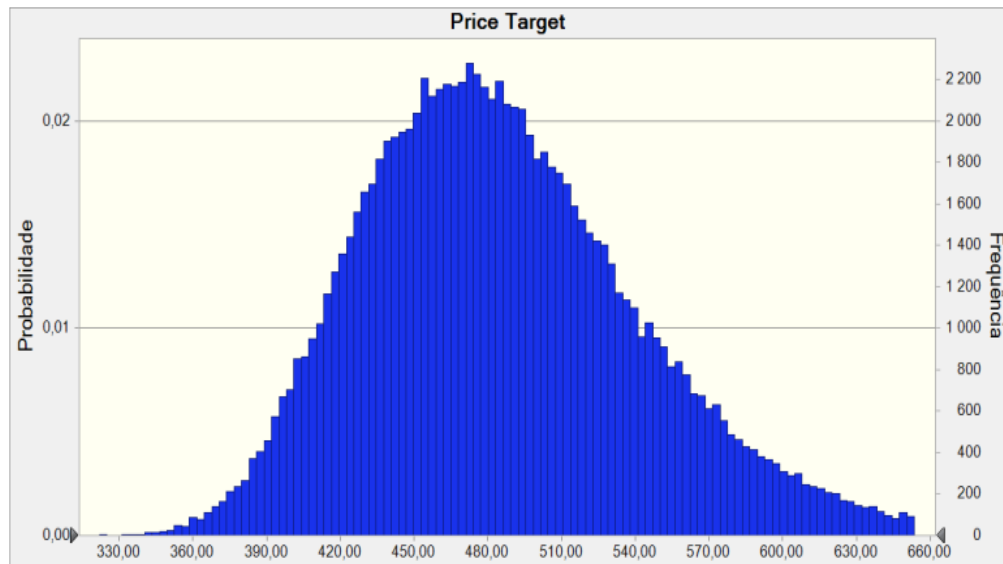


Figure 49- Monte Carlo Simulation

Source: Author

Appendices

Appendix 1: Statement of Financial Position

	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F
Assets	46620	44876	47528	50722	52997	56311	60124	64264	68788
Current Assets	17505	16103	17905	19502	21238	23982	27185	30780	34905
Cash and equivalents	2861	772	1514	1850	2412	3940	5832	8069	10673
Receivables	2265	2444	2337	2890	3075	3273	3488	3718	3967
Contract Assets	7992	9472	9094	10451	11119	11838	12612	13447	14347
Inventories	2878	2997	3619	3741	4025	4286	4566	4813	5135
Other Current Assets	1509	418	531	570	607	646	688	734	783
Property, plant and equipment	5775	6124	6591	6995	7402	7815	8236	8665	9104
Goodwill	10807	10769	10604	10604	10604	10604	10604	10604	10604
Intangible Assets	3797	3494	3213	2950	2694	2441	2191	1944	1699
Deferred income taxes	3156	3208	3319	3818	4062	4324	4607	4809	4849
Other noncurrent assets	5580	5178	6706	6854	6997	7144	7302	7462	7627
Liabilities and Equity									
Current Liabilities	12913	14398	13972	15133	15642	16621	17926	19062	20539
Accounts payable	1467	2402	1281	1375	1463	1558	1660	1770	1888
Contracts liabilities	7028	6491	7054	8121	8640	9198	9800	10448	11148
Salaries, benefits and payrolls taxes	1785	2122	2466	2492	2652	2823	3008	3207	3422
Current maturities of long term debt and commercial paper	750	1500	1250	900	500	500	750	750	1000
Other current liabilities	1883	1883	1921	2244	2388	2542	2708	2887	3081
Long term debt	13513	12604	11404	10504	10004	9504	8754	8004	7004
Accrued pensions liabilities	15703	11410	13234	16009	17032	18133	20003	21827	23725
Other postretirement benefit liabilities	719	704	337	362	385	509	437	744	1234
Other non current liabilities	4548	4311	5410	5555	5985	6622	7153	7842	8252
Total liabilities	47396	43427	44357	47563	49048	51389	54273	57479	60755
Stockholders' Equity									
Common Stock	284	281	280	278,5	277	275,5	274	272,5	271
Retained earnings	11405	15434	18401	20819	22281	23370	24522	25722	27555
Accumulated other comprehensive loss	-12539	-14321	-15554	-17982	-18653	-18768	-18988	-19253	-19837
Total Stockholders' equity	-850	1394	3127	3116	3905	4878	5808	6742	7989
Non-controlling interests in subsidiary	74	55	44	44	44	44	44	44	44
Total equity	-776	1449	3171	3160	3949	4922	5852	6786	8033
Total liabilities and equity	46620	44876	47528	50722	52997	56311	60125	64264	68788

