RESEARCH REPORT

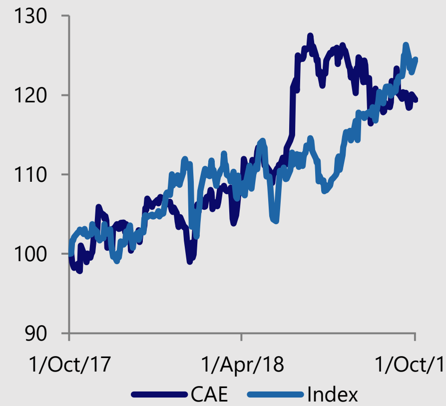
October 1st 2018

Stock Rating	HOLD
Price Target	CAD 28.00
Current Price	CAD 26.22

Bear Case	Price Target	Bull Case
$23.80	$28.00	$32.20

Ticker	CAE
Market Cap (MM)	$7,004MM
P/E	21.4x
EV/EBITDA	11.2x

52 Week Performance



Industrials

Walid Herzallah
wherzallah@quiconline.com

Mathew Andreou
mandreou@quiconline.com

Tina Fang
tfang@quiconline.com

Deven Chander
dchander@quiconline.com

CAE Inc.

Soaring to New Heights

Introduction

CAE Inc. (TSX: CAE) is the market leader in training for the civil aviation, defense and security, and healthcare markets worldwide. With fiscal year 2018 revenues of $2.8 billion, the company is the recognized global training partner of choice to enhance safety, efficiency, and readiness for its various segments.

Investment Thesis

(1) Strong Recurring Revenue Profile

(2) Runway for Growth Through Commercial Airlines

(3) Capital Allocation Drives Shareholder Value & Prioritizes Growth

Valuation

The discounted cash flow analysis reaches a targeted share price of $30.44, implying a one-year blended return of ~8.3%.

Conclusion

The Industrials team believes that CAE is a high quality business and offers exposure to attractive tailwinds in the Aerospace and Defense subsector. However, we believe much of its growth prospects are factored in to the current price, and the the company is trading close to fair value. We plan to either conduct more valuation work or wait for multiple contraction before entering the name.

Table of Contents

Company & Industry Overview 2
Company Introduction 2
Business Model Overview 2
Civil Aviation Segment 3
Defense & Security Segment 3
Thesis I: Strong Recurring Revenue Profile 5
Thesis II: Runway for Growth Through Commercial Airlines 7
Thesis III: Capital Allocation Drives Shareholder Value While Prioritizing Growth 9
Valuation 10
Historical Multiples 10
Discounted Cash Flow 10
Target Price Calculation 11
Portfolio Implications 11
References 12

Company & Industry Overview

Company Introduction

CAE Inc. is a pure-play simulation and training solutions company and one of the largest aerospace and defense names in Canada. The company operates in three reportable segments: civil aviation, defense & security, and healthcare. Each year, CAE trains more than 120,000 civil and defence crew members worldwide through a global network of 8,500 employees and 160+ sites in 35 countries. The company's truly global presence has led to a diversified revenue mix from both an industry and geographic perspective (see Exhibit I).

Over decades in the industry, CAE has developed end-to-end training solutions for these industries made up of a mix of simulation products and training services & systems. Essentially, these training solutions help pilots fly safer, ensure defense forces to be combat ready, and healthcare institutions to better serve patients. Given that only 4% of CAE revenue comes from the healthcare segment, this memo will only discuss the company's civil aviation and defense operations.

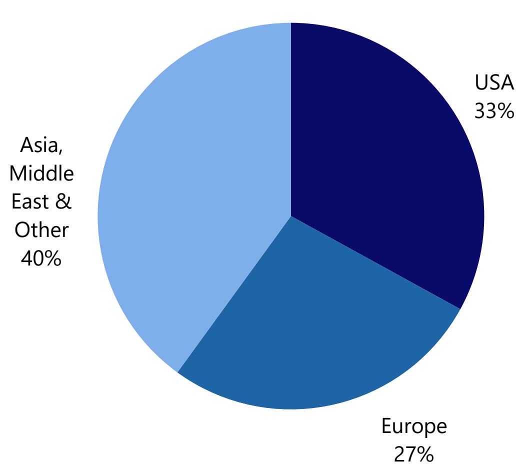
Business Model Overview

While the company used to generate over 85% of its revenue from the sale of products, it has shifted its business model towards one that relies on reoccurring service revenue. Today, only 40% of revenue comes from the sale of actual simulation products - the remaining 60% come from associated service and training revenue that is locked in with long-term contracts. Management has expressed that they expect the trend towards a higher proportion of service revenue to continue.

