**WACC & Company Valuation with FCFF Model**

**Intel Corporation**

**PART I. Business Description & Analysis on 10-K**

**INTRODUCTION TO THE BUSINESS**

Intel is an American company that specializes in the production of semiconductors. Their mission is to empower developers by providing them with the necessary assets to disrupt technology. These assets, better known to Intel as microprocessors, serve four purposes:

1. Enhance Artificial Intelligence (AI)
2. Provide a safe connectivity for end users
3. Establish a network between different cloud chains (Cloud Storage)
4. Embedding microprocessors to make life easier for consumers and businesses (CPU and RAM capabilities)

Ultimately, Intel’s competitive advantage revolves around the fact that due to supply shortages of microprocessors, the company can innovate by incentivizing developers to choose their semiconductors to enhance customers electronic devices.

**BUSINESS STRATEGY**

With the fourth Industrial Revolution and globalization, digital assets and expertise has become a necessity worldwide. For this reason, microprocessors are a necessity for both personal and professional use. Since connectivity is a crucial factor regarding the Internet of Things (IOT) there is a market need for capture, analyze, and store data. For this reason, Intel has decided to strategize on the following aspects:

1. Product Leadership
2. Open Platforms
3. Manufacturing at Scale

**PRODUCT LEADERSHIP**

Product leadership focuses on improving microprocessors memory, efficiency, and effectiveness. Intel successfully improved their products with the introduction of Intel x86 and XPU.

**OPEN PLATFORMS**

With an ecosystem of technology Intel promises to deliver both software and hardware at the best quality and price while maintaining a sustainable production model. This has been successfully achievedby designing microprocessors that are reliable, stable, and secure.

**MANUFACTURING AT SCALE**

In an evolving digital world, it is important for Intel to manufacture at scale to create a healthy supply chain where customer needs are met quickly. This was done by the company by focusing on three capabilities:

1. Product Optimization
2. Cost Optimization
3. Network Optimization

Manufacturing at scale was successful with the introduction of IDM 2.0 which combined the capabilities mentioned above. This new strategy allowed Intel Corporation to meet growing demand, needs, and preferences while focusing on innovation.

**BUSINESS ORGANIZATION**

Intel market share has been increasing ever since the company introduced a new organizational structure in 2015. Their operating segments include the following:

1. Client Computing Group (CCG)
   1. This segment is responsible for all the consumers devices and connecting them with Intel WIFI Services (2G, 3G, 4LTE, and Ethernet)
2. Data Center Group (DCG)
   1. This segment is responsible for providing efficient energy for all devices. One of its main goals is to decrease the cost of ownership while increasing efficiency optimization.
3. Internet of Things Group (IOTG)
   1. This segment’s purpose is to establish an ecosystem between distribution channels. It is mainly designed for retail, transportation, industrial, buildings and home use-
4. Software and services operating segments (SSG)
   1. Intel Security Group
   2. Software and Services Group
5. New Devices Group
6. Non-Volatile Memory Solutions Group (NCG)

With their organization structure Intel’s objective is to provide a platform across multiple devices that are both safe and reliable.

Apart from their organization structure Intel also offer different platforms that enhance both hardware and software. These different platforms are all part of the microprocessor and can be listed as:

1. Multi-core processors
   1. Intel Quark Processor
   2. Intel Atom Processor
   3. Intel Pentium Processor
   4. Intel Celeron Processor
   5. Intel Core m Processor
   6. Intel Core I Processor
   7. Intel Xeon Processor
   8. Intel Xeon Phi Processor
   9. Intel Itanium Processor
2. Chipset
3. SoC Products
4. Multichip Packages

**REVENUE BY MAJOR OPERATING SEGMENT**

Chart, application, pie chart

Description automatically generated

The main operating segments for Intel Corporation alongside their specific revenue can be seen in the table above. Clearly the Client Computing Group (CCG) segment accounts for more than 50% of both reportable segments and major operating segments. The second largest operating segment is the Data Center Group (DCG) with over 1/3 of percentage revenue regarding reportable segments and major operating segments.

