RESEARCH REPORT

January 15, 2018

Stock Rating	HOLD
Current Price	CAD $34.97

Bear Case	Price Target	Bull Case
$32.00	$35.00	$40.00

Ticker	TSX:AIF
Market Cap ($MM)	$1,380
P/E NTM	26.1x
EV/EBITDA NTM	17.0x

52 Week Performance

Altus Group Limited

The Bloomberg of Real Estate?

Within the software space, the TMT team is particularly interested in seeking names that offer a competitive moat that allow them to withstand the rapid change characterizing software. The team became interested in Altus Group upon learning that it is an industry standard software in Canada, akin to a "Bloomberg" for real estate.

To analyze the strength of this business model, the TMT team evaluated the revenue quality of each of Altus' service lines, explored the outlook for the commercial real estate (CRE) software and services market, and called an analyst at one of Canada's leading REITs to learn more about Altus' core offering, ARGUS. These analyses proved that within Altus's geographic strongholds (e.g., large Canadian cities), the company has sustainable competitive advantages through high switching costs and regional standardization.

To assess whether this moat could be extended to foreign markets (i.e., is there a significant runway for growth), the TMT team analyzed Altus' M&A history and industry dynamics, concluding that the company's flagship software will experience challenges finding foreign adoption.

In short, the TMT team determined that ARGUS is likely to continue dominating the Canadian real estate market and is expected to find low-moderate international product adoption. Incorporating these predictions into a sum of the parts valuation model using forward EV/EBITDA multiples segmented by business line, the TMT team set a price target of $35.65 on the company, implying a slim return 0.52%.

TMT

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Company Overview

History

Altus Group Limited (TSX: AIF) is a Canadian real estate advisory and software company. The Altus Group was founded in 2005 through the merger of three Canadian real estate professional services companies: Altus Group, Helyar Group, and Derbyshire Viceroy. Between 2006 and 2011, Altus deployed more than $200 million of capital into 21 acquisitions to expand its real estate services business. These acquisitions included real estate consultancies across the globe, positioning the company with a collection of over 30 international offices.

During this time, Altus Group was an income trust. In January of 2011, the company converted from an income trust to a corporation to fund a change in strategy. Shortly afterward, Altus acquired ARGUS Software for $126 million, levering itself to 3.69x EBITDA, dangerously close to its covenant maximum of 3.85x. To complete this acquisition, management cut its quarterly dividend by 50% and replaced its CEO with board member Stuart Smith. Over 2011, Altus shares lost 76% of their value, falling from $12.70 to close at $3.06 from beginning of year. Following this turbulence, the company continued to fund its push into the real estate software space via several transactions. Notable ones include the purchase of 16.4% equity interest in Real Matters for $20 million (2014), and the acquisitions of RealNet and Voyanta for $20 and 7$ million respectively (2014). Despite original concerns, investors have been extremely receptive to Altus' software strategy. Significantly improved operational performance and a strengthened management team have appreciated the company's share price to $35.6.

Business Line Overview

Before 2011, Altus generated its revenue from Property Tax Services, Global Asset Management Services, Consulting and Project Management Services, and Geomatics. These business lines were all service-based consultancies with the exception of Geomatics. Since pivoting to software as a service, analytics has grown to 34% of Altus' revenue, leading to management re-classifying the company's revenue into four key service lines:

1) Property Tax Consulting

This service line offers real estate property tax services, including assessment reviews, management, and appeals, as well as personal property, and state and local tax advisory services.

2) Valuation & Advisory Consulting

This service line offers valuation and cost advisory services, such as appraisals of real estate portfolios, valuation of properties for transactional purposes, due diligence, and litigation and economic consulting services.

3) Geomatics

This service line offers various services, including land surveys and mapping for setting of property boundaries, route and corridor selection, land settlement, construction developments, and oil field and well-sites. Geomatics is very exposed to the Canadian oil & gas industry, generating 55% of its revenue from the industry.

4) Altus Analytics

This service line offers data, analytics software, and technology-related services, such as ARGUS Enterprise (AE), a software for valuation and portfolio management; ARGUS Developer, a software for development feasibility analysis; ARGUS on Demand, a hosted version of AE and ARGUS Developer; and Voyanta, a cloud-based data management solution. It also offers data subscription products that provide comprehensive real estate information on the residential, office, industrial, and investment markets.

These re-classifications have made it straightforward to track the company's growth in the software space. For simplification purposes, TMT has combined Altus' Consulting segments into 'Advisory Services'.

Business Line Analysis

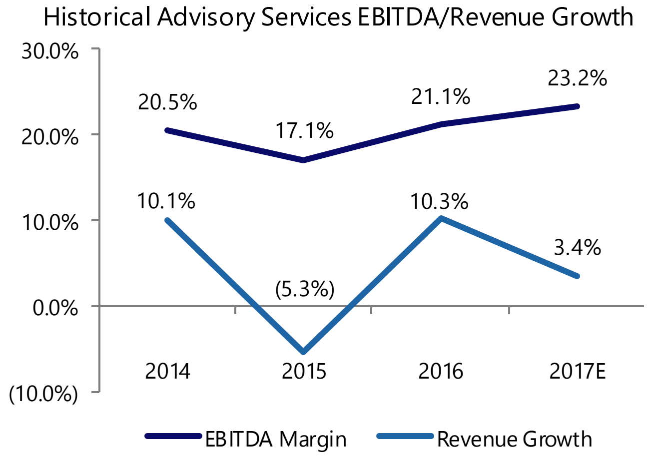
1) Advisory Services: Track Record of Performance

As noted in the Company History, the Altus Group consolidated in the early 2000s to become the dominant real-estate service provider in Canada. Since, Altus has maintained this market position, continuing to offer a breadth of professional services. Despite investors placing a large emphasis on the company's projected software growth, Advisory Services continues to be a revenue and cash flow staple for Altus.

Revenue Quality: Moderate

Although Advisory Services are mostly project-based, these revenues are indirectly recurring as a result of Altus' pre-established client relationships and degree of industry expertise. Advisory revenues have grown independent of M&A at a rate of approximately 3.0% over the last four years, with EBITDA margins regressing to approximately 21% over the long-run. Until its November 2017 acquisition announcement of CVS (see: M&A History), Altus' management had ignored investing in Advisory Services, choosing to instead allocate capital to the business line's eventual (higher margin) successor, Altus Analytics.