This ongoing demand comes from customers who operate under strict regulations and/or have a need for continuous training (i.e. airlines, militaries). In the past, CAE has been highly successful at growing its backlog through a mix of acquiring new customers and high renewal rates for existing contracts. CAE's business model relies on strong relationships with its customers, many of which it has been working with for decades. In many cases, it's not just a vendor - but a crucial partner embedded in customers' operations.

EXHIBIT I

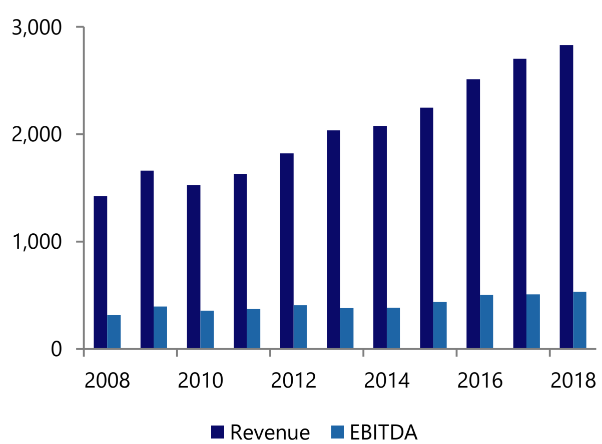
Global Revenue Mix



Source(s): Annual Report

EXHIBIT II

Annual Revenue and Operating Income ($M)



Source(s): Capital IQ

Company & Industry Overview

Civil Aviation

Civil aviation is CAE's bread and butter, making up 58% of revenue and 70% of operating income. The segment is not only the company's largest, but also generates significantly higher margins than defense & security or healthcare. This is made possible by the company's dominance of the civil aviation training solutions market, particularly in full-flight simulator (FFS) sales and services. CAE has a 35% market share in the $4.2 billion civil aviation training solutions market, making it the number one player in a highly fragmented industry that includes a wide range of training offerings. However, when it comes to FFS in particular, CAE boasts a 70% market share and the most complete offering on the market. In 2018, the company won contracts for 50 FFS, each of which can cost up to $50 million.

CAE has the unique capability to address the total lifecycle training needs of professional pilots, leading many customers to embed the company into their operations. CAE operates its own training centers, with services available to any customer (and in some cases, individuals). However, more than 40 major airlines around the world have training centers developed and operated exclusively by CAE. These are built specifically for the customer when a long-term contract is signed; CAE builds and equips these training centers at a contract's inception before continuing to operate them for the duration of the contract. In many cases, CAE’s customers enter JVs with the company and share in the costs of these centers’ development.

The outlook and key drivers for this segment are discussed under Thesis II.

Defense & Security

While the defense training systems market (~$17 billion) is significantly larger than the civil aviation one (~$4 billion), CAE has a smaller footprint in the former with a ~6% market share. This is largely because militaries often have more diverse training needs than commercial airlines; thus, they must rely on multiple vendors to serve their needs.

CAE's defense revenues also come primarily from large, long-term contracts with a few key military customers: the U.S. military (including the army, navy, and air force), the Royal Canadian, Australian and U.K. Air Forces, and the UAE Defense Forces. Over 50% of defense revenue comes from contracts with various U.S. military bodies; 20% comes from Europe; and 27% comes from the Middle East and Asia-Pacific regions. Only 1% of defense revenues come from Canada.

