



CFA Institute

CFA Institute Research Challenge

Hosted in

San Francisco, CA

University of California Santa Cruz

TICKER - NYSE: HPQ
RECOMMENDATION: HOLD

FEB 14, 2017, CLOSE: 16.06
TARGET PRICE: 16.62

| Market Statistics | |
|---------------------------|------------------|
| 52 Week Range | \$8.91 - \$16.25 |
| Avg Daily Vol (3 Mo) | 11,899,648 |
| Market Value (M) | 26,810 |
| Ent Value (M) | 27,358 |
| Shares Out (M) | 1,705 |
| Dividend Yield | 3.40% |
| Indicated Annual Dividend | 0.53 |
| Float | 99.90% |
| Institutional | 82.10% |
| Top 10 Inst Holders | 38.60% |

Source: FactSet Fundamentals & FactSet Estimates, USD

| Valuation | |
|-----------------|----------|
| Value of Equity | |
| Base | \$29,078 |
| Bull | \$31,123 |
| Bear | \$27,034 |
| Share Price | |
| Base | \$16.62 |
| Bull | \$18 |
| Bear | \$15.45 |
| Beta | 1.43 |
| Terminal Growth | 1.50% |
| WACC | 9.16% |

VALUATION SYNOPSIS

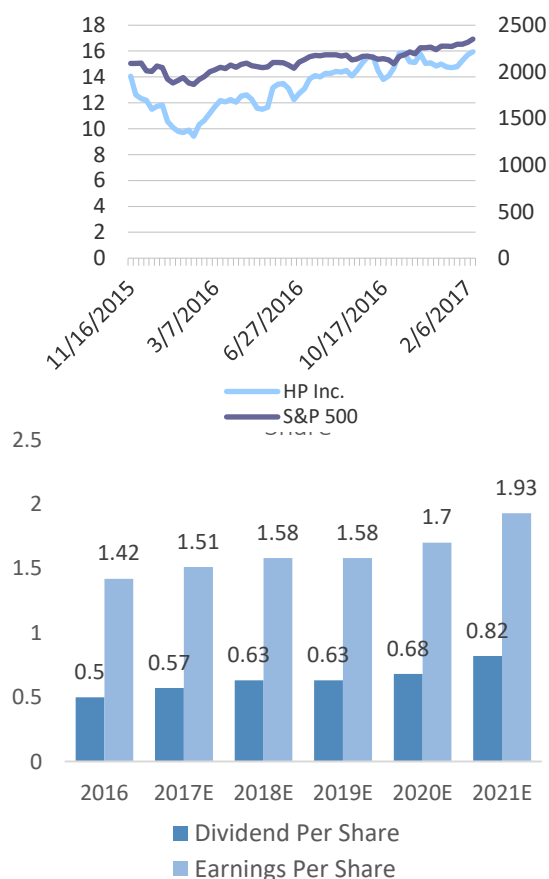
We are currently issuing a **HOLD** recommendation on shares of HP Inc. currently trading at \$16.06. Our target price per share is \$16.62. We expect convergence to this price within a time horizon of 12 months.

HP Inc. succeeds the Hewlett-Packard Company (HP) following a spin-off, yet remains one of the largest multinational technology companies in the world. Their main lines of business are computer systems and printing. In both they hold a major market share and have established themselves with a strong brand image.

HP Inc. is well diversified. Their products range from personal computing systems, printers for home and business, and accessories. Their revenues are diversified globally without heavy dependence on one region. They also have a heterogeneous client base comprised of consumers, businesses, government, and military. Their cost structure is reliable; they utilize numerous outsourced manufacturers, and for specific sole supplier components there is little expected variance in the future.

Predictable diversified cash flows match well with the Free Cash Flow to the Firm valuation approach we employ. We consider bear (\$15.45) and bull (\$17.78) cases as well, and run sensitivity analysis with a Monte Carlo simulation with varying distributions of future cash flows.

S&P 500 & HP Inc. Prices



HP Inc. faces significant risks related to continued slowdown in demand for their products, which are pro-cyclical in nature. Soft consumer and business demand for their products are exacerbated by future uncertainty given interest rates, market integration (EU), and currency risk with a strengthening dollar. Given the span of their business operations, HP Inc. bears execution risk as related to new product development and distribution.

HP Inc.'s management oversaw the split and the recent large acquisition of Samsung's printer business. They have also aligned incentives with stockholders given performance based compensation structures.

| Financial Data | | | | | | |
|--------------------------------|----------|----------|----------|----------|----------|----------|
| | 2016 | 2017E | 2018E | 2019E | 2020E | 2021E |
| Sales | \$48,212 | \$46,552 | \$45,400 | \$45,609 | \$46,065 | \$46,756 |
| Gross Income | \$9,046 | \$8,728 | \$8,512 | \$8,552 | \$8,752 | \$9,351 |
| EBIT (Operating Income) | \$3,481 | \$3,375 | \$3,518 | \$3,535 | \$3,685 | \$4,208 |
| EBITDA | \$3,813 | \$3,760 | \$3,965 | \$4,071 | \$4,318 | \$4,954 |
| Net Income | \$2,496 | \$2,625 | \$2,734 | \$2,742 | \$2,932 | \$3,336 |
| FCFF | \$3,324 | \$2,630 | \$2,485 | \$2,616 | \$2,750 | \$2,981 |
| Long-term Debt/EBITDA | 1.77 | 1.84 | 1.79 | 1.73 | 1.70 | 1.35 |
| EPS | 1.42 | 1.51 | 1.58 | 1.58 | 1.70 | 1.93 |

BUSINESS DESCRIPTION

Company Overview

HP Inc. was founded November 1, 2015 and is currently headquartered in Palo Alto, California. It succeeds the long-standing tech company Hewlett-Packard Company along with its sister company, Hewlett Packard Enterprise (HPE). HP Inc. provides products and services including hardware and software to individual consumers, businesses, large institutions and governments. It has two main sectors: Personal Systems, and Printing. In 2016 HP Inc. received 29.99 billion U.S dollars in revenue from its Personal Systems segment, and 18.26 billion from its Printing segment.

Personal Systems

The Personal Systems sector (formerly HP Personal Systems Group under Hewlett-Packard) is the largest sector of HP Inc. This sector includes all commercial and consumer computing devices. HP Inc. produces notebooks, desktops, commercial Point of Sale (POS) systems, and tablets. HP Inc. also provides services like HP Public cloud and HP CloudSystem under this sector. Key product lines for HP Inc. include HP EliteBook, HP ProBook, HP Pavilion, Omen, HP Sprout, HP Envy and HP Spectre. HP Inc. partners with Microsoft, Intel, and AMD to create desktops and notebooks, and uses Google Chrome and Android for its Chromebooks and tablets. Its main competitors include Lenovo, Dell, Acer, ASUS, Apple, Toshiba and Samsung.

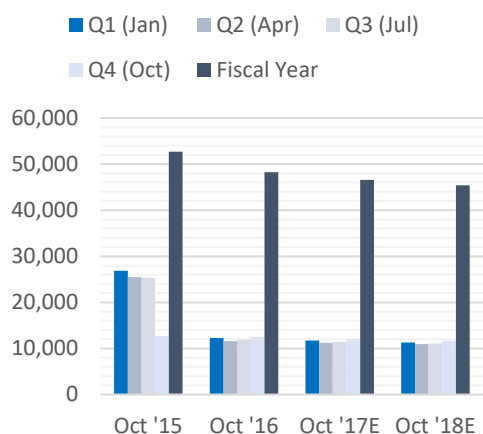
HP Inc.'s strategic focus for their Personal Systems segment is to increase market segmentation in order to enhance profitability. HP Inc. has invested in premium devices in order to competitively position themselves against premium product rivals. They have continued to develop products that meet the overwhelming consumer preferences for light and thin form factor devices—including a new array of convertible and mobile products. HP Inc. expects to see a decrease in the rate of decline in the Personal Systems sector in the next few years, despite higher refresh rates for consumer purchases of personal computers in the PC market.

Printing

HP Inc.'s printing sector focuses on commercial markets, which was the strongest segment for the printing sector in the last quarter of 2016. Its products include LaserJet, PageWide, Inkjet and Consumer printers. On the commercial side, Graphics Solutions creates large format printers for specialty printing. HP Inc.'s 3D Printing Solution segment is designed for producing functional manufacturing parts. The main competitors for HP Inc. in the Printing segment include Canon, Lexmark, Xerox, Brother, Epson, and Ricoh.

HP Inc.'s strategic focus for the Printing segment is on business printing. In particular, they plan to shift to contractual solutions and graphics. They also plan to continue to shift their installed base to higher value units—including 3D printing, laser and graphics programs. On the commercial side, HP Inc. plans to grow graphics solutions models and work towards the launch of their first commercial 3D printing products.

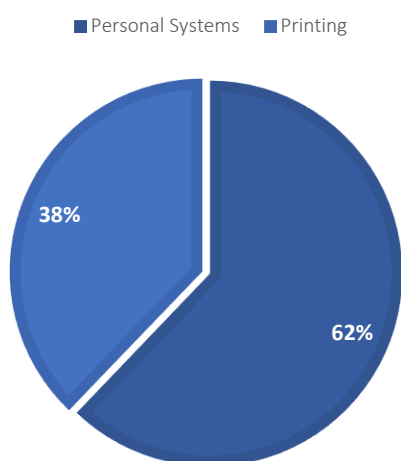
Sales (M) by Quarter



(units in millions USD)

Source: FactSet Fundamentals, Projections: Team

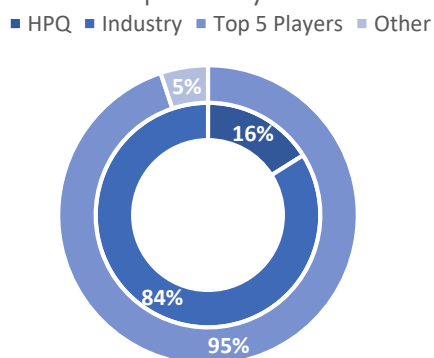
Revenue Breakdown Segment



*revenues from Corporate Investments <1 %

Source: FactSet Fundamentals

Revenue Share in Portable Computer Systems



Source: FactSet Fundamentals

INDUSTRY OVERVIEW AND COMPETITIVE POSITIONING

Demand Drivers

The demand drivers for HP Inc. come primarily from five types of customers: Consumer, Commercial, Academic, Government and Military. Commercial areas make up the largest portion of revenue for HP Inc. Their next largest source of revenue is provided by servicing hundreds of government accounts. The largest driver within their revenue toolbox is printing services. HP Inc. also benefits from favorable long-term contracts with global suppliers.

Domestic Growth

Growth in the computer and printer markets within the last five years in the United States has slowed, and is projected to continue to decline. This is spurred by market saturation in computers, and market stagnation in printing. In the fourth quarter of 2016, HP Inc.'s domestic growth declined 2%, which positioned them at a 6% total decrease in growth for the year. HP Inc. has responded by investing strongly in the professional sector. In particular, their EliteBook product line is competitive with other premium lines, such as Apple's Mac and MacBook Pro lines and Dell's XPS line.

International Growth

HP Inc. products are available worldwide. However, international growth for HP Inc. is dependent upon their ability to target emerging economies. The technology sector developing in economies such as India and China could provide a solid base on which to build future growth. If HP Inc. succeeds in leveraging their market share they can position themselves as leaders in the Personal Systems and Printing sectors. A failure to take advantage of new opportunities in emerging markets could result in further decline in international revenue.