EXHIBIT I



Source(s): Company Filings

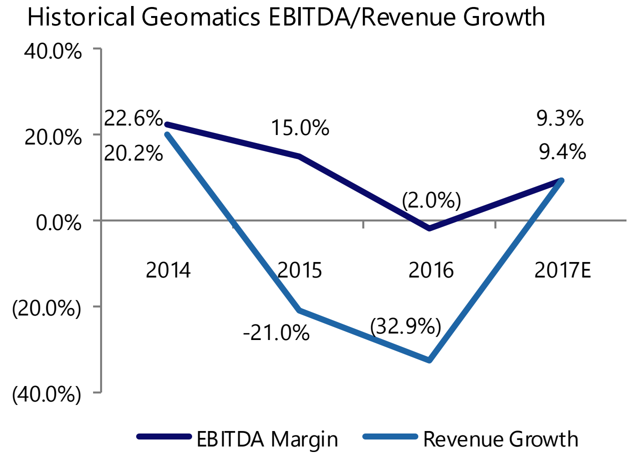
2) Geomatics: Struggling Operationally

Geomatics is a niche that the Altus Group has served since 2010. The segment displays a high revenue/EBITDA correlation to the performance of the Canadian Energy market, and is one which Altus has little competitive advantage in. Overall, Geomatics' has been a challenge for investors to predict, displaying erratic swings in top line growth and margin control. Management does not have any plans to grow Geomatics through M&A activity.

Revenue Quality: Low

2017E, 2016, and 2015 revenue growth for Geomatics are 9.3%, (32.9%), and (21.0%) respectively. EBITDA Margins were respectively as volatile, with values of 9.4%, (2.0%), and 15.0%. The two main weaknesses of this segment are that revenue and EBITDA are highly correlated with the Canadian energy market and out of management's control. Worryingly, Geomatics' performance has shown to add a large degree of uncertainty to quarterly financial reporting, eroding or amplifying EPS figures with little warning. 2017 margin improvements were a result of segment cost cutting, a trend management aims to continue.

EXHIBIT II



Source(s): Company Filings

Business Line Analysis

3) Altus Analytics: The Bloomberg of Real Estate

Altus' Analytics unit was established with the 2011 acquisition of ARGUS, a platform which has since served as a 'Trojan Horse' for the company's recently acquired and developed tools.

Generally, Altus Analytics is attempting to build what some refer to as 'The Bloomberg of Real Estate', a network of real estate applications to be used by both property managers and investment professionals to operate and assess the value of properties. Below are a few of Altus' analytic products/projects:

- ARGUS: Property/Portfolio Analysis tools for sub-segments including enterprise investing, Real-estate Development, Property Management, and others.
- Voyanta: cloud-based data management solution that is used to synchronize and benchmark organization data with market data. Sub-products include RealNet, DataBridge, DataExchange, and others.
- NCREIF Partnership: A project working to cross-analyze data within Altus' product silos. Reportedly the first platform to allow for simple industry-wide performance data analytics. From a high level, these products collectively work to centralize and interconnect all forms of real-estate management and investment data.

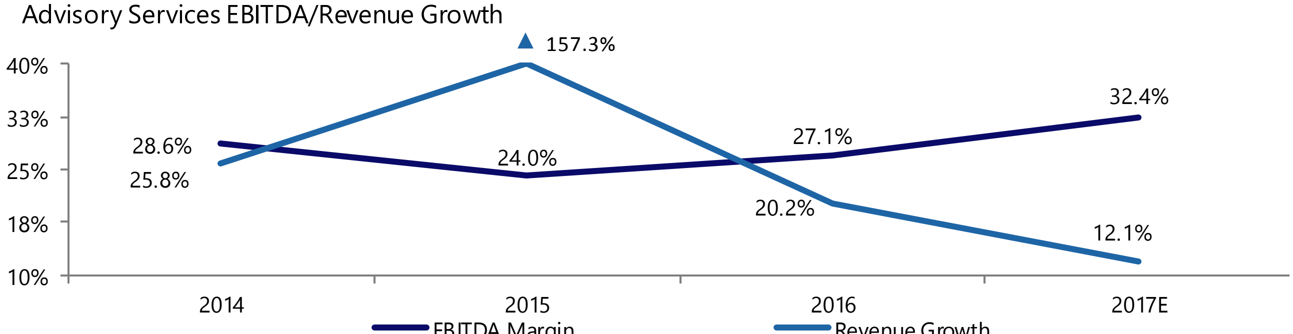
Revenue Quality: High

Revenues are largely recurring with typically three to five year contracts, and as of 2015, Altus has never lost a customer. In 2016, Altus Analytics reported a substantial EBITDA margin of 27.1%, up over 7% since the segment's 2011 inception. 2017E EBITDA margins are on track to hit 32.2%, and YoY revenue growth is expected to be 12%. Analytics accounts for only 37.3% of Altus' revenues, yet it is expected to yield approximately 69% of 2017 EBITDA. Although not reported, RBC estimates analytics' gross margin to be 70-80%, above the typical 20-25% gross margin for services industries.

Altus has been able to sustain/grow these margins due to both the quality of its offering, and the associated direct/indirect switching costs. Among real estate analysts, ARGUS reports in markets with high adoption (e.g., Toronto) are exchanged and treated like how excel files were treated 5-10 years ago: a necessary standard. Further, integrating Altus' tools involves a great deal of excel-ARGUS data pass-off, employee training, and adjustments to: financial reporting, risk management, valuation, property management, and other operation lines. Powerful tools and intimidating switching costs have resulted in almost zero churn.

EXHIBIT III

Advisory Services EBITDA/Revenue Growth



Source(s): Company Filings

Outlook for CRE Software and Services

Software

The commercial real estate (CRE) industry is characterized by older processes and systems. In terms of spending on information technology, the CRE industry lags behind most sectors. Globally, the CRE industry spends 3% of revenue on information technology, which is significantly below other verticals, such as financial services (5.7% of revenues) or the public sector (6.3% of revenues).

