

Applied Investment Management (AIM) Program

AIM Class of 2015 Equity Fund Reports Fall 2014

Date: Friday, November 21st / Time: 3:00 pm – 4:00 pm
Road Show Location: Heartland Funds

Student Presenter	Company Name	Ticker	Price	Page No.
Jeremy Poppe	First Industrial Realty Trust Inc.	FR	\$19.26	2
Jiajun Zhou	Validus Holdings Ltd.	VR	\$40.04	5
Kevin Lane	PNM Resources	PNM	\$28.58	8
Connor Showalter	China Unicom ADR	CHU	\$14.58	11

We appreciate the opportunity to take an AIM ‘road show’ to Heartland Funds. These student presentations are an important element of the applied learning experience in the AIM program. The students conduct fundamental equity research and present their recommendations in written and oral format – with the goal of adding their stock to the AIM Equity Fund. Your comments and advice add considerably to their educational experience and is greatly appreciated. Each student will spend about 5-7 minutes presenting their formal recommendation, which is then followed by about 8-10 minutes of Q&A.

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First Industrial Realty Trust (FR)

November 24, 2014

Jeremy Poppe

Domestic Financials

First Industrial Realty Trust (NYSE:FR) is an integrated real estate company which owns, manages, acquires, sell, develops, and redevelops industrial real estate. The firm is a real estate investment trust (REIT) as defined in the U.S. Internal Revenue Code. As of September 30, 2014 First Industrial owned 638 industrial properties located in 25 states, (in aggregate is 63.3 million square feet of gross leasable area). The majority of their portfolio is in light industrial properties and bulk warehouse properties. First Industrial's properties are in major industrial areas across geographic segments, the largest being Southern California accounting for 12%. First Industrial Realty Trust is headquartered in Chicago, Illinois.

Price (\$): Nov. 16 2014	19.26	Beta:	1.57	FY: Dec. 31	2013A	2014A	2015E
Price Target (\$)	28.21	WACC:	7.10%	Revenue	328,226.00	354,229.68	369,895.46
52 WK H-L (\$)	20.15-16.29	M-Term Revenue Gr. Rate Est:	4.42%	% Growth	7.92%	4.42%	4.42%
Market Cap (mil):	2.13	M-Term EPS Gr. Rate Est:	3.93%	Shareholder Equity	11,712.19	N/A	N/A
Float (mil):	108.34	EBITDA/Interest Expense	1.2x	FFO	\$0.98	\$1.16	\$1.29
Short Interest (%)	8.80%	ROA:	3.90%	P/B	1.7x	2.0x	2.0x
Avg Vol (K)	510,152	ROE:	4.80%				
Dividend (\$):	\$0.41	Total Debt/EBITDA	6.2x				
Yield (%)	2.13%						

Recommendation

Since the Financial Crisis, First Industrial Realty was forced to redefine their strategy and address liquidity issues. In the last three years, management has put their focus on forming a strong and flexible balance sheet, brought back the dividend, and have driven occupancy and net operating income. At the beginning of 2014, the firm increased its dividend and has a high probability of continuing this trend into the future. Along with a more focused company that is generating more profits, FR is benefitting from a strong rebound in manufacturing and industrial growth in the U.S. economy. This is demonstrated by the PMI statistic for October that is up 2.4% from September which indicates the 17th consecutive month of manufacturing growth. In 38 markets, vacancy rates are under 4.0%. This should continue to lead to higher rents and higher valuations of their assets. First Industrial also brings geographic and tenant diversity throughout the United States. This mitigates any risk from the local economy as well as being too dependent on any one particular firm. The AIM portfolio is significantly underweight REIT holdings compared to the benchmark, and this addition would bring the portfolio closer to its targeted weightings. Due to the firm's stronger credit quality, growth in U.S. manufacturing that is driving lower vacancy rates, and tenant diversity, it is recommend First Industrial be acquired with a target price of \$25.34 offering a 31.6% upside. First Industrial Realty pays a \$0.41 dividend, representing an annual dividend yield of 2.8% yield.