**COMPETITION**

Intel faces competition with other manufacturers of microprocessors that choose to vertically integrate these assets. The competition within market segments like internet cloud computing, storage, and networking has allowed Intel to increase their market share due to their connectivity of embedded products.

One of the biggest competitors Intel has as of now is Apple. Apple introduced a new silicon chip (M1 and M2) which greatly affected Intel and the brand identity that was being created between the two companies.

**COMPETITIVE ADVANTAGE**

Intel’s competitive advantage revolves around three main points:

1. Transitions to next-generation technologies
2. Ecosystem between manufacturing, assembly, and test facilities
3. Optimization of products

These three main competitive forces allow Intel to enter any market with a vertical approach, allowing them to build a global architecture of teams and receiving more net income to invest into R&D and facilities.

**RESEARCH AND DEVELOPMENT EXPENDITURES**

Investments in Research and Development made by Intel focus primarily on building a next generation of technology. The generation Intel is trying to deliver intends to optimize areas such as energy efficiency, system-level integration, security, scalability, and user friendly. In addition, bringing new capacities of a silicon microprocessor is a goal of Intel. Giving not only an additional competitive advantage but the opportunity to lower active power and increase density to enable longer battery life

**Part II. Item 7. Management’s Discussion and Analysis on 10K**

**MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

Intel’s operating segments accounts for 40% of the net revenue and 60% of the operating profit which correlates to a healthy PC supply chain with appropriate levels of inventory. With a healthy supply chain Intel decided to increase investment costs to expand their market segments of their data center, Internet of Things, and memory. Ultimately the increase of the company’s initial investment in 2014 caused a $1.3 billion reduction in operating profit of 2015. Even though operating profit decreased the company’s future cash flows remained strong due to the investment.

Intel’s future cash flows allowed the company to purchase $7.3 billion of assets that will serve to increase their manufacturing capabilities for new generation of products. These products will have enhancements in their performance regarding storage and efficiency. In addition, Intel payback was of $4.6 billion allowing the company to have an investment portfolio (cash, short-term investment, and trading assets) of approximately $25.3 billion

Intel and Altera announced on June 1, 2015, a merger and acquisition which issued an estimate o $9.5 billion long-term debt. In return, the company’s annual dividend increased $0.94 per share with a $0.26 per share of common stock. The goal of the acquisition was to merge Intel’s products with Altera’s technology which is a combination that ultimately allowed Intel to innovate regarding the Internet of Things.

**ACCOUNTING ESTIMATES**

The accounting estimates of Intel include:

1. Valuation of non-marketable securities
2. Useful life of property plant and equipment
3. Valuation and allocation of assets
4. Valuation and recoverability of long-term assets
5. Measurement of income taxes
6. Valuation of inventory
7. Measurement of loss contingencies

**(1) VALUATION OF NON-MARKETABLE SECURITIES**

The total value of Intel’s non-marketable securities is $4.5 billion as of 2015. In addition, their equity investments success depends on product development, market performance, and operational efficiency. To successfully build and income statement Intel uses a discounted cash flow model by using approximates of both revenues and costs. This is done by utilizing historical data and forecasted data.

**(2) USEFUL LIFE OF PROPERTY PLANT AND EQUIPMENT**

Intel was able to identify that the useful life of their equipment should be increase from four to five years.

**(3) VALUATION AND ALLOCATION OF ASSETS**

Property, Plant, and Equipment is considering as a non-financial asset which means that the asset is recorded at fair value. In addition, if these assets useful life is less than what is estimated then Intel will accelerate the rate of depreciation. In 2015 the depreciation for property, plant and equipment totaled $151 million.