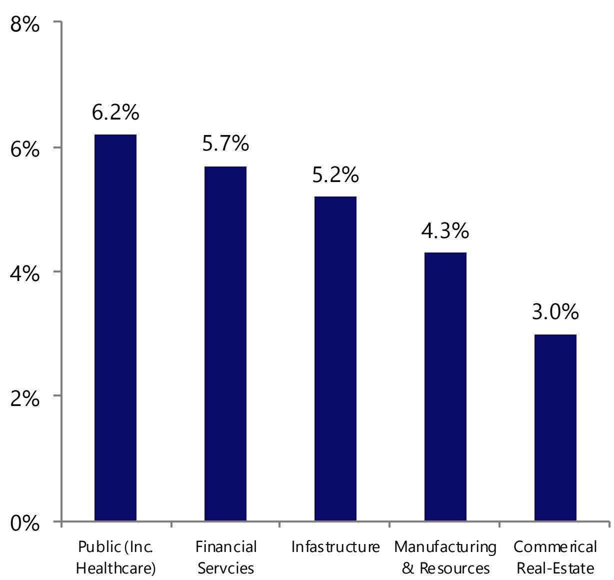
Furthermore, technology investments in CRE are concentrated in physical assets, like automation systems ($59.3 billion globally) and smart building hardware ($6.3 billion globally). In contrast, only $1.2 billion is spent on software or information systems.

There are, however, currently two major factors driving greater demand for CRE software. For one, process standardization is becoming a necessity for CRE investors. Unlike private real estate investors, who can focus on specific geographies and use ad hoc analysis or intuition, CRE cannot follow the same practices because of compliance requirements. CRE firms also stand to benefit from leveraging analytics to gain an advantage with regard to screening and analyzing investment decisions. As such, there is a growing demand within the industry for data and software specifically designed for real asset valuation and operations management.

The second factor driving demand for CRE software is the theme of consolidation and integration. This evolution is akin to the widespread adoption of Enterprise Resource Planning (ERP) programs like SAP for supply chain management during the 1990s. Prior to the 1990s, companies would tend to take a "best-of-breed" approach when implementing information systems – i.e., the best programs for specific capabilities would be selected from multiple vendors.

EXHIBIT IV

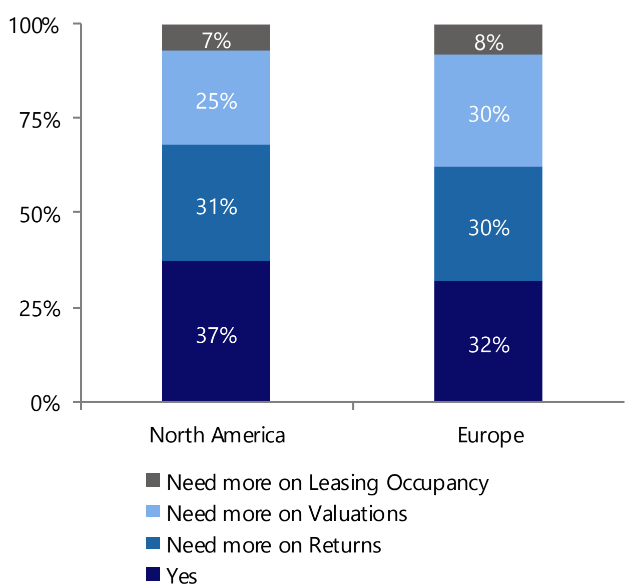
Commercial Real Estate Technology Spending: Significantly Below Other Verticals



Source(s): AIF Company Reports

Exhibit V

Industry Poll: "Do You Have Enough Data to Effectively Benchmark Against the Industry?"



Source(s): AIF Company Reports

Outlook for CRE Software and Services

The CRE industry is currently undergoing a similar transformation. According to IDC research, 30% of commercial real estate companies still use spreadsheets for asset and portfolio management tasks. The fact that less than a quarter of firms use integrated applications signals the potential for full-suite software to break into the CRE industry.

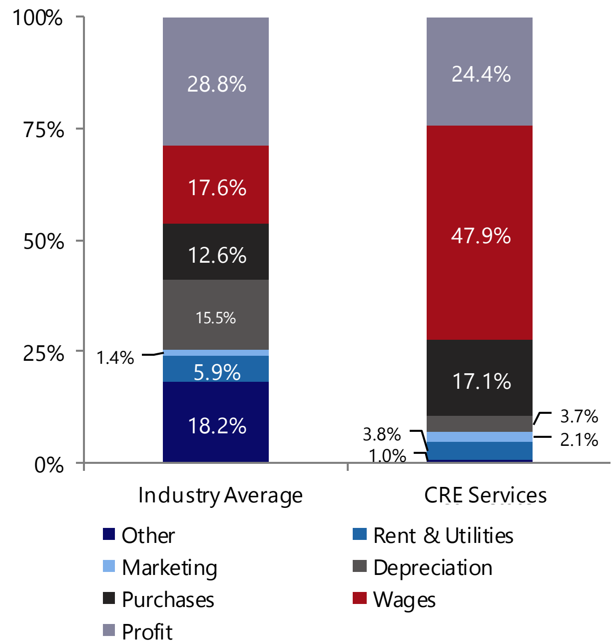
Services

The CRE services industry encompasses professional services related to the listing, sale, operating, and investing of real estate. In Canada, real estate services is currently a $2.3 billion industry and is projected to grow 1.6% annually over the next several years.

In comparison to the CRE software industry, which benefits from inherently low capital requirements and high scale economies, professional services for CRE suffer from wage costs representing nearly half of the industry's revenues, making up 47.9% in 2017. This percentage is much greater than that of all industries in the real estate sector due to the labour intensity and requirement of highly skilled individuals who have deep knowledge of the real estate industry and its technicalities.