Investment Thesis

- **Reduction of Net Debt and Preferred Stock.** In 2008, their net debt plus preferred stock to EBITDA ratio was at 11.1x. In the past six years, this has been brought down to 6.2x EBITDA. This decrease in leverage caused all three rating agencies to upgrade Industrial Realty's debt to investment grade. This has a major implications on their ability to borrow capital as many large financial institutions are restricted from owning securities below investment grade. The ability to have a flexible balance sheet that enables the firm to borrow at competitive rates will allow management to take advantage of future opportunities and propel earnings.
- **Rebound in U.S. Manufacturing is Driving Demand for Industrial Facilities.** United States manufacturing has been growing. ISM statistics show 16 of 18 manufacturing industries grew in October and new orders have been increasing for 17th consecutive months. This growth in the industrial sector has caused U.S. industrial property vacancy rates to drop to the lowest level in more than a decade during the third quarter of 2014. According to the

World Property Journal, the overall national vacancy average is 7.0%, 80 basis points lower than last year. This strong demand will cause rent prices to increase and occupancy rates to drop, driving higher revenues for First Industrial Realty Trust.

- **Tenants and Geography Diversity** First Industrial Realty Trust is geographically diverse throughout the country, with its largest market being southern California making up 12.0% of rental income. The firm has tenant diversity as well. The top rental client makes up 2.8% of income and top 20 customers account for 22.0% of income. Therefore, the firm mitigates business risk from any one particular client.

Valuation

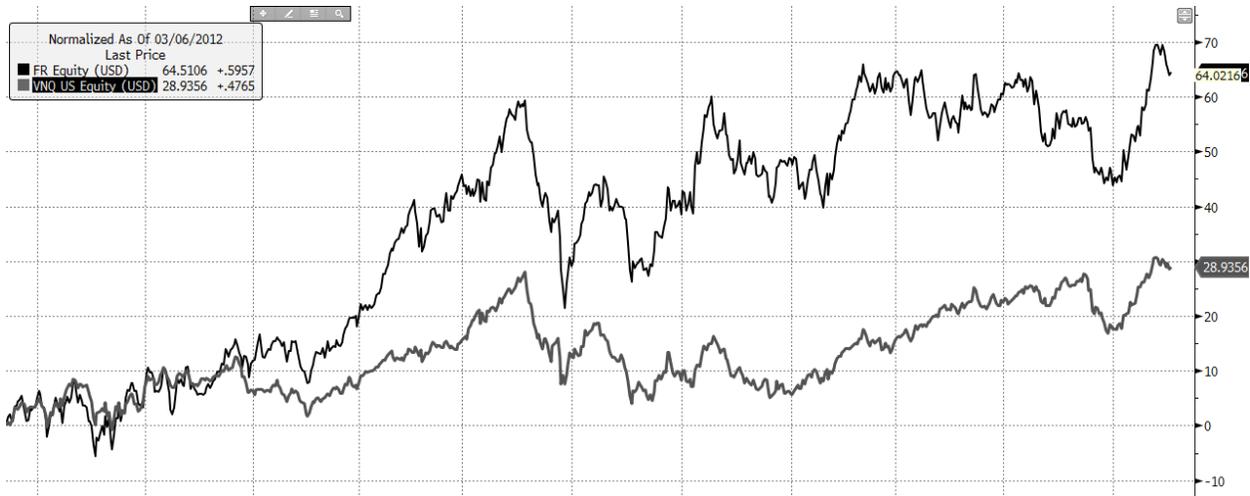
To find a target price for First Industrial Realty, an EV/EBITDA multiple method and a Price/Book method were used. The peer multiple for the industry was 24.1x, implying a share price of \$36.64. For the Price to Book multiple method, the industry average was 2.0x, implying a share price of \$19.77. Weighting the two valuations 33% and 67% respectively, a target price of \$25.34, providing for a potential 31.6% upside. Along with the upside, FR pays a \$0.41 dividend with a strong likelihood of increasing.

Risks

- **Rising Interest Rates.** Rising interest rates would cause an increase in current borrowing costs, impair their ability to finance future projects, and hurt assets values the firm currently holds. As of December 31, 2013, First Industrial Realty had 13.3% of their debt contracted in variable interest rate securities 86.7% in fixed rate.
- **Domestic Manufacturing.** If domestic manufacturing began to weaken, First Industrial would also face headwinds in occupancy rates. First Manufacturing typically signs shorter-term leases; however, this enables them to raise rents faster in an inflationary environment.
- **Downgrade from Rating Agencies.** The credit rating affects availability, terms, and pricing of any debt or preferred stock offering in the future. The company has taken steps post-financial crisis to deleverage itself and is committed to maintaining a strong balance sheet. Therefore, there is no reason to believe that management will engage in activity that would put the firm at risk of a debt downgrade.