**(4) VALUATION AND RECOVERABILITY OF LONG-TERM ASSETS**

When it comes to the valuation of the recoverability of long-term assets Intel focuses on Property, Plant, and equipment (PPE), Identified Intangibles, and Goodwill

* 1. Intel has determined that in terms of PPE there must be an increase in the reusability of machinery and equipment, increasing their useful life from four to five years.
  2. Identified intangibles allows Intel to evaluate whether the carrying value of an asset is recoverable.

**(5) MEASUREMENT OF INCOME TAXES**

Intel’s income taxes require periodic adjustments and are not the most accurate forecast but regardless of the biased of income taxes the company determines the recognition of both tax benefits and tax provisions.

**(6) VALUATION OF INVENTORY**

The inventory of Intel goes through a process known as product release qualification (PRQ) which is the point at which the costs of manufacturing are included in the valuation for such products. To determine this point, Intel first determines the capacity of their manufacturing facilities based on the total available capacity that a specific manufacturing facility has.

**(7) MEASUREMENT OF LOSS CONTINGENCIES**

Intel’s estimates loss contingencies when a liability has been incurred and the amount of loss of that liability can be approximated.

**RESULTS OF OPERATIONS**

Intel’s net revenue has always, historically, accelerate as the year goes by due the increase in gross margins from the sale of products in their CCG and DCG operating segments. In addition, the absence of depreciation expense has allowed the company’s gross margins to increase. The company has able to identify an ongoing trend of chip shortage across a variety of business. For this reason, the company has decided to invest in R&D and increase MG&A expenses to ultimately capture as much market share. In 2021, the total research and development and marketing, general, and administrative expenses increased by 10% compared to 2020. The key finding here is that Intel is continuously investing in R&D to accelerate growth.

In terms of R&D, Intel has successfully invested in process technology allowing an increase of 12.1% from 2020 to 2021. On the other hand, MG&A expenses increased 5.9% from 2020 to 2021 due to an increase in corporate spending and employee cash-compensation. Ultimately, Intel keeps investing into the company in the hopes to accelerate their process technology which will eventually lead to an increase in capital expenditures (fixed assets) and if Intel is able to apply repayment for future purchases, then their liquidity can be affected in a positive way.

Furthermore, Intel has several potential sources of liquidity that include their commercial paper program. In this program, Intel borrows up to $10 billion. In 2021, the company’s debt included $5 billion of senior notes and $5 billion of credit that matures in 2026. This means that the company is indulging into something that is known as a smart capital strategy. The smart capital strategy approach is when a company, in this case Intel, leverages government incentives, and customer participation to offset capital spending. This is one of the main reasons why the company has the cash flows to keep investing.

In term of Intel’s operating activities, the company experienced a $5.4 billion decrease in cash in 2021 due to a decrease net working capital. These changes in working capital are an effect of changes driven by inventory, accounts receivables, and income taxes that are offset by both assets and liabilities.

**PART III. Financial Input Variables & Assumptions**

**Assumptions and Calculations on CAPM and WACC**

**(1) All input variables. Capital Asset Pricing Model (CAPM)**

**a. Rf (3Month T-bill, %)**

The risk-free rate is the rate of return from a risk-free investment. Treasury bills are free risk since is backed up by a company, the government, that is not able to default. According to the Wall Street Journal the rate of return of a 3-month treasury bill is approximately 4.23%1.

1 Journal, W. S. (n.d.). *TMUBMUSD03M | U.S. 3 month Treasury Bill Price & news - WSJ*. The Wall Street Journal. Retrieved December 14, 2022, from https://www.wsj.com/market-data/quotes/bond/BX/TMUBMUSD03M

**b. Rm (S&P500, %)**

The expected return of the market is the rate of return an investor would expect from a market indicator. In this case the S&P 500 was used since its purpose is to act as a benchmark of the United States stock market. According to Investopedia, the historical average annual market return with inflation is 8.5%2.