EXHIBIT VI

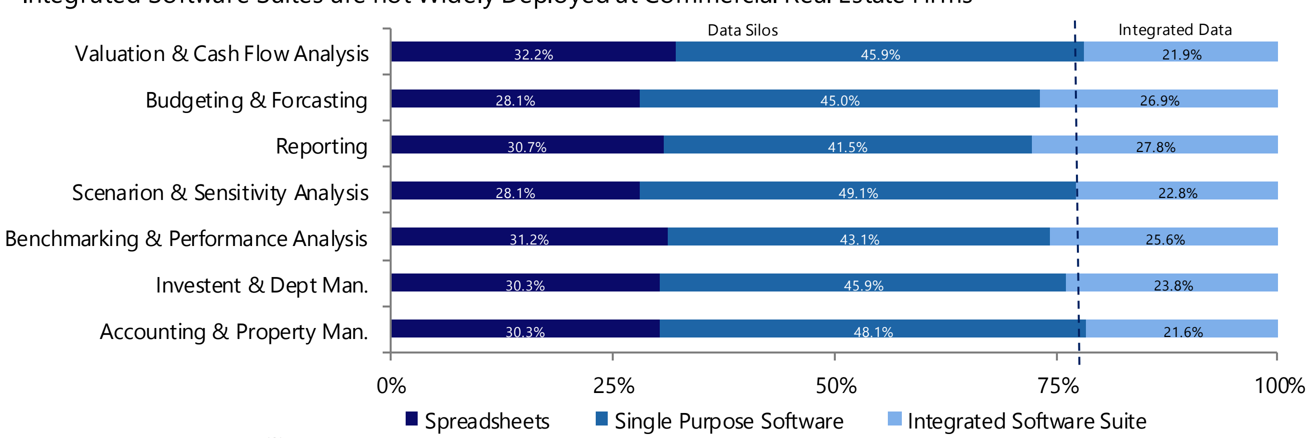
Cost Breakdown of CRE Services vs. RE Industry Avg.



Source(s): IBIS World

EXHIBIT VII

Integrated Software Suites are not Widely Deployed at Commercial Real Estate Firms



Source(s): AIF Company Filings, IDC

Analysis of M&A Activity

Altus' M&A Strategy with regard to Analytics

The global Commercial Real Estate industry provides a clear opportunity for information systems. This is due to the fact that software spending has lagged behind that of other industries and has primarily been focused on building systems, rather than information systems.

Altus Group is looking to exploit this need through an accretive M&A strategy that, if successful, could make Altus the "Bloomberg" of global CRE data. Altus is in the process of a strategic repositioning that will take it from its previous state as a real estate services company to its target future state, a real estate-focused software and data solutions company. To ensure success in their repositioning initiative, Altus has completed a series of successful acquisitions since 2011, which has led to Altus Analytics, the revenue stream related to information systems, accumulating $151.5MM in revenue in FY2016.

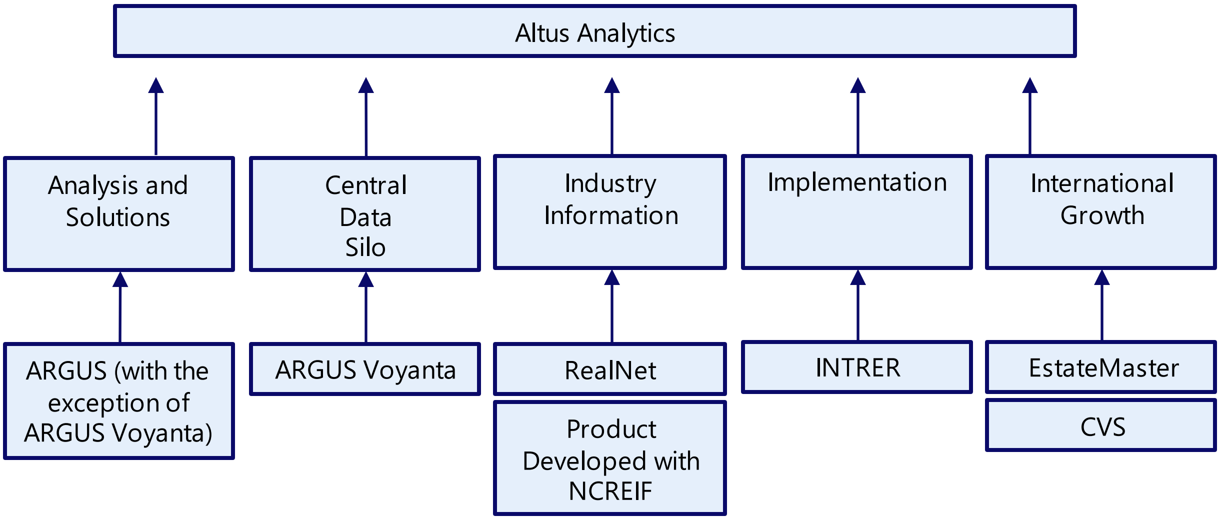
ARGUS Software – Personalized Analysis and Solutions

In June, 2011, Altus Group acquired Realm Solutions (Realm) for $126MM. This acquisition can be considered to be the beginning of Altus' desired repositioning. Altus acquired Realm so that it would own the rights to Realm Solution's ARGUS Software (ARGUS).

ARGUS was, at the time, a global market-leader in the Real Estate industry for management and analysis of commercial real estate investments. At the time of the acquisition, ARGUS was used by owners, managers, financial institutions, brokerages and REIT's in the real estate industry for its capabilities in areas such as: asset management, asset valuation, portfolio management, budgeting, forecasting, reporting, and lease management. The deal was funded by $80M in cash and $50M in debt.

EXHIBIT VIII

The Role of Each Acquisition in Altus Group



Source(s): Company Reports, RBC Capital Markets

Analysis of M&A Activity

ARGUS Software is now Altus' fourth-largest business unit and the global industry standard software for managing commercial real estate portfolios. ARGUS offers various software options including ARGUS Enterprise, ARGUS On Demand, ARGUS Developer, ARGUS Estate Master, and ARGUS Voyanta. Each of these services are sold separately.

RealNet and Partnership with NCREIF – Industry Information

In July 2014, Altus acquired RealNet for \$20MM. RealNet is a provider of real estate information services in Canada. At the time of the acquisition, it was estimated that RealNet's clientele, about 45,000 industry professionals, were involved in approximately 70% of market activity. Examples of information that RealNet tracks include: price paid for land, home sales, and condos under construction.

In November 2014, Altus partnered with the National Council of Real Estate Investment Fiduciaries (NCREIF), a not-for-profit, non-partisan, collector, processor, validator, and disseminator of real estate performance information. This partnership involves the development of a new data platform to analyze both historical and current real estate information collected by both organizations. This new tool will be the first to analyze performance and valuation data easily for the real estate industry.