Management

Since 2009, Bruce Duncan is the President and Chief Executive Officer. Mr. Duncan brings over 30 years of real estate management and investment experience including the acting as the President and CEO of Equity Residential (NYSE: EQR), the largest publicly traded apartment company in the United States. Presently serves as the Board of Starwood Hotels & Resorts Worldwide, Inc. One of the several companies he has served is JMB Realty Corporation and his most recent role is as President and Co-CEO. During his time with the firm, JMB Realty grew its asset base from \$800 million to more than \$25 billion.



Ownership

% of Shares Held by All Insider and 5% Owners:	3.00%
% of Shares Held by Institutional & Mutual Fund Owners:	35.00%

Source: Yahoo! Finance

Top 5 Shareholders

Holder	Shares	% Outstanding
The Vanguard Group	14,331,321	12.96%
Cohen & Steers Capital Management	13,156,554	11.90%
The London Company	8,217,552	7.43%
Principal Global Investors (Equity)	6,959,095	6.29%
BlackRock Institutional Trust	6,634,102	6.00%

Source: Thomson One

Validus Holdings Ltd (VR)

November 21, 2014

Jiajun Zhou

International Financials

Validus Holdings Ltd (NYSE:VR) is a holding company that provides reinsurance and insurance coverage in the property, marine and specialty line markets. It provides reinsurance and insurance products through three major subsidiaries: Validus Reinsurance, Ltd. (Validus Re, 54.0% of FY13 Revenue), Talbot Holdings Ltd. (Talbot, 38.3%), and AlphaCat Managers, Ltd. (AlphaCat, 7.7%). The Validus Re and Talbot divisions primarily provide short-tail lines of products and underwriting services, while the AlphaCat division offers investment services related to insurance linked securities. The company recognizes revenue from United States, Latin America, Europe, Asia, Australia and New Zealand, and other locations non-specific. In June 2014, VR announced that it reached an agreement to acquire US-based Western World Insurance Group and the acquisition was completed in October. VR expects to benefit from Western World Insurance's 50 years' experience of U.S. primary insurance distribution relationships and will be including the financial results during Q4FY14. Incorporated in 2005, VR is headquartered in Pembroke, Bermuda.

Price (\$): (11/13/14)	40.04	Beta	0.65	FY: Dec	2013A	2014E	2015E
Price Target (\$):	47.79	Cost of Equity	8.57%	Revenue (C\$ Mil)	2,158.5	2,132.6	2,324.6
52WK L-H (\$):	34.68 - 40.79	M-Term Rev. Gr Rate Est:	7.0%	% Growth	4.70%	-1.20%	9.00%
Market Cap (mil):	3,498.6	M-Term EPS Gr Rate Est:	5.0%	Operating Margin	30.60%	30.00%	30.00%
Float (mil):	89.112	Financial Leverage	2.66	Pretax Margin	27.70%	25.00%	25.00%
Short Interest (%):	1.93%	ROA:	5.4%	EPS	4.94	4.78	4.97
Avg. Daily Vol :	610,945	ROE:	13.3%	P/E	8.11	8.38	8.06
Dividend (\$):	1.20	Combined Ratio	71.2%	BVPS	38.57	42.76	47.07
Yield (%):	3.0%			P/B	1.04	0.94	0.85