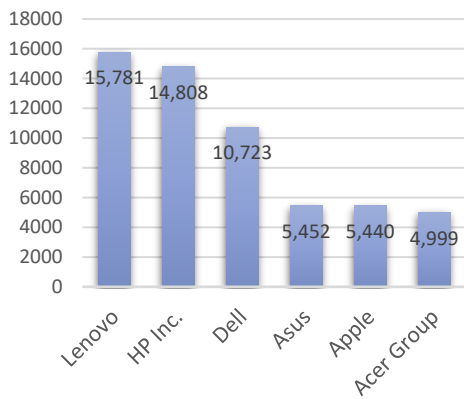
Industry Supply

HP Inc. works with suppliers and manufacturers around the world. HP Inc. must effectively manage their supply chain to accommodate expected growth. If HP Inc. can effectively avoid component shortages, excess supply quotas, litigation of contractual services, poor performance from contingent workers and failures to manage single source suppliers, they will be able to optimize overall efficiency of their supply chain. HP Inc.'s main vulnerability in this area results from their dependence on single-source suppliers such as: Neonode Inc., Canon Inc., Frasers Commercial trust, Intel Corporation and Ascendas Real Estate Investment.

Competitive Positioning

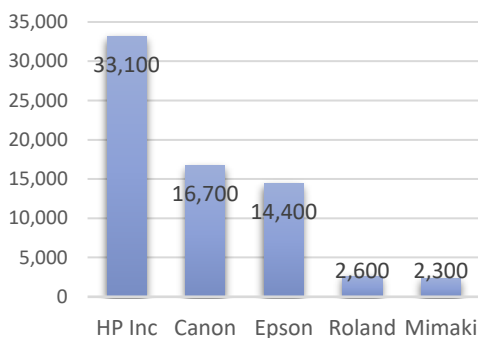
HP Inc. continues to see year over year erosion in their net revenue from their two largest sales segments: printing, and personal systems. Nevertheless, HP Inc. continues to lead the world in printing products shipped, domestically and globally. However, due to increased competition in printing markets, growing sophistication of third party component suppliers, and trend towards digital documents, the value of the traditional print market appears to have a downward trajectory. Despite this, HP Inc. has worked to amass more of the market share of what remains a 234 billion dollar industry through the acquisition of Samsung. Due to new innovations, HP Inc.'s prospects with respect to personal systems appear slightly better. The company has already increased market share of personal computers and are converging upon Lenovo for dominance in PC sales. However, potentially the most

4Q 2016 PC Shipments



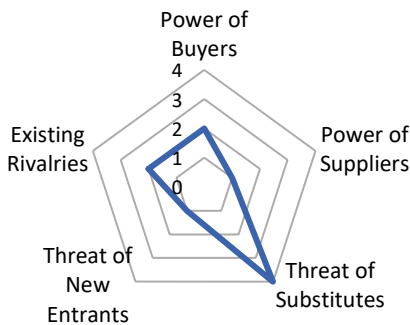
Note: Units in Thousands
Source: International Data Corporation

4Q 2016 Print Shipments

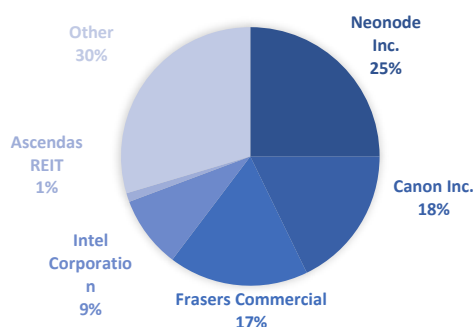


Note: Units in Thousands
Source: International Data Corporation

Porter's Five Forces



Suppliers by % of Revenue



Source: FactSet Fundamentals

promising driver of growth for shareholder value going forward is the strategic investment HP Inc. has made to insure they are leader in 3D printing.

Traditional Print

To maintain their position of dominance within traditional printing HP Inc. has invested in a variety of initiatives. *Ink in the Office* is fast growing web based service for small businesses. It focuses on shifting consumer behavior from transactional to contractual through managed print services to bolster the supply's division within printing. Expanding into the A3 copier markets offers an opportunity to grow overall market share. The fastest growing business for HP has been Graphics Solutions Services which focus on digital print production.

Personal Systems

HP Inc.'s estimate for the addressable PC market is \$340 billion. Regardless of the market environment, the company has expressed its desire to leverage market position, and direct research and development towards developing commercial PCs and particularly attractive segments of the consumer market. An emphasis is systematic segmentation of the consumer market to identify underpenetrated areas. Developing new form factors, such as convertibles, to accelerate refresh rate is a design priority, as is growing the *PC-as-a-Service* division, and other commercial mobility solutions. Potentially the most lucrative innovations are occurring in the domain of immersive computing. The new Sprout Pro allows for a desktop PC with built in cameras and projectors to enable 2D and 3D scanning and image manipulation.

FINANCIAL ANALYSIS

| | Ratios | | | | | |
|---------------------------------|--------|-------|--------|--------|--------|--------|
| | 2016 | 2017E | 2018E | 2019E | 2020E | 2021E |
| Profitability | | | | | | |
| Operating Profit Margin | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.09 |
| Net Profit Margin | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 |
| Return on Assets | 0.04 | 0.10 | 0.10 | 0.10 | 0.10 | 0.11 |
| Return on Equity | 0.22 | -0.78 | -1.02 | -1.32 | -1.77 | -3.90 |
| Return on Total Capital | 0.13 | 0.80 | 0.68 | 0.59 | 0.57 | 0.58 |
| Gross Profit Margin | 0.19 | 0.19 | 0.19 | 0.19 | 0.19 | 0.20 |
| Liquidity | | | | | | |
| Current Ratio | 0.98 | 1.00 | 1.03 | 1.03 | 1.03 | 1.03 |
| Cash Ratio | 0.33 | 0.34 | 0.35 | 0.34 | 0.34 | 0.34 |
| Quick Ratio | 0.74 | 0.76 | 0.78 | 0.78 | 0.77 | 0.77 |
| Activity | | | | | | |
| Accounts Receivable Turnover | 10.79 | 11.37 | 11.09 | 11.03 | 11.00 | 11.00 |
| Total Asset Turnover | 0.71 | 1.61 | 1.56 | 1.55 | 1.53 | 1.51 |
| Inventory Turnover | 8.93 | 8.48 | 8.27 | 8.22 | 8.18 | 8.08 |
| Fixed Asset Turnover | 29.87 | 24.83 | 20.87 | 17.75 | 15.08 | 12.97 |
| Accounts Payable Turnover Ratio | 3.68 | 3.46 | 3.47 | 3.52 | 3.51 | 3.48 |
| Financial Leverage | | | | | | |
| Long-term Debt to Assets | 0.23 | 0.24 | 0.24 | 0.23 | 0.23 | 0.20 |
| Equity Multiplier | 5.69 | -8.12 | -10.20 | -13.38 | -17.21 | -34.51 |
| Interest Coverage | 12.75 | 12.27 | 12.79 | 12.62 | 12.93 | 14.51 |
| Long-term Debt/EBITDA | 1.77 | 1.84 | 1.79 | 1.73 | 1.70 | 1.35 |
| Per Share | | | | | | |
| Dividend Per Share | 0.50 | 0.57 | 0.63 | 0.63 | 0.68 | 0.82 |
| EPS | 1.42 | 1.51 | 1.58 | 1.58 | 1.70 | 1.93 |

| DuPont Analysis | | | | | | |
|---------------------------------|-------|-------|-------|-------|-------|-------|
| | 2016 | 2017E | 2018E | 2019E | 2020E | 2021E |
| Asset Turnover | 0.710 | 1.606 | 1.562 | 1.547 | 1.528 | 1.507 |
| x Pretax Profit Margin | 0.078 | 0.079 | 0.084 | 0.084 | 0.086 | 0.096 |
| = Pretax Return on Assets | 0.055 | 0.127 | 0.131 | 0.130 | 0.132 | 0.145 |
| x Tax Rate Complement (1 - Tax) | 0.709 | 0.760 | 0.760 | 0.760 | 0.780 | 0.780 |
| = Return on Assets | 0.039 | 0.096 | 0.100 | 0.099 | 0.103 | 0.113 |
| x Equity Multiplier | 5.691 | 5.691 | 5.691 | 5.691 | 5.691 | 5.691 |
| = Return on Equity | 0.223 | 0.549 | 0.568 | 0.562 | 0.586 | 0.643 |

DuPont Analysis

For the purposes of the ROE decomposition alone, we have assumed the equity multiplier to be the same as it is in the year 2016. Post-restructuring, the company has a negative book value of equity, which would weaken the value of any subsequent analysis.

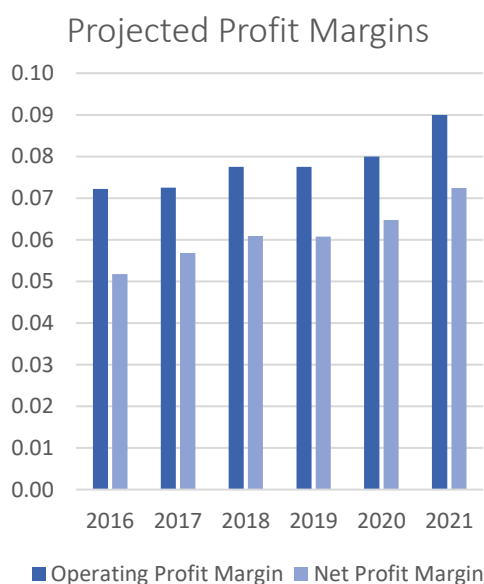
Assuming this, we have forecasted an ROE that grows at a CAGR of 3.65% from years 2017 to 2021. This is mainly driven by:

- A favorable tax rate going forward, due to an increase in business revenue from countries with lower tax rates such as China, Singapore and India
- An increased pre-tax profit margin, driven by lower Operating and Selling, General and Administrative costs. This is caused by reduced overheads and increased efficiency as a result of the restructuring of the business.

| Operating Cycle (Days) | | | | | | |
|--|---------|---------|---------|---------|---------|---------|
| | 2016 | 2017E | 2018E | 2019E | 2020E | 2021E |
| Days Inventory on Hand | 40.87 | 43.05 | 44.15 | 44.38 | 44.63 | 45.19 |
| + Days Sale Outstanding | 33.84 | 32.10 | 32.91 | 33.08 | 33.17 | 33.17 |
| = Operating Cycle | 74.71 | 75.15 | 77.05 | 77.47 | 77.80 | 78.35 |
| - Days of Payables Outstanding | 99.24 | 105.43 | 105.18 | 103.82 | 103.91 | 104.95 |
| =Net Operating Cycle/Cash Conversion Cycle in Days | (24.52) | (30.28) | (28.13) | (26.35) | (26.11) | (26.59) |

Operating Cycle

HP Inc. has a negative operating cycle, and we estimate that this will continue in the future, due to HP Inc.'s strong credit reputation and favorable long-term contracts with suppliers. Having a high share of the market in both the printing and personal systems industries means that HP Inc. is in a position to negotiate more control of its receivables, resulting in a stable Days Sale Outstanding. This indicates managerial efficiency in handling operations.



Profit Margins

Operating Profit margins are expected to increase from 7.22% in 2016 to 9.00% in 2021 and a steady growth from 5.18% in 2016 to 7.24% in 2021 is expected in the Net Profit Margin. These are expected to be due to:

- Lower corporate governance and other overhead costs related to the pre-separation combined entity.
- Reducing component costs in the Personal Systems segment.
- Favorable long-term contracts with suppliers in the Printing segment.
- Improving operational efficiency and cost synergies provided by the acquisition of Samsung Electronics' printing business.

Liquidity Position

HP Inc.'s short-term liquidity position is poor, with a current ratio of 0.98 which is lower than the industry average of 1.09. We believe that this does not pose a significant threat to the company, considering its strong credit reputation. An increase in the current ratio to 1.03 is expected over the next 5 years. This is driven by the projected increase in inventory due to the pursuit of new lines of business such as 3D printing and virtual reality.

