

Financial Analysis of Intel Corporation

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Abstract

Intel Corporation is a semiconductor manufacturing business that is currently transforming into a data-centric business. Intel was founded in 1968 in California and went public in 1971. Intel's largest competitor is Advanced Micro Devices, which also manufactures semiconductors. Intel's revenue has been growing and reached \$71.9 billion in fiscal 2019. Intel's revenue has increased due to a strong economy and its growing data-centric segments. At the same time, Intel has been cutting its operating expenses in order to increase its net income. The tax reform of 2017 also helped increase Intel's net income by 84% since fiscal 2015, due to the corporate tax rate being cut. Intel used 86% of its cash on additions to its property, plant, and equipment, the purchase of trading assets, the repurchase of its common stock, and payments of cash dividends in fiscal 2019. Intel has also been increasing the amount of cash used to pay dividends since fiscal 2015 in order to complete one of its top priorities, which is to return value to its shareholders. Intel is expected to continue its growth, because the industry is expected to grow by 3% until 2024.

Intel Corporation is a microprocessor and semiconductor manufacturing business. Intel was founded in 1968 in California (AYIR, Intel's 2018 Annual Report, 2019). This paper will show an analysis of Intel's financial statements, as well as an analysis of the financial statements of its largest competitor, Advanced Micro Devices (AMD). After examining the last 5 years of financial statements and annual reports for both companies, I created common size financial statements, a horizontal analysis of year-to-year changes, and a trend analysis of overall changes for both companies. I have also calculated many financial ratios for each company.

Company Information

Intel Corporation had its Initial Public Offering in 1971 at \$23.50 per share, raising \$6.8 million dollars (Introduction, Intel's 2018 Annual Report, 2019). Intel was reincorporated in Delaware in 1989 (Introduction, Intel's 2017 Annual Report, 2018). In 2015, Intel announced its transformation into a data-centric business, signaling growth in data-centric markets including artificial intelligence and autonomous driving (Introduction, Intel's 2018 Annual Report, 2019).

Capital Allocation Strategy

Intel's strategy consists of three top priorities. First, Intel invests in its own business through capital expenditures and through research and development. Intel must invest in research and development in order to continue to lead the industry with new products and technology (AYIR, Intel's

2018 Annual Report, 2019). Also, Intel must invest in capital expenditures, because it is transforming into a data-centric business, so it is ramping up production of new products (AYIR, Intel's 2018 Annual Report, 2019).

The second priority of Intel's capital allocation strategy is to acquire and integrate companies around the world that complement Intel's investments in research and development and capital expenditures (AYIR, Intel's 2018 Annual Report, 2019). Intel purchases companies yearly. Two major acquisitions that Intel had in recent years included Altera in fiscal 2016 and Mobileye in fiscal 2017 (AYIR, Intel's 2018 Annual Report, 2019). Intel's acquisitions stimulate growth in its data-centric businesses (AYIR, Intel's 2018 Annual Report, 2019).

Intel's third capital allocation priority is to return cash to shareholders. Intel pays dividends and repurchases its common stock to help increase each share's worth and return cash to the shareholders. Intel has increased its dividends paid per share since fiscal 2014 (AYIR, Intel's 2018 Annual Report, 2019).

Operating Segments

Intel has five main operating segments, including Client Computing Group, Data Center Group, Internet of Things Group, Non-Volatile Memory Solutions, and the Programmable Solutions Group. See Figure 1 below for breakdown of the revenues earned from each operating segment in fiscal 2018 (MD&A, Intel's 2018 Annual Report, 2019).

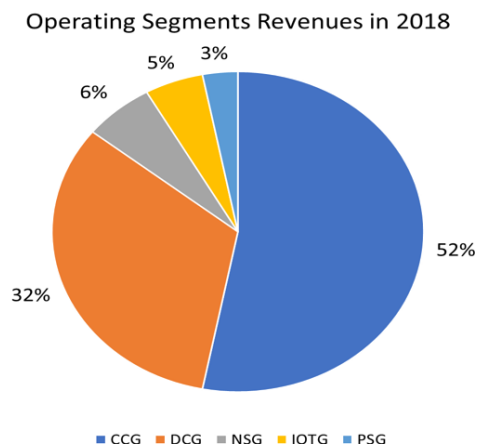


Figure 1: Revenue by Operating Segment

PC-Centric Business

Intel's Client Computing Group (CCG) is Intel's largest operating segment based on revenue earned. The Client Computing Group consisted of 52% of Intel's revenues in fiscal 2018 (MD&A, Intel's 2018 Annual Report, 2019). The CCG's main products are computer processors. A large group of products in this business is called the Intel Inside Program, which includes Intel Pentium Processors and the Intel Core Series (MD&A, Intel's 2018 Annual Report, 2019). The CCG is the only operating segment in Intel's PC-centric business line.

Data-Centric Businesses

Intel's Data Center Group (DCG) is Intel's second largest operating segment based on revenue earned. The Data Center Group earned Intel 32% of its revenues in fiscal 2018 (MD&A, Intel's 2018 Annual Report, 2019). The Data Center Group consists mainly of Intel's cloud, network data storage, and communication-based products (MD&A, Intel's 2018 Annual Report, 2019). The DCG grew faster than Intel's other segments (MD&A, Intel's 2018 Annual Report, 2019).

Intel's third largest operating segment in fiscal 2018 based on revenue earned was the Non-Volatile Memory Solutions Group (NSG). The Non-Volatile Memory Solutions Group earned Intel 6% of its revenue in fiscal 2018 (MD&A, Intel's 2018 Annual Report, 2019). The NSG's main product lines are Intel Optane and Intel 3D NAND, which are solid-state drives and memory and storage products (MD&A, Intel's 2018 Annual Report, 2019). The NSG's revenue grew 20% from fiscal 2017 to fiscal 2018 (MD&A, Intel's 2018 Annual Report, 2019).

Intel's fourth largest operating segment in fiscal 2018 based on revenue earned was the Internet of Things Group (IOTG). The Internet of Things Group earned 5% of Intel's revenue in fiscal 2018 (MD&A, Intel's 2018 Annual Report, 2019). The IOTG develops applications for retailers, manufacturers, health care providers, and governments (MD&A, Intel's 2018 Annual Report, 2019).

Intel's last operating segment is the Programmable Solutions Group (PSG), which earned 3% of Intel's revenues in fiscal 2018 (MD&A, Intel's 2018 Annual Report, 2019). The PSG works with other operating sectors, mainly the CCG. Its main products are Field Programmable Gate Arrays, which work with processors to add a specific function to systems (MD&A, Intel's 2018 Annual Report, 2019).

The Data Center Group, Non-Volatile Memory Solutions Group, Internet of Things Group, and Programmable Solutions Group make up Intel's data-centric business (MD&A, Intel's 2018 Annual Report, 2019). Intel is investing more in the data-centric business in order to broaden its product base and reach more customers (MD&A, Intel's 2018 Annual Report, 2019).

Advanced Micro Devices, Inc.

Intel's main competitor, Advanced Micro Devices, Inc., was founded in 1969 in California, just one year after Intel was founded (AMD, 2020). AMD specializes in processors and graphics cards for high performance computers, which aligns with Intel's largest operating segment, CCG (AMD, 2020). AMD and Intel are the two name-brands when it comes to computer processors for budget, business, and gaming computers. AMD's graphics cards also compete directly with those produced by Nvidia. Even as Intel's largest competitor, AMD's revenue of \$6.7 billion is much lower compared to Intel's revenues of \$72 billion in fiscal 2019 (AMD's and Intel's 2019 Annual Reports, 2020).

Industry Outlook

The microprocessor and semiconductor industry includes many well-known businesses, such as Intel, AMD, Nvidia, Apple, Samsung, and Qualcomm. The industry is expected to grow by 3% from 2019 to 2024, according to a Marketwatch report (Marketwatch, 2019). China is expected to be the largest manufacturer of microprocessors, but these processors will continue to be of slightly lower quality (Marketwatch, 2019). The United States is likely to have better quality products and processors because the U.S. is home to the largest and wealthiest companies in the industry (Marketwatch, 2019). The wealthy companies have an advantage in disposable income for more research and production of higher quality products (Marketwatch, 2019).

Fiscal Years

Intel and AMD both have fiscal years that end on the last Saturday of December (Notes, Intel's and AMD's 2018 Annual Report, 2019). Each of the five years represented in this analysis include 52 weeks.

