

Company Notes	2
Ratings History	3
Tigress Research Methodology Overview	4
Glossary of Key Terms and Measures	4
Contacts	5
Analyst Certification	5
Research Disclosures	5
Tigress Research Investment Rating Meanings and Distribution	5
Specific Disclosures for the companies that are the subject of this Report	6
Research Report Disclaimer	7
About Tigress Financial Partners LLC	7

Research
(646) 780-8880
research@tigressfp.com

Trading
(646) 780-8890
trading@tigressfp.com

Tigress Financial Partners LLC
Member of FINRA / MSRB / SIPC
500 Fifth Avenue
New York, NY 10110
(212) 430-8700
www.tigressfinancialpartners.com

Research Update

Alcoa Inc. (AA-US) 2

We are reiterating our Strong Buy rating on AA. We believe that Alcoa has come under undue pressure as a result of declining alumina and aluminum prices and negative investor sentiment surrounding the commodity complex as a whole. However, AA has been one of the most proactive operators in the commodity space, reducing its upstream exposure while simultaneously making strategic investments in downstream value-added businesses; the company's Q4 results reflect these strategic decisions. Despite headwinds from continued supply pressures out of China, AA was able to remain profitable and drive growth in its downstream business. We believe that AA is undervalued at these depressed prices and offers significant risk/reward benefits as the company is strongly positioned to capture long-term economic value.

Please refer to the last three pages of this report for important certification, disclosure and disclaimer information.
© 2016 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.

Company Notes
Alcoa Inc. (AA-US)
Metals & Mining

Philip Van Deusen
Director of Research
(646) 780-8887 Direct
pvandeusen@tigressfp.com

Research Action:
Reiterate Rating

Rating: **Strong Buy**

Prior Rating: **Strong Buy**

Price 01/11/2016: **\$8.00**

52 Week High / **\$17.10**
Low: **\$7.81**

Key Data: (TTM as of Sep-15)

Excess Cash per Share: **\$1.72**

Annual Dividend: **\$0.12**

Dividend Yield: **1.50%**

Ave. Volume (30 Day): **29.6M**

Shares Outstanding: **1,310.1M**

Float: **1,308.5M**

Equity MV: **\$10,481.0M**

Sales TTM: **\$23,623.0M**

Beta: **1.39**

EBITDAR: **\$4,586.7M**

NOPAT: **\$1,603.1M**

Total Invested Capital: **\$24,246.2M**

Return on Capital: **6.74%**

Cost of Capital: **5.43%**

Economic Profit: **\$311.3M**

Market Value Added: **-\$3,638.0M**

Current Operations Value: **\$29,974.7M**

Future Growth Value: **-\$9,366.4M**

- **We are reiterating our Strong Buy rating on AA.** We believe that Alcoa has come under undue pressure as a result of declining alumina and aluminum prices and negative investor sentiment surrounding the commodity complex as a whole. However, AA has been one of the most proactive operators in the commodity space, reducing its upstream exposure while simultaneously making strategic investments in downstream value-added businesses; the company's Q4 results reflect these strategic decisions. Despite headwinds from continued supply pressures out of China, AA was able to remain profitable and drive growth in its downstream business. We believe that AA is undervalued at these depressed prices and offers significant risk/reward benefits as the company is strongly positioned to create greater long-term economic value.
- **Performance metrics pressured, but valuation at rock bottom.** We see sales of the company declining 8% over the NTM to \$21.73 billion, reflecting the company's efforts to shutter high cost smelting capacity and the impact of lower aluminum prices. However, we expect minimal margin compression next year and see NOPAT margin declining only slightly from 7.86% this year to 7.38% as a result we are only forecasting a 4% decline in Economic Profit to \$362.1 million over the NTM. Given management's efforts to shield the company from the downturn in commodities and position the company for future growth, we believe the company is undervalued at 4.54x EV/EBITDAR, which is the lowest multiple it has traded at over the past five years.
- **Value added business delivering as promised; spinoff will unlock value.** Q4 results demonstrated the strength of the Value-add business with auto sheet shipments at its Global Rolled Products increasing 18% y/y, and aerospace revenue in its Engineered Products and Solutions up 34% y/y. Recent contract awards like the \$1.5 billion deal with GE (GE-US, Neutral rated), the \$2.5 billion contract with BA (BA-US, Buy rated), \$1.0 billion with Airbus(AIR-PA, Not rated) and the \$1.1 billion deal with LMT (LMT-US, Not rated) also speak to the ability of this business to capture value. We believe the aerospace industry and the domestic automotive industry represent attractive long term opportunities for Alcoa's future value added business and believe that the separation of this business from its raw commodity business will highlight the growth and solid underlying economics of this segment.
- **Management continues to aggressively pursue cost reduction strategies.** AA recently announced the closing of two more high cost US facilities, making 80% of the company's upstream business in low cost areas outside the U.S., where energy is less expensive. Once the supply/demand imbalance finds equilibrium and prices stabilize, AA's commodity business will benefit.

