

Company Note	2
Investment Thesis	5
Company Overview	6
Financial Data	7
Financial Analysis	8
Ratings History	9
Tigress Research Methodology Overview	9
Glossary of Key Terms and Measures	9
Contacts	10
Analyst Certification	10
Research Disclosures	10
Tigress Research Investment Rating Meanings and Distribution	10
Specific Disclosures for the companies that are the subject of this Report	11
Research Report Disclaimer	12
About Tigress Financial Partners LLC	12

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

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

Tigress Financial Partners LLC
Member of FINRA / MSRB / SIPC
40 Wall Street
New York, NY 10005
(212) 430-8700
www.tigressfinancialpartners.com

NVIDIA Corporation (NVDA-US)

Semiconductors & Semiconductor Equipment

- **We reiterate our Buy rating on NVDA as Business Performance continues to accelerate driven by strong results across all platforms especially in gaming and crypto currency specific GPUs.**
- **NVDA continues to show strong Business Performance driven by strong gaming results and new innovative applications of its GPUs.**
- **NVDA's market-leading and high-speed GPUs are taking it beyond gaming into new emerging industries.**
- **NVDA's ability to incorporate AI technology in cloud computing services, self-driving vehicles and home automation will continue to drive new opportunities for growth**
- **NVDA's emphasis on GRID computing will increase GPU data center adoption further creating significant growth opportunities.**
- **NVDA is evolving into becoming a major technology supplier to the automotive industry.**

Tigress Financial Partners seeks to do business with the companies that are the subject of these reports. Please refer to the last three pages of this report for important certification, disclosure and disclaimer information. © 2017 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.

Company Note
NVIDIA Corporation (NVDA-US)
 Semiconductors & Semiconductor Equipment

Ivan Feinseth
 Director of Research
 (646) 780-8901 Direct
ifeinseth@tigressfp.com

Research Action:

Reiterate rating

Rating: Buy

Prior Rating: Buy

Price 08/22/2017: \$162.55

52 Week High / Low: \$174.56 / \$57.32

Key Data: (TTM as of Jul-17)

Excess Cash per Share: \$9.15

Annual Dividend: \$0.56

Dividend Yield: 0.34%

Avg. Volume (30 Day): 17.3M

Shares Outstanding: 595.0M

Float: 565.8M

Equity MV: \$96,717.3M

Sales TTM: \$8,344.0M

Beta: 2.20

EBITDAR: \$4,081.8M

NOPAT: \$2,062.6M

Total Invested Capital: \$8,659.9M

Return on Capital: 32.32%

Cost of Capital: 11.93%

Economic Profit: \$1,170.8M

Market Value Added: \$90,399.3M

Current Operations Value: \$18,474.5M

Future Growth Value: \$80,584.7M

- **We reiterate our Buy rating on NVDA as Business Performance continues to accelerate driven by strong results across all platforms especially in gaming and crypto currency specific GPUs.** NVDA's advanced, high speed GPUs continue to drive its increasing leadership in key emerging applications including artificial intelligence (AI), deep learning, and self-driving cars continue to create accelerating demand. NVDA's emphasis on GRID computing will further increase its GPU data center adoption. NVDA leadership position in visual data processing and increasing opportunities in AI, deep learning and ongoing datacenter adoption will continue to drive greater Return on Capital, increasing Economic Profit and greater shareholder value creation. We believe significant upside in the shares still exists from current levels.
- **NVDA continues to show strong Business Performance driven by strong gaming results and new innovative applications of its GPUs.** For the LTM ending July 2017, Net Sales Revenue increased 53.4% Y/Y from \$5.44 billion to \$8.34 billion driven by strong gaming results and significant increases in Tegra processor and crypto currency specific GPUs revenue growth. We forecast an increase of 12.6% to \$9.4 billion over the NTM and believe further upside exists to NVDA's growth trend. Economic Operating Cash Flow (EBITDAR) increased 62.5% Y/Y from \$2.78 billion to \$4.51 billion over the LTM. We forecast an increase of 12.6% to \$5.08 billion over the NTM. Net Operating Profit After Tax (NOPAT) increased 138% Y/Y from \$1.01 billion to \$2.39 billion over the LTM. We forecast an increase of 11.3% to \$2.66 billion over the NTM. Return on Capital increased from 15.86% to 32.32% over the LTM. We forecast a further increase to 41.67% over the NTM. Economic Profit increased 404% Y/Y from 299.2 million to \$1.51 billion over the LTM. We forecast an increase of 29% to \$1.95 billion over the NTM. We believe increasing demand in AI, crypto currency data mining and other emerging technologies will continue to drive results that could well exceed our current expectations.

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

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

 40 Wall Street New York NY, 10005 (212) 430-8700 www.tigressfinancialpartners.com

Tigress Financial Partners seeks to do business with the companies that are the subject of these reports. Please refer to the last three pages of this report for important certification, disclosure and disclaimer information.

© 2017 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.