Income Statement

Intel's common size income statement is shown in Table1. The common size income statement indicates that Intel has an inconsistent cost of sales, decreasing operating

expenses, and a fluctuating tax rate as they relate to total revenue. Table 1 also indicates that it is necessary to explain why Intel's expenses are fluctuating.

Revenue

Intel's revenue from fiscal years 2015 to 2019 has increased (Figure 2). Intel's revenue has been increasing year-over-year because of growth in the data-centric businesses as well as growth in the Client Computing Group (MD&A, Intel's 2018 Annual Report, 2019). Growth in sales across Intel's business is due to an increase in demand, especially with high performance products (MD&A, Intel's 2018 Annual Report, 2019).

Intel's revenue has increased from \$55.4 billion in fiscal 2015 to \$72 billion in fiscal 2019. This is a growth of 30% over five years (MD&A, Intel's 2018 Annual Report, 2019). From fiscal 2017 to fiscal 2018, there was a 15% revenue increase (MD&A, Intel's 2018 Annual Report, 2019). Intel's revenue from its data-centric business grew 18% from 2017 to 2018 (MD&A, Intel's 2018 Annual Report, 2019).

Gross Profit

Intel's gross profit margin decreased by 3% in fiscal 2019 to 59% of total revenue. Intel's gross profit margin is higher than AMD's and the industry average. The Gross Profit Margin is seen in Figure 3 below. In fiscal 2019, Intel's gross profit margin fell below 60% of revenue for the first time since

before fiscal 2015 (MD&A, Intel's 2017 Annual Report, 2018).

Intel's gross profit margin in fiscal 2019 decreased because of the increase in cost of sales. In fiscal 2019, cost of sales increased by 13%, compared to revenue increasing by only 2%. Figure 4 below shows the trend of revenue compared to cost of sales since 2015. The increase in cost of sales is due to an increased mix of performance products (MD&A, Intel's 2018 Annual Report, 2019). Intel's cost of sales will fluctuate year-over-year based on the demand for its different products. For example, Intel's processors in its Client Computing Group are more profitable than the Non-Volatile Memory Solutions Group's products (MD&A, Intel's 2018 Annual Report, 2019). Intel's cost of goods sold increased as a total percent of revenue in fiscal 2019, because Intel manufactured more products that have a lower gross profit margin than it did in the previous years (MD&A, Intel's 2018 Annual Report, 2019).

Operating Profit Margin

The operating profit margin for Intel was 31% in fiscal 2019, according to the common size income statement. Figure 5 below shows the operating profit margin for Intel, AMD, and the industry. Operating expenses have been decreasing compared to total revenue, which has caused the operating profit margin to have a net increase of 2% in fiscal 2019, compared to fiscal 2017. The operating expenses for Intel

	2017	2018	2019
Net Revenue	100%	100%	100%
Cost of Sales	38%	38%	41%
Gross Margin	62%	62%	59%
Operating Expenses	34%	29%	28%
Operating Income	29%	33%	31%
Gains, Taxes, and Interest	21%	3%	7%
Net Income	15%	30%	29%

Table 1: Intel's Common Size Income Statement

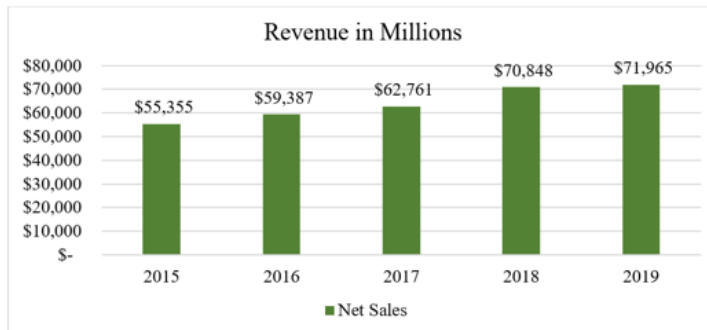


Figure 2: Intel's Revenue by Year

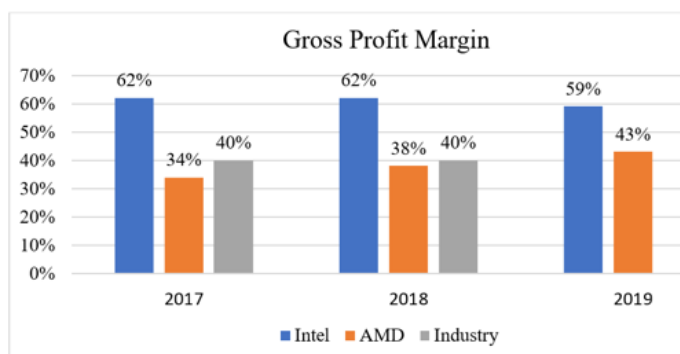


Figure 3: Gross Profit Margin

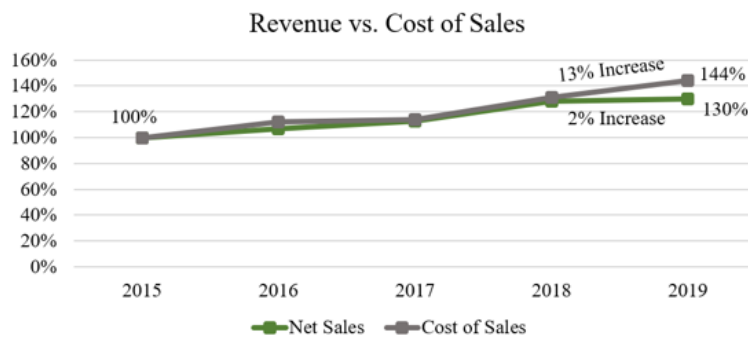


Figure 4: Revenue vs. Cost of Sales

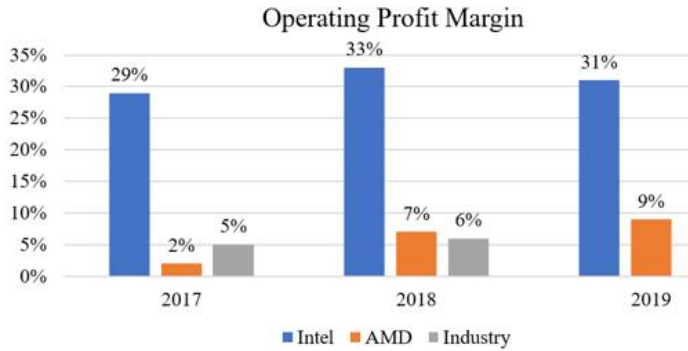


Figure 5: Operating Profit Margin

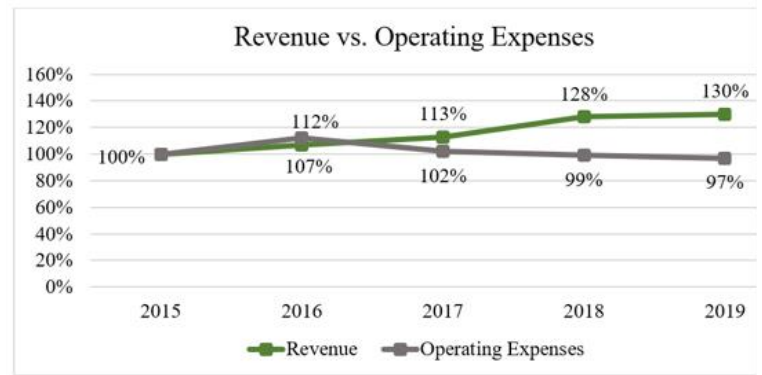


Figure 6: Trendline of Revenue vs. Operating Expenses

include research and development expenses and marketing, general, and administrative expenses (MG&A).

Operating Expenses

Operating expenses have decreased by 3% since fiscal 2015. See Figure 6 for a trendline analysis comparing net sales to operating expenses. Revenue has increased by 30% since fiscal 2015, compared to operating expenses decreasing. While net operating expenses decreased from 2015 to 2019, research and development expense has increased. The decrease in net operating expenses is attributed to a decrease in MG&A expenses.

Research and development expense (R&D expense) is the first of the two main operating expenses. A trendline showing the growth of revenue compared to the growth of research and development expense is seen below in Figure 7. Research and development expense has increased a total of 10% from fiscal 2015 to fiscal 2019, but decreased by 2% in fiscal 2019 from fiscal 2018. Research and development expense has increased because Intel is investing in research in its data-centric businesses (MD&A, Intel's 2018 Annual Report, 2019). Research and development expense decreased from fiscal 2018 to fiscal 2019 by 2%, because Intel's divestitures of Intel Security Group in 2017 and Wind River in 2018 caused there to be fewer expenses. Intel had a goal to have its operating expenses be 30% of revenue by 2020 and the

company achieved that goal (MD&A, Intel's 2018 Annual Report, 2019).