Appendix 2: Common-Size Statement of Financial Position

	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F
Assets	100%	100%	100%	100%	100%	100%	100%	100%	100%
Current Assets	38%	36%	38%	38%	40%	43%	45%	48%	51%
Cash and equivalents	6%	2%	3%	4%	5%	7%	10%	13%	16%
Receivables	5%	5%	5%	6%	6%	6%	6%	6%	6%
Contract Assets	17%	21%	19%	21%	21%	21%	21%	21%	21%
Inventories	6%	7%	8%	7%	8%	8%	8%	7%	7%
Other Current Assets	3%	1%	1%	1%	1%	1%	1%	1%	1%
Property, plant and equipment	12%	14%	14%	14%	14%	14%	14%	13%	13%
Goodwill	23%	24%	22%	21%	20%	19%	18%	17%	15%
Intangible Assets	8%	8%	7%	6%	5%	4%	4%	3%	2%
Deferred income taxes	7%	7%	7%	8%	8%	8%	8%	7%	7%
Other noncurrent assets	12%	12%	14%	14%	13%	13%	12%	12%	11%
Liabilities and Equity									
Current Liabilities	28%	32%	29%	30%	30%	30%	30%	30%	30%
Accounts payable	3%	5%	3%	3%	3%	3%	3%	3%	3%
Contracts liabilities	15%	14%	15%	16%	16%	16%	16%	16%	16%
Salaries, benefits and payrolls taxes	4%	5%	5%	5%	5%	5%	5%	5%	5%
Current maturities of long term debt and commercial paper	2%	3%	3%	2%	1%	1%	1%	1%	1%
Other current liabilities	4%	4%	4%	4%	5%	5%	5%	4%	4%
Long term debt	29%	28%	24%	21%	19%	17%	15%	12%	10%
Accrued pensions liabilities	34%	25%	28%	32%	32%	32%	33%	34%	34%
Other postretirement benefit liabilities	2%	2%	1%	1%	1%	1%	1%	1%	2%
Other non current liabilities	10%	10%	11%	11%	11%	12%	12%	12%	12%
Total liabilities	102%	97%	93%	94%	93%	91%	90%	89%	88%
Stockholders' Equity		0%	0%	0%	0%	0%	0%	0%	0%
Common Stock	1%	1%	1%	1%	1%	0%	0%	0%	0%
Retained earnings	24%	34%	39%	41%	42%	42%	41%	40%	40%
Accumulated other comprehensive loss	-27%	-32%	-33%	-35%	-35%	-33%	-32%	-30%	-29%
Total Stockholders' equity	-2%	3%	7%	6%	7%	9%	10%	10%	12%
Non-controlling interests in subsidiary	0%	0%	0%	0%	0%	0%	0%	0%	0%
Total equity	-2%	3%	7%	6%	7%	9%	10%	11%	12%
Total liabilities and equity	100%	100%	100%	100%	100%	100%	100%	100%	100%