These two ventures, RealNet and the tool developed with NCREIF, have been combined with Altus' existing benchmarking applications to help build a comprehensive information database and decision making platform. Now, RealNet has been incorporated into the industry data platforms that Altus sells subscriptions to.

ARGUS Voyanta – The Central Data Hub

While ARGUS is an industry leading software in itself, Altus decided to build a platform to further improve information available to and decision making for real estate investors. To do so, Altus acquired Voyanta, an international software-as-a-service (SaaS) provider of real estate data management and analytics software. The acquisition cost was \$7MM and it occurred in October of 2014. Altus acquired Voyanta so that it could become a central data hub for the collection and compilation of data from existing depots at real estate firms.

Voyanta is now sold under ARGUS Voyanta and is a central data repository for real estate companies. ARGUS Voyanta is a separate Altus service that clients can purchase and link with other ARGUS software. By linking ARGUS Voyanta to other ARGUS software, users can create solutions for their business practices that incorporate their own data, without their needing to implement it manually.

Integrated Real Estate ReSource(s)s (INTRER) – Implementation

In December 2015, Altus announced its acquisition of INTRER, a firm that provided software implementation, business process improvement, and customized solutions to the global, commercial, real estate industry. At the time of the acquisition, INTRER was already a key technical subcontractor for ARGUS and, as a result, had extensive knowledge of ARGUS products. Due to this, ARGUS acquired INTRER to provide customers with an implementation team that would make utilizing ARGUS software easy. The cost of the acquisition was \$5.3MM.

Real Matters – The Marketplace and Data

Altus owns a 12% equity interest in Real Matters (16.4% before Real Matters' May IPO). Coined the "Uber of real estate appraisals", Real Matters acts as a marketplace that connects residential real estate appraisers, inspectors, and financial institutions more efficiently and at a higher quality than traditional appraisal management companies. Outside of its market function, Real Matters has access to valuable real estate data that it could potentially monetize.

Analysis of M&A Activity

EstateMaster – International Growth and Solutions

In March 2017, Altus announced its acquisition of EstateMaster Group Holdings PTY Limited (EstateMaster), a development and management software provider, based out of Australia. At the time of the acquisition, EstateMaster was a market leader in Australia and the Middle East and the accepted standard of feasibility reports in the Australian market. With this acquisition, Altus intended to augment software solutions offered under ARGUS Developer and add market share in Australia and the Middle East. The cost of the acquisition was approximately $20.1MM.

CVS – International Growth

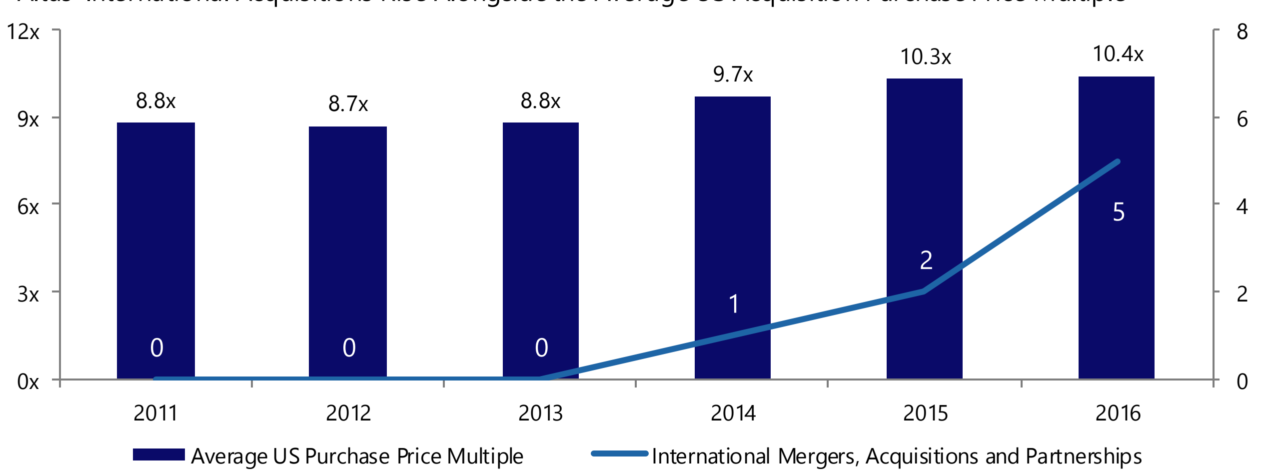
In November, 2017 Altus acquired Commercial Valuers & Surveyors (CVS), a UK-based property tax service provider and advisory service, for approximately $61.8MM. The goal of this acquisition was to improve Altus' advisory business segment, grow internationally and increase the amount of data on comparable property information that Altus has access to.

Future Outlook

Altus has succeeded in creating a market leading software that combines analysis, industry data, data repository, and implementation services. With Altus' leading platform, we anticipate that Altus will look to grow internationally. This expectation is not only based on Altus' recent acquisition of industry leading companies in Australia, the Middle East and the UK. It was also formed due to Altus' recent series of partnerships. These partnerships involve arrangements like referral sales agreements or the partner company's expanded use of the ARGUS platform. These agreements are with market leading companies who will grow ARUGS use in countries like South Africa, Spain, India, Germany, Switzerland, Austria, and the region of EMEA (Europe, the Middle East and Africa). In addition, the competitive US Private Equity landscape has led to high acquisition valuations across industries. The average purchase price multiples for US acquisitions have remained well above their 10-year historical average (9.17x) in recent years. This unfavourable phenomenon may even make international acquisitions more attractive to Altus.

EXHIBIT IX

Altus' International Acquisitions Rise Alongside the Average US Acquisition Purchase Price Multiple



Source(s): Bain & Company, Company Reports

Interview with REIT Analyst

The TMT team had the opportunity to set up a call with an analyst working for a major Canadian REIT. The purpose of the call was to learn more about Altus' software platform and its growth potential. Below are the discussion topics that were covered in the call.

Experience using Altus' software

Introduced to ARGUS DCF and developer earlier in my career (2-3 years ago). Have recently adopted ARGUS AE. Within Toronto/Canada, this is the standard. Real-estate professionals have become accustomed to the ARGUS platform, and juniors are now learning to work with it when they start their careers.