Marketing, general, and administrative expense (MG&A) is the second main operating expense. See Figure 8 to see a trendline comparing the growth of MG&A expense to revenue. MG&A expense has decreased by 22% since fiscal 2015. This decrease is due to fewer marketing programs, the divestitures of Intel Security Group and Wind River, and a decrease in expenses in the Intel Inside Program (MD&A, Intel's 2018 Annual Report, 2019).

Net Profit

The profit margin for Intel was 29% in fiscal 2019. Figure 9 exhibits the net profit margin for Intel, AMD, and the industry. The net profit margin has increased from 21% in fiscal 2015 to 29% in fiscal 2019. This increase is mainly due to the increase in the operating margin and the decrease of provision for income taxes. to the increase in the operating margin and the decrease of provision for income taxes.

In fiscal 2015 Intel's net income was \$11.4 billion. In fiscal 2019, its net income was \$21 billion. Figure 10 exhibits Intel's net income in millions. From fiscal 2015 to fiscal 2017, Intel's net income decreased by 16%. This decrease was due to the decrease in operating income and the increase in tax expense. Due to the Tax Cuts and Jobs Act of 2017, Intel paid 17% of its net revenue in income taxes in fiscal 2017 (MD&A,

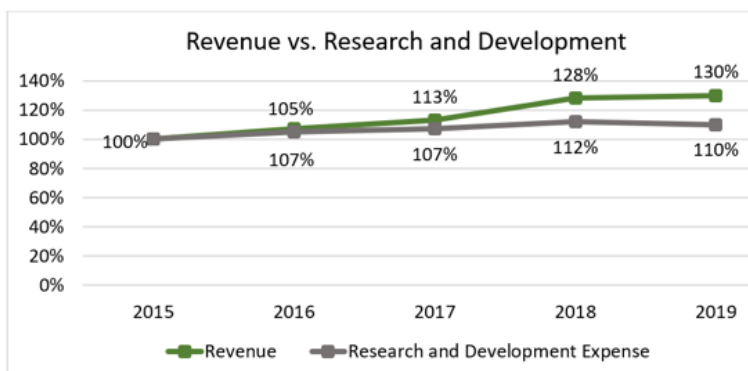


Figure 7: Trendline comparing Revenue to R&D expense

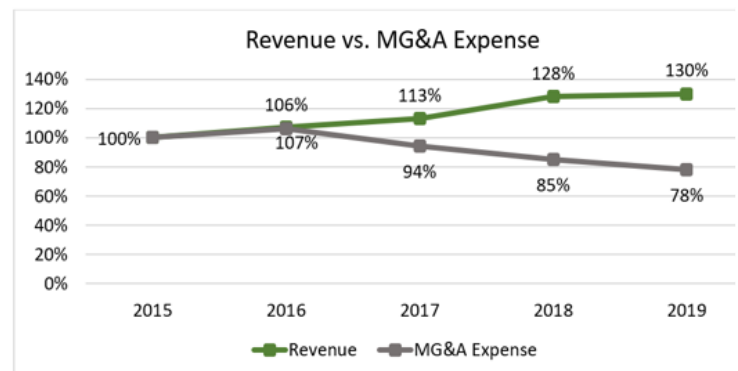


Figure 8: Trendline of Revenue vs. Marketing, General, and Administrative Expenses

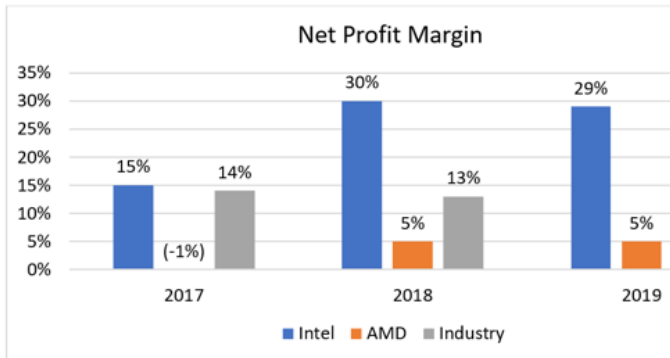


Figure 9: Net Profit Margin

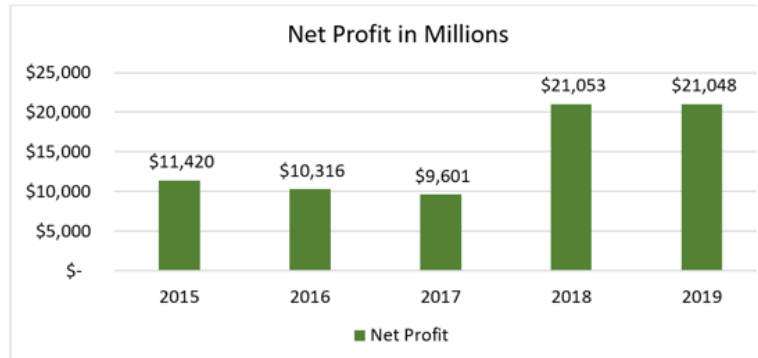


Figure 10: Net Income in Millions

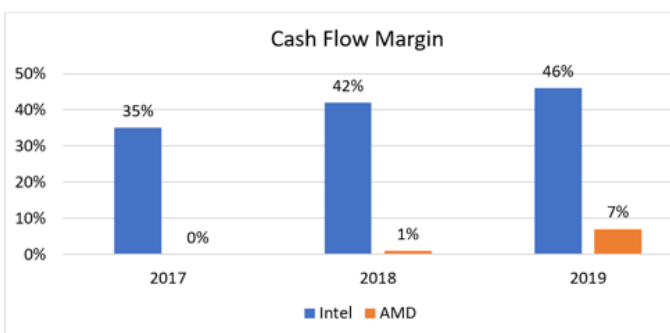


Figure 11: Cash Flow Margin

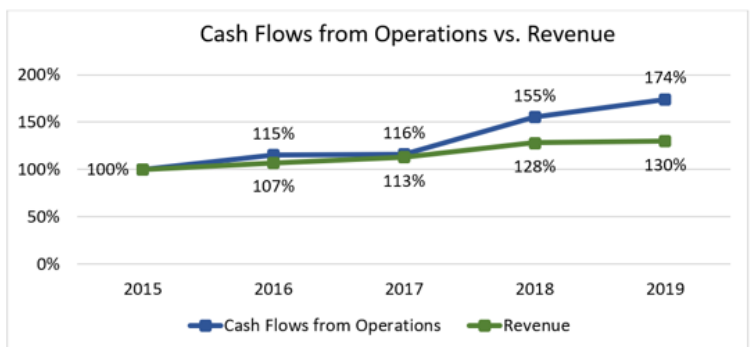


Figure 12: Cash flows from Operations vs. Revenue

Intel's 2017 Annual Report, 2018). The large increase in tax expense in fiscal 2017 was a one-time increase. After fiscal 2017, Intel paid 3% and 4% of its net revenues in taxes in fiscal 2018 and fiscal 2019, respectively.

Cash Flow Margin

Intel's cash flow margin has increased from 35% in fiscal 2017 to 46% in fiscal 2019. Figure 11 compares Intel's cash flow margin to AMD's.

Intel's cash flow margin has been increasing because of an increase in cash flow from operations. Figure 12 shows the comparison of cash flows from operations and revenue. The cash flows from operations has been increasing due to higher net income (MD&A, Intel's 2018 Annual Report, 2019). Intel has paid less income taxes in fiscal 2018 and 2019 compared to fiscal 2017. Cash flows from operations has increased by 44% more than revenue since fiscal 2015, causing the cash flow margin to increase.

Income Statement Summary

Intel's revenues have increased by 30% since 2015 due to increased demand for its products, while its operating expenses have decreased by 3%, due to fewer marketing programs. These changes, accompanied by the lower corporate tax rate, have contributed to the 84% increase in Intel's net profit from fiscal 2015 to 2019.

Balance Sheet

Intel's total assets have increased by 35% since fiscal 2015. The increase in assets of \$35.1 billion was offset by a \$19.4 billion increase in liabilities and a \$16.4 billion increase in stockholders' equity.