Appendix 3: Income Statement

	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F
Net Sales	49 960	53 762	59 812	64 223	68 326	72 743	77 501	82 631	88 165
Aeronautics	19 410	21 242	23 693	25 588	27 347	29 226	31 235	33 381	35 675
MFC	7 282	8 462	10 131	11 347	12 667	14 141	15 786	17 623	19 673
RMS	13 663	14 250	15 128	15 884	16 433	17 000	17 588	18 195	18 823
Space	9 605	9 808	10 860	11 403	11 879	12 376	12 893	13 432	13 993
Cost of Sales	43 589	46 488	51 445	55 874	60 127	64 014	68 201	71 889	76 703
Gross Profit	6 371	7 274	8 367	8 349	8 199	8 729	9 300	10 742	11 461
Other income, net	373	60	178	178	178	178	178	178	178
Operating Profit	6744	7334	8545	8 527	8 377	8 907	9 478	10 920	11 639
Interest Expense	- 651	- 668	- 653	-601	-548	-513	-488	-456	-419
Other non-operating expense, net	- 847	- 828	- 651	-894	-879	-934	-994	-1145	-1221
EBT	5 246	5 838	7 241	7 031	6 951	7 460	7 996	9 318	10 000
Income tax Expense	- 3 356	- 792	- 1 011	-1477	-1460	-1567	-1679	-1957	-2100
	73	-	-	-	-	-	-	-	-
Net Earnings	1963	5046	6230	5555	5491	5894	6317	7361	7900

Appendix 4: Common-Size Income Statement

	2017	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F
Net Sales	100%	100%	100%	100%	100%	100%	100%	100%	100%
Aeronautics	39%	40%	40%	40%	40%	40%	40%	40%	40%
MFC	15%	16%	17%	18%	19%	19%	20%	21%	22%
RMS	27%	27%	25%	25%	24%	23%	23%	22%	21%
Space	19%	18%	18%	18%	17%	17%	17%	16%	16%
Cost of Sales	87%	86%	86%	87%	88%	88%	88%	87%	87%
Gross Profit	13%	14%	14%	13%	12%	12%	12%	13%	13%
Other income, net	1%	0%	0%	0%	0%	0%	0%	0%	0%
Operating Profit	13%	14%	14%	13%	12%	12%	12%	13%	13%
Interest Expense	-1%	-1%	-1%	-1%	-1%	-1%	-1%	-1%	0%
Other non-operating expense, net	-2%	-2%	-1%	-1%	-1%	-1%	-1%	-1%	-1%
EBT	11%	11%	12%	11%	10%	10%	10%	11%	11%
Income tax Expense	-7%	-1%	-2%	-2%	-2%	-2%	-2%	-2%	-2%
	0%	0%	0%	0%	0%	0%	0%	0%	0%
Net Earnings	4%	9%	10%	9%	8%	8%	8%	9%	9%

Appendix 5: Cash Flow Statement

	2020F	2021F	2022F	2023F	2024F	2025F
Operating Activities	7 540	7 743	8 688	9 482	10 543	11 417
+EBIT	8 527	8 377	8 907	9 478	10 920	11 639
+D&A	1 400	1 489	1 586	1 689	1 801	1 922
-Income Tax	(1 477)	(1 460)	(1 567)	(1 679)	(1 957)	(2 100)
-ΔNWC	(910)	(664)	(238)	(6)	(221)	(45)
Investment Activities	(1 541)	(1 640)	(1 746)	(1 860)	(1 983)	(2 116)
-CAPEX	(1 541)	(1 640)	(1 746)	(1 860)	(1 983)	(2 116)
+Other Inv.	0					
Financing Activities	(5 663)	(5 540)	(5 415)	(5 730)	(6 323)	(6 697)
-Interest paid	(601)	(548)	(513)	(488)	(456)	(419)
-Dividends	(2 812)	(3 093)	(3 402)	(3 742)	(4 116)	(4 528)
-repurchase stocks	(1 000)	(1 000)	(1 000)	(1 000)	(1 000)	(1 000)
ΔDebt	(1 250)	(900)	(500)	(500)	(750)	(750)
Change in Cash	336	562	1 528	1 892	2 237	2 604
Beginning	1 514	1 850	2 412	3 940	5 832	8 069
End	1 850	2 412	3 940	5 832	8 069	10 673