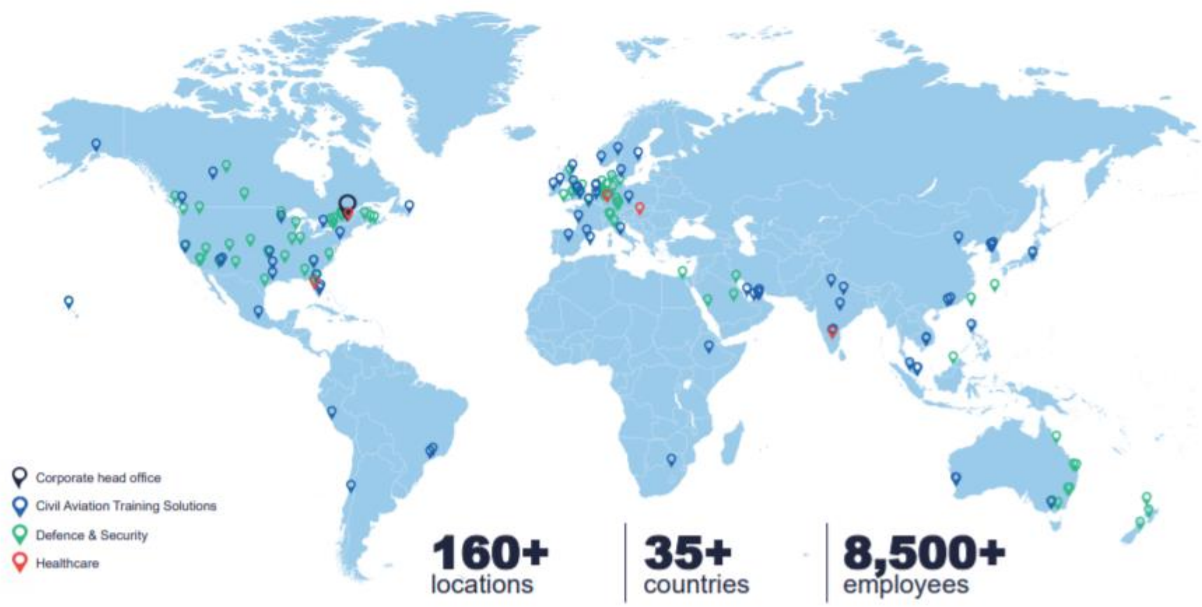
CAE offers a combination of live training on actual platforms, virtual training in simulators, and constructive training using computer-generated simulations. Most developed militaries are increasingly relying on a mix of these three categories for their training needs, giving the rise to integrated live, virtual, and constructive (iLVC) training solutions. To provide these solutions, CAE not only relies on state-of-the art technology, but also ex-military personnel. A typical iLVC offering may include academic training, virtual, and live training, as well as immersive, networked mission rehearsal in a synthetic environment. Outsourcing some training needs helps militaries save costs and focus on key operations while benefiting from the expertise of private sector contractors. Similar to its civil aviation business, these defense contracts are often massive and require development of training centers for particular customers. Examples include the CAE Dothan Training Center in Alabama and the UAE Naval Training Center outside of Dubai.

This segment will likely benefit from macro tailwinds in the global defense space as continued instability drives higher defense spending. The majority of NATO’s 29 members have announced defense budgets increases, including the U.S. at $700 billion. In Europe, there is a particular focus on modernizing air force fleets; these investments will require comprehensive training programs which often cannot be served in-house. Due to the trend towards using simulation and iLVC solutions to lower training costs, increase effectiveness, and save aircraft/vehicles/ships for operational use, much of these higher defense budgets are likely to benefit companies like CAE.

Company & Industry Overview

EXHIBIT III

Map of CAE Sites & Operations



Source(s): Investor Presentation (Aug 2018)

EXHIBIT IV

Full Flight Simulators (FSS)

Source(s): Google Images

Thesis I: Strong Recurring Revenue Profile

Fueling the compelling long-term investment thesis for CAE is a strong recurring revenue profile. Driven by a strategic focus on service-driven sales, long-term contracts in regulated markets, deep customer intimacy, unique OEM relations, and order backlog the company continues to develop a diversified base of business with a high degree of recurring revenue.

While CAE still sources 40% of revenues from the sale of actual simulation products, a recent business model shift now generates over 60% of sales from associated service and training revenue guaranteed by long-term contracts. From cadet to captain, the training solution, complete with courses and programs, is designed to cover the entire career of the pilot, creating a long and sustainable recurring revenue stream.

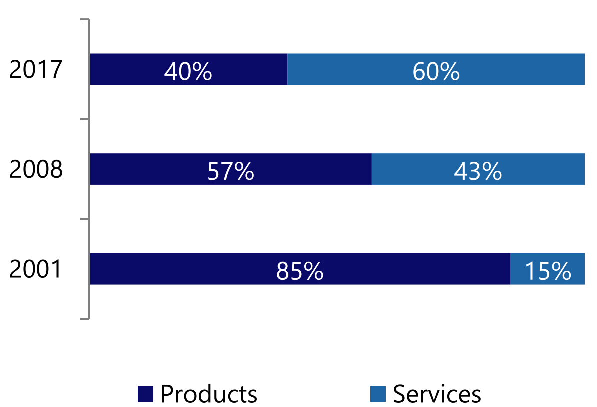
The long-term and regulated structure of these service contracts makes them attractive from an investment perspective. Service contracts may be purchased either at the time of sale of a simulator, as maintenance contracts, or as individual purchase orders. Deals that span 8 to 12 years paired with large enterprise customers that operate under regulations that require them to be trained on a recurring basis creates a favourable future outlook for the business.