Recommendation

With a strategy concentrated on short-tail risks, the experienced management team of VR believes it can earn additional risk-adjusted return from its area of focus: global property insurance and reinsurance. Premiums are the primary source of VR's income. From 1992 to present, the property catastrophe reinsurance market has experienced a higher level of worldwide catastrophic losses in terms of both frequency and severity. Based on this fact, management believes the significant rise in the premiums from property and other reinsurance will occur as it did before. As a result, VR has seen its gross premium rising at a CAGR of 23.7% since formation, while its net premiums earned increased at an even faster CAGR of 31.7% - which amounted over \$2.1B in FY13. VR's revenue has been benefiting from its ability to earn premiums and seen a double-digit growth in the corresponding period. In addition, underwriting income is also pushing VR's EPS and BVPS to higher levels. Talbot Underwriters, VR's Lloyd's of London business trading as Syndicate 1183, as well as Talbot's overseas offices, are recognized as a leading underwriter in the industry. Underwriting profits from Talbot and Validus Re divisions have grown at a CAGR of 10.9% to over \$604 million in FY13 and are expected to continue flourishing as an increasingly important segment of VR's business. With stronger profits from premiums and underwriting, it is recommended that VR be added into the AIM International Equity Fund with a price target of \$47.79, providing an upside of 19%. VR currently pays a dividend of \$1.20, yielding 3.0%.

Investment Thesis

- Stable Growth with Risks Under Control.** Since its formation in 2005, Validus Holdings has achieved a CAGR of 12.7% in book value per diluted common shares. Despite its short history, the company has been pursuing its growth at a relatively sustainable rate with a primary target of building a strong book value per share for its shareholders. VR has grown its revenue by a CAGR of 29.2%, net income by 18.4%, and assets by 29.0% since formation. Unlike its

Bermuda-based peers, VR has been carefully developing its business; and maintaining profitable status, even in 2011 when the majority of its peers suffered a loss because of natural catastrophes. VR has been conservative on its loss reserve and the average duration of its fixed maturity portfolio. For Q3FY14, it reported a 1.56 years duration of its fixed maturity and short term portfolio, down from 1.60 at Q4FY13. VR is also actively maintaining the credit quality of its investments, with investment-grade maturities over 85% of its portfolio. This investment-grade maturities ratio has been over 80% since its formation.

- **Seeking Stronger Regional Presence.** Despite the recent slowing global growth forecast and deflation concerns of the Eurozone, the insurance market has seen strong growth in total gross premiums in various countries, such as Chile (3-year CAGR of 16.6%), Australia (10.1%), United Kingdom (8.7%), Switzerland (7.0%), and United States (5.8%). VR has been building up its global presence with a primary focus on these high growth insurance markets. Since 2011, it has been using excess capital and stock exchanges to acquire companies in these countries to strengthen its insurance product lines. VR acquired Talbot Holdings in 2007 to earn geographic diversifications (Chile, U.S., U.K., and Dubai) and obtain additional underwriting expertise in specialty insurance lines (i.e. war, financial institutions, and contingency). VR also acquired Flagstone Reinsurance in 2012 to increase its U.S. and Swiss presence of Marine, Property and Casualty insurance market.

Valuation

To value VR, a Discounted Dividend Model was used. With a cost of equity of 8.57% and a terminal growth rate of 1%, an intrinsic value of \$49.93 was reached. Additionally, a P/B multiple of 1.02x from a conservatively weighted VR and peer historical average was applied against VR FY14-15 blended BVPS of \$44.91, generating an intrinsic value of \$45.66. Applying a weighted historical and peer P/E multiple of 10x against 2014E EPS of \$4.78, an intrinsic value of \$47.77 was obtained. Weighing three valuations equally, a price target of \$47.79 was established, representing a 19% upside.

Risks

- **Natural Disaster Risk.** Unexpected catastrophes could bring potential losses to the company as property reinsurance made up 60% of Validus Re's gross written premium and . Disasters such as earthquakes that took place in Japan and New Zealand in 2011 and flooding in Thailand could substantially affect VR's profits.
- **Political and Event Risk.** VR's specialty reinsurance segment could face losses should unfavorable political events take place. Incidents such as the destruction of Malaysian Air Flight 17 in Ukraine, the terrorist attack at the Tripoli Airport, and the Rosneft Russian oil refinery explosion could have adverse effect on VR's profitability.
- **Currency and Sovereign Debt Risk.** VR uses foreign currencies, including Australian dollar, New Zealand dollar, Japanese yen, British pound sterling and the Euro, in its businesses. Its fixed maturity portfolio contains Eurozone government and agency securities as well as Eurozone corporate securities. Potential losses could occur from foreign exchange rates fluctuations and sovereign defaults.