Assets

Current Assets

Intel's current assets have decreased 1% as a percent of total assets since fiscal 2017. The current asset portion of Intel's balance sheet is shown in Table 2. Intel's cash decreased by 1% of total assets in fiscal 2018 compared to fiscal 2017 and then increased by 1% of total assets in fiscal 2019. Intel's short-term investments have decreased by 1% compared to total assets since fiscal 2017, and its inventory has not changed.

	2017	2018	2019
Cash and Cash Equivalents	3%	2%	3%
Short-term Investments	8%	7%	7%
Inventory	6%	6%	6%
Accounts Receivable	5%	5%	6%
Other Current Assets	2%	2%	1%
Total Current Assets	24%	22%	23%

Table 2: Common sized Current Assets

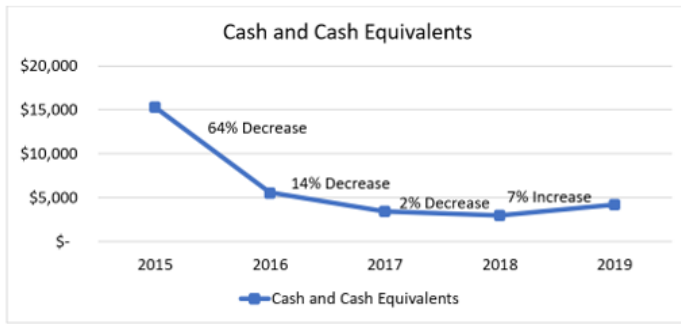


Figure 13: Trendline analysis of Cash and Cash Equivalents

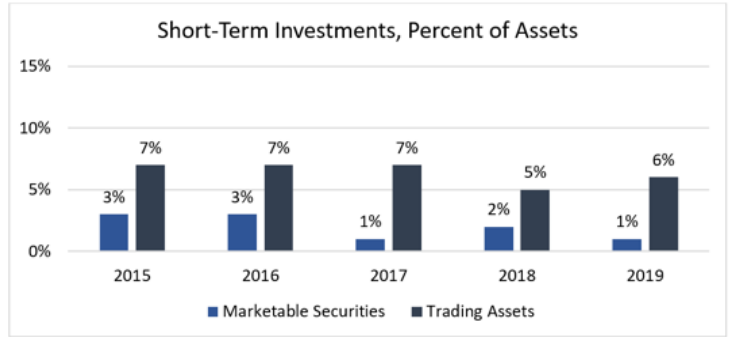


Figure 14: Breakdown of Short-term Investments' Percent of Assets

Intel's cash and cash equivalents have decreased since fiscal 2015. Figure 13 shows a trendline of Intel's cash from fiscal 2015 to fiscal 2019. At the end of fiscal 2015, Intel had \$15.3 billion of cash on hand. However, immediately after fiscal 2015, Intel purchased Altera for \$14.5 billion on December 28, 2015, causing cash to decrease 64% (Note 10, Intel's 2017 Annual Report, 2018). Cash then decreased by 14% from fiscal 2016 to 2017. This decrease was due to the repayment of long-term debt and the acquisition of Mobileye (MD&A, Intel's 2017 Annual Report, 2018). In fiscal 2018, Intel's net cash decreased by 2%, due to Intel repurchasing more common stock (MD&A, Intel's 2018 Annual Report, 2019). Finally, in fiscal 2019, Intel's cash increased by 7%, due to the increase in cash flow from operations and less cash being used by financing activities. The changes in cash have not been large enough to create a large change in its total percent of assets in recent years. Cash was still 3% of total assets in fiscal 2019, while in fiscal 2016 it was 5%.

Intel's final major current asset is inventory. Intel's inventory has consistently been 6% of its total assets since fiscal 2017, which is an increase of 1% since fiscal 2015. Figure 15 exhibits Intel's inventory's percent of assets compared to AMD's and the industry's.

Intel also invests in short-term investments. These investments are in trading assets (nonmarketable debt securities), marketable debt securities, and marketable equity securities (Note 2, Intel's 2018 Annual Report, 2019). Figure 14 shows marketable securities' percent of total assets versus trading assets' percent of assets from fiscal 2015 to fiscal 2019.

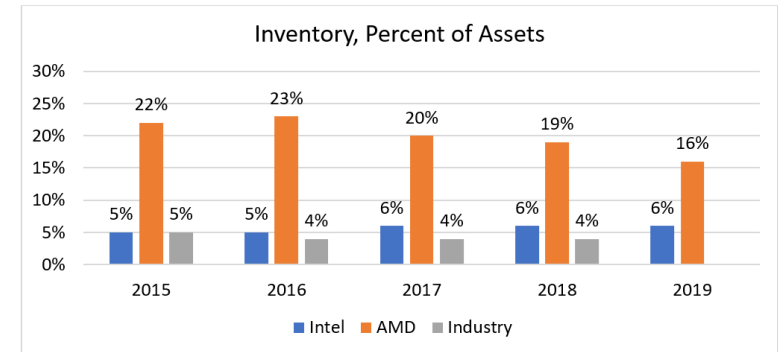


Figure 15: Inventory's Percent of Assets

Intel's inventory's value has increased by \$3.6 billion since fiscal 2015. It was worth \$5.2 billion in fiscal 2015, and it is valued at \$8.7 billion in fiscal 2019. Intel's inventory has increased because it has been manufacturing more inventory due to higher demand for its products, and Intel is manufacturing more products for its data-centric businesses (MD&A, Intel's 2018 Annual Report, 2019).

Intel's short-term investments had a value of \$10 billion in fiscal 2015. This value has decreased to \$8.9 in fiscal 2019. The decrease in value is due to fewer short-term investments and the maturities and sales of short-term investments (MD&A, Intel's 2018 Annual Report, 2019).

Intel's inventory was held for about 107 days on average in fiscal 2019. Figure 16 shows Intel's, AMD's, and the industry's inventory turnover ratio, and Figure 17 shows Intel's AMD's, and the industry's days inventory held ratio. Intel holds its inventory longer than its competitors do. Intel's

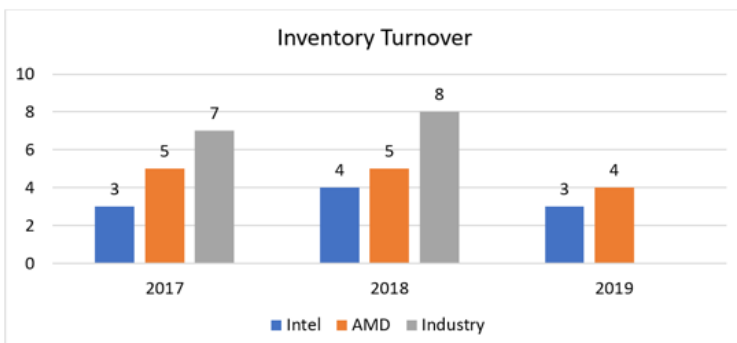


Figure 16: Inventory Turnover Ratio

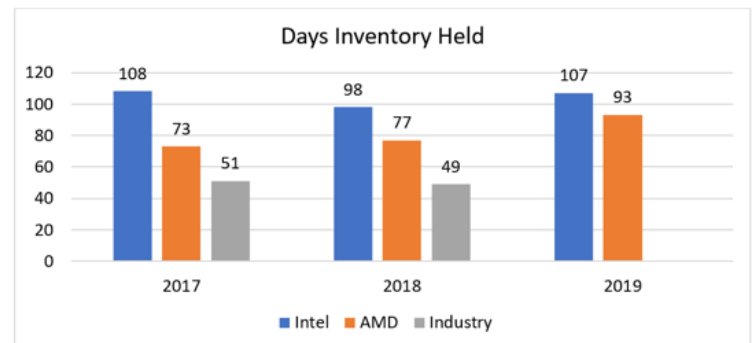


Figure 17: Average Days Inventory Held

inventory turnover ratio increased in fiscal 2018, due to its inventory increasing faster than its cost of goods sold. Intel may hold its inventory longer than competitors do, but Intel still has higher sales than AMD.

Intel's current ratio for fiscal 2019 was 1.40, which was a decrease of 0.33 from fiscal 2018. Figure 18 below shows the current ratio for Intel, AMD, and the industry. Intel's current ratio decreased in fiscal 2019, due to current liabilities increasing faster than current assets, specifically a \$2.4 billion increase in short-term debt and a \$2.7 billion increase in accrued liabilities. Current liabilities increased by \$5.7 billion in fiscal 2019, while current assets increased by only \$2.5 billion.