Appendix 6: Common-Size Cashflow statement

	2020F	2021F	2022F	2023F	2024F	2025F
Operating Activities	100%	100%	100%	100%	100%	100%
+EBIT	113%	108%	103%	100%	104%	102%
+D&A	19%	19%	18%	18%	17%	17%
-Income Tax	-20%	-19%	-18%	-18%	-19%	-18%
-ΔNWC	-12%	-9%	-3%	0%	-2%	0%
Investment Activities	-20%	-21%	-20%	-20%	-19%	-19%
-CAPEX	-20%	-21%	-20%	-20%	-19%	-19%
+Other Inv.	0%	0%	0%	0%	0%	0%
Financing Activities	-75%	-72%	-62%	-60%	-60%	-59%
-Interest paid	-8%	-7%	-6%	-5%	-4%	-4%
-Dividends	-37%	-40%	-39%	-39%	-39%	-40%
-repurchase stocks	-13%	-13%	-12%	-11%	-9%	-9%
ΔDebt	-17%	-12%	-6%	-5%	-7%	-7%

Appendix 7: Net Working Capital

	2019	2020F	2021F	2022F	2023F	2024F	2025F
Current Assets	15 581	17 652	18 825	20 042	21 353	22 711	24 232
Receivables	2 337	2 890	3 075	3 273	3 488	3 718	3 967
Contract Assets	9 094	10 451	11 119	11 838	12 612	13 447	14 347
Inventories	3 619	3 741	4 025	4 286	4 566	4 813	5 135
Onther Current Assets	531	570	607	646	688	734	783
Current Liabilities	13 972	15 133	15 642	16 621	17 926	19 062	20 539
Accounts payable	1 281	1 375	1 463	1 558	1 660	1 770	1 888
Contracts liabilities	7 054	8 121	8 640	9 198	9 800	10 448	11 148
Salaries, benefits and payrolls taxes	2 466	2 492	2 652	2 823	3 008	3 207	3 422
Short term debt	1 250	900	500	500	750	750	1 000
Other current liabilities	1 921	2 244	2 388	2 542	2 708	2 887	3 081
NWC	1 609	2 519	3 183	3 421	3 428	3 649	3 693
ΔNWC		910	664	238	6	221	45

Appendix 8: Key Financial Ratios

Key Financial Ratios	2018	2019	2020F	2021F	2022F	2023F	2024F	2025F
Liquidity Ratios								
Current Ratio (x)	1,12	1,28	1,29	1,36	1,44	1,52	1,61	1,70
Quick Ratio (x)	0,22	0,28	0,31	0,35	0,43	0,52	0,62	0,71
Cash Ratio (x)	0,05	0,11	0,12	0,15	0,24	0,33	0,42	0,52
Efficiency Ratios								
Total Assets Turnover (x)	1,20	1,26	1,27	1,29	1,29	1,29	1,29	1,28
Accounts Receivables Turnover (x)	22,00	25,59	22,22	22,22	22,22	22,22	22,22	22,22
Collection Period (days)	16,59	14,26	16,43	16,43	16,43	16,43	16,43	16,43
Inventory Turnover (x)	17,94	16,53	17,17	16,97	16,97	16,97	17,17	17,17
Days in Inventory (days)	20,35	22,08	21,26	21,50	21,50	21,50	21,26	21,26
Payables Turnover (x)	22,38	46,69	46,69	46,69	46,69	46,69	46,69	46,69
Payables Period (days)	16,31	7,82	7,82	7,82	7,82	7,82	7,82	7,82
Operating Cycle (days)	36,94	36,35	37,68	37,93	37,93	37,93	37,68	37,68
Cash Cycle (days)	20,63	28,53	29,87	30,11	30,11	30,11	29,87	29,87
Assets Turnover	1,87	1,97	2,06	2,15	2,25	2,35	2,47	2,60
Profitability Ratios								
Gross Profit Margin (%)	13,53%	13,99%	13,00%	12,00%	12,00%	12,00%	13,00%	13,00%
EBIT Margin (%)	13,6%	14,3%	13,3%	12,3%	12,2%	12,2%	13,2%	13,2%
Net Profit Margin (%)	9,39%	10,42%	8,65%	8,04%	8,10%	8,15%	8,91%	8,96%
ROA (%)	11%	13%	11%	10%	10%	11%	11%	11%
ROCE (%)	17%	19%	16%	15%	15%	15%	16%	16%
ROE (%)	348%	196%	176%	139%	120%	108%	108%	98%
ROIC (%)	16%	18%	17%	16%	17%	18%	20%	17%
EPS (x)	17,96	22,25	19,94	19,82	21,39	23,05	27,01	29,15
SG&A/Sale (%)	86%	86%	87%	88%	88%	88%	87%	87%
Solvency Ratios								
Long- and short-term Debt Ratio (%)	26%	21%	18%	15%	14%	12%	11%	9%
Long-term Debt Ratio (%)	23%	19%	16%	15%	13%	11%	10%	8%
Debt to Equity Ratio (x)	9,73	3,99	3,61	2,66	2,03	1,62	1,29	1,00
Equity Multiplier (x)	30,97	14,99	16,05	13,42	11,44	10,27	9,47	8,56
Payout-Ratio	0,47	0,41	0,51	0,56	0,58	0,59	0,56	0,57
Interest Coverage Ratio (x)	10,98	13,09	14,18	15,30	17,37	19,43	23,92	27,78