A culture of innovation and focus on providing an excellent end-to-end customer experience at CAE has allowed the company to retain clients for several decades. The civil aviation and defense markets are characterized by frequent changes in customer requirements, new aircraft models, and evolving industry standards. Consequently, the ability of CAE to develop product and service enhancements that address evolving market dynamics creates deep levels of customer intimacy and sticky relationships with their customers, and the cycle continues.

Furthermore, the broad geographic coverage of CAE allows the company to respond in a quick and cost effective manner to clients while having a deep understanding of the regulations and customs of the local market. CAE operates a fleet of over 245 full flight and full-mission simulators in more than 50 civil aviation, military, and helicopter training locations worldwide to meet clients' operational requirements.

EXHIBIT V

Increased Proportion of Recurring Revenue



Source(s): Investor Presentation (Aug 2018)

EXHIBIT VI

Notable Awards in Fiscal Year 2018

Contract	Duration	Customer
Purchase	2028	Virgin Atlantic Airways
Purchase	2030	Air Transat
Extension	2036	Jazz Aviation LP
Extension	2036	AirAsia
Extension	-	Flexjet
Renewal	-	Elit'Avia

Source(s): Company News

Thesis I: Strong Recurring Revenue Profile

CAE has more long-term training services agreements and joint ventures than any other competitor with more than 40 major airlines and aircraft operators around the world and relationships with approximately 50 defense operators in over 35 countries.

For simulation training, OEMs are always introducing new platforms or upgrading existing platforms, and CAE's partnerships with OEMs ensure that they will be the preferred developer of training solutions for those platforms. Training systems for Boeing's new P-8 maritime patrol aircraft has been subcontracted to CAE to design and develop. CAE also develops training systems for Airbus' C295 and Lockheed Martin's C-130J Super Hercules transport aircraft, among others.

Nothing is more important to CAE than locking in customers, as there are high switching costs in the civil aviation and defense training space. CAE has an extensive installed base of simulators worldwide. For example, CAE's prime contractor position on programs such as the U.S. Air Force Aircrew Training System positions them well for recurring product upgrades as well as maintenance and support services.

Additionally, the company is able to ensure enhanced financial visibility through strong order backlog. Over the last five years, the company has grown backlog at a 16% CAGR to a record-high of $7.53 billion in 2017. The company records an item as part of order intake when they get a legally binding commercial agreement with a client that details each party's obligations and includes the value of future expected revenues. At CAE, ongoing growth in backlog will continue to support stable, predictable cash flows.

Ultimately, a highly regulated environment, with global and national standards for licensing and certification, plus a high success rate of renewing existing customer contracts results in long-term competitive barriers to entry in this market. As the economic cycle approaches its final stages of growth, a resilient business model that only saw consolidated segment operating income fall by 14% post-financial crisis becomes very valuable. By stabilizing the financial profile of the company and lowering the risk level of the business, CAE's strong recurring revenue profile satisfies an important investment criteria for the Industrials' team.

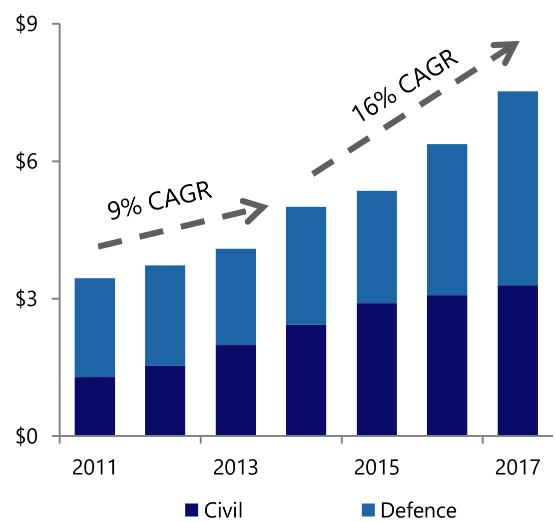
EXHIBIT VII

Industry & Regulatory Association Support

Source(s): Company Website

EXHIBIT VIII

Strengthening Order Backlog ($B)



Source(s): Annual Report

Thesis II: Runway for Growth Through Commercial Airlines

Positive Macro Tailwinds in Commercial Aviation

CAE is primed to grow revenues within its civil aviation segment due to a stable source of underlying demand in the industry over the next decade. In short, higher demand for commercial airline traffic results in more aircraft in operation, which in turn means more pilots need to be trained.

First, as indicated in Exhibit IX, OEM backlogs are at record high levels due to increasing global demand for commercial airplanes. In the short-term, this has been bolstered by a wave of fleet renewal and expansion for many airlines around the world. However, the stronger underlying driver is the steady increase of passenger trips that has come mostly from emerging markets. The International Air Transport Association (IATA) has estimated that commercial aviation passenger trips are set to grow by 4.2% annually over the next 10 years. While 2018 saw 3.7 billion passenger trips in 2018, this number is forecasted to grow to 5.2 billion in 2028.