- **NVDA's market-leading and high-speed GPUs are taking it beyond gaming into new emerging industries.** As computer interaction continues to become more visual, NVDA's innovative ability and powerful GPUs are continuing to create new opportunities for its growth. More complex software is in turn creating the need for a more sophisticated visual user interface rather than just textual information. NVDA's GPU ability to process visual data is creating new opportunities in desktops, workstations and data centers along with AI, data mining and autonomous vehicle applications. Moreover, Windows 8 uses significantly more GPU resources than prior versions as it leverages improved graphics capabilities to create a richer more interactive user experience. High Performance Computing (HPC) and data centers will continue to experience tremendous growth as processing demand continues to increase. NVDA consistently launches new products that can process greater amounts of data with lower energy and operating costs. Recently introduced GPU's including Tesla P100 GPU Accelerator offers higher efficiency and performance with 70% lower operating costs. NVDA's Tesla M10 GPU enables enterprises to connect up to 64 users per board or up 228 users per server with two boards. Increasing computing demands continue to drive greater demand for NVDA's GPUs.
- **NVDA's ability to incorporate AI technology in cloud computing services, self-driving vehicles and home automation will continue to drive new opportunities for growth.** NVDA's Volta-Based Tesla V100 Data Center GPU is the world's most powerful GPU computing architecture which will drive the next wave of advancement in artificial intelligence and high performance computing. NVDA's Volta GPUs high speeds and scalability better meet the demands of AI inferencing and learning, as well as, for accelerating HPC and graphics workloads. Volta's speed enables real-time understanding of images, speech, text and video. NVDA recently announced alliance with Baidu (BIDU-US, Non-rated) to use its Volta GPUs in its cloud services and AI framework Paddle for data analysis and product development. Baidu will use NVDA's DRIVE PX 2 AI supercomputer for its self-driving car initiative called Apollo. NVDA will use Baidu's DuerOS AI assistants in its Shield TV. The partnership will help both companies develop new products and increased their capabilities in AI development, cloud computing and autonomous vehicle development.

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

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

40 Wall Street New York NY, 10005 (212) 430-8700 www.tigressfinancialpartners.com

Tigress Financial Partners seeks to do business with the companies that are the subject of these reports. Please refer to the last three pages of this report for important certification, disclosure and disclaimer information.

© 2017 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.

- **NVDA's emphasis on GRID computing will increase GPU data center adoption further creating significant growth opportunities.** NVIDIA GRID is a powerful GPU-based that powers virtual desktops in data centers, cloud platforms and design software-as-a-service (SaaS) applications providing a high-quality, visually rewarding graphics experience that in the past was only available from a very high-powered and expensive dedicated PC. NVDA has partnered with VMware (VMW-US, Strong Buy rated) to run NVIDIA GRID on the VMware Horizon Desktop-as-a-Service (DaaS) Platform enabling it to offer its high-powered graphics technology on a virtual cloud-based platform. NVDA is currently offering a trial of its GRID technology enabling customers to test its GRID-backed VDI (virtual desktop infrastructure) and has attracted significant interest, which is helping to generate additional demand for its graphics technology. NVDA will introduce new GRID based enabled devices that will drive increasing adoption. NVDA will also expand its GRID for enterprise virtualization targeting a market of over 50 million enterprise workers globally, as well as emphasizing the availability on over 50 different server platforms. We believe the improved visual effects and broad adoption of NVDA's GRID enterprise virtual graphics will drive significant future revenue growth.
- **NVDA is evolving into becoming a major technology supplier to the automotive industry.** In 2016, NVDA introduced NVIDIA DRIVE™ PX an extremely powerful processor for in vehicle AI. NVIDIA DRIVE™ PX it is an open AI car computing platform enabling auto manufacturers and component suppliers to accelerate the production of automated and autonomous vehicles. It can scale from a module for auto cruise capabilities to an AI powerful supercomputer capable of autonomous driving. NVIDIA DRIVE™ PX is the open AI car computing platform that enables automakers and tier 1 suppliers to accelerate production of automated and autonomous vehicles. It scales from a palm-sized, energy efficient module for AutoCruise capabilities, to a powerful AI supercomputer capable of autonomous driving. NVDA also introduced Xavier an AI supercomputer chip design for self-driving cars. DRIVE PX can process ambient vehicle information and GPS data in real time to provide autonomous vehicle guidance. It is an extremely advanced self-driving car platform that combines deep learning, sensor fusion and surround vision. NVDA currently has development agreements with component and manufacturers including Bosch, HERE and ZENRIN. In April 2017, NVDA made in equity investment in Beijing based autonomous driving startup TuSimple. TuSimple uses deep learning detection algorithms enabling cameras to perceive surrounding just like a human eye.

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

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

40 Wall Street New York NY, 10005 (212) 430-8700 www.tigressfinancialpartners.com

Tigress Financial Partners seeks to do business with the companies that are the subject of these reports. Please refer to the last three pages of this report for important certification, disclosure and disclaimer information.

© 2017 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.

NVDA is currently an OEM supplier to many leading auto and component manufacturers including BMW, Dahmer AG, Delphi automotive, Fiat Chrysler, Ford, Hyundai Peugeot, Rolls-Royce Toyota and, Volkswagen. We believe NVDA powerful visual data processing GPUs will position it as a leading developer and supplier of autonomous vehicle empowering technology.