Appendix 9: Forecasting Assumptions- Income Statement

Description	Units	2020F	2021F	2022F	2023F	2024F	2025F	Assumption
Sales by segment:								
Aeronautics		8,00%	6,87%	6,87%	6,87%	6,87%	6,87%	2020F we assume the company's predictions for that year, and for the other years and due to Covid-19 we assume that the sales will growth at cagr 2017-2019
MFC		12,00%	11,64%	11,64%	11,64%	11,64%	11,64%	
RMS		5,00%	3,45%	3,45%	3,45%	3,45%	3,45%	
Space		5,00%	4,18%	4,18%	4,18%	4,18%	4,18%	
Cost of Sales	%sales	87%	88%	88%	88%	87%	87%	We assume that 2020F, this item will be the average of the last 3 years, and then for the period 2020-2023, due to covid-19 cost of sales will be higer, due to possible issua in the suply chain or higher cost of contracts
Gross Margin	%sales	13%	12%	12%	12%	13%	13%	Same explanation given for cost of Sales
Interest Expense	%debt	5%	5%	5%	5%	5%	5%	Average of interest in bonds issued
Other non-operating profit	%operating profit	-10,49%	-10,49%	-10,49%	-10,49%	-10,49%	-10,49%	Average value of last 3 years
Income tax expense	%EBT	21%	21%	21%	21%	21%	21%	Statutory tax rate for the USA