\$8.7 billion of Intel's current assets is in inventory, so the current ratio may not be the best indicator of how liquid Intel is. The quick ratio may be better, because it excludes inventory. Below in Figure 19 is a comparison of Intel's, AMD's, and the industry's quick ratios. Intel's quick ratio decreased by 0.29 in fiscal 2019, due to the increase in current liabilities stated before. However, Intel still has a quick ratio above a 1.00, which indicates that it is still liquid enough to pay off all current liabilities if needed.

The cash flow liquidity ratio compares cash from operating activities to current liabilities. In Figure 20, the cash flow liquidity ratio is shown for Intel and AMD. The 0.4 increase in fiscal 2018 was due to an increase of \$7.3 billion in

cash flow from operations. The ratio decreased by 0.4 in 2019, due to the increase in current liabilities.

Noncurrent Assets

Intel's noncurrent assets consist of property, plant, and equipment, goodwill, intangible assets, and equity investments. Noncurrent assets have increased by 1% of total assets since fiscal 2017. Shown below in Table 3 is the noncurrent assets portion of Intel's common sized balance sheet.

Intel's property, plant, and equipment account has increased by 8% as a percent of total assets since fiscal 2017. The account has increased by \$22.5 billion since fiscal 2015, which is a 74% increase. Intel's property, plant, and equipment is increasing because Intel continues to invest in it in order to continue growing the company (Fundamentals, Intel's 2018 Annual Report, 2019). Intel is also transforming into a data-centric business, so Intel invests in the development of those businesses (Fundamentals, Intel's 2018 Annual Report, 2019). As Intel continues its transformation into a data-centric business, it keeps investing into its data-centric businesses so that they can continue to grow and become profitable. Figure 21 shown below, exhibits Intel's and AMD's fixed asset turnover. Intel's fixed asset ratio has decreased by 0.23 since fiscal 2017 because its property, plant, and equipment account has increased faster than its revenue. Intel's investments in its property, plant, and equipment have not started to increase the fixed asset turnover. AMD's fixed asset turnover is higher than

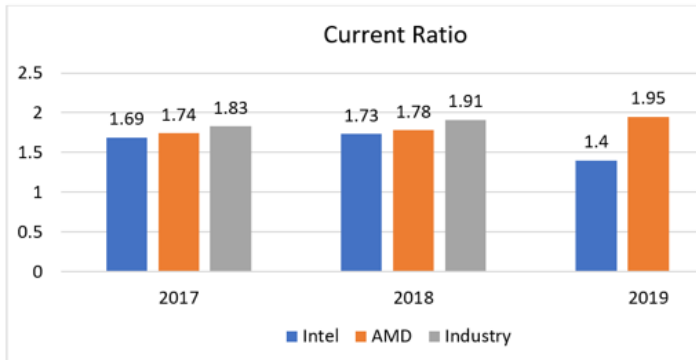


Figure 18: Current Ratio

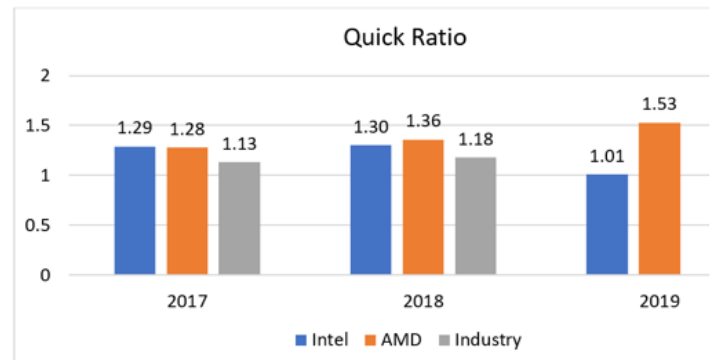


Figure 19: Quick Ratio

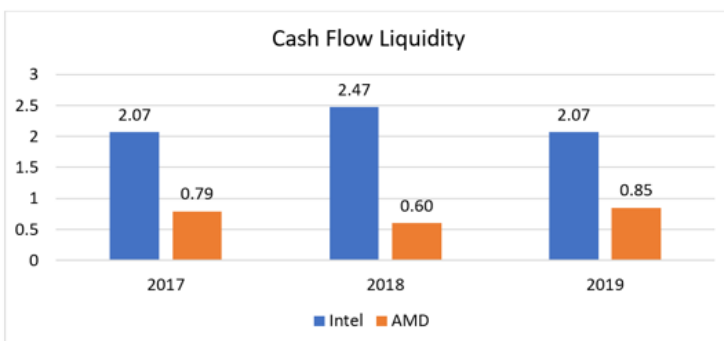


Figure 20: Cash Flow Liquidity Ratio

	2017	2018	2019
Current Assets	24%	22%	23%
Property, Plant, & Equipment	33%	38%	41%
Goodwill	20%	19%	19%
Intangible Assets	10%	9%	8%
Equity Investments	7%	5%	3%
Other Long-term Assets	6%	6%	6%
Total Assets	100%	100%	100%

Table 3: Common sized Noncurrent Assets

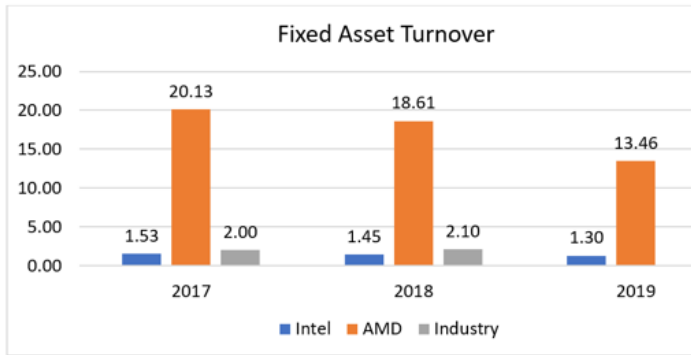


Figure 21: Fixed Asset Turnover

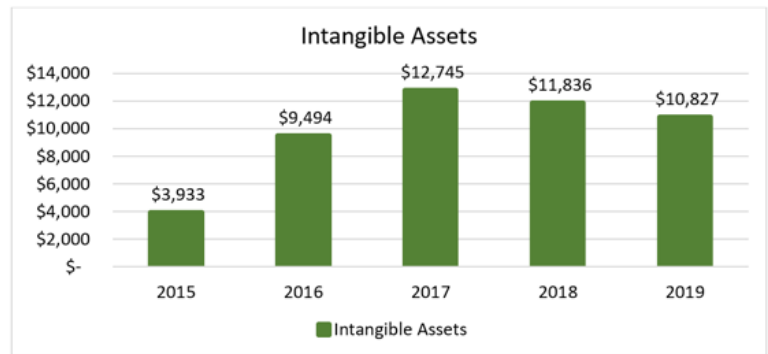


Figure 22: Intangible Assets

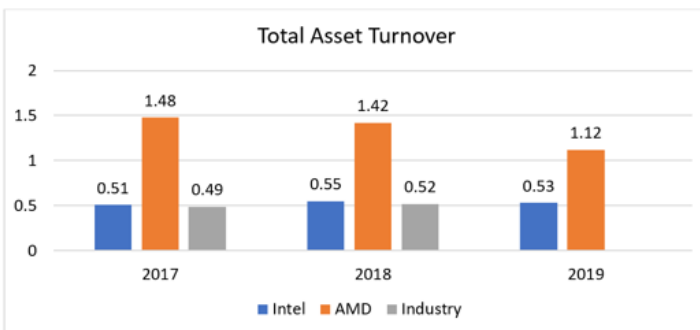


Figure 23: Total Asset Turnover

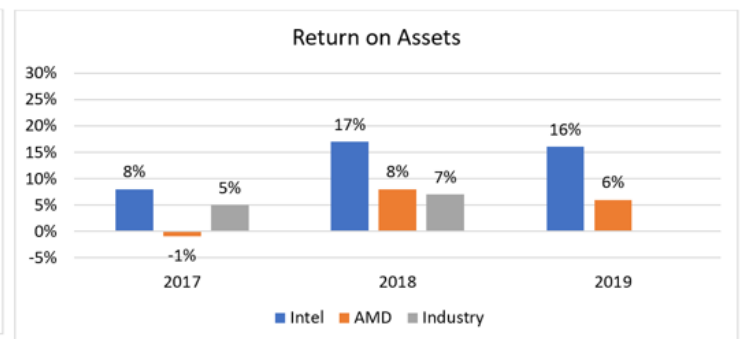


Figure 24: Return on Assets

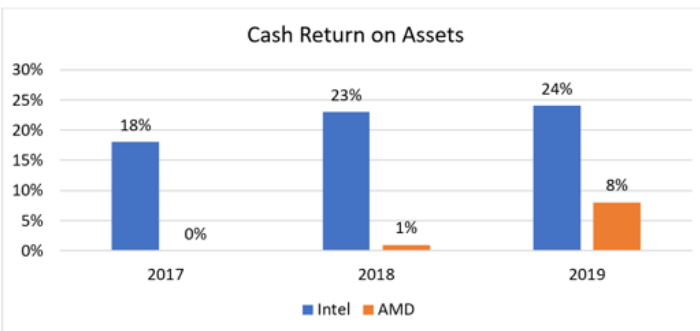


Figure 25: Cash Return on Assets

	2017	2018	2019
Accrued Liabilities	10%	9%	11%
Other Current Liabilities	4%	4%	5%
Total Current Liabilities	14%	13%	16%
Debt	20%	20%	19%
Other Long-Term Liabilities	9%	8%	8%
Total Liabilities	43%	41%	43%

Table 4: Common Sized Liabilities

Intel's because Intel owns equipment to design their own products and has a more diverse set of businesses (Fundamentals, Intel's 2018 Annual Report, 2019). This means that AMD will have a lower balance in the property, plant, and equipment account, which causes its ratio to be higher.