This increase translates into an additional 12,000 active commercial aircrafts – a significant increase from the 27,000 in operation today.

To operate these new aircrafts, the industry will need to train over 320,000 pilots over the next 10 years. Training these pilots is mandated by regulation around the world. Furthermore, this increase will be roughly evenly split between three regions: the Americas, Asia-Pacific, and the Middle East, Africa & Europe. CAE's industry leading position, customer relationships, and global presence will allow it to capture much of this growth.

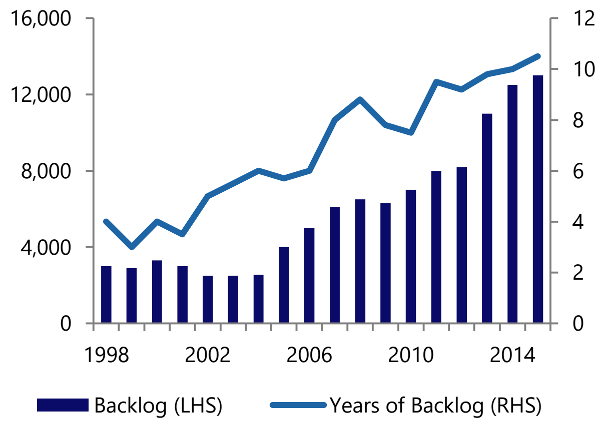
Finally, a growing proportion of training occurs virtually in today's world due to the cost savings and higher effectiveness these solutions can offer. Currently, training a pilot on a simulator can be 3x cheaper than its live training equivalent. While a degree of live training will always be required, these solutions will only become cheaper and more effective over time.

Why CAE?

Civil aviation is CAE's most promising segment, both in terms of its service revenue generation potential

EXHIBIT IX

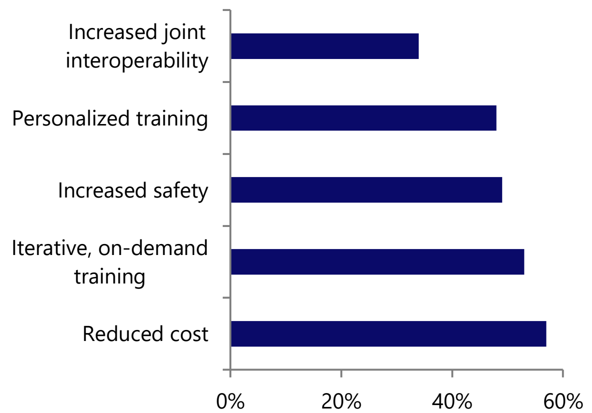
United States OEM Civil Aviation Backlog



Source(s): Deloitte

EXHIBIT X

Benefits of Simulation Training (n=310)



Source(s): Government Business Council Survey

Thesis II: Runway for Growth Through Commercial Airlines

and its durable competitive advantage. The Industrials team believes that the company is well-positioned to increase share from smaller players and capture the growth coming from the aforementioned macrotrends.

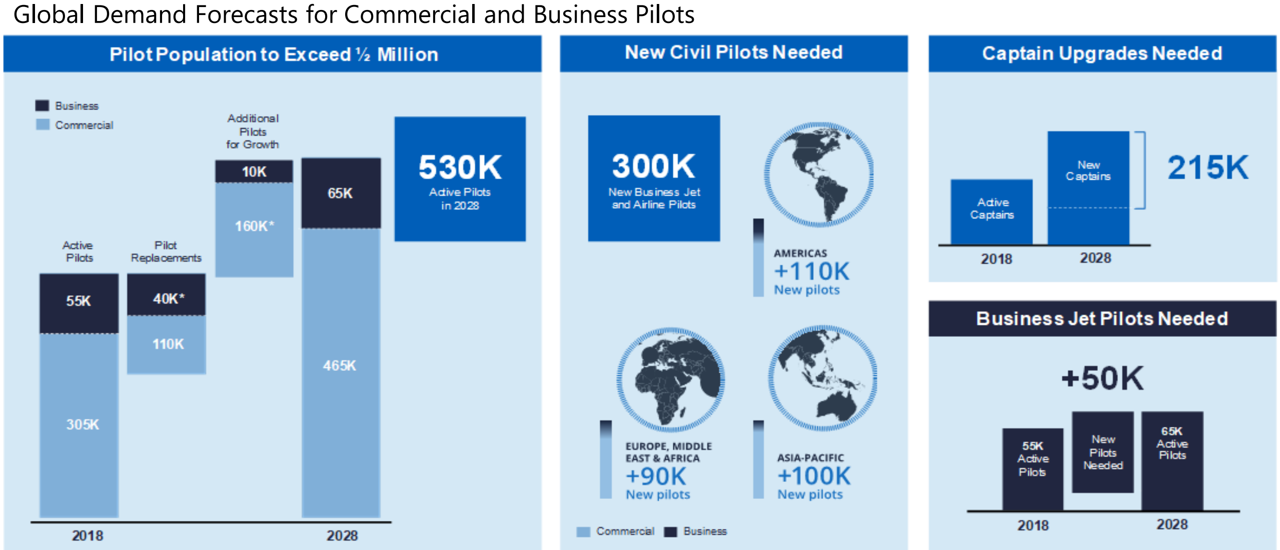
CAE holds a strong economic moat rooted in customer captivity. Once a commercial airline engages in a contractual agreement to train pilots using CAE's services, the airline is required to sign a contract guaranteeing revenue for a defined period of time. In many cases, these training solutions are custom-made for the airline's needs. Even after the contract expires, switching from CAE would require a significant investment by the customer in order to replace all the CAE equipment and infrastructure present at the their facilities. Furthermore, the customer would need a rival to recreate the program, leading to potential delays and new contract negotiations for a mission critical function. Unless CAE provides the companies with poor service or a reason to switch its relationships are likely to last for decades.