VALUATION

DCF Model

A Discounted Cash Flow model was used to estimate the intrinsic value of HP Inc.'s share price, due to the fact that HP Inc. is a company in its mature growth phase and is seeing predictable cash flows. The cash flows move with net income, so it is a suitable proxy for the performance of the company. We use a 5-year Free Cash Flow to Firm (FCFF) model, as we believe that it captures the fundamentals superior to FCFE, due to the significant changes in leverage that accompanied the restructuring.

The base case for this model, formulated with guidance from financial performance, industry forecasts and HP Inc.'s future prospects, generated a target price of \$16.62. The model is sensitive to the following factors:

WACC

To determine the Cost of Equity, we use CAPM as it has a higher observed statistical power than the Fama-French model (See Appendix B4). Beta for the CAPM model was calculated by regressing 2 years' worth of weekly returns of HPQ against the returns of the S&P 500. The 10-year US Treasury Bond yield is used as a proxy for the risk-free rate. For the Cost of Debt, the weighted-average Cost of Debt to HPQ of 4.2% is used, as opposed to the less conservative estimate obtained by using the risk-free rate plus a BBB-bond spread, which gives us a Cost of Debt of 3.8%. Considering HP Inc.'s current Debt-Equity weight of 0.213-0.787, and the fact that they have sizeable debt repayments scheduled for the next 5 years, we have assumed a constant debt-equity weight of 0.2-0.8.

Terminal Growth Rate

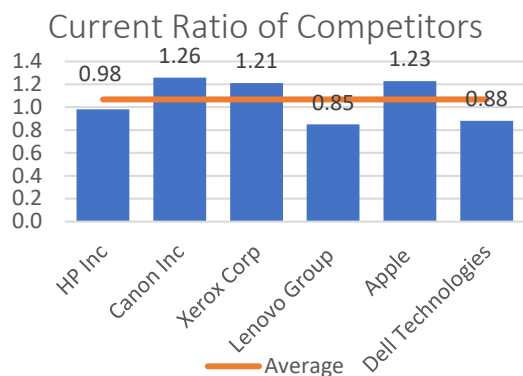
While HP Inc. is experiencing negative growth in both printing and personal systems, with new opportunities such as 3D printing and growing demand from emerging markets such as India and China, we expect HP to see a positive long-term growth rate. Using the long-term expected nominal GDP growth rate of the US of 2%, we have forecasted a terminal growth rate of 1.5%. Our forecast considers the fact that HP Inc. is in an industry that will not grow as fast as the rest of the economy as it is in its mature growth phase.

Revenue Growth

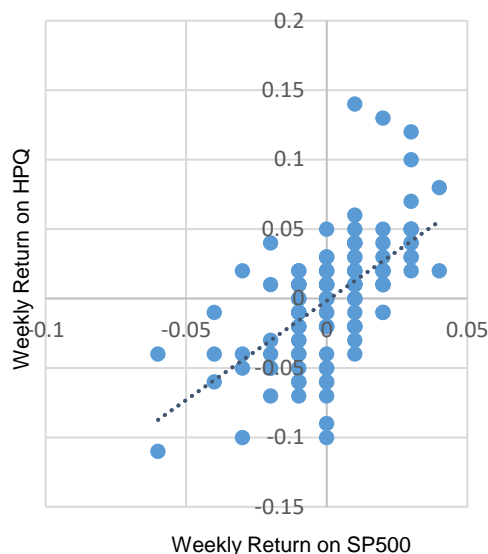
In order to accurately forecast the revenue growth rate, we estimated different growth rates for the printing and personal systems businesses. In line with management's expectations, we expect positive revenue growth in personal systems, due to HP Inc.'s strong presence in emerging market economies and the increasing demand from those countries.

The printing business has been seeing negative revenue growth, which we expect will continue for the next 3 years, albeit with a lower rate. Considering HP Inc.'s position as market leader in the printing industry and the investment that it has made in 3D printing equipment, we expect demand for commercial 3D printers to be the catalyst for positive revenue growth starting 2020.

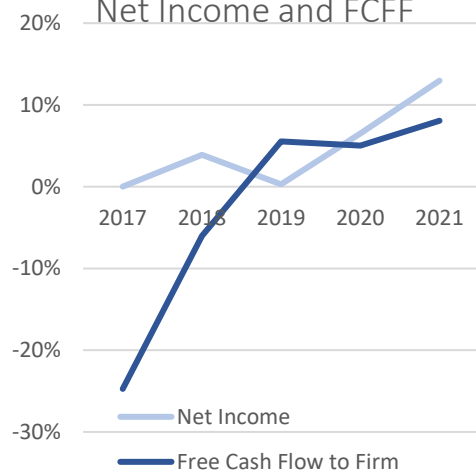
Despite an estimated revenue CAGR of -0.6% over the next 5 years, we maintain our optimistic stance due to the long-term growth prospects and improved efficiency post-restructuring.



Regression: Beta Estimate



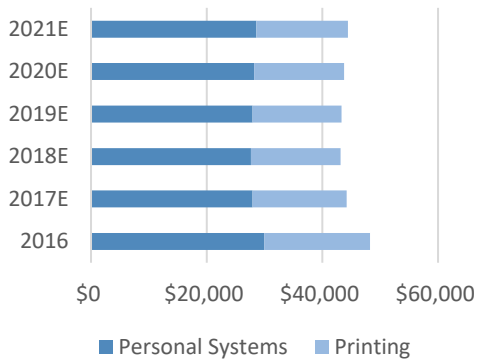
Project Growth Rates of Net Income and FCFF



Calculated WACC

| | |
|-------------------|--------|
| Weight of Equity | 0.80 |
| Weight of Debt | 0.20 |
| Cost of Debt | 4.30% |
| Beta | 1.43 |
| SP50 Return | 8.16% |
| 10yr US Treasury | 2.50% |
| Cost of Equity | 10.61% |
| Terminal Tax Rate | 22.00% |
| WACC | 9.16% |

Projected Revenue Growth

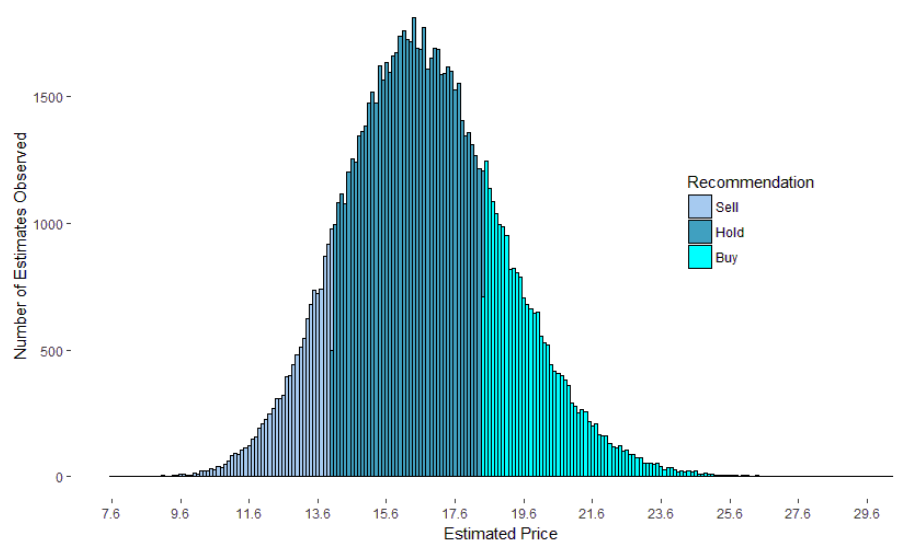


| Projected 5 Year DCF Valuation (Base Case) | | | |
|--|-------------|-----------------|---------|
| Year | FCFF | Discounted FCFF | Growth |
| 1 | \$2,629.79 | \$2,409.06 | -\$0.21 |
| 2 | \$2,485.02 | \$2,085.37 | -5.5% |
| 3 | \$2,616.11 | \$2,011.11 | \$0.05 |
| 4 | \$2,750.19 | \$1,936.73 | \$0.05 |
| 5 | \$2,980.71 | \$1,922.89 | \$0.08 |
| Terminal | \$39,483.71 | \$25,471.31 | \$0.02 |
| Value of Firm | | \$35,836.47 | |
| Value of Debt | | \$6,758.00 | |
| Value of Equity | | \$29,078.47 | |
| Shares | | 1,750 | |
| Per share | | \$16.62 | |

Monte Carlo Simulation

| | |
|--------------|---------|
| Min Price | \$7.64 |
| 1st Quartile | \$15.08 |
| Median | \$16.60 |
| Mean | \$16.71 |
| 3rd Quartile | \$18.22 |
| Max Price | \$30.25 |
| Variance | 5.5257 |
| Skewness | 0.2699 |
| Kurtosis | 3.2037 |
| Sell | 9,956 |
| Buy | 22,899 |
| Hold | 65,172 |
| Total | 11,929 |

Monte Carlo Simulation, 100,000 Simulations



Monte Carlo Method

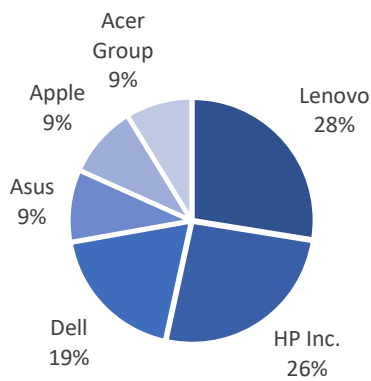
The target price of \$16.62 per share with a 1-year time horizon originates with our DCF (free cash flow to the firm) base case valuation. To supplement the bear and bull case scenarios in accounting for possible changes to cash flow, we use a Monte Carlo simulation with the following assumptions:

- Sales in personal systems and printing business lines varying with standard deviation of 5% from base case.
- Gross Margin, SG&A, taxes and interest, and other costs varying 5% per standard deviation
- Normal distribution for the each of the variables above, chosen to model a decreasing likelihood of extreme values far from the base case, values not expected to vary per 10k set constant.
- Addition of a time trend reflected in the base case to reflect the slowing in the losses of revenue.

This simulation randomizes the possibility of our projected inputs to visualize the sensitivity of a FCFF valuation. Over 100,000 iterations we observe possible intrinsic values between \$7.64 and \$30.25 in the extreme cases. Our target price of \$16.62 in the base case falls between the simulations median share price estimation of \$16.60 and \$16.71. Categorization into buy and sell thresholds for this simulation were \$18.39 and \$14.00 respectively, based on best outcomes given the ability to invest in alternative assets, the SP500 and discounted by a variance factor for conservatism.

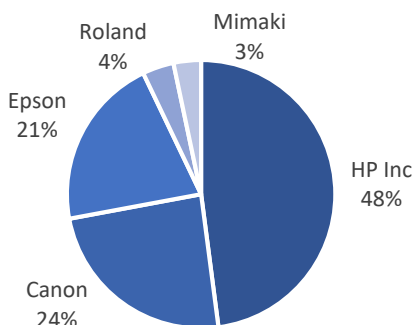
Using these boundaries, 65.2% of observations support hold, 22.9% would result in buy, and 11.9% result in sell being the optimum decision, based on the probability that these potential intrinsic prices are realized a year from now.

PC Market Share



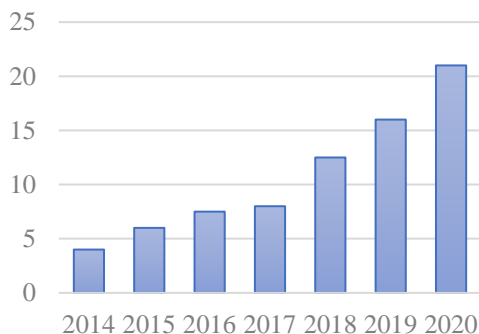
Source: Gartner.