Investment Thesis

NVDA's ability to process digital data into visual data and visual data into digital data will continue to drive new growth opportunities. Applications for crypto currency mining, artificial intelligence, machine learning and data center processing will continue to drive increasing demand for NVDA's advanced high-speed GPUs. Increasing gaming demand and product development for new markets will continue to drive greater Return on Capital, increasing Economic Profit and greater shareholder value creation.

Company Overview

NVIDIA Corp. (NVDA-US) is the world's leading developer of visual computing technologies and the creator of the Graphic Processing Unit (GPU). NVDA develops three-dimensional (3D) graphics processors and software for use on visual computing platforms. It enables the conversion of digital data into visual data and also can convert visual data into digital data for a wide range of applications used to generate visually realistic interactive graphics for workstations, personal computers, game consoles and mobile devices. NVDA's processors are used in applications for creating digital content, digital image editing and industrial applications.

NVDA's technologies enable visual machine learning that power artificial intelligence (AI) applications such as crypto currency mining and autonomous driving. Its GPU's are used in video cards for used in many PCs and in gaming consoles. Its GPU's also power applications for autonomous vehicles and deep learning uses in data centers for scientists and researchers. NVDA's product line includes its GeForce for game consoles. Quadro for desktops and workstations for use in computer-aided design, video editing and other visual applications. NVDA's Tesla and DGX datacenter GPU's for use by scientists and researchers. Its Tegra processor is a line of system-on-a-chip devices for mobile gaming and entertainment, as well as autonomous robots, drones, and cars. Its Tegra line includes DRIVE PX, automotive chip systems that provide self-driving capabilities, and SHIELD, which includes a family of devices and services for cloud-based mobile applications for home entertainment, AI, and gaming. NVIDIA GRID provides virtual desktops.

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

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

40 Wall Street New York NY, 10005 (212) 430-8700 www.tigressfinancialpartners.com

Tigress Financial Partners seeks to do business with the companies that are the subject of these reports. Please refer to the last three pages of this report for important certification, disclosure and disclaimer information.

© 2017 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.



Company Report – Research Update

NVIDIA Corporation (NVDA-US)