Appendix 10: Forecasting Assumptions – Balance Sheet

Description	Units	2020F	2021F	2022F	2023F	2024F	2025F	Assumption
Assets								
Cash and equivalents								See cashFlow Statment
Receivables	%sales	4,50%	4,50%	4,50%	4,50%	4,50%	4,50%	Project based on average value of last 3 years
Contract Assets	% sales	16%	16%	16%	16%	16%	16%	Project based on average value of last 3 years
Inventories	%cogs	7%	7%	7%	7%	7%	7%	Project based on average value of last 3 years
Onther Current Assets	%sales	1%	1%	1%	1%	1%	1%	Carrying amount of 2019FY
Porperty, plant and equipment		6995	7402	7815	8236	8665	9104	PPE(t)=PPE(t-1)-Dep.+CAPEX
Goodwill		0%	0%	0%	0%	0%	0%	Carrying amount 2019
Intangible Assets		2950	2694	2441	2191	1944	1699	Intangible assets (t)= Intangible (t-1)-Amort.
Deferred income taxes	%sales	6%	6%	6%	6%	6%	6%	Project based on average value of last 3 years
Liabilities								
Accounts payable	%sales	2%	2%	2%	2%	2%	2%	Project based on average value of last 3 years
Contracts liabilities	%sales	13%	13%	13%	13%	13%	13%	Project based on average value of last 3 years
Salaries, benefits and payrolls taxes	%sales	4%	4%	4%	4%	4%	4%	Project based on average value of last 3 years
Current maturities of long term debt and commercial papper		900	500	500	750	750	1000	Payments scheduled for each year in the LMT's rport of 2019 (in million \$)
Other current liabilities	%sales	3,5%	3,5%	3,5%	3,5%	3,5%	3,5%	Project based on average value of last 3 years
Long term debt		10504	10004	9504	8754	8004	7004	We assumed LMT will not issue more debt LTD(t)= LTD(t-1)-Notional Pyment (in million \$)
Acrued pensions liabilities	%sales	25%	25%	25%	26%	26%	27%	For the first 3 years we assumed the average of the last 3 years. For the remainig years we assume slightly increase.
Other postreirement benefit liabilities	%sales	1%	1%	1%	1%	1%	1%	Project based on average value of last 3 years
Other non-current liabilities	%sales	9%	9%	9%	9%	9%	9%	Project based on average value of last 3 years
Stockholders' Equity								
Retained earnings		20819	22281	23370	24522	25722	27555	Retained earnings(t)=Income(t-1)-Dividends(t-1)-Repurchase Stock(t-1)
Accumulated other comprehensive loss	%sales	-28%	-27%	-26%	-25%	-23%	-23%	Until 2022 the value ias higher than de average of the last 3 years (25%) because of theeconomic impact caused by covid-19.After thar the value is decreasing over the years,due to econommic recovery. At the end, the average of the 5 years forecasted is equal to the previous 5 years average.

Appendix 11 – Other Main Risks related to LMT’s performance

Operational risk| Ability to perform in key contracts (OR2)

Any delay, technical/performance issue, or the failure to comply with the budget in place, can result in the termination of the contract, penalties (included in the contract), or even the loss of already existent orders. Additionally, any flaw during the process might affect the company’s reputation, which plays a critical role in the capability of companies to deliver contracts with big clients.

Security Risk| Cybersecurity event (SR1)

Nowadays cyberterrorism is one of the biggest threats worldwide, and considering the clients, the flow of classified and proprietary information this companies possess, it makes this industry a big target for that kind of attacks. If companies do not have IT systems capable of protecting that information, it would be catastrophic for not only the clients (U.S. government), citizens, and the reputation of the company.

Regulatory & Legal Risk| Termination Clause (RLR1)

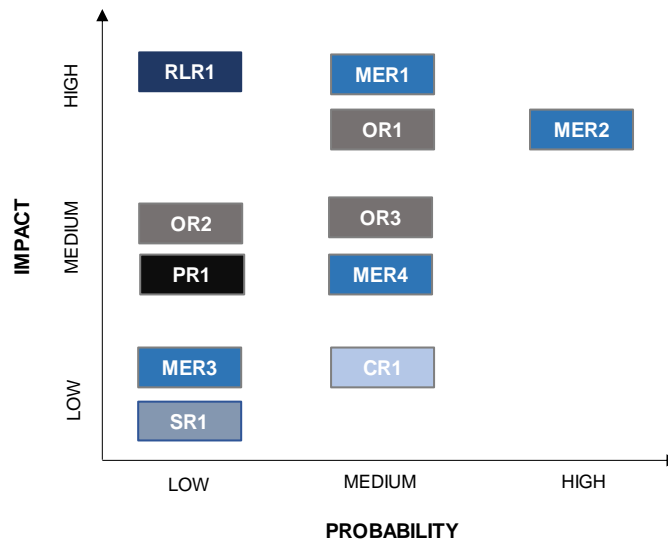
Majority of contracts celebrated with the U.S. government have a termination clause, that allows the government to, by convenience or breach of contract, terminate the contract at any moment, in whole or in part. Considering the previous point, this represents a major risk for LMT, and can have a major impact in companies’ financial results.

Operational Risk| Capacity to Innovate (OR3)

There are several areas of innovation for companies in the industry. They need to be able to innovate in the products they sell, as the demand is constantly changing due to the technological advancements. To stay competitive, companies need to improve their manufacturing process, with new technologies, which improves both their performance and their efficiency. Without this innovation companies have the risk of becoming obsolete in their processes and in their product portfolio.