2 Maverick, J. B. (2022, November 22). *S&P 500 average return*. Investopedia. Retrieved December 14, 2022, from https://www.investopedia.com/ask/answers/042415/what-average-annual-return-sp-500.asp

c. **Market Risk Premium (MRP, %)**

With no further hard put data the CAPM Model can be solved by first identifying the market risk premium. The market risk premium is the difference between the risk-free rate and the risk market rate. In other words, it is the difference between the expected return on the risky market portfolio and the rates regarding the risk-free. Since the risk free rate is 4.23% and the market risk rate is 8.50% then the market risk premium would be 4.27%.

**d. Beta**

After figuring out the market risk premium it is now crucial to calculate the beta in order to understand Intel’s stock movement to market volatility. A beta greater than 1 means that the stock is more sensitive to changes in the market while a beta less than 1 means that the stock is not that sensitive to changes in the market. Having said that, the beat for Intel can be calculated with the slope of the 60 monthly prices between Intel and the S&P 500 (=slope in excel). The beta for Intel turns out to be 0.69 which means that if the stock market changes by 1% then the stock of Intel will change by an average of 0.69%.

**e. Equity Risk Premium (ERP, %)**

Equity risk premium is the rate of return an investor expect to earn from a riskier asset instead of investing into a risk-free asset. Multiplying the beta by the market risk premium will give the equity risk premium. For Intel, the equity risk premium is 2.95%.

**f. Required rate of return on Equity**

With all the variables now available the required rate of return on equity can be found by using the CAPM Model (Rf + (Rm – Rf) \* B. With a required rate of return of 7.17% it is now feasible to calculate the Weighted Average Cost of Capital for Intel.

**(2) All input variables II. Weighted Average Cost of Capital (WACC)**

a. Price of CS per share ($) as of today

b. CS shares outstanding (#)

c. Tax rate (%)

According to the Intel Reports of 2022 the company’s tax rate was approximately 6% with GAAP and 8% without GAAP.

QUESTION TO PROFESSOR 🡪 WHAT IS GAAP?

d. MV of Debt

e. MV of CS

f. Total MV of Capital Resources

g. Cost of Debt (%)

h. Cost of CS

i. WACC (%)

**PART IV.  Project Assumption section on the Company Valuation of the Excel part. (Section 1. Project Assumptions: sales growth ~ permanent growth rate)**

*[Instruction. All the input numbers of assumptions on Excel part must be described in Word part. Hard input numbers of the project assumptions should be explained by* ***Where and Why*** *this number is applied. (Justified explanation by students own words with citation) Why should be this amount? How are they obtained? Must be realistic based on your research. Students MUST adjust the assumption section by adding or dropping along with the items of the chosen company’s Income Statement.]*

**(1) SALES GROWTH**

According to the Intel Highlights of 2022 regarding Long-Term Growth Strategy there is a $1 trillion market opportunity by 2030 due to an increase of sustainable technology. With this market trend happening as of right now the company outlined their strategy growth to accelerate 10%-12% year over year with 10% being more feasible to Intel.

<https://www.intc.com/news-events/press-releases/detail/1528/intel-highlights-2022-and-long-term-growth-strategy-at>

**(2) COST OF SALES**

According to Intel’s Chief executive Pat Geisinger the company promised a $10 billion cost reduction. To be more specific, the company plans to reduce its cost of sales by $3 billion in the following years which will in return make the company save between $8 to $10 billion by the end of 2025-2026-2027. The current cost of sales according to Intel’s Income Statement (2022) is an approximate of $27 billion. With a reduction of $3 billion in the short term and $8 to $10 billion in the long term, Intel plans to have an approximate cost of sales of $17 to $24 billion for the following years. This means that the percentage of cost of sales will decrease if and only if the cost of sales for years 2023, 2024, 2025, and 2026 remain at or less than $24 billion. Ultimately, Intel’s cost of sales will decrease by half by the end of 2027, that is a 28% decrease for years 2025-2026-2027.