Semiconductors & Semiconductor Equipment

Financial Data

Report Basis	LTM	LTM	LTM	LTM	LTM	LTM	LTM	NTM	5 Yr	3 Yr	Current
Reported Period Ending	07/29/2012	07/28/2013	07/27/2014	07/26/2015	07/31/2016	07/30/2017	07/31/2018	Average	Average	Trend	
Net Sales Revenue	\$3,988.5	\$4,243.0	\$4,403.8	\$4,779.9	\$5,439.0	\$8,344.0	\$9,396.4	\$5,441.9	\$6,187.6	\$8,870.2	
Sales Growth	7.54%	6.38%	3.79%	8.54%	13.79%	53.41%	12.61%	17.18%	25.25%	33.01%	
Sales Growth Trend	4.63%	6.84%	4.83%	6.64%	11.69%	37.56%	28.93%	13.51%	18.63%	33.25%	
Operating Cash Flow (EBITDAR)	\$1,894.6	\$2,166.6	\$2,295.9	\$2,466.9	\$2,777.4	\$4,512.8	\$5,081.9	\$2,843.9	\$3,252.4	\$4,797.3	
EBITDAR Margin	47.50%	51.06%	52.13%	51.61%	51.07%	54.08%	54.08%	51.99%	52.25%	54.08%	
EBITDAR Growth	10.77%	14.35%	5.97%	7.45%	12.59%	62.48%	12.61%	20.57%	27.51%	37.55%	
Net Operating Profit Before Tax (NOPBT)	\$566.1	\$649.9	\$675.5	\$859.7	\$1,177.4	\$2,686.8	\$3,025.6	\$1,209.9	\$1,574.6	\$2,856.2	
NOPBT Margin	14.19%	15.32%	15.34%	17.99%	21.65%	32.20%	32.20%	20.50%	23.94%	32.20%	
NOPBT Growth	-2.92%	14.81%	3.94%	27.27%	36.95%	128.19%	12.61%	42.23%	64.14%	70.40%	
Cash Operating Income Tax	\$79.9	\$83.6	\$105.5	\$195.5	\$171.7	\$293.1	\$361.7	\$169.9	\$220.1	\$327.4	
Economic Tax Effective Rate	14.12%	12.86%	15.62%	22.74%	14.58%	10.91%	11.95%	15.34%	16.08%	11.43%	
Net Operating Profit After Tax (NOPAT)	\$486.2	\$566.4	\$570.0	\$664.2	\$1,005.7	\$2,393.7	\$2,663.9	\$1,040.0	\$1,354.6	\$2,528.8	
NOPAT Margin	12.19%	13.35%	12.94%	13.90%	18.49%	28.69%	28.35%	17.47%	20.36%	28.52%	
NOPAT Growth	-4.32%	16.50%	0.64%	16.53%	51.41%	138.01%	11.29%	44.62%	68.65%	74.65%	
Cash & Equivalents	\$3,278.1	\$2,935.9	\$4,386.1	\$4,505.0	\$4,879.0	\$5,877.0	\$7,577.3	\$4,516.6	\$5,087.0	\$6,727.2	
Total Assets	\$5,891.9	\$5,569.6	\$6,933.7	\$6,979.0	\$7,461.0	\$9,402.0	\$12,122.1	\$7,269.1	\$7,947.3	\$10,762.1	
Non - Interest Bearing Liabilities (NIBLs)	\$1,323.6	\$1,275.0	\$1,130.8	\$1,272.0	\$1,383.0	\$1,358.0	\$1,750.9	\$1,283.8	\$1,337.7	\$1,554.4	
Net Assets	\$4,568.3	\$4,294.6	\$5,802.9	\$5,707.0	\$6,078.0	\$8,044.0	\$10,371.3	\$5,985.3	\$6,609.7	\$9,207.6	
Economic Asset Adjustments	\$251.3	\$259.6	\$404.4	\$472.8	\$623.3	\$155.9	\$201.0	\$383.2	\$417.3	\$178.4	
Net Operating Assets	\$4,819.5	\$4,554.2	\$6,207.3	\$6,179.8	\$6,701.3	\$8,199.9	\$10,572.2	\$6,368.5	\$7,027.0	\$9,386.1	
Debt & Debt Equivalents	\$163.4	\$173.9	\$1,649.5	\$1,633.8	\$1,680.3	\$2,197.9	\$2,833.8	\$1,467.1	\$1,837.3	\$2,515.8	
Equity & Equivalents	\$4,453.7	\$4,172.2	\$4,304.8	\$4,185.0	\$4,552.0	\$5,973.0	\$7,701.1	\$4,637.4	\$4,903.3	\$6,837.0	
Total Capital - Financing Sources	\$4,617.1	\$4,346.1	\$5,954.3	\$5,818.8	\$6,232.3	\$8,170.9	\$10,534.8	\$6,104.5	\$6,740.7	\$9,352.9	
Capital Adjustments	\$108.1	\$103.4	\$141.0	\$250.0	\$379.0	\$29.0	\$37.4	\$180.5	\$219.3	\$33.2	
Net Capital Financing Sources	\$4,725.2	\$4,449.5	\$6,095.3	\$6,068.8	\$6,611.3	\$8,199.9	\$10,572.2	\$6,284.9	\$6,960.0	\$9,386.1	
Net Working Capital	\$222.4	\$382.6	\$470.0	\$534.0	\$671.0	\$1,675.2	\$2,159.9	\$746.5	\$960.0	\$1,917.5	