For more information or a copy of our complete report, please contact us at (212)430-8730 or research@tigressfp.com

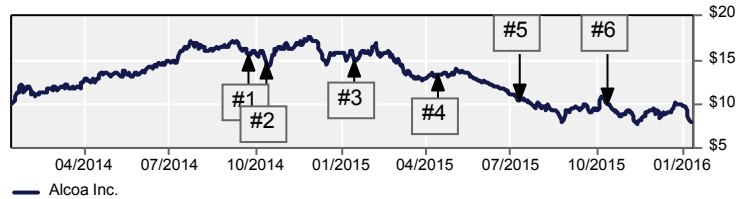
Tigress Financial Partners LLC - Member of FINRA / MSRB / SIPC

Research: (646) 780-8880 research@tigressfp.com

500 Fifth Avenue New York, NY 10110 (212) 430-8700 www.tigressfinancialpartners.com

Ratings History

Alcoa Inc. (AA-US)				
Item #	Date	Research Action	Rating	Price
#6	10/12/2015	Reiterate Rating	Strong Buy	\$10.08
#5	07/09/2015	Reiterate Rating	Strong Buy	\$10.59
#4	04/14/2015	Reiterate Rating	Strong Buy	\$13.37
#3	01/14/2015	Reiterate Rating	Strong Buy	\$14.95
#2	10/10/2014	Upgrade	Strong Buy	\$14.71
#1	09/23/2014	Initiation of Coverage	Buy	\$15.70



Tigress Financial Partners LLC - Member of FINRA / MSRB / SIPC

Research: (646) 780-8880 research@tigressfp.com

500 Fifth Avenue New York, NY 10110 (212) 430-8700 www.tigressfinancialpartners.com

Tigress Research Methodology Overview

We employ proprietary quantitative valuation models combined with dynamic fundamental analysis based on the principles of Economic Profit to formulate timely and insightful investment ratings, analysis, strategies and recommendations.

We make key adjustments to reported financial data eliminating GAAP-based accounting distortions and measuring all companies on a cash operating basis.

Our proprietary research framework is a multi-factor model that scores and ranks companies based on their risk-adjusted ability to create Economic Profit relative to their current market value focusing on three key components:

Business Performance: Measuring economic profitability, growth and operating efficiency.

Risk: Measuring business sustainability, volatility, strength and consistency.

Valuation: Linking business performance to market value. Measuring value created relative to capital employed and enterprise multiples of economic profit and cash flow.

We score and rank 24 key measurements of performance, risk and value into relative market and industry investment recommendations.

For more information on our research methodology, please review the Tigress Investment Research Guide to Company Valuation and Analysis.

Glossary of Key Terms and Measures

Excess Cash per Share: Excess Cash per Share is the amount of excess cash divided by basic shares outstanding. Excess Cash consists of all cash and short-term securities less operating cash needed to run the business. Operating Cash is 5% of TTM net sales revenue.