Furthermore, from an intrinsic perspective, CAE's leading market position and larger size allows it to provide a competitive breadth and depth of solutions that smaller players cannot match. CAE is the largest producer of flight simulation products in the world, giving it access to significant capital to fund both organic and inorganic expansion into new geographies. Additionally, CAE's scale gives it access to healthy margins, allowing it to return value to shareholders and focus on M&A.

Finally, while R&D expenses are still high, capital expenditure as a percentage of cash flow from operations has decreased by over 30% over the trailing five year period. Management expects this trend to continue. Ultimately, it indicates that CAE has a strong training platform that requires little maintenance moving forward, aligning it with the Industrial team's goal to invest in names that are "beyond the capex phase."

EXHIBIT XI

Global Demand Forecasts for Commercial and Business Pilots



Source(s): CAE Analysis, IATA Data

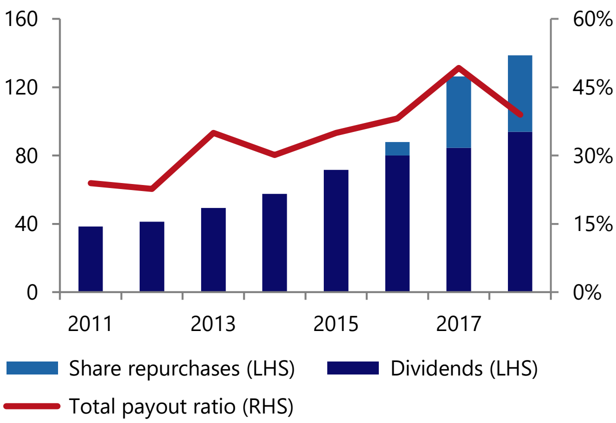
Thesis III: Capital Allocation Drives Shareholder Value

CAE's capital allocation decisions are guided by three overarching strategic imperatives: *grow* by providing the most comprehensive training solutions globally, *protect* their leadership position by ensuring operational excellence and *innovate* by driving new technology and offerings that advance training. CAE has deployed over $300 million of growth capital in the Civil Aviation Training Solutions segment, which has been increasing recurring revenue. Incremental pre-tax operating income return on capital deployed has been highly accretive and is a tribute to the strength of the management team. CAE's balance sheet is being gradually delevered, with a net-debt-to-capital ratio that has fallen below management's "optimal" area of 35% to 45%. This will allow CAE the stability and flexibility to pursue accretive investment opportunities; they are very active in acquiring training assets around the globe where they obtain fully operational flight simulators and customer contracts.

Finally, CAE has managed to prioritize growth while steadily increasing returns to shareholders. In 2018, management returned a record $138.7 million back to shareholders. We believe that management's ability to drive long term growth while returning capital to shareholders through share buybacks and dividends makes CAE a highly attractive investment opportunity.