<https://siliconangle.com/2022/10/27/intels-stock-rises-plan-save-10-billion-cost-reductions-2025/>

<https://www.club386.com/intel-plans-to-shed-10-billion-in-costs-by-2025/>

**(3) RESEARCH AND DEVELOPMENT (R&D)**

In March of 2022 Intel announced that it plans to invest roughly 80 billion euros in the European Union over the next 10 years. In the initial phase Intel will invest 17 billion euros creating more than 7,000 jobs, 3,000 of which will be permanent high-tech jobs. For the following years of 2023, 2024 Intel will invest about 17 billion euros ($18.3 Billion) and for the years of 2025, 2026, and 2027 Intel will invest up to 4.5 billion euros ($4.67 Billion) in Italy.

This means that the percentage of sales given the investment in research and development for years 2023 and 2024 will spike more than 30% and the investment for years 2025, 2026, and 2027 will be 6% to 7%.

<https://www.intel.com/content/www/us/en/newsroom/news/eu-news-2022-release.html#gs.jv27w4>

(4) **MG&A EXPENSES**

To successfully assume the cost of doing business (MG&A Expense) for Intel in the next five years it is important to consider the future establishments of Intel in Europe. In March of 2022, Intel announced that it is planning to establish a main foundry in France. The purpose of this foundry is to offer both design services and collaterals. Having said that the cost of doing business of Intel will increase by a considerable amount given the fact that the company will now have to deal with construction permits, electricity bills, protecting minority investors, pay taxes, wages and reinforcing their already existing contracts. In addition, the operating expenses which include rent, utilities, marketing, advertising, sales, management, and administrative salaries will increase for Intel by more than 11%, which is Intel’s current M&GA percentage of sales, due to the new investments an operations in the European market.

<https://www.doingbusiness.org/content/dam/doingBusiness/country/f/france/FRA.pdf>

<https://www.cnbc.com/2022/03/15/intel-commits-36-billion-to-making-chips-in-europe.html>

**(5) RESTRUCTURING AND CHARGES**

Since restructuring and charges account for any initial cash outlay that Intel does in the future then it is more likely that the restructuring and charges will increase due to a shift in production to new locations. The fact that Intel is investing in property, plant, and equipment in Europe then the company will need to build new manufacturing capacities and R&D capabilities which needs initial cash outlays to create future cash flows for the company. In addition, Intel mentioned in their highlight reports that they are planning a major reduction in jobs and since restructuring charges are costs strictly correlated to employee severance then restructuring and charges will likely increase in the following years by more than 1%.

<https://www.intel.com/content/www/us/en/newsroom/news/eu-news-2022-release.html#gs.jwwyul>

<https://www.intel.com/content/www/us/en/newsroom/news/intel-highlights-2022-long-term-growth-strategy-investor-meeting.html#gs.kxhb7i>

**(6)** **GAINS ON EQUITY INVESTMENTS (OTHER INCOME)**

Intel investment portfolio as of 2020 totaled $132 million in 11 different technology startups and Intel has not accounted if they are going to keep investing into other technology companies which is safe to assume that the gains on equity investments will stay linear over the next couple of years.

<https://www.intel.com/content/www/us/en/newsroom/news/intel-capital-invests-132-million-11-disruptive-technology-startups.html#gs.jgdiog>

**(7) INTEREST EXPENSE**

Intel borrowing’s come from three main sources: short term debt, long term debt, and senior notes. In the company’s 10K it states that on December 21, 2015, Intel entered into a short-term debt of $5 billion in order to finance the Acquisition of Altera (acquisition described in the description of Item 7). This is relevant to the assumptions of the interest expense of the following years because Intel in February of 2022 announced an acquisition of Tower Semiconductor for a total accounting value of $5.4 billion. Since Intel also plans to invest in R&D in Europe, apart from the acquisition, then it would make sense for them to indulge into more borrowing.