Printer Market Share



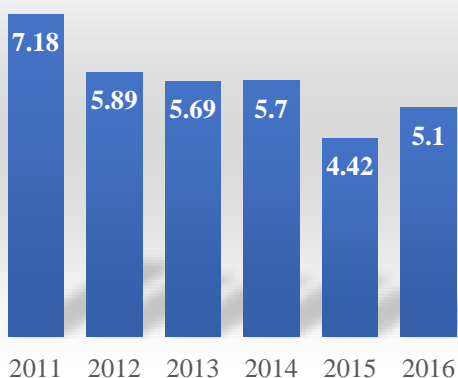
Source: Gartner

Worldwide 3D Printing Industry Forecast



Notes: Units in Billions USD
Source: Forbes (Wohlers Associates)

Samsung Printer Market Share %



Source: International Data Corporation

INVESTMENT SUMMARY

Current Outlook

Our current recommendation is to **HOLD** shares of HP Inc. with a target price of \$16.62, and within an investment horizon of 12 months. We use a Free Cash Flow for the Firm (FCFF) valuation for HP Inc., which we believe is well suited to the predictability of the cash flows HP Inc. generates as a mature technology company well diversified geographically and in product offerings.

While we believe our target price is the best estimation given current information for the next 5 years, we recognize that investors are forward-looking. Within the next year, new information may come to light which could alter HP Inc.'s valuation given its core competencies in research and development and bringing to market innovative products cost effectively. The following are three factors which could significantly alter HP Inc.'s valuation in a short time horizon.

Strong Dollar

Continued strong performance of the US Dollar can increase the competitive pressures HP Inc. faces abroad. In particular, while earnings are reported in constant currency terms, continued strength in the dollar over long periods could adversely inhibit growth for HP Inc. internationally which would be necessary to replace lines of business that age, altering future cash flow trajectory.

3D Printing

High costs continue to inhibit more rapid adoption of 3D printing, but as the technology progresses, significant changes in upfront or variable production costs could significantly alter the trajectory of demand for commercial 3D printers. HP Inc. is well positioned to serve this market. Given the wealth of intellectual property at their disposal, HP Inc. should translate their market leadership in the traditional printer space to 3D printing. Depending on their execution, the expected growth rate of HP Inc.'s future cash flows could be materially revised upward.

The acquisition of David Vision Systems, a 3D imaging technology company, could extend HP Inc.'s leadership position in what may be their most valuable future income stream. Through this new acquisition, HP Inc. is aiming to strengthen its ability to provide the world's only end-to-end 3D ecosystem.

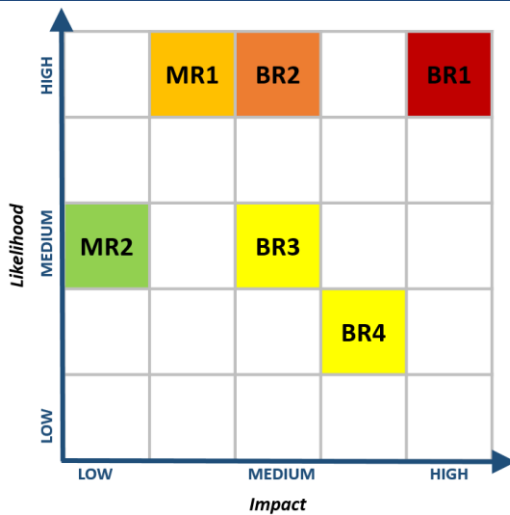
Synergies from Acquisitions

HP Inc.'s 1.1 billion dollar acquisition of Samsung's Print Business brings with it 6000 new employees—2000 of whom are research and design engineers—as well as 6,500 print technology patents. The move increases market share of a diminishing market, while simultaneously establishing a stronger presence in Asia and potentially disrupting an antiquated \$55 billion copier market industry with superior multi-functioning printing.

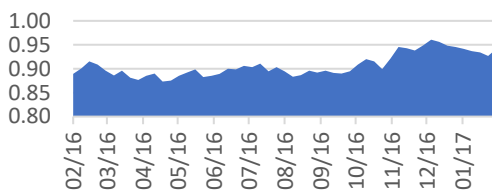
Unstable Political Environment

The United States is likely to see a rapidly transforming executive agenda driven by nationalistic anti-globalization trade policies which could manifest itself in the form of corporate tax cuts, new import tariffs, and more stringent immigration and visa policies. Such developments could result in like measures occurring globally, which would further complicate transfer pricing, tax attribution across international divisions, talent acquisition and allocation.

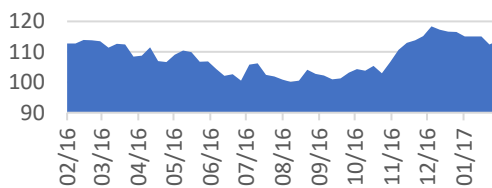
Risk Matrix



EUR:USD

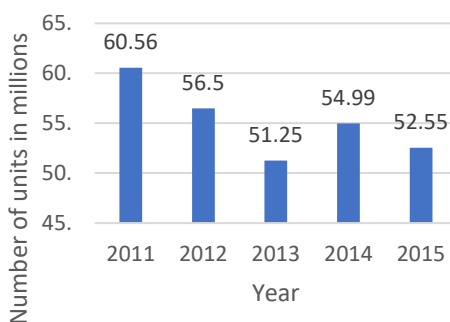


JPY:USD



Source: FactSet Fundamentals

HP Inc. Annual PC Shipments Worldwide



Source: Gartner

| Risk | Mitigant |
|---|---|
| Market slowdown (BR1) | Expanding into untapped markets |
| Fluctuating foreign currency exchange rates (MR1) | Using forwarding contracts and options |
| Interest rate risk (MR2) | Use of interest rate swaps |
| Uncertainty in global markets (BR2) | Large market share |
| Failure in acquisitions (BR3) | Experienced management team |
| Unpredictable 3rd party suppliers (BR4) | Duration and strength of supplier contracts |

INVESTMENT RISKS

Continued slowdown in printing and personal computing sectors (BR1)

(High Likelihood, High Impact)

HP Inc. may face challenges if business revenue in personal computing and printing continue to decline. Their strategy is to leverage existing products and services to meet demand and offset decline in the industry. However, failure to expand in appropriate growth areas or keep up with competitor technologies could adversely affect its financial condition.

Economic weakness and uncertainty in global markets (BR2)

(High Likelihood, Medium Impact)

HP Inc.'s financial success largely depends on economic conditions and global demand. Several of their largest markets have experienced recent macroeconomic weakness. The United Kingdom's separation from the European Union has caused weak macroeconomic conditions across Europe and the United States. Currently, the United States faces political turmoil that has the potential to weaken the global market.

Failure to manage, complete, integrate acquisitions/significant transactions (BR3)

(Medium Likelihood, Medium Impact)

HP Inc. acquires companies, divests assets and businesses, and enters partnerships and alliances to make investments. This leaves HP Inc. open to management risks, and unexpected costs relating to redundancy. In addition, HP Inc. leaves themselves open to creating dilution in existing stockholders if they issue common stock during a transaction. Borrowing to finance transactions could adversely affect their liquidity. HP Inc. could also fail to integrate acquired companies successfully—which would lead to a large sink of time and resources.

Failure to properly manage third party suppliers (BR4)

(Low Likelihood, Medium Impact)

HP Inc. depends on third party suppliers to deliver sufficient amounts of quality components to operate. Since HP Inc. provides a large breadth of technologies to many geographic regions, they are open to potential problems with suppliers such as: component shortages, excess supply, disadvantageous contractual terms, poor management of contingent workers, and loss or modification to the contractual terms of single-source suppliers.

Fluctuations in foreign currency exchange rates (MR1)

(High Likelihood, Low Impact)

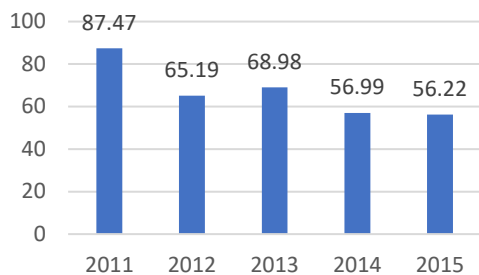
HP Inc. performs business transactions with 44 currencies worldwide. The most significant portions of their international currency markets include the euro, the Chinese yuan renminbi, the British pound and the Indian rupee. HP Inc. is the net receiver in most of their business transactions, and benefits from a weaker U.S. dollar. To mitigate risk, HP Inc. uses both forward contracts and options designated as cash flow hedges. They also swap foreign currency denominated debt obligations to U.S. dollar-denominated debt to limit exposure to foreign currency exchange rate fluctuation.

Interest Rate Risk (MR2)

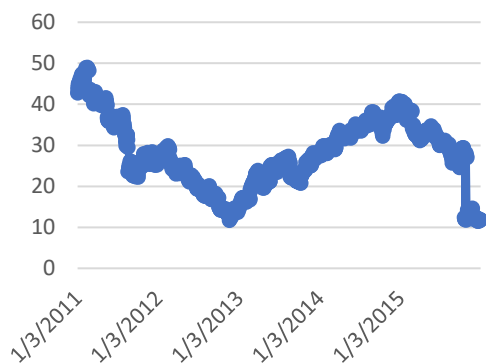
(Medium Likelihood, Low Impact)

HP Inc. is vulnerable to interest rate risk relating to issued debt and their investment portfolio. They choose the currency in which they issue their debt based on current market conditions. They also use interest rate and currency swaps to alter interest rate risk complementary to debt.

HPQ Executive Compensation



HPQ Stock Price



Source: Google Finance and MorningStar

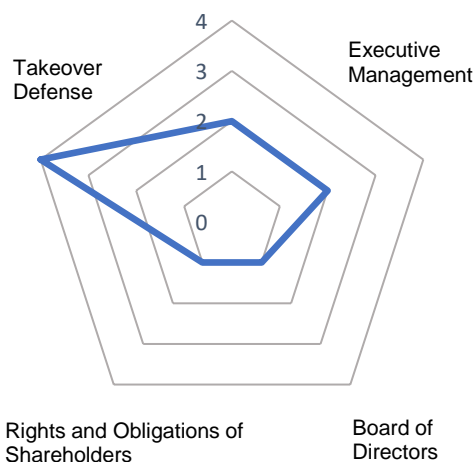
Compensation Top 5 Executives

| Year | Salary | Stock-Based |
|------|--------|-------------|
| 2013 | 1482 | 23700 |
| 2014 | 3181 | 24400 |
| 2015 | 3105 | 28150 |

Source: HPQ Proxy Statement

Shareholder Threat Rating

Disclosure, Transparency, and Engagement



Corporate Governance

Hewlett Packard's Legacy

In addition to inheriting Hewlett Packard's ticker and financial history, HP Inc. shoulders a portion of the predecessor's managerial legacy. We support the conclusion that to compete in the rapidly evolving tech market it was worth the large operating cost to bisect the parent company into two more agile entities. We credit the managerial team with performing the largest corporate separation in history, executed without customer or partner disruption. Additionally, shareholders should be pleased about the ensuing division of the CEO and Chairperson positions. However, the age and length of tenure of the Executive Management Team that accompanied the newly established HP Inc. could pose governance problems. Nevertheless, we deem management to pose a low risk to shareholders and judge that in the small interlude since its inception HP Inc. management have acquitted themselves well (See Appendix D1).

Executive Management

HP Inc.'s executive management team is comprised of twenty-eight professionals, whose average tenure with the company is 28 years (See Appendix D2). CEO and President of Operations, Dion Weisler has a history of success in previous roles with the parent company, including his role in conducting Asia-Pacific and Japan operations. Under his guidance in the last year HP has been able to improve cost structures despite a strengthening dollar, expand computing and commercial segments, reaffirm partner relationships and contracts and articulate and advance HP Inc.'s strategy to exploit new income streams.

Board of Directors

HPs Inc.'s Board of Directors is made up of 13 members, with an average tenure of two years, and the longest serving having been there 8 years (See Appendix D3). Except for Chair and CFO all board members are independent directors. These directors are up for re-election annually, with candidates slated by the board, and elected by majority shareholder vote. Board members are expected to take most of their compensation in the form of equity and options to ensure their decisions are consistent with shareholders' incentives.