Cost of Net Working Capital	\$21.0	\$37.5	\$46.6	\$53.3	\$67.1	\$140.1	\$180.6	\$68.9	\$86.8	\$160.4	
% of Revenue	0.53%	0.88%	1.06%	1.11%	1.23%	1.68%	1.92%	1.19%	1.34%	1.80%	
Operational Capital	\$939.7	\$1,117.7	\$1,290.3	\$1,253.8	\$1,400.3	\$2,380.1	\$3,068.7	\$1,488.4	\$1,678.1	\$2,724.4	
Cost of Operational Capital	\$101.2	\$127.6	\$131.6	\$135.0	\$147.9	\$225.7	\$291.1	\$153.6	\$169.5	\$258.4	
% of Revenue	2.54%	3.01%	2.99%	2.82%	2.72%	2.71%	3.10%	2.85%	2.75%	2.90%	
Productive Capital	\$1,927.6	\$2,081.3	\$2,194.1	\$2,061.8	\$2,156.3	\$3,074.1	\$3,963.5	\$2,313.5	\$2,430.7	\$3,518.8	
Cost of Productive Capital	\$210.3	\$248.7	\$233.7	\$225.8	\$235.0	\$312.3	\$402.7	\$251.1	\$257.7	\$357.5	
% of Revenue	5.27%	5.86%	5.31%	4.72%	4.32%	3.74%	4.29%	4.79%	4.26%	4.01%	
Total Operating Capital	\$1,740.9	\$1,830.4	\$2,041.4	\$1,913.8	\$2,094.3	\$2,740.1	\$3,532.8	\$2,124.0	\$2,249.4	\$3,136.5	
Cost of Total Operating Capital	\$191.6	\$221.5	\$211.6	\$209.8	\$223.3	\$288.7	\$372.2	\$231.0	\$240.6	\$330.5	
% of Revenue	4.80%	5.22%	4.80%	4.39%	4.11%	3.46%	3.96%	4.40%	3.99%	3.71%	
Non - Operating Capital	\$3,078.7	\$2,723.7	\$4,165.9	\$4,266.0	\$4,607.1	\$5,459.8	\$7,039.4	\$4,244.5	\$4,777.6	\$6,249.6	
Cost of Non - Operating Capital	\$301.8	\$359.9	\$376.5	\$447.3	\$494.4	\$601.2	\$775.1	\$455.9	\$514.3	\$688.1	
% of Revenue	7.57%	8.48%	8.55%	9.36%	9.09%	7.20%	8.25%	8.54%	8.55%	7.73%	
Total Capital	\$4,819.5	\$4,554.2	\$6,207.3	\$6,179.8	\$6,701.3	\$8,199.9	\$10,572.2	\$6,368.5	\$7,027.0	\$9,386.1	
Cost of Total Capital	\$493.4	\$588.1	\$588.1	\$657.2	\$717.7	\$889.8	\$1,147.3	\$686.9	\$754.9	\$1,018.6	
% of Revenue	12.37%	13.70%	13.35%	13.75%	13.20%	10.66%	12.21%	12.93%	12.54%	11.44%	
Cost of Capital (WACC)	11.25%	12.41%	10.93%	10.61%	11.14%	11.94%	11.94%	11.41%	11.23%	11.94%	
Capital Structure											
Debt & Debt Equivalents	\$163.4	\$173.9	\$1,649.5	\$1,633.8	\$1,680.3	\$2,197.9	\$2,833.8	\$1,467.1	\$1,837.3	\$2,515.8	
Debt & Debt Equivalents % of Market Value	1.92%	2.08%	14.25%	13.52%	5.21%	2.20%	2.20%	4.46%	3.82%	2.20%	
Preferred Equity	\$0.0	\$0.0	\$0.0	\$0.0	\$72.0	\$0.0	\$0.0	\$14.4	\$24.0	\$0.0	
Preferred Equity % of Market Value	0.00%	0.00%	0.00%	0.00%	0.22%	0.00%	0.00%	0.04%	0.05%	0.00%	
Market Value of Common Equity	\$8,338.4	\$8,206.4	\$9,926.2	\$10,448.0	\$30,491.4	\$97,812.0	\$126,110.6	\$31,376.8	\$46,250.5	\$111,961.3	
Common Equity % of Market Value	98.08%	97.92%	85.75%	86.48%	94.57%	97.80%	97.80%	95.49%	96.13%	97.80%	
Total Economic Market Value (MV)	\$8,501.8	\$8,380.3	\$11,575.7	\$12,081.8	\$32,243.7	\$100,009.9	\$128,944.3	\$32,858.3	\$48,111.8	\$114,477.1	
Total %	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Excess Cash	\$3,078.7	\$2,723.7	\$4,165.9	\$4,266.0	\$4,607.1	\$5,459.8	\$7,039.4	\$4,244.5	\$4,777.6	\$6,249.6	
Economic Enterprise Value	\$5,423.1	\$5,656.6	\$7,409.9	\$7,815.8	\$27,636.7	\$94,550.1	\$121,904.9	\$28,613.8	\$43,334.2	\$108,227.5	
Average Capital	\$4,306.7	\$4,587.3	\$5,272.4	\$6,082.0	\$6,340.1	\$7,405.6	\$9,386.1	\$5,937.5	\$6,609.2	\$8,395.8	
Capital Δ	\$836.9	(\$275.7)	\$1,645.8	(\$26.4)	\$542.5	\$1,588.6	\$2,372.3	\$694.9	\$701.5	\$1,980.5	