EXHIBIT XII

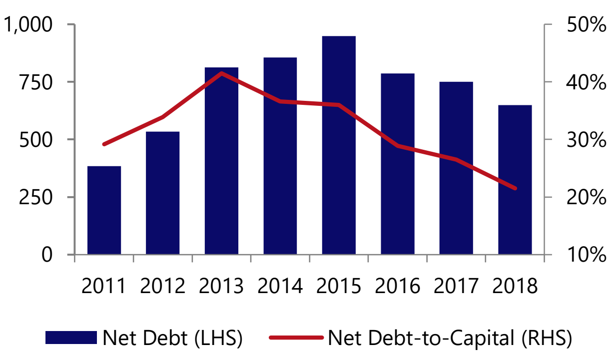
Capital returned to shareholders increasing steadily



Source(s): Company Reports

EXHIBIT XIII

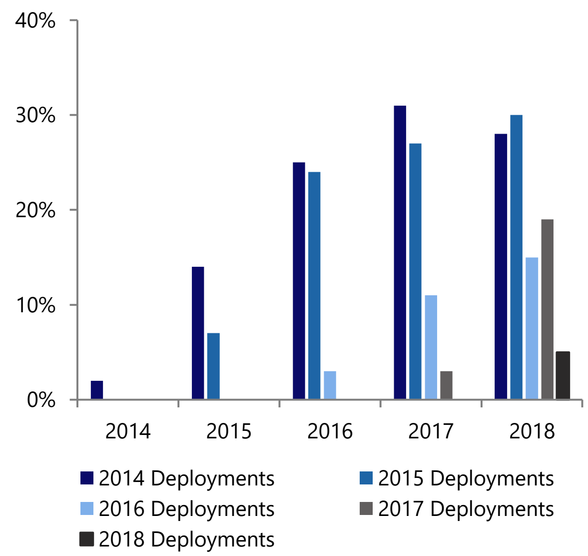
Strong balance sheet to pursue further growth



Source(s): Company Reports

EXHIBIT XIV

Incremental Pre-tax DOI return % on capital deployed in Civil Aviation



Source(s): Company Reports

EXHIBIT XV

Discounted Cash Flow Analysis

DCF Output	2017A	2018A	2019E	2020E	2021E	2022E	2023E
(In CAD 000s)							
Revenue	**2,705**	**2,830**	**3,058**	**3,305**	**3,571**	**3,831**	**4,107**
YoY Growth	7.6%	*4.6%*	*8.1%*	*8.1%*	*8.1%*	*7.3%*	*7.2%*
EBITDA	**495**	**535**	**560**	**630**	**713**	**795**	**869**
% of Revenue	18.3%	*18.9%*	*18.3%*	*19.1%*	*20.0%*	*20.8%*	*21.2%*
EBIT	**325**	**378**	**358**	**412**	**477**	**542**	**598**
Less: Tax Expense	39	29	45	52	60	68	75
NOPAT	**286**	**349**	**313**	**360**	**417**	**474**	**523**
Plus: Depreciation and Amortization	170	158	202	218	236	253	271
Less: Capital Expenditure	(223)	(174)	(202)	(212)	(229)	(259)	(266)
Less: Change in Working Capital	(3)	12	(1)	(91)	(99)	(97)	(103)
Unlevered Free Cash Flow	**230**	**345**	**312**	**275**	**325**	**371**	**426**
Unlevered Free Cash Flow for Discounting			**312**	**275**	**325**	**371**	**426**
Discount Period			0.50	1.50	2.50	3.50	4.50
Discounted Unlevered Free Cash Flow			**299**	**243**	**265**	**279**	**295**

EXHIBIT XVI

Share Price Calculations & WACC

Share Price Calculation	
2023E EBITDA	896
EV/NTM EBITDA Exit Multiple	12.2x
Terminal Value	10,931
PV of Terminal Value	7,562
PV of UFCF	1,381
Enterprise Value	8,943
Less: Net Debt	812
Implied Equity Value	8,131
Shares Outstanding	267
Implied Share Price	$30.44
Current Share Price	$26.22
Dividend Yield	1.50%
All-in Return	**17.61%**

WACC Calculation	
Risk-Free Rate	3.09%
Market Risk Premium	5.50%
Beta	1.17
Cost of Equity	9.53%
Cost of Debt	3.69%
Tax Rate	12.56%
After Tax Rate Cost of Debt	3.23%
Capital Structure	
Equity	84.23%
Debt	15.77%
Total	100.00%
WACC	**8.53%**