EBITDAR: Earnings Before Interest, Taxes, Depreciation, Amortization, and Restructuring and Rent Costs. This is especially important when comparing companies that use a significant amount of leased assets like restaurants and retailers.

NOPAT: Net Operating Profit after Tax. Represents a company's after-tax cash operating profit excluding financing costs.

Total Invested Capital: Total Invested Capital the total cash investment that shareholders and debt holders have made during the life of company.

Return on Capital: Return on Capital equals NOPAT divided by Total Invested Capital. It is a key measure of operating efficiency. ROC quantifies how well a company generates cash flow relative to the capital invested in its business.

Cost of Capital: Is the proportionately weighted cost of each category of capital – common equity, preferred equity and debt.

Economic Profit: Economic Profit is the net operating income after tax less the opportunity cost of the total capital invested. It is the most important driver of shareholder value.

Current Operations Value: Current Operations Value is the portion of market value based on the discounted present value of the current earnings stream assuming it remains constant forever.

Future Growth Value: Future Growth Value is the portion of market value based on un-earned Economic Profit

For more information on the key terms and measures, please review the Tigress Investment Research Guide to Company Valuation and Analysis.

Tigress Financial Partners LLC - Member of FINRA / MSRB / SIPC

Research: (646) 780-8880 research@tigressfp.com

500 Fifth Avenue New York, NY 10110 (212) 430-8700 www.tigressfinancialpartners.com

Research Highlights

January 12, 2016
Page 5 of 7

Contacts

Ivan Feinseth
Chief Investment Officer
(646) 780-8901 Direct
ifeinseth@tigressfp.com

Philip Van Deusen
Director of Research
(646) 780-8887 Direct
pvandeusen@tigressfp.com

Ernest Williams
SVP, Institutional Sales & Trading
(646) 780-8905
ewilliams@tigressfp.com

George Medina
Senior Managing Director, Trading
(646) 780-8910 Direct
gmedina@tigressfp.com

Analyst Certification

I, Ivan Feinseth, hereby certify that the views expressed herein accurately reflect my personal views about the subject company and their securities and that I have not been and will not be directly or indirectly compensated for expressing specific recommendations or views in the report.

Research Disclosures

Employees, officers, directors and shareholders of Tigress Financial Partners LLC and of any of Tigress Financial Partners LLC affiliated entities that are not directly involved with the production of any Tigress Research report (s) and / or their family members may buy / sell or hold securities for their own accounts contrary to the current recommendation expressed in any report published by Tigress Research.

Tigress Financial Partners LLC as well as affiliates of Tigress Financial Partners LLC provide or may seek to provide investment banking, consulting and / or other services to the companies and / or the officers, directors, and employees of the companies that are the subject of research reports published by Tigress Research.

Tigress Financial Partners research personnel, including the analyst(s) responsible for the production of this report receive compensation based upon the overall profitability of the entire firm including profits derived from investment banking revenues.

Tigress Research Investment Rating Meanings and Distribution

Tigress Research employs a five-tier rating system for evaluating the investment opportunity and potential return associated with owning the common equity of rated firms within our research universe. The potential return is measured on a relative basis to the general market which is represented by the S&P 500 and to the subject company's industry peer group as indicated.

Rating:	Meaning:	Rating Distribution (01/11/2016)				
		Companies Under Coverage		Relationship Companies Under Coverage*		
		#	%	#	%	
Strong Buy:	Expect significant price gains in the price of the stock relative to its industry peer group and general market over the next 12 months.	22	17%	0	0	
Buy:	Expect out-performance for the price of the stock relative to its industry peer group and general market over the next 12 months.	54	41%	4	67%	
Neutral:	Expect little or no outperformance opportunity over the next 12 months.	50	37%	2	33%	
Underperform:	Expect underperformance for the price of the stock relative to its industry peer group and general market over the next 12 months.	7	5%	0	0	
Sell:	Expect price decline or significant relative market and industry underperformance over the next 12 months.	0	0%	0	0	
		Total	133	100%	6	100%

*Relationship Companies under research coverage are companies in which Tigress Financial Partners LLC or one of its affiliates has received compensation for investment banking or non-investment banking services from the company, affiliated entities and / or its employees within the past twelve months or expects to do so within the next three months.