Management

Edward J. Noonan has been the Chairman and Chief Executive Officer since VR's foundation and over 30 years of experience in the insurance and reinsurance industry. Mr. Noonan currently also serves as a director of Central Mutual Insurance Company and All American Insurance Company. Prior to joining VR, he served as president, CEO or chairman of several insurance companies. Jeffrey D. Sangster, Chief Financial Officer since February 2013 and Executive Vice President since May 2012, joined VR in 2006 and served in various senior positions including Chief Accounting Officer and Chief Financial Officer of Validus Re. Prior to joining VR, he worked with Endurance, Centre Group and Ernst & Young.



Ownership

% of Shares Held by All Insider and 5% Owners:	3.80%
% of Shares Held by Institutional & Mutual Fund Owners:	93.17%

Source: Bloomberg

Top 5 Shareholders

<u>Holder</u>	<u>Shares</u>	<u>% Out</u>
Vanguard Group INC	5,987,431	6.85%
Boston Partners	5,581,493	6.39%
Capital Group Companies INC	5,411,000	6.26%
LSV Asset Management	4,553,206	5.21%
Blackrock	4,243,068	4.86%

Source: Bloomberg

PNM Resources (PNM)

November 21, 2014

Kevin Lane

Domestic Utilities

PNM Resources Inc. (NYSE: PNM), through its subsidiaries, is an investor-owned holding company of energy and energy-related businesses. "Resources" primarily operates under two utility subsidiaries: Public Service Company of New Mexico (PNM) and Texas-New Mexico Power (TNMP) PNM is a regulated utility in New Mexico which primarily operates in the generation, transmission and distribution of electricity – it accounts for 80% of Resources' revenue. TNMP is a regulated electric utility in Texas which provides transmission and distribution services and produces the remaining 20% of Resources' revenue. Through these utility subsidiaries, Resources provides reliable power to more than 746,000 homes and businesses across New Mexico and Texas. Additionally, Resources' 2,572 MW of generation capacity reflects a balanced mix of coal, natural gas, nuclear, wind and solar generation. Resources was founded in 1917 and is headquartered in Albuquerque, New Mexico.

Price (\$) (11/17/14)	\$ 28.58	Beta:	0.86	FY: June	2013A	2014E	2015E
Price Target (\$):	\$ 33.71	WACC	5.20%	Revenue (Mil)	\$ 1,387.90	\$ 1,416.80	\$ 1,476.70
52WK Range (\$):	22.65-29.94	M-Term Rev. Gr Rate Est:	3.00%	% Growth	3.40%	2.08%	4.23%
Market Cap:	2,283.7M	M-Term EPS Gr Rate Est:	7.00%	Gross Margin	56.20%	64.10%	64.00%
Shares Outstanding	79.70M	Debt/Equity	114.62%	Operating Margin	35.70%	36.00%	35.00%
Short Interest (%):	3.8%	ROA:	2.00%	EPS	\$ 1.41	\$ 1.47	\$ 1.55
Avg. Daily Vol (90 day):	408,102	ROE:	6.20%	FCF/Share	\$ 0.48	\$ (0.58)	\$ (1.70)
Dividend (\$):	\$ 0.74			P/E	20.6x	19.8x	18.5x
				Dividend Yield	2.30%	2.50%	2.80%

Recommendation

Resources has traditionally maintained a consistent dividend growth policy, which included a 12% increase during the last fiscal year. Resources currently maintains a payout ratio of around 50% and has a long-term payout target range of 50-60%. After implementing its capital expenditure plan, Resources is forecasting above average dividend growth within their targeted payout range. Additionally, Resources has benefitted from EBITDA growth which has primarily been driven by base case rate relief. EBITDA has grown at a 7% CAGR over the past last 5 years. Resources continues to file rate case increases at PNM and TNMP in order to recover their investments in new and existing projects, to comply with environmental challenges, as well as to seek growth opportunities. Resources has continued its Renewable Procurement Plan which has consisted of the construction of 23MW of proprietary solar capacity and customer-owned solar facilities. Based on solid historical and projected operating results, it is recommended that PNM be added to the AIM Equity Fund with a target price of \$33.71, representing a potential upside of 17.29%. The firm pays a dividend of \$.74 per share for a yield of 2.50%.