Committees, Audits, and Code of Conduct

The composition of the board with respect to independent directors complies with and exceeds all SEC, and New York Stock Exchange standards. The following four committees operate under a publicly reviewable charter: Audit Committee; Finance, Investment, and Technology Committee; HRC Committee; and NGSR Committee. There exist a Standards of Business Conduct, applicable to all levels of HP Inc. employees. The last two years, as approved by shareholder vote, Ernst and Young have conducted financial audits (See Appendix D5). The combined ownership stake of all inside actors represents less than .06% of HP Inc.'s total equity.

Common Size Income Statement

| | 2016 | 2016 | 2017E | 2017E | 2018E | 2018E | 2019E | 2019E | 2020E | 2020E | 2021E | 2021E |
|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Sales | 48,212 | 100.0% | 46,552 | 100.0% | 45,400 | 100.0% | 45,609 | 100.0% | 46,065 | 100.0% | 46,756 | 100.0% |
| Sales in Personal Systems | 29,987 | 62.2% | 29,387 | 63.1% | 29,093 | 64.1% | 29,384 | 64.4% | 29,678 | 64.4% | 30,123 | 64.4% |
| Sales in Printing | 18,260 | 37.9% | 17,164 | 36.9% | 16,306 | 35.9% | 16,225 | 35.6% | 16,387 | 35.6% | 16,633 | 35.6% |
| Cost of Goods Sold (COGS) incl. D&A | <u>39,166</u> | 81.2% | <u>37,823</u> | 81.3% | <u>36,887</u> | 81.3% | <u>37,057</u> | 81.3% | <u>37,313</u> | 81.0% | <u>37,405</u> | 80.0% |
| Gross Income | 9,046 | 18.8% | 8,728 | 18.8% | 8,512 | 18.8% | 8,552 | 18.8% | 8,752 | 19.0% | 9,351 | 20.0% |
| SG&A Expense | <u>5,565</u> | 11.5% | <u>5,353</u> | 11.5% | <u>4,994</u> | 11.0% | <u>5,017</u> | 11.0% | <u>5,067</u> | 11.0% | <u>5,143</u> | 11.0% |
| EBIT (Operating Income) | 3,481 | 7.2% | 3,375 | 7.3% | 3,518 | 7.8% | 3,535 | 7.8% | 3,685 | 8.0% | 4,208 | 9.0% |
| Interest Expense | <u>273</u> | 0.6% | <u>275</u> | 0.6% | <u>275</u> | 0.6% | <u>280</u> | 0.6% | <u>285</u> | 0.6% | <u>290</u> | 0.6% |
| Nonoperating Income - Net | 553 | 1.1% | 577 | 1.2% | 577 | 1.3% | 577 | 1.3% | 577 | 1.3% | 577 | 1.2% |
| Pretax Income | 3,761 | 7.8% | 3,677 | 7.9% | 3,820 | 8.4% | 3,832 | 8.4% | 3,977 | 8.6% | 4,495 | 9.6% |
| Income Taxes | <u>1,095</u> | 2.3% | <u>882</u> | 1.9% | <u>917</u> | 2.0% | <u>920</u> | 2.0% | <u>875</u> | 1.9% | <u>989</u> | 2.1% |
| Net Income | 2,666 | 5.5% | 2,795 | 6.0% | 2,904 | 6.4% | 2,912 | 6.4% | 3,102 | 6.7% | 3,506 | 7.5% |
| Discontinued Operations | <u>170</u> | 0.4% | <u>170</u> | 0.4% | <u>170</u> | 0.4% | <u>170</u> | 0.4% | <u>170</u> | 0.4% | <u>170</u> | 0.4% |
| Net Income available to Common | <u>2,496</u> | 5.2% | <u>2,625</u> | 5.6% | <u>2,734</u> | 6.0% | <u>2,742</u> | 6.0% | <u>2,932</u> | 6.4% | <u>3,336</u> | 7.1% |

*figures in millions, USD

Common Size Balance Sheet

| | 2016 | 2016 | 2017E | 2017E | 2018E | 2018E | 2019E | 2019E | 2020E | 2020E | 2021E | 2021E |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Assets | | | | | | | | | | | | |
| Current | | | | | | | | | | | | |
| Cash & Cash Equivalents | 6,288 | 21.7% | 6,225 | 21.5% | 6,163 | 21.1% | 6,101 | 20.5% | 6,132 | 20.1% | 6,193 | 19.7% |
| Accounts Receivables | 4,114 | 14.2% | 4,073 | 14.1% | 4,114 | 14.1% | 4,155 | 14.0% | 4,217 | 13.8% | 4,280 | 13.6% |
| Inventories | 4,484 | 15.5% | 4,439 | 15.3% | 4,484 | 15.4% | 4,528 | 15.2% | 4,596 | 15.0% | 4,665 | 14.8% |
| Other Current Assets | 3,582 | 12.3% | 3,546 | 12.3% | 3,582 | 12.3% | 3,617 | 12.2% | 3,672 | 12.0% | 3,727 | 11.8% |
| Total Current Assets | <u>18,468</u> | 63.7% | <u>18,283</u> | 63.2% | <u>18,342</u> | 62.8% | <u>18,402</u> | 61.9% | <u>18,617</u> | 60.9% | <u>18,865</u> | 59.9% |
| Long | | | | | | | | | | | | |
| Gross Property, Plant & Equipment | 6,084 | 21.0% | 7,057 | 24.4% | 8,187 | 28.0% | 9,824 | 33.0% | 11,592 | 37.9% | 13,679 | 43.4% |
| (Accumulated Depreciation) | -4,348 | -15.0% | -5,044 | -17.4% | -5,851 | -20.0% | -7,021 | -23.6% | -8,285 | -27.1% | -9,776 | -31.0% |
| Net Property, Plant and Equipment | 1,736 | 6.0% | 2,014 | 7.0% | 2,336 | 8.0% | 2,803 | 9.4% | 3,308 | 10.8% | 3,903 | 12.4% |
| Goodwill | 5,622 | 19.4% | 5,566 | 19.2% | 5,510 | 18.9% | 5,510 | 18.5% | 5,565 | 18.2% | 5,621 | 17.8% |
| Other non-current assets | 3,184 | 11.0% | 3,082 | 10.6% | 3,014 | 10.3% | 3,031 | 10.2% | 3,061 | 10.0% | 3,107 | 9.9% |
| Total Assets | <u>29,010</u> | 100.0% | <u>28,945</u> | 100.0% | <u>29,202</u> | 100.0% | <u>29,746</u> | 100.0% | <u>30,551</u> | 100.0% | <u>31,497</u> | 100.0% |
| Liabilities & Shareholders' Equity | | | | | | | | | | | | |
| Current | | | | | | | | | | | | |
| Notes Payable and short-term borrowings | 78 | 0.3% | 76 | 0.3% | 74 | 0.3% | 74 | 0.2% | 75 | 0.2% | 76 | 0.2% |
| Accounts Payable | 11,103 | 38.3% | 10,748 | 37.1% | 10,511 | 36.0% | 10,569 | 35.5% | 10,675 | 34.9% | 10,835 | 34.4% |
| Employee Compensation and benefits | 759 | 2.6% | 794 | 2.7% | 720 | 2.5% | 707 | 2.4% | 750 | 2.5% | 774 | 2.5% |
| Taxes on Earnings | 231 | 0.8% | 229 | 0.8% | 226 | 0.8% | 229 | 0.8% | 232 | 0.8% | 232 | 0.7% |
| Deferred Revenue | 919 | 3.2% | 890 | 3.1% | 870 | 3.0% | 875 | 2.9% | 882 | 2.9% | 892 | 2.8% |
| Other Accrued Liabilities | 5,718 | 19.7% | 5,535 | 19.1% | 5,413 | 18.5% | 5,443 | 18.3% | 5,487 | 18.0% | 5,552 | 17.6% |
| Total Current Liabilities | <u>18,808</u> | 64.8% | <u>18,271</u> | 63.1% | <u>17,815</u> | 61.0% | <u>17,897</u> | 60.2% | <u>18,100</u> | 59.2% | <u>18,362</u> | 58.3% |
| Long | | | | | | | | | | | | |
| Long-Term Debt | 6,758 | 23.3% | 6,826 | 23.6% | 6,894 | 23.6% | 6,825 | 22.9% | 6,961 | 22.8% | 6,265 | 19.9% |
| Other Non-Current Liabilities | 7,333 | 25.3% | 7,098 | 24.5% | 6,942 | 23.8% | 6,980 | 23.5% | 7,036 | 23.0% | 7,121 | 22.6% |
| Total Non-Current Liabilities | <u>14,091</u> | 48.6% | <u>13,924</u> | 48.1% | <u>13,836</u> | 47.4% | <u>13,805</u> | 46.4% | <u>13,998</u> | 45.8% | <u>13,386</u> | 42.5% |
| Total Equity | <u>-3,889</u> | -13.4% | <u>-3,249</u> | -11.2% | <u>-2,449</u> | -8.4% | <u>-1,956</u> | -6.6% | <u>-1,547</u> | -5.1% | <u>-251</u> | -0.8% |
| Total Liabilities & Shareholders' Equity | <u>29,010</u> | 100.0% | <u>28,945</u> | 100.0% | <u>29,202</u> | 100.0% | <u>29,746</u> | 100.0% | <u>30,551</u> | 100.0% | <u>31,497</u> | 100.0% |

*figures in millions, USD

| Income Statement [BASE] | | | | | | |
|---------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2016 | 2017E | 2018E | 2019E | 2020E | 2021E |
| Sales | \$48,212 | \$46,552 | \$45,400 | \$45,609 | \$46,065 | \$46,756 |
| *Personal Systems | \$29,987 | \$29,387 | \$29,093 | \$29,384 | \$29,678 | \$30,123 |
| *Printing | \$18,260 | \$17,164 | \$16,306 | \$16,225 | \$16,387 | \$16,633 |
| Cost of Goods Sold (COGS) excl. D&A | \$38,834 | \$37,438 | \$36,440 | \$36,521 | \$36,680 | \$36,658 |
| Depreciation and Amortization | \$332 | \$385 | \$447 | \$536 | \$633 | \$746 |
| Cost of Goods Sold (COGS) incl. D&A | \$39,166 | \$37,823 | \$36,887 | \$37,057 | \$37,313 | \$37,405 |
| Gross Income | \$9,046 | \$8,728 | \$8,512 | \$8,552 | \$8,752 | \$9,351 |
| SG&A Expense | \$5,565 | \$5,353 | \$4,994 | \$5,017 | \$5,067 | \$5,143 |
| EBIT (Operating Income) | \$3,481 | \$3,375 | \$3,518 | \$3,535 | \$3,685 | \$4,208 |
| Interest Expense | \$273 | \$275 | \$275 | \$280 | \$285 | \$290 |
| Nonoperating Income - Net | \$553 | \$577 | \$577 | \$577 | \$577 | \$577 |
| Pretax Income | \$3,761 | \$3,677 | \$3,820 | \$3,832 | \$3,977 | \$4,495 |
| Income Taxes | \$1,095 | \$882 | \$917 | \$920 | \$875 | \$989 |
| Net Income | \$2,666 | \$2,795 | \$2,904 | \$2,912 | \$3,102 | \$3,506 |
| Discontinued Operations | -\$170 | -\$170 | -\$170 | -\$170 | -\$170 | -\$170 |
| Net Income available to Common | \$2,496 | \$2,625 | \$2,734 | \$2,742 | \$2,932 | \$3,336 |
| EBITDA | \$3,813 | \$3,760 | \$3,965 | \$4,071 | \$4,318 | \$4,954 |

| Free Cash Flow to the Firm Calculation [BASE] | | | | | | |
|---|----------------|----------------|----------------|----------------|----------------|-----------------|
| | 2016 | 2017E | 2018E | 2019E | 2020E | 2021E |
| Net Income | \$2,496 | \$2,625 | \$2,734 | \$2,742 | \$2,932 | \$3,336 |
| Deferred Taxes & Investment Tax Credit | \$401 | \$401 | \$401 | \$401 | \$401 | \$401 |
| Other Funds | \$338 | \$336 | \$338 | \$340 | \$342 | \$344 |
| Depreciation and Amortization | \$332 | \$385 | \$447 | \$536 | \$633 | \$746 |
| Post-tax interest | \$194 | \$209 | \$209 | \$213 | \$222 | \$226 |
| (FCInv) | -\$337 | -\$973 | -\$1,129 | -\$1,637 | -\$1,768 | -\$2,087 |
| (WCInv) | -\$100 | -\$353 | -\$514 | \$22 | -\$12 | \$13 |
| FCFF | \$3,324 | \$2,630 | \$2,485 | \$2,616 | \$2,750 | \$2,981 |
| Terminal Growth, Value | | | | | 1.50% | \$39,484 |
| WACC | 9.16% | 9.16% | 9.16% | 9.16% | 9.16% | 9.16% |
| Present Value of Cash Flows | \$3,324 | \$2,409 | \$2,085 | \$2,011 | \$1,937 | \$27,394 |
| Value of Equity | | | | | | \$29,078 |
| Value per Share | | | | | | \$16.62 |