Tigress Financial Partners LLC - Member of FINRA / MSRB / SIPC

Research: (646) 780-8880 research@tigressfp.com

500 Fifth Avenue New York, NY 10110 (212) 430-8700 www.tigressfinancialpartners.com

Specific Disclosures for the companies that are the subject of this Report

Company:	Disclosure:
Alcoa Inc. (AA-US)	14
Key Disclosure:	
	<ol style="list-style-type: none"> 1. The Analyst or a household member responsible for the production of this report currently holds a position in securities of the company that is the primary subject of this report in a personal, related or beneficial account. 2. The Analyst or a household member responsible for the production of this report beneficially owns one percent or more in securities of the company that is the primary subject of this report in a personal, related or beneficial account. 3. Tigress Financial Partners LLC together with its affiliates beneficially owns one percent or more of the security that is the primary subject of this report. 4. The Analyst or a household member responsible for the production of this report currently serves as an officer, director or advisory board member of the company that is the primary subject of this report. 5. An employee of Tigress Financial Partners LLC, its affiliates or subsidiaries currently serves as an officer, director or advisory board member of the company that is the primary subject of this report. 6. Tigress Financial Partners LLC, its affiliates or subsidiaries is acting as manager/co-manager, underwriter, selling group member, placement or sales agent in regard to an offering of securities of this subject company/entity or one of its affiliates. 7. Tigress Financial Partners LLC, its affiliates or subsidiaries has acted as manager/co-manager, underwriter, selling group member, placement or sales agent in regard to an offering of securities of this subject company/entity or one of its affiliates within the past 12 months. 8. Tigress Financial Partners LLC or an affiliated entity currently receives compensation for non-investment banking services from the company and / or employees and / or affiliated persons of the company that is the primary subject of this report. 9. Within the last 12 months, Tigress Financial Partners LLC, or an affiliated entity has received compensation for investment banking services from the company that is the primary subject of this report. 10. Within the last 12 months, Tigress Financial Partners LLC, or an affiliated entity has received compensation for non-investment banking services from the company that is the primary subject of this report. 11. Within the last 12 months, Tigress Financial Partners LLC, or an affiliated entity has received compensation for non-investment banking services from employees and / or affiliated persons of the company that is the primary subject of this report. 12. In the next 3 months, Tigress Financial Partners LLC, or an affiliated entity, expects to receive compensation for investment banking services from the company that is the primary subject of this report. 13. In the next 3 months, Tigress Financial Partners LLC, or an affiliated entity, expects to receive compensation for non-investment banking services from the company that is the primary subject of this report. 14. Accounts managed by Tigress Financial Partners LLC, and / or an employee or an affiliated entity currently hold a position in the security that is the primary subject of this report. 15. Tigress Financial Partners LLC and /or an affiliated entity currently has contracted the products and / or services of the company that is the primary subject of this report.

Tigress Financial Partners LLC - Member of FINRA / MSRB / SIPC

Research: (646) 780-8880 research@tigressfp.com

500 Fifth Avenue New York, NY 10110 (212) 430-8700 www.tigressfinancialpartners.com

Research Report Disclaimer

This report is produced for informational purposes only and is not a solicitation to buy or sell any securities or services from any companies or issuers mentioned herein or to participate in any particular trading strategy or in any jurisdiction in which such an offer or solicitation would violate applicable laws or regulations.