Corporate Risk| Bonds issuance (CR1)

LMT has a A- credit rating, that is stable, according to Moddy, Standard & Poors and Fitch. Since the main source of financing is the issuance of corporate bonds, the company has to maintain its investment-grades in order to have access to low interest rates and continue to obtain financing. If LMT is unable to maintain this grade, the cost of financing will be higher for the company



Appendices 12 – Governance

12.1 – Board of directors and committees

Name, Age, Independence and Position	Tenure	Other Public Boards	Committees				Member:	Chair: C
			Audit	Classified Business and Security	Management Development and Compensation	Nominating and Corporate Governance	●	
 Daniel F. Akerson, 71, Independent Lead Director Retired Chairman and Chief Executive Officer of General Motors Company	2014	CommScope Holding Company, Inc.						C
 David B. Burritt, 64, Independent President and Chief Executive Officer of United States Steel Corporation	2008	United States Steel Corporation	●					●
 Bruce A. Carlson, 70, Independent Retired United States Air Force General	2015	Benchmark Electronics Inc.		●				●
 Joseph F. Dunford, Jr., 64, Independent Retired United States Marine Corps General Former Chairman of the Joint Chiefs of Staff	2020	None		●				●
 James O. Ellis, Jr., 72, Independent Retired President and Chief Executive Officer of Institute of Nuclear Power Operations	2004	Dominion Energy, Inc.	●	C				
 Thomas J. Falk, 61, Independent Retired Chairman and Chief Executive Officer of Kimberly-Clark Corporation	2010	None	C		●			
 Ilene S. Gordon, 66, Independent Retired Chairman and Chief Executive Officer of Ingredion Incorporated	2016	International Paper Company	●		C			
 Marilyn A. Hewson, 66 Chairman, President and Chief Executive Officer of Lockheed Martin Corporation	2012	Johnson & Johnson						
 Vicki A. Hollub, 60, Independent President and Chief Executive Officer of Occidental Petroleum Corporation	2018	Occidental Petroleum Corporation			●			●
 Jeh C. Johnson, 62, Independent Partner at Paul, Weiss, Rifkind, Wharton & Garrison LLP Former Secretary of Homeland Security	2018	None		●				●
 Debra L. Reed-Klages, 63, Independent Retired Chairman, President and Chief Executive Officer of Semptra Energy	2019	Chevron Corporation; Caterpillar Inc.	●		●			
 James D. Taiclet, Jr., 59, Independent Chairman, President and Chief Executive Officer of American Tower Corporation	2018	American Tower Corporation		●	●			

12.2 – New Executive Officer target compensation

NEO	Base Salary (\$)	Annual Incentive		2019 LTI Grant (\$)	Total Target Direct Compensation (\$)
		Target %	Target Amount (\$)		
Ms. Hewson	1,798,000	175	3,146,500	14,300,136	19,244,636
Mr. Possenriede*	905,000	70 / 105	915,408	4,500,222	6,320,630
Mr. Tanner**	1,030,000	115	1,184,500	4,500,222	6,714,722
Mr. Ambrose	905,000	105	950,250	3,925,107	5,780,357
Mr. Bennett	905,000	105	950,250	3,925,107	5,780,357
Ms. Evans	905,000	105	950,250	3,925,107	5,780,357
Mr. St. John	905,000	105	950,250	3,925,107	5,780,357