(figures in millions USD)

| Income Statement [BULL] | | | | | | |
|---------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2016 | 2017E | 2018E | 2019E | 2020E | 2021E |
| Sales | \$48,212 | \$48,879 | \$47,670 | \$47,889 | \$48,368 | \$49,094 |
| *Personal Systems | \$29,987 | \$30,857 | \$30,548 | \$30,854 | \$31,162 | \$31,630 |
| *Printing | \$18,260 | \$18,023 | \$17,121 | \$17,036 | \$17,206 | \$17,464 |
| Cost of Goods Sold (COGS) excl. D&A | \$38,834 | \$39,329 | \$38,285 | \$38,374 | \$38,546 | \$38,529 |
| Depreciation and Amortization | \$332 | \$385 | \$447 | \$536 | \$633 | \$746 |
| Cost of Goods Sold (COGS) incl. D&A | \$39,166 | \$39,714 | \$38,732 | \$38,910 | \$39,178 | \$39,275 |
| Gross Income | \$9,046 | \$9,165 | \$8,938 | \$8,979 | \$9,190 | \$9,819 |
| SG&A Expense | \$5,565 | \$5,621 | \$5,244 | \$5,268 | \$5,321 | \$5,400 |
| EBIT (Operating Income) | \$3,481 | \$3,544 | \$3,694 | \$3,711 | \$3,869 | \$4,418 |
| Interest Expense | \$273 | \$275 | \$275 | \$280 | \$285 | \$290 |
| Nonoperating Income - Net | \$553 | \$577 | \$577 | \$577 | \$577 | \$577 |
| Pretax Income | \$3,761 | \$3,846 | \$3,996 | \$4,008 | \$4,161 | \$4,705 |
| Income Taxes | \$1,095 | \$923 | \$959 | \$962 | \$916 | \$1,035 |
| Net Income | \$2,666 | \$2,923 | \$3,037 | \$3,046 | \$3,246 | \$3,670 |
| Discontinued Operations | -\$170 | -\$170 | -\$170 | -\$170 | -\$170 | -\$170 |
| Net Income available to Common | \$2,496 | \$2,753 | \$2,867 | \$2,876 | \$3,076 | \$3,500 |
| EBITDA | \$3,813 | \$3,929 | \$4,141 | \$4,248 | \$4,502 | \$5,165 |

| Free Cash Flow to the Firm Calculation [BULL] | | | | | | |
|---|----------------|----------------|----------------|----------------|----------------|-----------------|
| | 2016 | 2017E | 2018E | 2019E | 2020E | 2021E |
| Net Income | \$2,496 | \$2,753 | \$2,867 | \$2,876 | \$3,076 | \$3,500 |
| Deferred Taxes & Investment Tax Credit | \$401 | \$401 | \$401 | \$401 | \$401 | \$401 |
| Other Funds | \$346 | \$344 | \$346 | \$348 | \$350 | \$353 |
| Depreciation and Amortization | \$332 | \$385 | \$447 | \$536 | \$633 | \$746 |
| Post-tax interest | \$194 | \$209 | \$209 | \$213 | \$222 | \$226 |
| (FCInv) | -\$337 | -\$973 | -\$1,129 | -\$1,637 | -\$1,768 | -\$2,087 |
| (WCInv) | -\$100 | -\$353 | -\$514 | \$22 | -\$12 | \$13 |
| FCFF | \$3,332 | \$2,766 | \$2,627 | \$2,759 | \$2,902 | \$3,153 |
| Terminal Growth, Value | | | | | 1.50% | \$41,768 |
| WACC | 9.16% | 9.16% | 9.16% | 9.16% | 9.16% | 9.16% |
| Present Value of Cash Flows | \$3,332 | \$2,534 | \$2,204 | \$2,121 | \$2,044 | \$28,979 |
| Value of Equity | | | | | | \$31,123 |
| Value per Share | | | | | | \$17.78 |

(figures in millions USD)

| Income Statement [BEAR] | | | | | | |
|---------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| | 2016 | 2017E | 2018E | 2019E | 2020E | 2021E |
| Sales | \$48,212 | \$44,224 | \$43,130 | \$43,329 | \$43,762 | \$44,418 |
| *Personal Systems | \$29,987 | \$27,918 | \$27,639 | \$27,915 | \$28,194 | \$28,617 |
| *Printing | \$18,260 | \$16,306 | \$15,491 | \$15,413 | \$15,568 | \$15,801 |
| Cost of Goods Sold (COGS) excl. D&A | \$38,834 | \$35,547 | \$34,596 | \$34,668 | \$34,814 | \$34,788 |
| Depreciation and Amortization | \$332 | \$385 | \$447 | \$536 | \$633 | \$746 |
| Cost of Goods Sold (COGS) incl. D&A | \$39,166 | \$35,932 | \$35,043 | \$35,204 | \$35,447 | \$35,535 |
| Gross Income | \$9,046 | \$8,292 | \$8,087 | \$8,124 | \$8,315 | \$8,884 |
| SG&A Expense | \$5,565 | \$5,086 | \$4,744 | \$4,766 | \$4,814 | \$4,886 |
| EBIT (Operating Income) | \$3,481 | \$3,206 | \$3,343 | \$3,358 | \$3,501 | \$3,998 |
| Interest Expense | \$273 | \$275 | \$275 | \$280 | \$285 | \$290 |
| Nonoperating Income - Net | \$553 | \$577 | \$577 | \$577 | \$577 | \$577 |
| Pretax Income | \$3,761 | \$3,508 | \$3,645 | \$3,655 | \$3,793 | \$4,285 |
| Income Taxes | \$1,095 | \$842 | \$875 | \$877 | \$834 | \$943 |
| Net Income | \$2,666 | \$2,666 | \$2,770 | \$2,778 | \$2,958 | \$3,342 |
| Discontinued Operations | -\$170 | -\$170 | -\$170 | -\$170 | -\$170 | -\$170 |
| Net Income available to Common | \$2,496 | \$2,496 | \$2,600 | \$2,608 | \$2,788 | \$3,172 |
| EBITDA | \$3,813 | \$3,591 | \$3,789 | \$3,894 | \$4,134 | \$4,744 |

| Free Cash Flow to the Firm Calculation [BEAR] | | | | | | |
|---|----------------|----------------|----------------|----------------|----------------|-----------------|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
| Net Income | \$2,496 | \$2,496 | \$2,600 | \$2,608 | \$2,788 | \$3,172 |
| Deferred Taxes & Investment Tax Credit | \$401 | \$401 | \$401 | \$401 | \$401 | \$401 |
| Other Funds | \$330 | \$328 | \$330 | \$332 | \$334 | \$336 |
| Depreciation and Amortization | \$332 | \$385 | \$447 | \$536 | \$633 | \$746 |
| Post-tax interest | \$194 | \$209 | \$209 | \$213 | \$222 | \$226 |
| (FCInv) | -\$337 | -\$973 | -\$1,129 | -\$1,637 | -\$1,768 | -\$2,087 |
| (WCInv) | -\$100 | -\$353 | -\$514 | \$22 | -\$12 | \$13 |
| FCFF | \$3,316 | \$2,494 | \$2,343 | \$2,474 | \$2,598 | \$2,808 |
| Terminal Growth, Value | | | | | 1.50% | \$37,200 |
| WACC | 9.16% | 9.16% | 9.16% | 9.16% | 9.16% | 9.16% |
| Present Value of Cash Flows | \$3,316 | \$2,284 | \$1,966 | \$1,902 | \$1,830 | \$25,809 |
| Value of Equity | | | | | | \$27,034 |
| Value per Share | | | | | | \$15.45 |

(figures in millions USD)

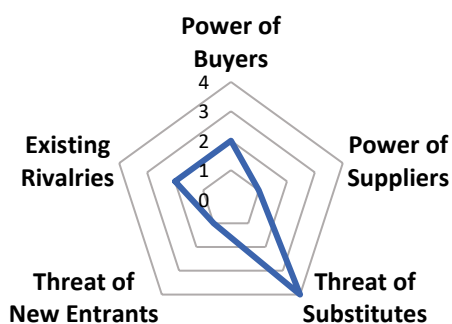
| Beta Analysis | | | | |
|-------------------------------|------------|---------------|-----------|------------|
| | HP Inc. | Apple Inc. | DELL | Canon Inc. |
| | (NYSE:HPQ) | (NASDAQ:AAPL) | (Private) | (7751:JP) |
| 5Y Weekly Beta S&P 500 | 1.22532 | 1.05415 | -0.45417 | 0.38907 |
| R-squared | 0.20650 | 0.22360 | 0.01720 | 0.05360 |
| Std. Error | 0.14786 | 0.12205 | 0.58904 | 0.10156 |
| 5Y Weekly Beta S&P Technology | 0.99665 | 1.04175 | -0.21250 | 0.31718 |
| R-squared | 0.20950 | 0.33480 | 0.03580 | 0.05460 |
| Std. Error | 0.11920 | 0.09125 | 0.51477 | 0.05100 |

| Fama and French Cost of Equity | | |
|--------------------------------|-------------|--------------|
| | Coefficient | Risk Premium |
| Market Risk | 0.182 | 0.330 |
| Size Risk | -0.139 | 0.003 |
| Value Risk | 0.586 | 2.068 |
| Total Risk Premium | | 4.900 |
| Adjusted R-squared | | -0.030 |

Beta Calculation

At first, we consider which index to use as a proxy for market index – S&P 500 or S&P Technology Index. We see a negligible difference in the R-squared and standard errors between the two across competitors, so we decide to use S&P 500 as we believe that Cost of Equity will be driven by overall market conditions, and not those specific to the technology industry. CAPM Beta is calculated regressing weekly returns of HPQ on the S&P 500 for the last 2 years gives us a value of 1.434685 (R-squared of 0.2065 and statistically significant). Our proxy choice for the risk-free rate is the current 10-year US treasury bond rate of 2.5%, and the return on our market proxy, the S&P 500 Index, is 8.156% using 40-year CAGR. Using a Fama and French model is considered, however the low adjusted R-squared indicates the additional controls for book value and firm size do not add enough explanatory power to be desirable.

Five Forces Analysis



Future Outlook as a Whole:

HP Inc. has customers in over 170 countries, numerous government contracts and a net revenue of 48.2 billion dollars. HP Inc. generates 54% of its revenue from outside of the United States. HP Inc. is the global leader in the printer market and is challenged by Canon, Epson, Roland and Mimaki. HP Inc. controls 48% of market share followed by Canon at 24%. In order to remain the market leader in the long-term, HP Inc. must use strategic positioning and capitalize on competitive advantages.