Tigress research is distributed in the United States by Tigress Financial Partners LLC a registered broker dealer with the Securities and Exchange Commission (SEC) and a member of the Financial Industry Regulatory Authority (FINRA) and in Brazil by Gradual Investimentos, Gradual CCTVM S/A, a financial institution authorized by the Central Bank of Brazil.

The information contained herein has been obtained or derived from sources believed to be reliable but its accuracy and completeness is not guaranteed and should not be the sole basis of any investment decision but only to be used as a factor in the investment decision process.

This report does not provide individually tailored investment advice and has been prepared without regard to the individual financial circumstances and investment objectives of any person(s) receiving it. The analysis and conclusions herein are not a complete analysis of every material fact respecting any company, industry, or security. The opinions expressed in this report reflect the judgment of the author(s) at this date and are subject to change without further notice. Tigress Financial Partners is under no obligation to provide updates to recipients of any previously issued reports or recommendations.

The market value and expected income from any investment may vary because of changes in interest rates or foreign exchange rates, securities prices or market indexes, operational or financial conditions of the underlying companies or other factors. Past performance is not indicative of future performance. Estimates of future performance, research ratings and target prices are based on assumptions that may not be realized. Unless otherwise stated, the cover page provides the most recently available closing price on the primary exchange for the subject company's securities/instruments.

Securities are offered through Tigress Financial Partners LLC a SEC Registered Broker Dealer and registered investment advisor and a member of FINRA/MSRB/SIPC which clears its securities transactions and provides custody of client accounts on a fully disclosed basis through Pershing LLC, a subsidiary of The Bank of New York Mellon.

Securities in your account are protected up to \$500,000 of which \$250,000 can be for claims for cash awaiting reinvestment. Please note that SIPC does not protect against loss due to market fluctuation. For additional information please go to www.sipc.org.

In addition to SIPC protection, Pershing provides Tigress Financial Partners LLC client accounts coverage in excess of SIPC limits from Lloyd's of London, in conjunction with other insurance companies. The excess of SIPC coverage provides an aggregate loss limit of \$1 billion for eligible securities over all client accounts and a per-client loss limit of \$1.9 million for cash awaiting reinvestment within the aggregate loss limit of \$1 billion. The excess of SIPC coverage does not protect against loss due to market fluctuation. For additional information please go to www.lloyds.com.

Pershing's excess of SIPC coverage is provided by Lloyd's of London in conjunction with XL Specialty Insurance Co., Axis Specialty Europe Ltd., Great Lakes Reinsurance (UK) PLC and Ironshore Specialty Insurance Co.

About Tigress Financial Partners LLC

Tigress Financial Partners is a specialized financial services firm providing expertise and services in investment banking, investment research, asset management, corporate advisory and trade execution services.

Tigress Financial Partners provides its services to corporate entities, institutional investors, high-net worth individual investors, public and private pensions, federal, state and municipal governments.

Tigress Financial Partners LLC is a registered broker dealer and registered investment advisor with the Securities and Exchange Commission (SEC) and a member of the Financial Industry Regulatory Authority (FINRA), the Municipal Securities Rulemaking Board (MSRB) and a member of the Securities Investor Protection Corporation (SIPC).

Tigress Financial Partners LLC is a Woman-Owned Business Enterprise (WBE) and is nationally certified by WBENC, the Women's Business Enterprise National Council.

Tigress Financial Partners LLC is a wholly-owned subsidiary of Tigress Holdings LLC and Gradual Holding Financeira S.A.

For further information please go to www.tigressfinancialpartners.com.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise without prior expressed permission in writing from Tigress Financial Partners LLC.

All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service of their respective owners.

© 2016 Tigress Financial Partners LLC. All Rights reserved.

Tigress Financial Partners LLC - Member of FINRA / MSRB / SIPC

Research: (646) 780-8880 research@tigressfp.com

500 Fifth Avenue New York, NY 10110 (212) 430-8700 www.tigressfinancialpartners.com