Intel also accounts for a large amount of goodwill earned from its acquisition of other companies. Intel's goodwill is 19% of its total assets. Intel's goodwill account has increased from \$11.3 billion in fiscal 2015 to \$26.3 billion in fiscal 2019. There was a \$10.3 billion increase in fiscal 2017, due to the purchase of Mobileye (Note 11, Intel's 2018 Annual Report, 2019).

Intel also has many intangible assets. The intangible assets account was 8% of total assets in fiscal 2019, which has decreased from 10% in fiscal 2017. Figure 22 shows the value of Intel's intangible assets from fiscal 2015 to fiscal 2019.

Intangible assets increased by \$5.5 billion in fiscal 2016 due to the intangible assets obtained in the acquisition of Altera. The \$3.2 billion increase in fiscal 2017 was due to the acquisition of Mobileye. Intangible assets have been decreasing from 2017 until fiscal 2019 because of amortization (Note 13, Intel's 2018 Annual Report, 2019).

Intel's total asset turnover has increased by 0.02 since fiscal 2017. Figure 23 below shows Intel's, AMD's, and the industry's total asset turnover ratios. Intel's total asset turnover has increased because its revenue has increased faster than its total assets have. AMD's total asset turnover is higher than Intel's because it has more income compared to its assets' values.

Intel's return on assets has increased by 8% since fiscal 2017. Figure 24 below shows Intel's, AMD's, and the industry's return on assets. Intel's return on assets has

increased by 8% because its net income increased from \$9.6 billion in fiscal 2017 to \$21 billion in fiscal 2018 and fiscal 2019. Intel's return on assets is higher than AMD's and the industry's.

Intel's cash return on assets has also increased by 6%, which is shown in Figure 25 below. The increase in the cash return on assets is due to Intel's cash flow from operations increasing faster than its total assets.

Liabilities

Intel's total liabilities increased from \$39.5 billion in fiscal 2015 to \$58.9 billion in fiscal 2019. This increase is due to the increase in current liabilities and long-term debt. Table 4 shows the liabilities portion of the common size balance sheet.

Intel's long-term debt was 20% of its total assets in fiscal 2015, 2016, 2017, and 2018. Then, in fiscal 2019, it decreased by 1% of total assets. In fiscal 2017, Intel's long-term debt increased by \$4.4 billion, to \$25 billion. At that time, Intel signed more long-term debt notes to repurchase common stock and to invest in property, plant, and equipment (MD&A, Intel's 2018 Annual Report, 2019). Long-term debt did not increase as a percent of total assets because Intel's current liabilities had increased by \$7 billion since fiscal 2015.

Intel's long-term debt to total capitalization ratio has decreased by 0.02 since fiscal 2017. Figure 26 compares Intel's and AMD's long-term debt to total capitalization ratios. Intel's ratio was 0.25 in fiscal 2019, meaning that it finances 25% of

its assets with long-term debt. AMD's ratio decreased because its common stock account increased in fiscal 2019.

Intel's assets have increased faster than its total liabilities since fiscal 2017. This increase has caused its debt ratio to decrease by 0.01. Intel's debt ratio in fiscal 2019 was 0.43, as shown in Figure 27, which exhibits Intel's, AMD's, and the industry's debt ratios. AMD's debt ratio has decreased because its assets are increasing faster than its liabilities.

In fiscal year 2019, Intel could pay its interest on debt 45 times over. Figure 28 shows Intel's, AMD's, and the industry's times interest earned ratio. Intel has a substantially higher ratio than the industry and AMD have. Intel's ratio indicates that it can easily repay interest earned on its debt. Intel's ratio increased because its net income also increased in fiscal 2018.

Intel's cash interest coverage ratio is compared to AMD's in Figure 29. Intel's cash interest coverage ratio has increased by 33 since fiscal 2017. This increase is due to the increase in cash flow from operations (see page 34). Intel's ratio indicates that Intel could easily pay its interest expense with cash earned from operating activities.

Stockholders' Equity

Intel's stockholders' equity section has increased as a percent of total assets since fiscal 2017. Intel's common sized stockholders' equity section of the balance sheet is shown in Table 5. Intel's retained earnings account is continuing to increase, due to net income increasing. Intel's stockholder's

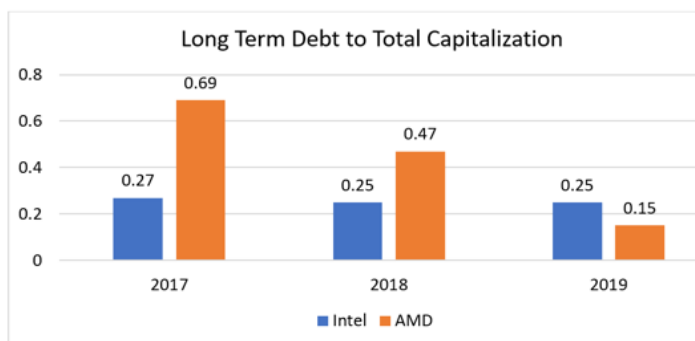


Figure 26: Long-term Debt to Total Capitalization

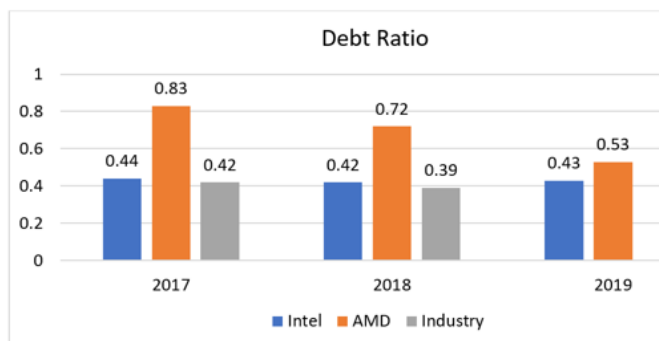


Figure 27: Debt Ratio

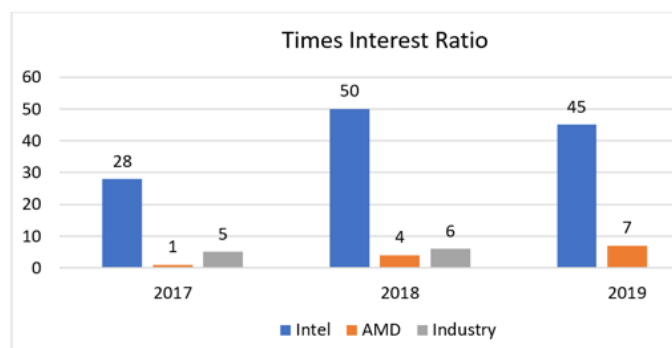


Figure 28: Times Interest Earned

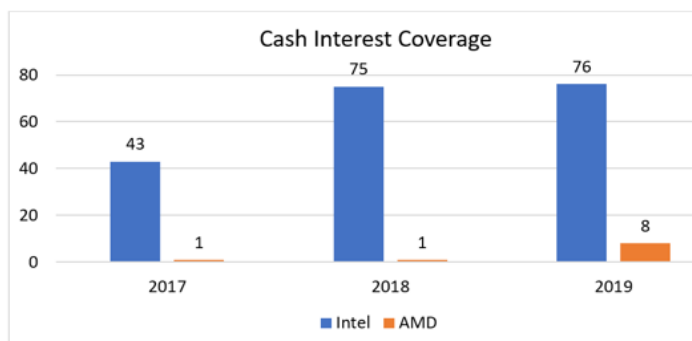


Figure 29: Cash Interest Coverage

equity section has increased from \$61.1 billion in fiscal 2015 to \$77.5 billion in fiscal 2019.