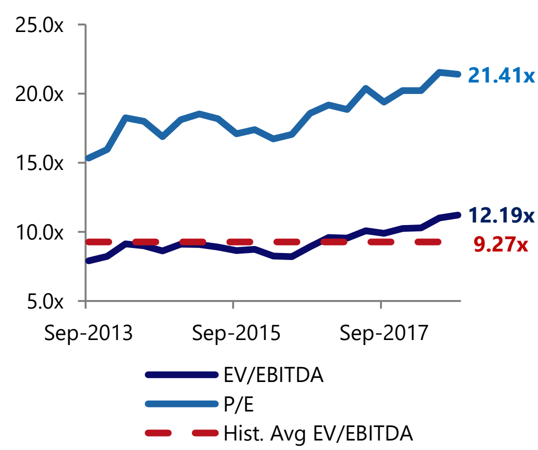
Historical Multiples	Mid	Low Price	Mid Price	High Price
P/E	20.3x	$21.23	$27.08	$30.07
EV/EBITDA	11.0x	$14.59	$18.79	$46.70

Discount Rate (%) \ EV/EBITDA NTM Exit Multiple	11.2x	11.7x	12.2x	12.7x	13.2x
7.53%	$29.23	$30.44	$31.65	$32.86	$34.07
8.03%	$28.67	$29.85	$31.04	$32.22	$33.41
8.53%	$28.12	$29.28	$30.44	$31.60	$32.76
9.03%	$27.59	$28.73	$29.86	$31.00	$32.14
9.53%	$27.07	$28.19	$29.30	$30.41	$31.53

Source(s): Capital IQ

EXHIBIT XVII

Historical Multiples



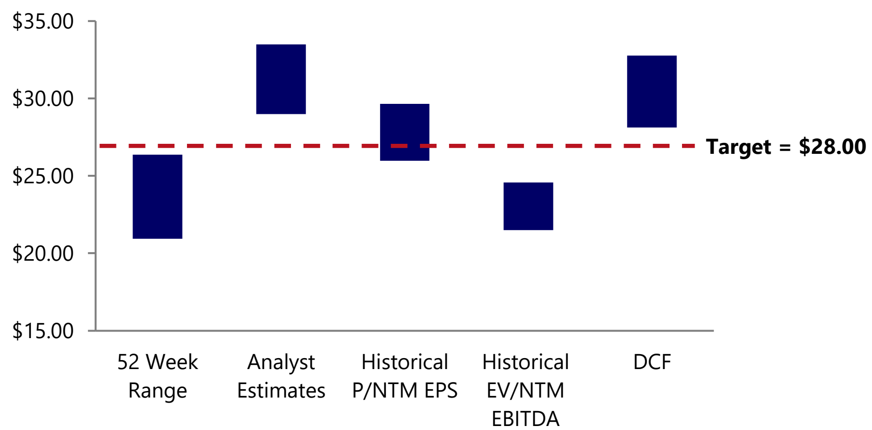
Source(s): Capital IQ

Valuation Summary & Commentary

EXHIBIT XVIII

Valuation Summary

Target Price		
Historical P/E NTM	$	27.61
Historical EV/EBITDA	$	23.16
DCF	$	30.44
Target Price	$	28.00
Current Price	$	26.22
Capital Return		6.79%
Dividend Yield		1.50%
All-in Return		**8.29%**



Source(s): Capital IQ

The all-in return implied by QUIC's valuation is 8.29%. This was calculated using a blended valuation, placing a 50% weighting on the DCF, and a 25% weighting on both the historical P/E NTM and historical EV/EBITDA multiples. CAE's lack of public comparable companies on the TSX resulted in us supplementing a comparable analysis with a historical multiples analysis. The revenue projections used in the DCF model were bullish forward five years because the QUIC Industrials team forecasts strong returns to civil aviation due to OEM backlog and contract renewals. We arrived at a target price per share of $28.00, which we believed to be conservative relative to the street consensus.

Portfolio Implications

CAE is a high quality name in the sector, offering strong business fundamentals as well as exposure to aerospace & defense tailwinds. The Industrials team has conviction in the name due to its transition to services and a reoccurring revenue model, sticky customer relationships, and strong demand prospects, particularly in its civil aviation operations. These characteristics are attractive in a subsector that often sees lumpy revenue and cash flows.

Further, CAE makes up 3% of the Industrials TSX benchmark – one of the largest aerospace names - offering an opportunity to match an index that has performed extremely well this fiscal year. Nonetheless, the name has already seen significant multiple appreciation over the past two years, pricing in much of its growth prospects and high quality earnings. Even with bullish assumptions, QUIC's target price currently implies <7% return before dividends. While we have conviction in the quality of the name, we are not confident that this is an ideal point of entry.

Thus, the Industrials team will not invest in CAE until its multiples contract or we are able to do further valuation work. Thus, we would like to add CAE to our watchlist and carefully monitor the name over the next few quarters.

References

1. Bloomberg
2. CAE Analysis
3. Capital IQ
4. Company Filings & Presentations
5. Company Website
6. Deloitte
7. Google Images
8. Government Business Council Survey
9. International Air Transport Association