Altus' software popularity outside of Canada

Altus was first to market in Toronto, meaning that most Canadian real-estate investors use ARGUS' platform for all their analysis. Outside of Canada there are very many similar softwares, each with high adoption in their respective markets.

Potential of other regional competitors considering switching to ARGUS

Frankly, Altus' software is not very differentiated at all. The software interface has very poor user interface. The reason why we (and all other real estate investment firms) continue to use ARGUS is the high switching cost.

All of our research and analysis is in ARGUS, and will stay in ARGUS. As a result, when we do business with non-ARGUS firms they are often forced to buy the software in order to be able to analyse our data. We often do the same with other U.S. software (that is, purchase subscriptions in order to be able to work with firms using different platforms)

Potential demand for Altus' expanded data services suite, and whether any demand is being unserved by CRE software companies

A lot of real-estate firms don't pay for data. Companies like the CBRE which provide advisory/brokerage services provide us with free market data in exchange for our business. I'm not sure who Altus plans on providing this data to, but currently our data needs are already met. [did not mention any areas of underserved demand]

Additional Comments

Altus' consulting services (tax, cost, etc.) are good. Despite having in-house specialists firms will still use Altus for a 2nd opinion, and very frequently.

Saturation in the real estate software space is very high, both small and large players have these tools.

EXHIBIT X

Takeaways from REIT Analyst Phone Call

Regionally Bound Growth Opportunities

↓

Highly segmented markets with high switching costs limit ARGUS' ability to expand internationally

Questionable Product Expansion

↓

Real-Estate analysts (at least in Canada) already have cost-less access to high quality real estate data

Leading Consulting Services Unit

↓

The real estate market values Altus' consulting services and is willing to pay a premium for industry expertise

Investment Outlook

Despite initiating coverage on Altus Group because of the company's high growth potential in the software subsegment, the team has concluded that because of industry dynamics, Altus' future is likely to be continuing to serve/optimize its software business in Canada, while taking steps to expand its consulting business abroad.

High universal switching costs and the availability of market data will prove to be headwinds as Altus continues to invest into its ARGUS offering. TMT expects that due to broader trends in demand for analytical tools, revenue will continue to moderately grow in the short-medium term. With 2017E Analytics revenue growth expected to be 7.0%, TMT predicts the segment will organically grow at a rate slightly below this figure.

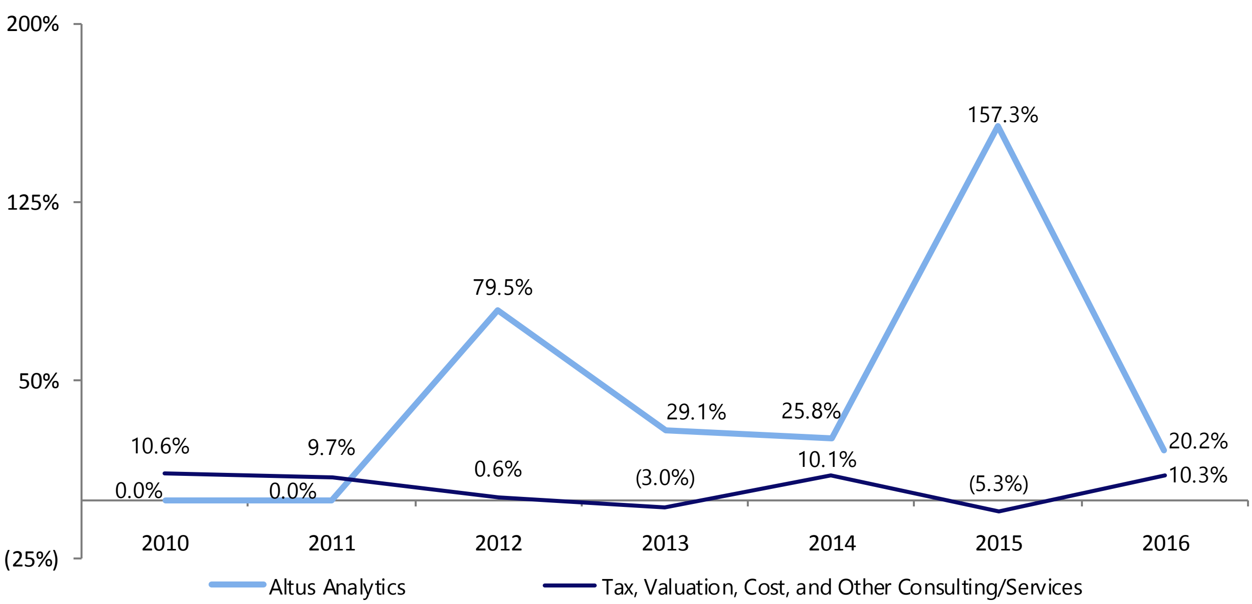
As noted by the REIT analyst TMT had the opportunity to interview, and supported by the segment's 18% EBITDA margin, Altus' consulting units provide high-quality advisory services which have a history of growing demand in Canada. Within Canada, this segment's growth is anticipated to remain relatively flat, yet Altus has recently taken steps to extend its reputation to markets abroad, notably with the November 2017 acquisition of U.K.-based CVS.

In all, the Altus Group's core business lines have strong margins, free cash flow generation, and sustainable competitive advantages in their respective niches. At its core, Altus' business is fundamentally robust, but growth is expected to be restricted as a result of industry structure and saturation.

Next, the TMT team factored these predictions into a sum of the parts valuation using forward EV/EBITDA multiples.

EXHIBIT XI

YoY Revenue Growth by Segment



Source(s): Company Filings

Valuation

Altus Group's business is segmented into three divisions—Altus CRE, Altus Analytics, and Altus Geomatics—each of which has different margins and growth rates, therefore the team valued Altus Group using a sum-of-the-parts valuation. The team assembled a comparable companies universe for each segment, and applied a range of EV/EBITDA multiples for 2017E and 2018E based on three scenarios.

In the team's bear case, Altus Analytics growth slows as installations from US institutional investors slows, and international expansion is not successful amid increased competition from CRE software vendors.

In the team's base case, Altus Analytics growth continues to taper off slowly in the US, and makes steady progress in Europe, Australia, and the Middle East through its acquisitions of Voyanta and CVS.