Source: Company Data, Financial statements and Tigress Research

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

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

40 Wall Street New York NY, 10005 (212) 430-8700 www.tigressfinancialpartners.com

Tigress Financial Partners seeks to do business with the companies that are the subject of these reports. Please refer to the last three pages of this report for important certification, disclosure and disclaimer information.

© 2017 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.



Company Report – Research Update

NVIDIA Corporation (NVDA-US)

Semiconductors & Semiconductor Equipment

Financial Analysis

Report Basis	LTM	LTM	LTM	LTM	LTM	LTM	LTM	NTM	5 Yr	3 Yr	Current
Reported Period Ending	07/29/2012	07/28/2013	07/27/2014	07/26/2015	07/31/2016	07/30/2017	07/31/2018	Average	Average	Trend	
Return on Market Value (NOPAT / MV)	5.72%	6.76%	4.92%	5.50%	3.12%	2.39%	3.09%	4.54%	3.67%	2.74%	
Return on Enterprise Value (NOPAT / EV)	8.97%	10.01%	7.69%	8.50%	3.64%	2.53%	3.26%	6.48%	4.89%	2.90%	
Return on Capital (NOPAT / Average Capital)	11.29%	12.35%	10.81%	10.92%	15.86%	32.32%	41.67%	16.45%	19.70%	37.00%	
Cost of Capital (WACC)	11.25%	12.41%	10.93%	10.61%	11.14%	11.94%	11.94%	11.41%	11.23%	11.94%	
Economic Return Spread	0.04%	-0.06%	-0.12%	0.31%	4.72%	20.38%	26.28%	5.05%	8.47%	23.33%	
Capital Charge	\$484.3	\$569.1	\$576.3	\$645.3	\$706.5	\$884.5	\$1,140.4	\$676.3	\$745.4	\$1,012.4	
Economic Profit (EP)	\$1.8	(\$2.7)	(\$6.3)	\$18.9	\$299.2	\$1,509.2	\$1,945.9	\$363.7	\$609.1	\$1,727.6	
Economic Profit Improvement (EPI)	(\$122.6)	(\$4.6)	(\$3.6)	\$25.2	\$280.3	\$1,210.0	\$436.6	\$301.5	\$505.2	\$823.3	
EP Growth	-98.52%	-246.90%	-130.97%	401.82%	1482.73%	404.38%	28.93%	382.21%	762.97%	216.65%	
Economic Profit Margin on Sales	0.05%	-0.06%	-0.14%	0.40%	5.50%	18.09%	20.71%	4.76%	7.99%	19.40%	
Economic Profit Per Share	\$0.00	(\$0.00)	(\$0.01)	\$0.03	\$0.55	\$2.79	\$3.60	\$0.67	\$1.12	\$3.19	
GAAP Earnings Per Share	\$0.77	\$0.91	\$0.93	\$0.96	\$1.66	\$4.03	\$3.63	\$1.70	\$2.22	\$3.83	
Excess Cash Per Share	\$4.97	\$4.65	\$7.46	\$7.89	\$8.63	\$9.15	\$11.79	\$7.55	\$8.55	\$10.47	
Performance Drivers											
Sales Growth	7.54%	6.38%	3.79%	8.54%	13.79%	53.41%	12.61%	17.18%	25.25%	33.01%	
Sales Growth Trend (ROC Sales Growth)	4.63%	6.84%	4.83%	6.64%	11.69%	37.56%	28.93%	13.51%	18.63%	33.25%	
EBITDAR Margin	47.50%	51.06%	52.13%	51.61%	51.07%	54.08%	54.08%	51.99%	52.25%	54.08%	
EBITDAR Growth	10.77%	14.35%	5.97%	7.46%	12.59%	62.48%	12.61%	20.57%	27.51%	37.55%	
NOPBT Margin	14.19%	15.32%	15.34%	17.99%	21.65%	32.20%	32.20%	20.50%	23.94%	32.20%	
NOPBT Growth	-2.92%	14.81%	3.94%	27.27%	36.95%	128.19%	12.61%	42.23%	64.14%	70.40%	
NOPAT Margin	12.19%	13.35%	12.94%	13.90%	18.49%	28.69%	28.35%	17.47%	20.36%	28.52%	
NOPAT Growth	-4.32%	16.50%	0.64%	16.53%	51.41%	138.01%	11.29%	44.62%	68.65%	74.65%	
Economic Profit Margin on Sales (EP / Sales)	0.05%	-0.06%	-0.14%	0.40%	5.50%	18.09%	20.71%	4.76%	7.99%	19.40%	
Economic Profit Growth	-98.52%	-246.90%	-130.97%	401.82%	1482.73%	404.38%	28.93%	382.21%	762.97%	216.65%	
Economic Return Spread (ROC-WACC)	0.04%	-0.06%	-0.12%	0.31%	4.72%	20.38%	29.73%	5.05%	8.47%	25.06%	
Economic Return Ratio (ROC / WACC)	100.38%	98.52%	98.91%	102.93%	142.35%	270.64%	348.94%	142.87%	171.97%	309.79%	
Economic Profit Momentum (ΔEP/Capital)	-2.59%	-0.10%	-0.06%	0.41%	4.24%	14.76%	4.13%	3.85%	6.47%	9.44%	
Economic Profit Momentum Margin (ΔEP/Sales)	-3.07%	-0.11%	-0.08%	0.53%	5.15%	14.50%	4.65%	4.00%	6.73%	9.57%	
Capital Growth	21.52%	-8.84%	36.99%	-0.43%	8.94%	24.03%	28.93%	12.74%	10.84%	26.48%	
Capital Turns	0.84X	0.95X	0.72X	0.79X	0.82X	1.02X	0.88X	0.86X	0.88X	0.95X	
EVC Acceleration Margin	-3.31%	-0.11%	-0.08%	0.57%	5.86%	22.25%	5.23%	3.21%	9.28%	13.31%	
EVC Acceleration Spread	-3.58%	-0.11%	-0.08%	0.48%	4.61%	19.09%	5.90%	3.21%	8.51%	12.46%	
Risk Factors											
Free Cash Flow (NOPAT - Δ Capital)	(\$350.7)	\$842.1	(\$1,075.8)	\$690.7	\$403.2	\$805.1	\$291.6	\$345.1	\$653.0	\$548.3	