Intel's common stock has decreased as a percent of total assets by 2% since fiscal 2017. The account's value has increased from \$23.4 billion in fiscal 2015 to \$25.3 billion in fiscal 2019. Intel's stock-based compensation has caused a \$7.3 billion increase in the account since fiscal 2015 (Note 20, Intel's 2018 Annual Report, 2019). However, that \$7.3 billion increase was offset by the repurchase of common stock. Intel has recorded \$4.4 billion of treasury stock to its common stock account since fiscal 2015. Intel records its treasury stock using the par value method, which means that Intel records the par value of the stock that was repurchased instead of recording the price that it paid to repurchase the stock (Note 5, Intel's 2018 Annual Report, 2019).

Intel's return on equity ratio has increased by 13% since fiscal 2017, as shown in Figure 30. The increase is attributed to the increase in net profit, which is due to lower operating expenses and lower income taxes. Intel's net income increased faster than its equity, so the ratio increased. This ratio indicates that Intel's stockholders saw a 27% return in fiscal year 2019.

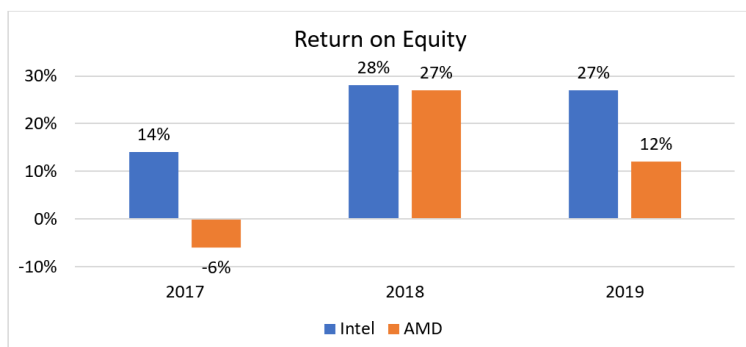


Figure 30: Return on Equity

Balance Sheet Summary

Intel is transforming into a data-centric business and is investing in inventory and property, plant, and equipment. Its inventory account has increased by 69% since fiscal 2015, and its property, plant, and equipment account has increased by 74% since fiscal 2015. Intel's long-term debt has also increased by \$4.4 billion since fiscal 2015, and it was used to repurchase common stock and invest in property, plant, and equipment. Intel's common stock account has also increased, due to its stock-based compensation program.

Statement of Cash Flows

Intel is a plus-minus-minus company, meaning that the only section of the statement of cash flows that provides cash is the operating section. This is because Intel is investing in its assets and stockholders (dividend payments and treasury stock purchases) and is through repaying debt. An overview of the statement of cash flows is seen in Table 6.

	2017	2018	2019
Cash Provided by Operating Activities	\$22,110	\$29,432	\$33,145
Cash Used by Investing Activities	(\$15,762)	(\$11,239)	(\$14,405)
Cash Used for Financing Activities	(\$8,475)	(\$18,607)	(\$17,565)
Change in Cash	(\$2,127)	(\$414)	\$1,175

Table 6: Statement of Cash Flows Overview

Cash Inflows

Most of Intel's cash inflows are from operating activities. The second largest cash generator for Intel is the sale and maturities of trading assets. A summary of Intel's inflow sources is seen in Table 7.

	2017	2018	2019
Cash Provided by Operating Activities	37%	60%	62%
Maturities and Sales from Trading Assets	24%	25%	14%
Issuance of Long-Term Debt	13%	1%	6%
Maturities and Sales of Available for Sale Debt Investments	9%	6%	8%
Proceeds from Equity Method Investments	9%	6%	5%
Other	8%	2%	5%
Total Inflows	100%	100%	100%

Table 7: Summary of Cash Inflows

Intel's cash provided by operating activities has increased from 37% of inflows in fiscal 2017 to 62% of cash inflows in fiscal 2019. Fiscal 2017's cash from operating activities was lower than that of most years, because Intel paid higher taxes, due to the tax reform of 2017, and Intel issued long-term debt that offset the cash from operating activities. Intel's net income has also been increasing, which has caused the cash provided from operating activities to increase. Cash provided by operating activities has increased by 52% since fiscal 2016.

Intel's trading assets are maturing, and Intel is also selling its trading assets. The maturities and sales of trading assets provided 14% of Intel's cash inflows in fiscal 2019. Figure 31 shows the cash provided by the sale and maturities

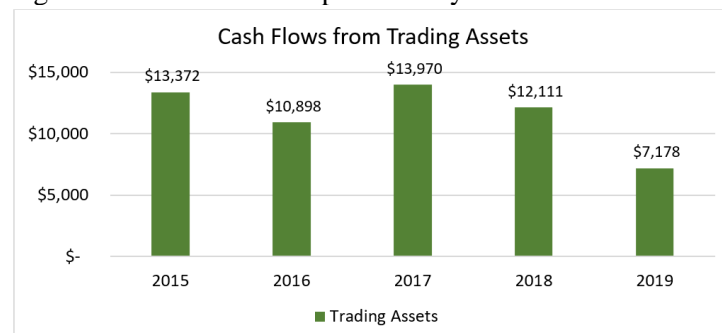


Figure 31: Cash Provided by the Sale and Maturities of Trading Assets

of trading assets. In fiscal 2015, Intel received \$13.3 billion from the sales and maturities of its investments. This amount has decreased to only \$7.1 billion in fiscal 2019. The cash provided by the sale and maturities from trading assets is decreasing because Intel is purchasing fewer trading assets.

Cash Outflows

Intel's cash outflows mainly consist of additions to property, plant, and equipment, repurchases of common stock, purchases of trading assets, and the payment of dividends. Table 8 shows a summary of Intel's cash outflows.

Intel's cash outflows used on the addition to property, plant, and equipment consisted of 31% of all cash outflows in fiscal 2018 and 2019. The cash spent on additions to property, plant, and equipment was increased to \$16.2 billion in fiscal 2019. This increase is due to the transformation of Intel into a data-centric business (MD&A, Intel's 2018 Annual Report, 2019).

	2017	2018	2019
Additions to Property, Plant, & Equipment	19%	31%	31%
Repurchase of Common Stock	6%	22%	26%
Purchase of Trading Assets	22%	19%	18%
Payment of Dividends	8%	11%	11%
Repayments of Long-Term Debt	13%	6%	5%
Acquisitions	24%	0%	4%
Other	8%	11%	5%
Total Inflows	100%	100%	100%

Table 8: Summary of Cash Outflows

Intel has also started to repurchase more of its common stock. Figure 32 shows the amount spent on the repurchase of common stock from fiscal 2015 to fiscal 2019. In fiscal 2015, Intel spent \$3 billion on the repurchase of its common stock. In fiscal 2018, Intel increased its spending on the repurchase of common stock to \$10.7 billion, and then in fiscal 2019, it increased to \$13.6 billion. Intel's Board of Directors approved a \$15 billion increase in the stock repurchase program in fiscal 2018, which is why Intel started to increase its spending on common stock (MD&A, Intel's 2018 Annual Report, 2019). Intel has repurchased \$33.5 billion of its common stock since fiscal 2015, which has caused cash outflows to increase.

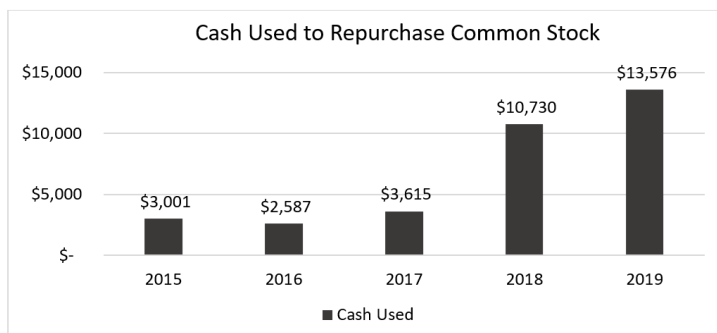


Figure 32: Cash Used to Repurchase Common Stock

Intel is purchasing fewer trading assets since 2017. In fiscal 2017, Intel purchased \$13.7 billion in trading assets. In fiscal 2019, this amount decreased to \$9.1 billion. Intel has started purchasing more common stock, so there is less available cash flow for trading assets.