In the team's bull case, the acquisition of Voyanta allows Altus Analytics to grow quickly in Europe as a result of the stricter regulatory requirements brought about by the Alternative Investment Fund Managers Directive (AIFMD).

EXHIBIT XII

Comparable Companies Analysis

Real Estate Software & Data Analytics								
	Market	**Enterprise**	**EV / EBITDA**			**2-Year**	**Dividend**	**EBITDA**
Company Name	**Capitalization**	**Value**	**LTM**	**2017E**	**2018E**	**Rev. Growth**	**Yield**	**Margin**
CoStar Group, Inc.	$11,366	$11,048	46.9x	39.2x	28.1x	15.2%	-	25.3%
RealPage, Inc.	$3,887	$4,175	47.3x	25.8x	19.1x	21.5%	-	14.0%
CoreLogic, Inc.	$3,805	$5,453	13.8x	11.5x	11.1x	(2.2%)	-	21.2%
Reis, Inc.	$227	$210	30.3x	17.0x	13.1x	6.0%	3.4%	14.6%
Mean			**34.6x**	**23.4x**	**17.8x**	**10.1%**	**3.4%**	**18.8%**
Median			**38.6x**	**21.4x**	**16.1x**	**10.6%**	**3.4%**	**17.9%**

Real Estate Services								
	Market	**Enterprise**	**EV / EBITDA**			**2-Year**	**Dividend**	**EBITDA**
Company Name	**Capitalization**	**Value**	**LTM**	**2017E**	**2018E**	**Rev. Growth**	**Yield**	**Margin**
CBRE Group, Inc.	$14,813	$17,882	13.7x	10.7x	10.1x	6.8%	-	9.5%
Jones Lang LaSalle Incorporated	$6,921	$8,189	12.0x	11.5x	10.8x	9.2%	0.5%	9.0%
Colliers International Group Inc.	$2,965	$3,475	15.4x	14.7x	13.3x	12.3%	0.2%	10.6%
Mean			**13.7x**	**12.3x**	**11.4x**	**9.4%**	**0.3%**	**9.7%**
Median			**13.7x**	**11.5x**	**10.8x**	**9.2%**	**0.3%**	**9.5%**

Engineering Services								
	Market	**Enterprise**	**EV / EBITDA**			**2-Year**	**Dividend**	**EBITDA**
Company Name	**Capitalization**	**Value**	**LTM**	**2017E**	**2018E**	**Rev. Growth**	**Yield**	**Margin**
Stantec Inc.	$4,018	$4,619	12.6x	11.5x	10.3x	9.5%	-	10.6%
Aecon Group Inc.	$1,176	$1,676	11.1x	9.7x	8.1x	(2.0%)	2.5%	5.1%
Stuart Olson Inc.	$212	$277	12.5x	8.0x	6.3x	8.8%	7.8%	2.3%
Mean			**12.1x**	**9.8x**	**8.2x**	**5.4%**	**5.2%**	**6.0%**
Median			**12.5x**	**9.7x**	**8.1x**	**8.8%**	**5.2%**	**5.6%**

Source(s): Capital IQ, Company Filings

Valuation

EXHIBIT XIII

Sum-of-the-Parts Valuation

2017E EV/EBITDA	Bear	Base	Bull
Altus Analytics 2017E EBITDA	46	46	46
EV/EBITDA Multiple	21.0x	23.0x	26.0x
EV of Altus Analytics	**959**	**1,050**	**1,187**
Altus Advisory Services 2017E EBITDA	45	45	45
EV/EBITDA Multiple	9.0x	10.0x	11.0x
EV of Altus Advisory Services	**408**	**453**	**498**
Altus Geomatics 2017E EBITDA	2	2	2
EV/EBITDA Multiple	5.5x	6.5x	7.5x
EV of Altus Geomatics	**10**	**12**	**14**

Total (2017E Multiples)	Bear	Base	Bull
EV of Altus Analytics	959	1,050	1,187
EV of Altus Advisory Services	408	453	498
EV of Altus Geomatics	10	12	14
Total EV	**1,377**	**1,515**	**1,699**
(Less): Net Debt	(85)	(85)	(85)
Implied Equity Value	**1291.6**	**1430.1**	**1614.2**
FDSO	37	37	37
Equity Value per Share	**34.46**	**38.16**	**43.07**

2018 EV/EBITDA	Bear	Base	Bull
Altus Analytics 2017E EBITDA	47	47	47
EV/EBITDA Multiple	16.0x	18.0x	21.0x
EV of Altus Analytics	**745**	**838**	**977**
Altus Advisory Services 2017E EBITDA	46	46	46
EV/EBITDA Multiple	8.5x	9.5x	10.5x
EV of Altus Advisory Services	**390**	**436**	**482**
Altus Geomatics 2017E EBITDA	1	1	1
EV/EBITDA Multiple	4.5x	5.5x	6.5x
EV of Altus Geomatics	**6**	**7**	**8**

Total (2018E Multiples)	Bear	Base	Bull
EV of Altus Analytics	745	838	977
EV of Altus Advisory Services	390	436	482
EV of Altus Geomatics	6	7	8
Total EV	**1,141**	**1,281**	**1,468**
(Less): Net Debt	(85)	(85)	(85)
Implied Equity Value	**1055.46**	**1195.75**	**1382.6**
FDSO	37	37	37
Equity Value per Share	**28.16**	**31.90**	**36.89**

Source(s): Capital IQ, Company Filings

EXHIBIT XIV

Blended Valuation and Implied Return

Blended Valuation	Weighting	Bear	Base	Bull
2017E Valuation	60%	34.5	38.2	43.1
2018E Valuation	40%	28.2	31.9	36.9
Blended Valuation		**31.94**	**35.65**	**40.60**
Current Share Price		**35.47**	**35.47**	**35.47**

Blended Return	Weighting	Bear	Base	Bull
2017E Implied Return	60%	(2.8%)	8%	21%
2018E Implied Return	40%	(20.6%)	(10.1%)	0.0
Blended Return		**-10%**	**1%**	**14%**

In the blended valuation, the 2017 estimates were weighted more highly, as these estimates are more likely to be accurate. From this sum-of-the-parts valuation, the team's target price is $35.65, implying a return of 0.52%. The team has concluded that at a current price of $35.47, Altus Group appears to be fairly valued. While the company has expanded its software offering and grown its software revenues significantly, the company's share price has also appreciated to reflect this.