Free Cash Flow Rate (FCF / Capital)	-7.42%	18.93%	-17.65%	11.38%	7.01%	9.82%	2.76%	5.90%	9.40%	6.29%	
Free Cash Flow Yield (FCF / MV)	-4.12%	10.05%	-9.29%	5.72%	1.44%	0.81%	0.23%	1.74%	2.65%	0.52%	
Total Debt / Total Capital	3.46%	3.91%	27.06%	26.92%	25.42%	26.80%	26.80%	22.02%	26.38%	26.80%	
Total Debt / EBITDAR	8.63%	8.03%	71.85%	66.23%	60.50%	48.70%	55.76%	51.06%	58.48%	52.23%	
Excess Cash	\$3,078.7	\$2,723.7	\$4,165.9	\$4,266.0	\$4,607.1	\$5,459.8	\$0.0	\$4,244.5	\$4,777.6	\$2,729.9	
Financial Leverage ((Total Debt - Excess Cash) / Pension Leverage (Net Pension Liability / MV))	-34.28%	-30.43%	-21.74%	-21.79%	-9.08%	-3.26%	2.20%	-17.26%	-11.37%	-0.53%	
Equity Risk Index (S&P 500 = 1.00)	2.15	2.15	2.16	2.16	2.24	2.20	2.20	2.18	2.20	2.20	
Stock Price Volatility	7.02	4.92	3.28	4.05	5.15	6.09	6.09	4.70	5.10	6.09	
Sales Index (NL Sales)	8.29	8.35	8.39	8.47	8.60	9.03	9.15	8.57	8.70	9.09	
Market Value Index (NL Market Value)	9.05	9.03	9.36	9.40	10.38	11.51	11.77	9.94	10.43	11.64	
Size Index (NL Sales: MV)	8.67	8.69	8.87	8.94	9.49	10.27	10.46	9.25	9.57	10.36	
Beta	2.72	2.72	2.73	2.73	2.85	2.79	2.79	2.77	2.79	2.79	
TFP Adjusted Beta	2.15	2.15	2.16	2.16	2.24	2.20	2.20	2.18	2.20	2.20	
Stock Price Volatility	7.02	4.92	3.28	4.05	5.15	6.09	6.09	4.70	5.10	6.09	
Valuation Measures											
Total Economic Market Value (MV)	\$8,501.8	\$8,380.3	\$11,575.7	\$12,081.8	\$32,243.7	\$100,009.9	\$128,944.3	\$32,858.3	\$48,111.8	\$114,477.1	
Economic Enterprise Value	\$5,423.1	\$5,658.6	\$7,409.9	\$7,815.8	\$27,638.7	\$94,550.1	\$121,904.9	\$28,813.8	\$43,334.2	\$108,227.5	
Equity Market Value	\$8,338.4	\$8,208.4	\$9,928.2	\$10,448.0	\$30,491.4	\$97,812.0	\$128,110.6	\$31,378.8	\$46,250.5	\$111,961.3	
Total Capital	\$4,819.5	\$4,554.2	\$6,207.3	\$6,179.8	\$6,701.3	\$8,199.9	\$10,572.2	\$6,368.5	\$7,027.0	\$9,386.1	
Market Value Created MVC (MV - Capital)	\$3,622.3	\$3,628.1	\$5,368.4	\$5,902.0	\$25,542.4	\$91,810.0	\$118,372.1	\$26,489.8	\$41,064.8	\$105,091.1	
MVC Margin (MVC / Sales)	92.32%	90.17%	121.90%	123.48%	469.62%	1100.31%	1259.77%	486.77%	683.98%	1184.77%	
MVC Spread (MVC / Capital)	76.40%	84.01%	86.49%	95.50%	381.16%	1119.65%	1119.65%	415.95%	584.67%	1119.65%	
Current EVC Value (EP / WACC)	\$16.4	(\$21.9)	(\$7.3)	\$178.2	\$2,685.3	\$12,636.6	\$16,292.8	\$3,188.3	\$5,422.9	\$14,464.6	
Current Operations Value COV	\$4,323.2	\$4,565.5	\$5,215.1	\$6,200.2	\$9,025.3	\$20,042.2	\$25,678.8	\$9,125.8	\$12,032.1	\$22,880.4	
Current Operations Value Per Share	\$7.16	\$7.37	\$8.87	\$11.33	\$16.62	\$37.05	\$45.15	\$16.05	\$22.06	\$41.20	
Future Growth Value (MVC - EVA Value)	\$4,178.7	\$3,814.8	\$6,360.7	\$5,821.6	\$23,218.4	\$79,967.7	\$103,265.7	\$23,732.5	\$36,079.7	\$91,616.7	
Future Growth Value Reliance (FGV / MV)	49.15%	45.52%	54.95%	48.18%	72.01%	79.96%	80.09%	72.23%	74.99%	80.03%	
Share Price	\$12.98	\$13.41	\$18.73	\$22.03	\$57.10	\$104.30	\$104.30	\$43.11	\$61.14	\$104.30	
Dividend Yield	0.00%	1.68%	1.76%	1.60%	0.77%	0.51%	0.51%	-58.66%	41.82%	70.58%	
Total Shareholder Return (TTM)	-6.15%	4.99%	41.43%	19.22%	159.97%	83.17%	0.00%	-58.66%	41.82%	70.58%	
MV to IC Ratio	1.76X	1.84X	1.86X	1.96X	4.81X	12.20X	12.20X	5.16X	6.85X	12.20X	
EV / EBITDAR Multiple	2.86X	2.61X	3.23X	3.17X	9.95X	20.95X	23.99X	10.06X	13.32X	22.56X	
EV / NOPBT Multiple	9.58X	8.70X	10.97X	9.09X	23.47X	35.19X	40.29X	23.65X	27.52X	37.89X	
EV / NOPAT Multiple	11.15X	9.99X	13.00X	11.77X	27.48X	39.50X	45.76X	27.51X	31.99X	42.80X	
EV / EP Multiple	2937.53X	-2085.77X	-1182.93X	413.41X	92.36X	62.65X	62.65X	78.68X	71.14X	62.65X	
Future Growth Value (% of MV)	49.15%	45.52%	54.95%	48.18%	72.01%	79.96%	80.09%	72.23%	74.99%	80.03%	
Current Operations Value (% of MV)	50.85%	54.48%	45.05%	51.82%	27.99%	20.04%	19.91%	27.77%	25.01%	19.97%	
Market Value (COV + FGV %)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
Basic Shares Outstanding	603.6	619.3	587.9	552.3	543.0	541.0	568.7	568.7	545.4	554.9	