Cash Flow Adequacy

Intel invested 47% of its cash in capital expenditures, debt repayments, and cash dividends in fiscal 2019. Intel can continue to invest this much of its cash in these investments because it has an adequate amount of cash flow. The cash flow adequacy ratios for Intel and AMD are shown in Figure 33. In fiscal 2017, Intel's cash flows from operations covered 89% of Intel's cash used on capital expenditures, debt repayments, and dividends paid. Intel's cash flows from operations has increased by 50% since fiscal 2017, while the cash used on capital expenditures, debt repayment, and dividends paid has had a net decrease of 2%. The increase in cash flows from operations and the decrease in the cash used on capital expenditures, debt repayment, and dividends paid has caused the cash flow adequacy ratio to increase to 1.36 in fiscal 2019. This ratio indicates that Intel has an adequate amount of cash flows.

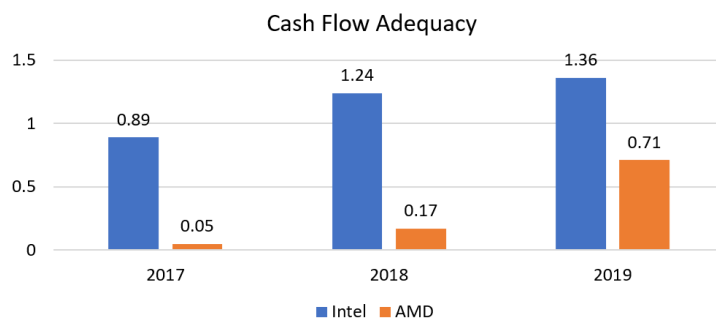


Figure 33: Cash Flow Adequacy Ratio

Summary of the Statement of Cash Flows

Intel has an adequate amount of cash flows to continue investing in its assets and stockholders, as well as repay its debt and purchase its common stock. Intel's operating section is the only section of the statement of cash flows to provide cash for Intel. Intel has repurchased \$33.5 billion of common stock since fiscal 2015.

Stock, Earnings, and Dividends

Intel's Stock

Within the last year, Intel's stock reached a high of \$69.29 per share, and its lowest point was at \$42.86 per share (Intel Corp Stock, 2020). Intel's stock was trading at \$58.20 after the market closed on April 7, 2020. Figure 34 compares Intel's, AMD's, and NASDAQ's stock values over the last 5 years. Intel is the blue line in the graph, while AMD is orange, and the NASDAQ index is the purple line. Intel and NASDAQ index have grown at almost the same rate over the last 5 years.



Figure 34: Stock Growth (Intel Corp Stock, 2020)

Rating	Number of Analysts
Buy	14
Overweight	2
Hold	19
Underweight	1
Sell	7

Table 9: Analyst Ratings (Intel Corp Stock, 2020)

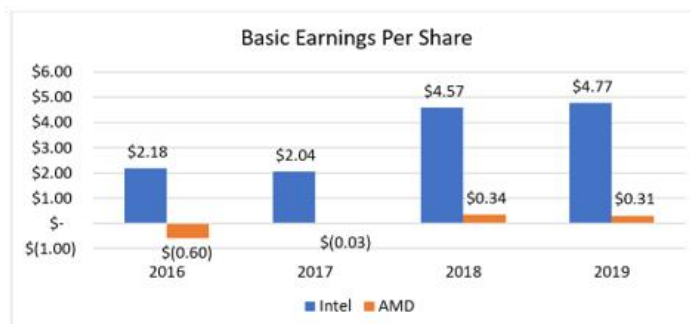


Figure 35: Basic Earnings Per Share



Figure 36: Price to Earnings Ratio



Figure 37: Dividends Paid Per Share

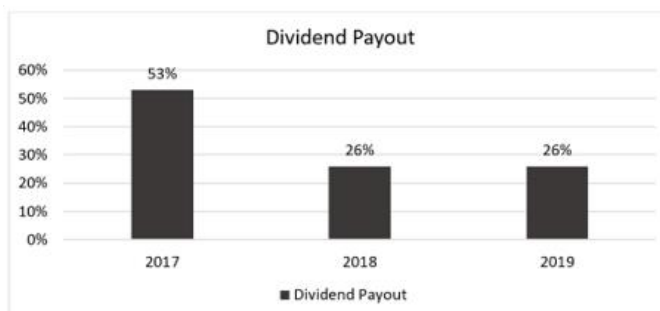


Figure 38: Dividend Payout

AMD's stock price has grown by over 15 times. AMD was operating at a loss until 2018, which contributed to its stock not performing well prior to 2018.

Analysts have advised investors to either hold or buy Intel's stock as of April 2020 (Intel Corp Stock, 2020). Table 9 exhibits 43 analysts' ratings retrieved from Marketwatch. Intel's stock increased by just under \$14 per share from fiscal 2018 to fiscal 2019 (Historical Stock, 2020). The increase in stock value has contributed to analysts advising investors to buy Intel's stock. The current coronavirus pandemic also caused Intel's stock to decrease in value temporarily, which caused analysts to advise shareholders to hold Intel's stock, because Intel stock is expected to recover.

Earnings Per Share

The increase in net income and the decrease in shares outstanding has caused Intel's basic earnings per share to increase from \$2.18 per share in fiscal 2016 to \$4.77 per share in fiscal 2019. Figure 35 shows Intel's and AMD's basic earnings per share since fiscal 2016. Intel's earnings per share has increased by 98% since fiscal 2015.

Intel's basic earnings per share has increased faster than its stock price, which has caused Intel's price-to-earnings ratio to drop to 12.60 in fiscal 2019. Figure 36 compares Intel's and AMD's price-to-earnings ratios. In fiscal 2019, Intel's stock price was 12.6 times its earnings per share for that year. AMD had a net loss in fiscal 2017.

Dividends

Intel has increased its cash dividends since fiscal 2015. In fiscal 2015, Intel paid \$4.6 billion in dividends. In fiscal 2019, Intel paid \$5.6 billion in dividends. Figure 37 shows Intel's dividends paid per share since fiscal 2015. AMD does not pay dividends; thus there is no comparison for Intel in this section. Intel has been repurchasing its common stock, and since Intel has continued to increase its cash dividends, the dividends paid per share has increased by \$0.30 since fiscal 2015.

Intel's dividend yield has been consistent at 2% since fiscal 2017, meaning shareholders have a 2% yield on their stock's market price. Intel also had a dividend payout of 26% in fiscal 2018 and 2019. Intel's dividend payout ratio is seen in Figure 38. The dividend payout percentage in fiscal 2017 was 53%. The dividend payout in fiscal 2017 was unique, because Intel had abnormally low earnings that year, and the company increased the dividends paid.

SWOT Analysis

Strengths

A major strength of Intel is its data-centric businesses. Intel is reaching out to new customers with its transformation into a data-centric business. Intel has also continued to increase its revenue, while controlling and decreasing operating expenses. Intel also has high quick and current ratios, so its liquidity is also a strength.

Weaknesses

Intel's main weakness is that a total of 27% of its assets are in goodwill or intangible assets. The 19% of assets that are goodwill does not directly contribute to Intel's revenue. The intangible assets are also amortizing and will eventually expire, so these assets will also not always increase revenues, but it would increase the total asset turnover and return on assets ratios.

Opportunities

Intel has two major opportunities. Intel's transition to a data-centric business is a major opportunity to continue its development and growth. Intel can continue to reach more individuals and businesses to capture more revenues with its new data-centric businesses.

Intel also could profit off people working at home due to the coronavirus. Intel sponsors many esports leagues, which are continuing to see increased viewership while most people are at home. These sponsorships may help Intel's revenues increase.

Threats

The coronavirus pandemic has caused stock prices to drop. This will have a direct effect on Intel's marketable investment portfolio. Intel may see a decrease in its marketable assets values, due to this pandemic. Intel also competes with AMD for its PC-centric business. If AMD continues to grow, then it could become a stronger competitor and hurt Intel's revenues.

Summary

Intel is continuing its transformation into a data-centric business. Intel must manufacture more inventory and invest in more property, plant, and equipment for these new businesses. Intel can do so because its revenue, net income, and cash flows from operating activities have been increasing since fiscal 2015. Net income has increased 84% since fiscal 2015. Intel is also repurchasing its own common stock and increasing dividends to return value to its shareholders. Intel continues to have an adequate amount of cash flows to continue its development, growth, and share repurchases.

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