Investment Thesis

- Constructive Regulatory Developments.** In October, PNM reached a settlement with the NMPSC in the San Juan Generating Station (SJGS) revised state implementation plan. Some of the key outcomes include: 50% recovery of the un-depreciated investment in SJGS which results in \$115.5M, Palo Verde Nuclear Generating Station unit 3 and 132MW of SJGS unit 4 are to be brought into rate base at values of \$221.1M and \$26M respectively effective 2018. In September, TNMP's latest transmission cost of service filing requesting additional annual revenue of \$4.2M was approved. This should give TNMP the ability to recover transmission and distribution cost of service investments in a timely manner. Additionally, by the end of Q4, PNM is expected to file a rate case which would be in effect in the beginning of 2016. The main items expected to be included in the filing include the purchase of Palo Verde 2 leases, the construction of a \$79 million 40MW solar facility, as well as the installation of Selective Non-Catalytic Reduction technology on San Juan units 1 and 4. The firm will seek to continue its projected above average rate base CAGR of 6-8% throughout 2018.

- **Eventual Dividend Growth Through 5 Year Capital Forecast.** Resources has presented its capital forecast for the next 5 years totaling an estimated \$2.3B. The forecast contains capital expenditures peaking in 2015 at \$558M followed by a steady decline in the remaining years. This decline, along with the firm's target payout ratio estimated to range from 50%-60%, should allow for significant stock price appreciation and shareholder payout in the form of dividend growth. Resources believes that it will continue to provide above industry average dividend growth with the next dividend review date set for December 2014.
- **Improved Economic Conditions.** Management remains optimistic regarding the economic conditions in New Mexico and Texas. NM's current state unemployment is 6.6% compared to the national rate of 5.8%, offering much room for improvement. Like TX, NM has taken a more business friendly posture with its gross receipts tax reform and implementation of single sales factor state tax reform. In recent weeks companies such as S&P Data, Flagship Foods, Comcast, and others have announced an increase of over 1000 jobs within the area. An improvement in the state's economic condition as well as any population increase would benefit Resources' bottom line.

Valuation

In order to reach an intrinsic value for Resources, a five year discounted cash flow model was created. A terminal growth rate of 2.5% and a WACC of 5.10% resulted in a valuation of \$33.15 per share. Additionally, a DDM was created using a retention rate of 49% and a ROE of 6.13% generating a growth rate of 3.00% resulting in a valuation of \$36.36 per share. A P/E comparison was also created using an average industry P/E as well the historical 5 year P/E for Resources. By weighting the industry average P/E of 21.53x and the historical average of 20.29x equally, the P/E multiple was calculated at 20.91x. Using the estimated EPS for 2014 of \$1.47, a value of \$30.74 was calculated. Finally, by weighting the DDM at 40% and the DCF and P/E multiple each by 30%, a price target of \$33.71 was determined establishing a potential upside of 17.95%.

Risks

- **Rate Regulation.** The profitability of Resources' utility subsidiaries depends upon their ability to recover costs through regulated rates and earn a fair ROIC. The firm is currently in a period of increased capital expenditures, while energy efficiency measures and a sluggish New Mexico economy are reducing customer demand. The increased expenditures are related to things such as environmental compliance, regulatory mandates to acquire power from renewable resources, new asset construction, and certain other factors. The rates that Resources charges its customers are regulated by the NMPRC and FERC while TNMP is regulated by the PUCT. The combination of increased costs and the slowing of customer usage places upward pressure on the per unit prices that must be charged by the company to recover its costs.
- **Environmental Regulation.** Resources' utilities are subject to various federal, state, and local environmental laws that may significantly affect their operations. Compliance with climate change, air quality, CCBs, cooling water, and other regulatory initiatives may result in increased capital, operating, and other costs. Resources cannot predict how it would be affected if existing environmental laws and regulations were to be revised or reinterpreted.
- **Weather Conditions Affect Operating Results.** Variations from normal weather conditions may place the operating results for certain of Resources' business segments at risk. Demand for electricity traditionally peaks in the summer and winter cooling and heating months. A significant amount of natural gas revenues are recognized in the first and fourth quarters related to the residential and commercial customers heating demands. Unusually mild summers and winters therefore could have an adverse effect on the financial condition and results of operations.