Source: Company Data, Financial statements and Tigress Research

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

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

40 Wall Street New York NY, 10005 (212) 430-8700 www.tigressfinancialpartners.com

Tigress Financial Partners seeks to do business with the companies that are the subject of these reports. Please refer to the last three pages of this report for important certification, disclosure and disclaimer information.

© 2017 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.

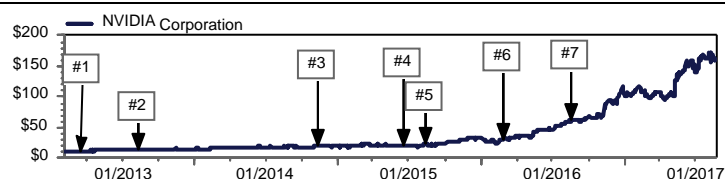
Company Report – Research Update

NVIDIA Corporation (NVDA-US)

Semiconductors & Semiconductor Equipment

Ratings History

NVIDIA Corporation (NVDA-US)				
Item #	Date	Research Action	Rating	Price
#7	08/18/2016	Reiterate Rating	Buy	\$62.10
#6	02/26/2016	Reiterate Rating	Buy	\$31.60
#5	08/13/2015	Reiterate Rating	Buy	\$23.52
#4	06/17/2015	Upgrade Rating	Buy	\$21.58
#3	11/14/2014	Reiterate Rating	Neutral	\$19.55
#2	08/02/2013	Reiterate Rating	Neutral	\$14.76
#1	03/18/2013	Initiation of Coverage	Neutral	\$12.55



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

40 Wall Street New York NY, 10005 (212) 430-8700 www.tigressfinancialpartners.com

Tigress Financial Partners seeks to do business with the companies that are the subject of these reports. Please refer to the last three pages of this report for important certification, disclosure and disclaimer information.

© 2017 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.

Contacts

Ivan Feinseth
 Director of Research
 (646) 780-8901 Direct
ifeinseth@tigressfp.com

Michael Naidrich
 Capital Markets / Sales & Trading
 (646) 780-8902 Direct
mnaidrich@tigressfp.com

Peter Bergen
 Institutional Sales and Trading
 (646) 780-8915 Direct
pbergen@tigressfp.com

Christofer Dolis
 Institutional Sales & Trading
 (646) 780-8914 Direct
cdolis@tigressfp.com

Mario LoGrande
 Institutional Sales & Trading
 (646) 780-8905 Direct
mlogrande@tigressfp.com

Joseph Pisano
 Institutional Sales & Trading
 (646) 780-8893 Direct
jpisano@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 (08/22/2017)			
		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.	16	13%	1	17%
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	44%	4	66%
Neutral:	Expect little or no outperformance opportunity over the next 12 months.	46	38%	1	17%
Underperform:	Expect underperformance for the price of the stock relative to its industry peer group and general market over the next 12 months.	6	5%	0	0%
Sell:	Expect price decline or significant relative market and industry underperformance over the next 12 months.	0	0%	0	0%
Not Rated	No Current Research Rating	NA	NA	65	NA

*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.

Total 123 100% 71 100%

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

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

40 Wall Street New York NY, 10005 (212) 430-8700 www.tigressfinancialpartners.com

Tigress Financial Partners seeks to do business with the companies that are the subject of these reports. Please refer to the last three pages of this report for important certification, disclosure and disclaimer information.

© 2017 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.

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

Company:	Disclosure:
VMware, Inc. (VMW-US)	14

Key	Disclosure:
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

40 Wall Street New York NY, 10005 (212) 430-8700 www.tigressfinancialpartners.com

Tigress Financial Partners seeks to do business with the companies that are the subject of these reports. Please refer to the last three pages of this report for important certification, disclosure and disclaimer information.

© 2017 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.

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).

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.

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.

© 2017 Tigress Financial Partners LLC. All Rights reserved.

Tigress Financial Partners LLC - Member of FINRA / MSRB / SIPC**Research: (646) 780-8880 research@tigressfp.com****40 Wall Street New York NY, 10005 (212) 430-8700 www.tigressfinancialpartners.com**

Tigress Financial Partners seeks to do business with the companies that are the subject of these reports. Please refer to the last three pages of this report for important certification, disclosure and disclaimer information.

© 2017 Tigress Financial Partners LLC. No part of this report may be reproduced or redistributed in any form.