Beyond the company's transition to a more data and software-oriented business, there seems to be limited upside beyond the team's target price. Altus's consulting services are high quality and profitable, however it will be difficult to continue to grow the business through acquisitions as it is already in the top three companies by market share for tax consulting in Canada, the United States, and the United Kingdom.

Growth in the software business does not have a long runway in the North America, where the market is saturated, and which makes up 47% of invested real estate assets by AUM. There is more room for growth in Europe, which makes up 37% of real estate AUM, and where ad-hoc analysis is more common and the need for technology is increasing, however several other CRE software vendors such as Yardi have established presences in Europe, and it is unclear whether Altus will be able to lead in this market.

Catalysts

1) Sale of Non-Core Businesses

Considering management's steps to transform Altus into a software and information company, the TMT team believes that there is a high probability of the company selling its non-core businesses (i.e., the services segments) in the near future.

In particular, the Geomatics segment, which is specific to limited verticals, does not offer any cross-selling opportunities that would enable Altus to take a land-and-expand approach with its customer base. Geomatics have been weighing down AIF's current valuation, so we believe that a potential sale would allow the company to reduce its leverage or buy back shares.

Moreover, there is upside potential if Altus were to reallocate capital toward its software businesses, which have much higher gross margins and scale economies than services. Based on RBC estimates, ARGUS has a gross margin of around 70%-80% compared to a 20%-25% gross margin for services.

Altus also owns a 12% equity stake in Real Matters, which is a brokerage platform that connects real estate appraisers, insurance inspectors, and financial institutions. The platform brings the parties together more efficiently than a traditional appraisal management company, which is an estimated $5 billion industry overall. Considering Real Matters' double-digit revenue growth, there is a foreseeable upside if Altus decides to sell or reduce its stake in Real Matters in subsequent equity financings.

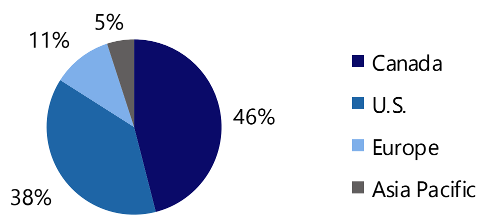
2) Potential International Expansion

Despite challenges associated with localizing ARGUS to other regions, there is a particularly high prevalence of ad hoc analysis and manual excel spreadsheets or homegrown proprietary systems in Europe and Asia-Pacific. As a result, the TMT team believes that there is meaningful opportunity for Altus' ARGUS platform. Following the introduction of the Alternative Investment Fund Managers Directive (AIFMD) in Europe, the CRE industry in the EU faces stricter rules for valuation, risk management, and market data.

Altus has already taken steps to adapt its platform outside of North America, having released updates to ARGUS for European standards as well as Australian real estate valuation standards. Furthermore, Altus' acquisition of Voyanta enhances its translation as well as it units and currency conversion capabilities. It is important to note, though, that localization is at an early stage, so it hard to determine with high conviction Altus' success with these efforts.

EXHIBIT XV

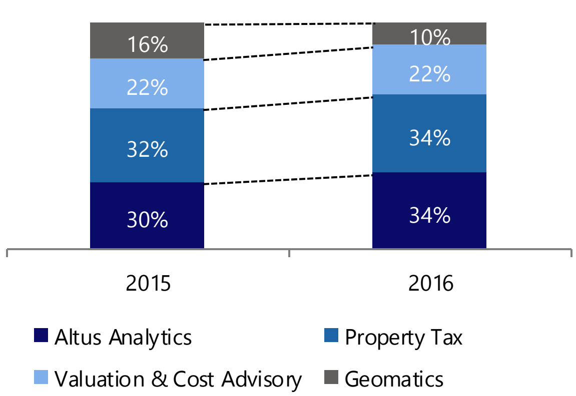
2016 Revenues by Geography



Source(s): Company Filings

EXHIBIT XVI

Revenue Contribution by Segment



Source(s): Company Filings

Risks

1) Ability to Acquire Software Suites

Typically in the software industry, Canadian companies have experienced success with the "consolidator" approach, in which management is able to identify specialized software companies for tuck-in acquisitions. This strategy has proven to be effective for companies including Constellation Software, Kinaxis, and OpenText because of the fragmented end markets and numerous acquisition opportunities.

In Altus' case, however, there is only one end market (CRE) and only five other providers of software or information services with a meaningful install base. Three of these companies are too large for Altus to acquire through internally generated FCF and one company was already acquired recently by a PE firm, which leaves only one company remaining. Nonetheless, the scarcity of viable acquisition targets means that Altus cannot employ a land-and-expand strategy to inorganically grow.

2) NR Exposure

Another risk associated with AIF is its exposure to the oil & gas sector. Through the company's Geomatics business, which offers services for land settlements, including oil field and well-sites (which comprise 55% of the segment's revenue), the performance of this business segment is highly correlated with the performance of the Canadian oil & gas sector. As discussed in the catalysts section, however, the TMT team believes that Altus will eventually divest from its Geomatics business considering that it represents less than 10% of EBITDA and the services nature of the business does not align with the company's transformation into an information and software company.

EXHIBIT XVII

Leading CRE Software Providers

Company	Products/Services	Annual Revenue	Potential Target?
YARDI (privately held)	Property management software for all RE verticals	$600 million (estimated)	✗ Too large
CoStar Group NASDAQ:CSGP	Information, analytics, and marketing platform	$838 million	✗ Too large
mri REAL ESTATE SOFTWARE (privately held)	Management, accounting, and automation software	$100 million (estimated)	✗ Acquired by PE firm
REIS NASDAQ:REIS	Market research and economic analysis reports	$48 million	✗ Too large
REAL CAPITAL ANALYTICS (privately held)	Proprietary data analytics and transaction database	$20 million (estimated)	✓ Suitable size

Source(s): Company Filings, RBC Capital Markets

References

1. Bain & Company
2. Capital IQ
3. Company Filings
4. IBIS World
5. IDC
6. Industry Analyst Interview
7. RBC Capital Markets