Management

Patricia Collawn is the Chairman, President and CEO of Resources having worked in a leadership role for the company since joining in 2007. Ms. Collawn has more than 20 years of experience in the utility industry having previously served as President and CEO of Public Service Company of Colorado, a subsidiary of Xcel Energy. Charles Eldred is EVP and CFO of Resources and has been with the company since 2005. Eldred oversees treasury, investor relations and corporate planning, the controller's group, internal auditing, customer service and business technology services.



Source: Bloomberg

Top 5 Share Holders	Shares	% Out
Price (T.Rowe) Associates Inc	6,420,432	8.06
Vanguard Group, Inc. (The)	5,371,081	6.74
Franklin Resources, Inc	3,598,800	4.52
BlackRock Fund Advisors	3,484,381	4.37
AllianceBernstein, L.P.	3,374,552	4.24

Source: Yahoo Finance

Breakdown	
% of Shares Held by All Insider and 5% Owners:	1%
% of Shares Held by Institutional & Mutual Fund Owners:	87%

Source: Yahoo Finance

China Unicom ADR (CHU)

November 21, 2014

Connor Showalter

International Telecom

China Unicom Corporation (NYSE: CHU) is a full services communications operator and the world's 2nd largest wireline operator. They also provide a mobile telecommunications network (CDMA) and offer a broadband internet platform. CHU wired operations have 88 million, broadband customers totaling 65M, and mobile telephone subscribers equal to 281M. CHU owns China's only GSM standard mobile network with competitors using WCDMA 3G networks. China Unicom has 222,530 full time employees. The firm receives revenues from wireline voice and data (29.4%), mobile voice and data (51.4%), and the sale of telecommunication products (19.1%). China Telecom is headquartered in Beijing, China and was founded in 1994 and reorganized with China Mobile and Telecom in 2008.

Price (\$): (11/12/14)	14.58	Beta:	0.65	FY: Aug	2013A	2014E	2015E
Price Target (\$):	18.53	WACC	6.8%	Revenue (Mil)	47,991	48,108	51,957
52WK H-L (\$):	18.20-11.71	L-Term Rev. Gr Rate Est:	6.0%	% Growth	21.65%	0.24%	8.00%
Market Cap (bil):	34.83B	L-Term EPS Gr Rate Est:	6.0%	Operating Margin	5.58%	5.50%	8.00%
Float (mil):	179.41M	Debt/Equity:	6.0%	Net Income Margin	3.53%	3.37%	5.63%
Short Interest (%):	0.1%	ROA:	2.5%	EPS (Cal)	\$0.71A	\$0.68E	\$1.22E
Avg. Daily Vol (thousand):	410.74	ROE:	5.7%	FCF/Share	1.36	-0.93	0.35
Dividend (\$):	\$ 0.23			P/E (Cal)	\$ 20.60	\$ 21.52	11.93
Yield (%):	1.60%			EV/EBITDA	3.65	4.21	4.7

Recommendation

In 2008, the Chinese telecom sector underwent a transformation. CHU sold their Code division multiple access (CDMA) infrastructure to China Telecom and merged with China Netcom. After the merger, CHU had the country's largest GSM network, serving 10 of the northern Chinese provinces, and a better designed network which could more efficiently provide services with a global GSM network. After the telecommunications restructuring in 2008, CHU has seen their customer base grow by 90%; the result of strong marketing advantages over the other telecommunication competitors. CHU has been able to bundle their services while China Mobile and China Telecom cannot to the degree that CHU can. During 2014, the Chinese government has allowed CHU to deploy its LTE network to 16 cities. In 2015, the expansion of its hybrid FD/TDD LTE network, along with the rapid growth in internet-usage, will help CHU grow their customer base further while increasing the ARPU as the new customers use increasing amounts of data. CHU, due to its unique ability to bundle services is able to target a wide range of users that represent the broad range of Chinese income levels. CHU also continues to develop its broadband networks to offer highly efficient and fast internet for both corporate and residential customers.. The company pays a dividend of 1.60%. It is recommended that CHU be added to the portfolio with a target price of \$18.53. The company should reach its intrinsic value if it is able to capitalize on rising ARPU, and the company meets the following investment thesis

Investment Thesis

- Mobile Data Penetration.** CHU has a total of 295M mobile subscribers with 140 million using 3G or 4G data connectivity. This amounts to 47.7% of their customers using data, representing a sharp increase over 2013 when only 38.1% (110 M of 262M) of subscribers used data. Over the next year as the users increase data usage, the ARPU should increase and reflect much higher revenues. Currently CHU's ARPU is \$7.67, a decrease from 2013 when the ARPU was \$7.91 due to an extensive marketing campaign that helped CHU broaden its customer base but cut into revenues. This is due to a promotional program designed to attract customers throughout the begging of 2014 and the company will recuperate these loses as the customer increases their usage. CHU has the capability not only to greatly increase their market share as their hybrid LTE network grows, but to greatly increase revenues as their ARPU increases.