Power of Buyers: **LOW**

Among the buyers, there exists no group with enough buying power to influence prices. Amongst some government, academia and professionals exists non-price sensitive customers who want the highest quality. However, most of HP Inc.'s customers are price-sensitive and thus will purchase a substitute printer if it becomes cheaper than replacing the ink for their HP Inc. printer. This is due to the lack of distinction in printing hardware and the inelastic nature of consumers' demand.

Power of Suppliers: **LOW**

Among the suppliers, there exists no group with enough supplying power to influence prices. Most of the components that go into making a PC or printer include aluminum, plastic resin, chemicals, and hardware that are available from many different suppliers. HP Inc. may experience some supply issues with NAND flash, a crucial component of solid-state drives. However, if a shortage of NAND were to occur it would affect all market share holders.

Threat of Substitutes: **HIGH**

The threat of substitutes is the primary force HP Inc. must focus on if they are to ensure stable long-run growth. Domestic growth in the computer and printer market is declining due to market saturation. This forces HP Inc. to invest in acquiring new market share in emerging economies in order to expand. Due to the inelasticity of the majority of consumers in emerging economies, HP Inc. will be forced to be a price-taker rather than a price-maker.

Threat of New Entrants: **LOW**

Market leaders in both the computer and printer market have numerous patents which provide strength in creating barriers to entry for new entrants. Even if a new entrant were to successfully establish a supply chain it would be very difficult for them to establish a customer base. If the new entrant were to produce a substitute good it would have to be priced aggressively to compete with an iconic brand such as HP Inc. Furthermore, if the new entrant were to be developing new technology the probability of their work depending on elements that are patented is high. Industry conditions leave no market share for new entrants.

Existing Rivalry: **MODERATE**

Moderate rivalry exists within the peripheral equipment sector, but HP Inc. has combatted this by positioning itself as a leader in the market of 3D printing. Furthermore, HP Inc. is in the process of acquiring Samsung's print sector, which removes one rival from the list. However, HP Inc.'s products are very similar to those of its competitors which forces aggressive pricing and makes them vulnerable to a price war. If a market competitor could supply a substitute good for a cheaper cost HP Inc. would be forced to lower their price or lose market share.

SWOT Analysis

This SWOT analysis was created to establish a better understanding of HP’s relative market position within the technology industry. Within the sections Strengths, Weaknesses, Opportunities and Threats is 10 categories that are ranked according to their potential impact. The ranking system is ranked by a maximum of 3 points for each category and a maximum of 30 points for each section. The total graph is a summary of each section in comparison.

Strengths

- Iconic International Brand
- Serves around 400 governments
- Maximum market share in the printer market
- Primary partner with Microsoft

Weaknesses

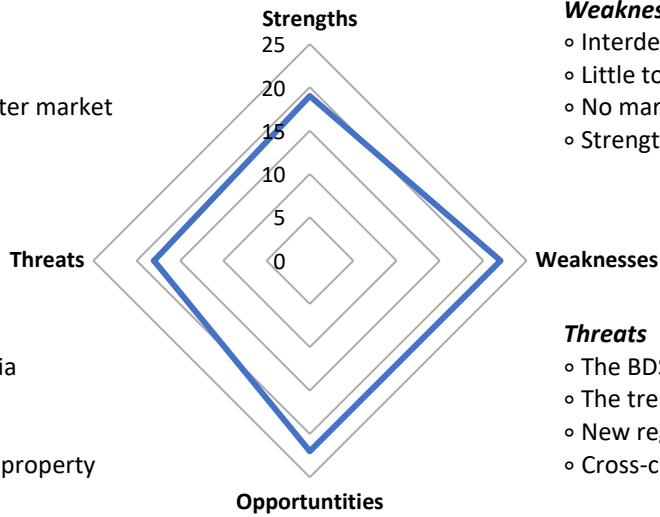
- Interdependence across divisions
- Little to no customization
- No market share in smart phones
- Strength of United States Dollar

Opportunities

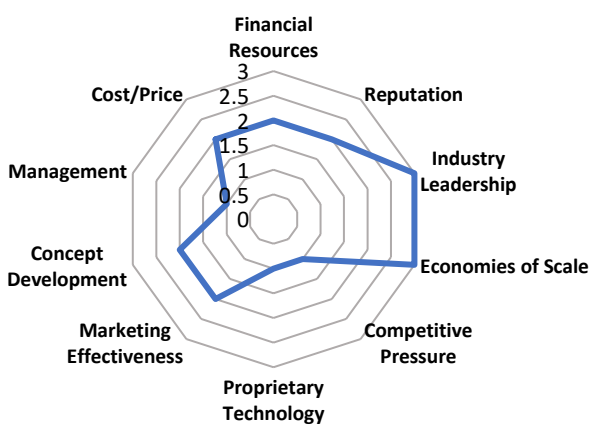
- Emerging markets in China and India
- 3D printer market
- Corporate print servicing contracts
- Capitalizing on existing intellectual property

Threats

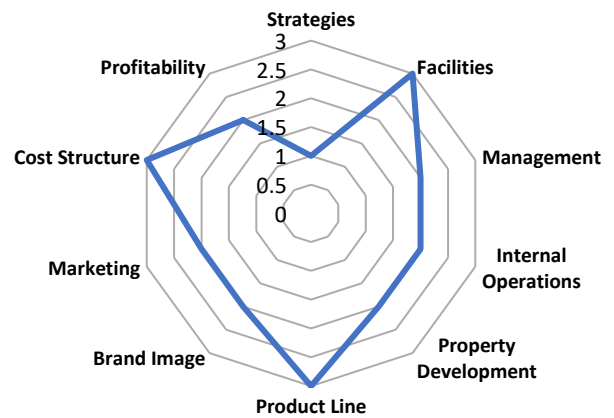
- The BDS movement
- The trend of digitizing information
- New regulation in the European Union
- Cross-currency exposure



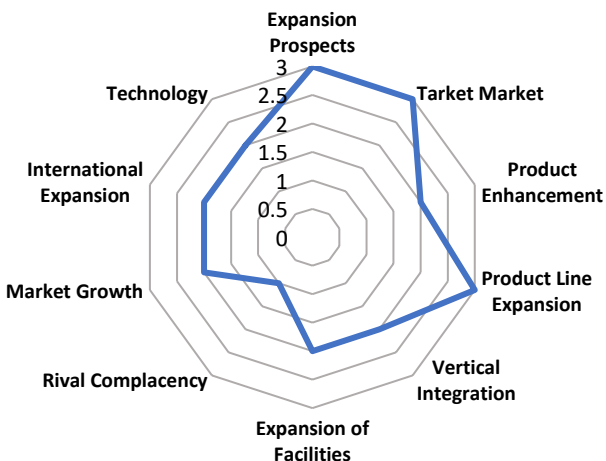
Strengths Rating



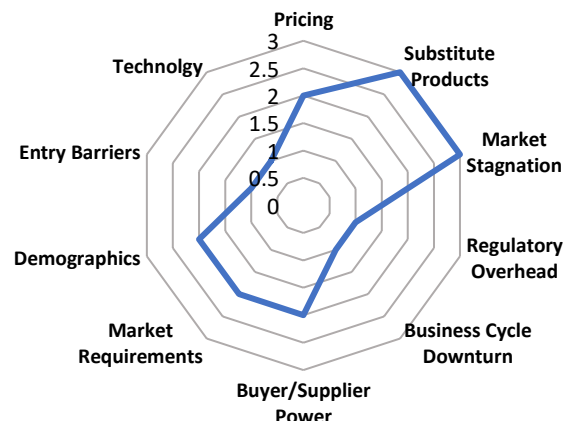
Weaknesses Rating



Opportunities Rating



Threats Rating



In assessing the quality of corporate governance of HP Inc., criteria described by the U.S. Security and Exchange Commission and the New York Stock Exchange governance stipulations are utilized in conjunction with a rating methodology adapted from that of Institutional Share Holders Services.

| Shareholder Threat Rating | |
|---------------------------|--------------------------------------|
| Score | Key |
| 1 | Insignificant threat to Shareholders |
| 2 | Low threat to Shareholders |
| 3 | Moderate threat to Shareholders |
| 4 | Significant threat to Shareholders |
| 5 | High Threat to Shareholders |

Overall Managerial and Corporate Governance

Score 2

Disclosure, Transparency, and Engagement

Score 2

Hewlett Packard Inc. has a strong Investor Relations department that provides and prepares high quality reports. Shareholders are mailed detailed instructions on how to access online Proxy Statements, 10-Ks, and 8-Ks, with paper copies available upon request. HP Inc. has made considerable effort to engage shareholders, and encourage participation in company policy. They track shareholder participation and in 2015 moved to a completely virtual meeting of stockholders for the annual shareholder meeting, conducted via live webcast.

HP Inc. devotes considerable resources to conducting internal audits as well as developing and managerial compensation incentives that are consistent with shareholder interest. In 2015, 206 million dollars were spent in audit-related fees including accounting consultations, employee benefit plan audits and merger and acquisition due diligence. It is of concern that management has already stated its desire to employ Ernst & Young LLP to conduct 2016 independent auditing, given that they earned 51.2 and 112.7 million dollars in the 2014 and 2015 respectively, for providing similar services.

Executive Management

Score 2

To their credit, in 2015, HP Inc.'s very experienced management team orchestrated the largest global corporate separation in history, resulting in the creation of two Fortune 500 companies. While shareholder price initially suffered, HP Inc. conveyed sufficient competence, rallying prices back upwards, though expectations remain bearish. Management has established 2016 budgets and three-year plans for Hewlett Packard Enterprise and HP Inc. as separate companies. While acknowledging headwinds in the currency markets, HP Inc. has made cost structure improvements and strides in increasing customer and partner scores. As traditional printing incomes streams stagnate, management has highlighted a framework for transformation areas, with heavy investment being made in three-dimensional printing, and virtual reality technologies.

Board of Directors

Score 1

HP Inc. has designed the criteria for members of the Board of Directors to reflect and exceed the NYSE corporate governance listing standards in terms of restrictiveness. In addition, each member of the Audit and Compensation Committees meets the heightened independence SEC standards. In the past year, they have added nine new independent directors, four of whom are women, appointed a new Lead Independent Director and enhanced that role. In connection with the separation, the Board has separated CEO and Chairman roles: Meg Whitman was appointed Chairman and Dion J. Weisler was appointed President and CEO.

Rights and Obligations of Shareholders

Score 1

In a recent amendment to HP Inc.'s Certificate of Incorporation with the state of Delaware, the company has moved towards the prevailing election standard of one vote per share for each nominee, abandoning the preexisting cumulative voting methodology; which disproportionately favors minority shareholders. At an annual meetings shareholder participate in a majority vote to reinstate existing Independent Directors, or to approve new directors from a slate produced by the current board. Making amendments to bylaw require only a simple majority, special meetings can be called by 25% of shareholders, and proxy voting is permitted.