Appendix 13 – DCF Model

13.1 – WACC Assumptions

DCF Analysis	2020F	2021F	2022F	2023F	2024F	2025F	Terminal
Cost of Equity							
RFR (risk free rate)	0,75%	0,75%	0,75%	0,75%	0,75%	0,75%	0,75%
Beta unlevered	0,85	0,85	0,85	0,85	0,85	0,85	0,85
Beta levered	1,00	1,00	1,00	1,00	1,00	1,00	1,00
MRP (market risk premium)	6,01%	6,01%	6,01%	6,01%	6,01%	6,01%	6,01%
Cost of Equity	6,77%	6,77%	6,77%	6,77%	6,77%	6,77%	6,77%
Cost of Debt							
Cost of Debt	5,00%	5,00%	5,00%	5,00%	5,00%	5,00%	5,00%
Marginal tax rate (Tc)	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%	21,00%
After-tax cost of debt	3,95%	3,95%	3,95%	3,95%	3,95%	3,95%	3,95%
WACC							
Weight of Equity	77,52%	80,18%	82,23%	84,19%	86,38%	88,36%	90,00%
Weight of Debt	22,48%	19,82%	17,77%	15,81%	13,62%	11,64%	10,00%
WACC	6,13%	6,21%	6,26%	6,32%	6,38%	6,44%	6,5%

13.2 – FreeCash Flow Model

FCFF USD	2020F	2021F	2022F	2023F	2024F	2025F	Terminal
EBIT*(1-Tc)	6 736	6 618	7 037	7 488	8 627	9 195	
D&A	1 400	1 489	1 586	1 689	1 801	1 922	
ΔNWC	910	664	238	6	221	45	
CAPEX	1 541	1 640	1 746	1 860	1 983	2 116	
FCFF			6 638	7 311	8 224	8 956	9 010
PV of FCFF			6 599	7 224	8 077	8 745	

13.3 – Target Price FCFF

Enterprise Value	
Terminal Growth Rate	0,60%
Perpetuity WACC	6,48%
Terminal Value	153 141
PV of Terminal Value	111 861
NPV of FCFF	30 644
Enterprise Value	142 505
Price Target (FCFF) 2021F	
Enterprise Value	142505
Net Debt	8092
Equity Value	134414
No. of Outstanding Shares	280
Equity Value per Share	480,05
Price at 14 Oct 2020	390,72
Upside Potential	23%

13.4 – Perpetual Terminal Growth

$$\text{Terminal Growth Rate} = \frac{\text{CAPEX} - \text{D\&A} + \Delta\text{NWC}}{\text{EBIT}(1 - T)} * \text{ROIC}$$

	2020	2021	2022	2023	2024	2025
Reinvestment Rate (RR)	13,3%	10,4%	4,7%	2,0%	3,9%	2,1%
g (RR*ROIC)	2,2%	1,7%	0,8%	0,4%	0,8%	0,4%

As perpetual terminal growth rate we assumed the average of the last 4 years forecasted, consider the previous 2 years an outlier.

Appendix 14 – Relative Valuation

14.1 – Peers

	Revenues(bn)	EBITDA Margin(%)
Boeing Co (BA)	76	-
Raytheon Tech	77	14,6%
Northrop Grumman	33,8	16,5%
General Dynamics	39,4	13,4%
L3Harris Tech	17	14,9%

14.2 – Multiple Valuation Resume

	Ev/EBITDA	Ev/sales
Raytheon Technologies Corp	8,87	1,84
General Dynamics Corp	11,4	1,38
Northrop Grumman Corp	13,91	1,84
L3harris Technologies Inc	14,21	2,34
Average	12,10	1,85

14.3 – EV/EBITDA

	2021FY
EV/EBITDA Peers	12,1
EBITDA LMT	9867
EV LMT	119360
NetDebt	8092
N0. Shares	280
Target Price	397,4
Upside Potencial	2%

14.2 – EV/Revenues

	2021FY
EV/Sales Peers	1,85
Sales LMT	68326
EV LMT	126404
NetDebt	8092
N0. Shares	280
Target Price	422,5
Upside Potencial	8%

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Recommendation System

Level of Risk	SELL	REDUCE	HOLD/NEUTRAL	BUY	STRONG BUY
High Risk	0%≤	>0% & ≤10%	>10% & ≤20%	>20% & ≤45%	>45%
Medium Risk	-5%≤	>-5% & ≤5%	>5% & ≤15%	>15% & ≤30%	>30%
Low Risk	-10%≤	>-10% & ≤0%	>0% & ≤10%	>10% & ≤20%	>20%