- **Hybrid TD and FDD LTE Network.** CHU's aggressive adoption of the FDD-LTE and TD-LTE hybrid network should erase China Mobile's advantage within a short period of time. The aggressive rollout strategy employed by CHU coupled with its fully developed 3G infrastructure will translate directly to higher subscriber growth. This past August when FDD-LTE contracts were awarded to CHU they aggressively deployed the hybrid network to 40 cities and will quickly catch up with the market leader in CHL. Most smartphone manufacturers do not support the TD-LTE, but the world standard FDD-LTE giving CHU an inherent marketing and manufacturing advantage.
- **WIFI and Broadband.** CHU has used "bundling" to grow their home broadband services and the program has been very successful. While largely broadband subscriber growth has stalled in China, CHU has had an increase in subscribers 67.5 M from 62.5 M YOY and ARPU has increased from \$10.10 to \$10.21 YOY within the mobile broadband segment.

Valuation

To find the intrinsic value of CHU a 10 year DCF model was used. CHU has a WACC of 6.3%, and a terminal growth rate of 3%. It yielded an intrinsic value of \$18.44; an upside return potential of nearly 27%. An EV/Sales and EV/EBITDA relative valuation method was also used returning intrinsic values of 17.99 and 19.05, respectively. The DCF, EV/Sales, and EV/EBITDA were weighted 50%, 20%, and 30%, respectively and returned a target price of \$18.53. The blended target price has a return prospectus of 27.12%.

Risks

- **Government Control.** The government's influence and control of the three major telecommunications companies presents a conflict of interest for the government. The Chinese government does not have any incentive to provide CHU with any benefit over the CHL and CHA. However, this does seem to be weaning as the government realizes the need for an enhanced wireless network throughout the country.
- **Increasing Capital Expenditures.** CHU has had high capital expenditures the last three years due to increasing investment in their LTE network. However, it is expected that costs due to LTE expansion will subside starting in 2016. CHU's management has funded most investment in the network infrastructure through cash flow and they hold very little debt.
- **Network Regulation.** The Chinese government is forcing all Chinese telecoms to use TD-LTE as opposed to FDD-LTE, which the majority of the world uses. CHU and CHA are waiting for government approval on a significant expansion in FDD-LTE, CHU currently serves 16 cities with the hybrid FDD/TD-LTE network, and management is hoping to expand that to 40 cities by the end of the year if given approval.

Management

Mr. Chang Xiobing, Chairman and CEO, was appointed in December of 2004. Mr. Chang was a professor of engineering and graduated in 1982 from the Nanjing Institute of Posts and Telecommunications with a degree in telecommunications engineering. He later received his Masters in Business Administration from Tsinghua University and a doctorate degree in business administration from Hong Kong Polytechnic. Mr. Li Fushen, Executive Director and CFO, joined CHU in March of 2011. Mr. Li graduated from Jilin Engineering Institute with a degree in engineering management in 1988, and obtained a master degree in management in 2004. Mr. Li has a range of experience in telecommunications as the General Manager of Jilin Provincial Telecommunications Co., as well as the CFO of Chinese Netcom until being acquired by China Telecom.



Source: Bloomberg

Ownership

% of Shares Held by All Insider and 5% Owners:	5%
% of Shares Held by Institutional & Mutual Fund Owners:	2.03%

Source: Yahoo!, Bloomberg

Top 5 Shareholders

Fund/Institution	Shares	% Shares
DFA	12,242,302	0.51
DFA EM I	7,214,573	0.30
SKAGEN AS	5,212,364	0.22
Merrill Lynch & Co Inc	2,268,604	0.10
DFA EM Core Equity I	1,117,285	0.05