Takeover Defense

Score 4

HP Inc. has a very low ability to fend off any attempt at a takeover. They do not have an active poison pill provision, and 99.89 percent of equity is floating publicly.

| Hewlett Packard Key Executives | | |
|--------------------------------|--|---|
| Dion Weisler | President & Chief Executive Officer | Mr. Dion J. Weisler is President, Chief Executive Officer & Director at HP, Inc. He is on the Board of Directors at HP, Inc. Mr. Weisler was previously employed as COO & VP-Mobile Internet Digital Home Groups by Lenovo and General Manager by Telstra Corp. Ltd. He received his undergraduate degree from Monash University. |
| Ron Coughlin | President, Personal Systems Business | Mr. Ronald Coughlin is President-Personal Systems business at HP, Inc. Mr. Coughlin was previously employed as Brand Manager by G Heileman Brewing Co., Chief Marketing Officer & Senior Vice President by PepsiCo, Inc. Received his undergraduate degree from Lehigh University and an MBA from the Kellogg School of Management. |
| Enrique Lores | President, Imaging & Printing Business | Mr. Enrique Lores is President-Imaging & Printing Business at HP, Inc. He received a degree from the Polytechnic University of Valencia and an MBA from Escuela Superior de Administración y Dirección de Empresas. |
| Stephen Nigro | President, 3D Printing Business | Mr. Stephen Nigro is President-3D Printing Business at HP, Inc. He is on the Board of Directors at Oregon Business Council. He received his undergraduate degree from the University of California, Santa Barbara and a graduate degree from Stanford University. |
| Richard Bailey | President, APJ Region | Richard Bailey is President of the Asia Pacific and Japan (APJ) Region for HP Inc. In this role, Richard is responsible for the go-to-market strategy and overall financial performance of the HP APJ business. Most recently, Richard was Senior Vice President of Customer Support & Solutions. Richard holds a Bachelor of Arts degree from The University of Western Australia in Perth. |
| Nick Lazaridis | President, EMEA Region | Nick Lazaridis is the President of the Europe, Middle East, and Africa (EMEA) region for HP Inc. He is responsible for managing all of HP's operations, growth, and profitability throughout the EMEA region. Prior, Nick led the Asia Pacific & Japan (APJ) region for HP. Before joining HP, Nick managed regional businesses for AMD, Lenovo, Dell, and Acer. |
| Christoph Schell | President, Americas Region | Christoph Schell is President of the Americas Region for HP Inc. Most recently, Christoph was the Executive Vice President at Philips, where he managed the Lighting Business in Growth Markets across the world. He holds Bachelor's degrees from Ecole De Commerce De Reims in France and ESB Reutlingen. |
| Jon E. Flaxman | Chief Operating Officer | Mr. Jon E. Flaxman is Chief Operating Officer at HP, Inc. He received his undergraduate degree from the University of Illinois and a graduate degree from Washington University in St. Louis. |
| Tracy Keogh | Chief Human Resources Officer | Ms. Tracy S. Keogh is Chief Human Resources Officer at HP, Inc. Ms. Keogh was previously employed as Senior Vice President-Human Resources by Hewitt Associates, Inc., Chief Human Resources Officer by Bloomberg LP, Vice President-Human Resources by Analog Devices, Inc., and Senior Vice President-Sales & Marketing by Sapient Corp. She received her undergraduate degree from Smith College and an MBA from Harvard Business School |
| Catherine A. Lesjak | Financial Officer & Executive Vice President | Ms. Catherine A. Lesjak is Independent Director at SunPower Corp., Chief Financial Officer at HP, Inc., and Chief Financial Officer & Director at 3Com Corp. Ms. Lesjak also served on the board at Neoware, Inc. and Hewlett Packard Enterprise Co. She received her undergraduate degree from Stanford University and a graduate degree from the University of California, Berkeley. |
| Antonio J. Lucio | Chief Marketing & Communications Officer | Mr. Antonio J. Lucio is Chief Marketing & Communications Officer at HP, Inc. and Chief Marketing Officer at Visa International Service Association. He is on the Board of Directors at Association of National He was previously employed as Chief Brand Officer & Executive Vice President by Visa, Inc., Chief Marketing Officer & Senior Vice President by PepsiCo Beverages International Ltd. |
| Stuart C. Pann | Chief Supply Chain Officer | Mr. Stuart Pann is Chief Supply Chain Officer at HP, Inc. He received his undergraduate degree from Michigan Technological University and an MBA from the University of Michigan. |

Source: HP Proxy Statement

| Board Members | | | | |
|-----------------------------|---|---|-------------|---------|
| Member | Title | Background | Independent | Tenure |
| Margaret C. Whitman | Chairman | Ms. Margaret C. Whitman is Chairman at HP, Inc. and Chief Executive Officer at Hewlett Packard Enterprise Development LP. She is on the Board of Directors at Hewlett Packard Enterprise Co., SurveyMonkey, Inc., Zaarly, Inc., Procter & Gamble Co., Everett Spingo, Inc., Teach For America, Inc. and The Nature Conservancy, Inc. | No | 6 years |
| Dion J. Weisler | President, Chief Executive Officer & Director | See Appendix D2 | No | 2 years |
| Aida M. Alvarez | Independent Director | Ms. Aida M. Alvarez is Chairman at Latino Community Foundation. She is on the Board of Directors at HP, Inc., Zoosk, Inc., San Francisco Symphony, Oportun, Inc., Smithsonian American Art Museum, Smithsonian National Museum of American History and The National Trust For Historic Preservation. | Yes | 1 year |
| Carl Bass | Independent Director | Mr. Carl Bass is President, Chief Executive Officer & Director at Autodesk, Inc. and an Advisor at Impact Venture, Inc. He is on the Board of Directors at E2open, Inc., Autodesk, Inc., and iRise, Inc. Mr. Bass was previously employed as President & Chief Executive Officer by Buzzsaw.com, Inc. | Yes | 2 years |
| Charles Victor Bergh | Independent Director | Mr. Charles V. Bergh is on the Board of Directors at HP, Inc. Mr. Bergh was previously employed as President, Chief Executive Officer & Director by Levi Strauss & Co., an Independent Director by VF Corp., Group President-Global Male Grooming by Procter & Gamble Co., Non-Executive Director by Procter & Gamble Hygiene & Health Care Ltd., and a Member by US-ASEAN Business Council, Inc. | Yes | 2 years |
| Stacy Brown-Philpot | Independent Director | Ms. Stacy Brown-Philpot is Independent Director at HP, Inc. and Chief Executive Officer at TaskRabbit, Inc. She is on the Board of Directors at HP, Inc. Ms. Brown-Philpot was previously employed as a Principal by Goldman Sachs & Co. and a Principal by PricewaterhouseCoopers LLP. She received an MBA from Stanford University. | Yes | 2 years |
| Stephanie A. Burns | Independent Director | Dr. Stephanie A. Burns is a Member at American Chemical Society. She is on the Board of Directors at HP, Inc., Kellogg Co. and Corning, Inc. She received his doctorate degree from Iowa State University. | Yes | 2 years |
| Mary Anne Citrino | Member | Ms. Mary A. Citrino is on the Board of Directors at Alcoa Corp., Royal Ahold Delhaize NV, HP, Inc. and Dollar Tree, Inc. Ms. Citrino was previously employed as an Independent Director by Health Net, Inc., Senior Managing Director by Blackstone Advisory Partners LP. She received her undergraduate degree from Princeton University and an MBA from Harvard Business School. | Yes | 2 years |
| Stacey J. Mobley | Independent Director | Mr. Stacey J. Mobley is on the Board of Directors at HP, Inc., International Paper Co., Nuclear Electric Insurance Ltd. and Howard University. Mr. Mobley was previously employed as Chief Administrative Officer & General Counsel by E.I. du Pont de Nemours & Co. He received both his undergraduate and graduate degree from Howard University. | Member | 2 years |

Source: FactSet, HP Official Website

| Board Members (continued) | | | | |
|---------------------------|---------------------------|--|-------------|---------|
| Member | Title | Background | Independent | Tenure |
| Subra Suresh | Independent Director | Dr. Subra Suresh, MD, is Independent Director at HP, Inc. and President at Carnegie Mellon University. He is on the Board of Directors at HP, Inc., Battelle Memorial Institute, and The Pittsburgh Cultural Trust. Dr. Suresh was previously employed as a Principal by Massachusetts Institute of Technology. He received a graduate degree from Iowa State University, and a doctorate degree from the Massachusetts Institute of Technology. | Yes | 2 years |
| Robert R. Bennet | Independent Director | Mr. Robert R. Bennett is a Managing Director at Hilltop Investments LLC and President & Managing Director at Hilltop Investments, Inc. He is on the Board of Directors at HP, Inc., Liberty Media Corp., First Western Financial, Inc., Discovery Communications, Inc., Liberty Media Corp. Capital and Denison University. He received his undergraduate degree from Denison University and an MBA from Columbia Business School. | Yes | 4 years |
| Shumeet Banerji | Independent Director | Dr. Shumeet Banerji is Vice Chairman at Innocoll Holdings Plc and Partner at Condorcet LP. He is on the Board of Directors at Proteus Digital Health, Inc., Innocoll Holdings Plc, Innocoll, Inc., HP, Inc., AbsolutData Technologies, Inc. and Berg LLC. Dr. He received his undergraduate degree from the University of Delhi, an MBA from the University of Delhi and a doctorate degree from Kellogg School of Management | Yes | 6 years |
| Rajiv Lochan Gupta | Lead Independent Director | Mr. Rajiv Lochan Gupta is Non-Executive Chairman at Delphi Automotive Plc, Chairman at Avantor Performance Materials, Inc. and Chairman at Delphi Automotive LLP. He is on the Board of Directors at Information Resources, Inc., HP, Inc., Affle Pte Ltd. and Arconic, Inc. He received his undergraduate degree from Indian Institute of Technology Bombay, a graduate degree from Cornell University and an MBA from Drexel University. | No | 8 years |

Source: FactSet, HP Investor Relations

| Board Committee Positions | |
|---|------------------------------|
| Audit Committee | |
| Robert R. Bennett | Financial expert |
| Stacy Brown-Philpot | Independent Director |
| Stephanie A. Burns | Financial expert |
| Mary Anne Citrino | Chairwoman, Financial expert |
| Subra Suresh | Independent Director |
| Finance, Investment and Technology Committee | |
| Shumeet Banerji | Independent Director |
| Carl Bass | Independent Director |
| Robert R. Bennett | Chairman |
| Stephanie A. Burns | Independent Director |
| Mary Anne Citrino | Independent Director |
| Subra Suresh | Independent Director |
| Margaret C. Whitman | Director |
| HR and Compensation | |
| Carl Bass | Independent Director |
| Charles V. Bergh | Independent Director |
| Rajiv L. Gupta | Chairman |
| Stacey Mobley | Independent Director |
| Nominating, Governance and Social Responsibility | |
| Shumeet Banerji | Chairman |
| Charles V. Bergh | Independent Director |
| Stacy Brown-Philpot | Independent Director |
| Rajiv L. Gupta | Lead Independent Director |
| Stacey Mobley | Independent Director |

Source: FactSet, HP Investor Relations

| Top 15 Institutional Investors | | | | |
|--------------------------------|-------------------------------------|------|------------------|----------|
| Rank | Institution | %OS | Number of Shares | Activism |
| 1 | Dodge & Cox | 9.92 | 169,157 | Very Low |
| 2 | The Vanguard Group, Inc. | 6.84 | 116,618 | Very Low |
| 3 | SSgA Funds Management, Inc. | 4.63 | 79,006 | Very Low |
| 4 | BlackRock Fund Advisors | 4.28 | 73,001 | Very Low |
| 5 | PRIMECAP Management Co. | 3.62 | 61,762 | Very Low |
| 6 | Fidelity Management & Research Co. | 2.75 | 46,885 | Very Low |
| 7 | AQR Capital Management LLC | 1.77 | 30,105 | Very Low |
| 8 | SunAmerica Asset Management LLC | 1.68 | 28,599 | Very Low |
| 9 | JPMorgan Investment Management Inc. | 1.66 | 28,343 | Low |
| 10 | AllianceBernstein LP | 1.41 | 24,068 | Very Low |
| 11 | Northern Trust Investments, Inc. | 1.28 | 21,870 | Very Low |
| 12 | Mellon Capital Management Corp. | 1.15 | 19,595 | Very Low |
| 13 | Norges Bank Investment Management | 1.03 | 17,510 | Medium |
| 14 | Geode Capital Management LLC | 0.90 | 15,417 | Very Low |
| 15 | Dimensional Fund Advisors LP | 0.86 | 14,648 | Very Low |

Source: FactSet, HP Investor Relations

Disclosures:

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CFA Institute

CFA Institute Research Challenge