The investment opportunities in Europe, as McKinsey explains, will project a growth in IoT of 13.6% and Intel’s growth strategy will be 10% to 12%. Therefore, interest expense for the years of 2023, 2024, 2025 will be 4.1% and for years 2026, 2027 6.1% showing a correlation of the assumptions explain in (a) sales growth. The growth in interest expense can also be backed up by the fact that Intel interest rates regarding construction activities have been increasing in the past years with a total debt increase of $12 billion from 2018 to 2022. If the total debt of $12 billion keeps increasing, then it is assumed that the following interest expenses will increase at a faster rate that the previous 5 years.

<https://www.intel.com/content/www/us/en/newsroom/news/feb-2022-corporate-news.html#gs.jgdqgt>

<https://www.mckinsey.com/industries/private-equity-and-principal-investors/our-insights/growing-opportunities-in-the-internet-of-things>

(8) Net Operating Working Capital

**(9)** **FIXED ASSETS**

Fixed assets of Intel for the following years will increase due to the different investments in the next decade. Due to the complexity of Intel’s manufacturing operations the company sometimes incurs in costs due to the inability of the company to respond to demand so increasing their fixed assets will give the necessary resources to fulfill demand and customer needs and preferences. Since Intel is expanding their network of operations in places like France and Italy there will be an increase in property, plant, equipment, and machinery.

**(10) DEPRECIATION**

Depreciation & amortization for Intel was roughly $12.822 billion in 2022. If we look back at the consolidated statements of years 2013, 2014, 2015 there has been a linear increase in depreciation due to the increase in capital assets and investments in research and development for equipment and manufacturing plants. Based on passed assumptions it is feasible to say that depreciation for years 2023, 2024, 2025, 2026, and 2027 will increase in the same linear way. In addition, Intel said in its 10K that they determine that the useful lives of their equipment and machinery in their wafer fabrication facilities should be increased from four to five years. Having said that, Intel’s depreciation is more likely to increase 1% year over year due to the company’s expansion to Europe and several investments in their wafer facilities.

<https://finbox.com/NASDAQGS:INTC/explorer/da>

<https://blog.auditanalytics.com/what-depreciation-at-intel-says-about-moores-law/>

**(11)** **TAX RATE**

Since Intel’s interest expense is assumed to increase then tax rate will also increase because a change in the volume of profits given the location of the company’s asset, which means that apart of repaying more debt there are more tax audits to consider regarding expenses that are not tax deductible. In addition, the investment of Intel into industrial factories will not be deducted immediately because they are deducted over 39 years. This means that when Intel starts building their new foundry’s the buildings the company will not be able to decrease the cost of the investment which in return will increase the tax of the project(s). It is estimated that by 2030, tax rates will rise to 25.6% to 23.7%.

<https://taxfoundation.org/semiconductor-shortage-tax-policy/>

**(12) PERMANENT GROWTH RATE**

According to McKinsey the semiconductor Industry, which Intel operate in, will increase by an average of 6 to 8% a year up to 2023. In this case the most optimistic percentage, 8%, will be accounted for the permanent growth of Intel after year 2027 (year 5).

<https://www.mckinsey.com/industries/semiconductors/our-insights/the-semiconductor-decade-a-trillion-dollar-industry>

**PART V. Valuation Model & Investment Proposal.**

**1) Interpretation of Free Cash Flows of the Firm Model & Intrinsic Value (section 2 ~ 6 on the Excel part)**

**(1) OPERATING CASH FLOWS**

Operating cash flows for Intel are projected to increase year over year because of the several investments the company plans to perform in the future. Given the level of investment plans it is evident that the firm generates sufficient cash to support their initiatives. If we look back at Intel for the past 5 years, we can see the company generated $50.4 billion in cash flows which allowed them to retain a market capitalization of 26%. Having said that it is evident with more investments in the future Intel’s operating cash flows will increase.

(2) Cash flows in NOWC

(3) Cash flows in capital investment

(4) Free Cash Flows of the Firm

(5) Intrinsic Value of Common Stock on FCFF Model

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**2) Explanation of Relative Method Valuation (at least 5 relative methods, section 7 on the Excel part)**

It is important to state that Intel is in the semiconductors computer hardware industry which allows the industry ratios to be pivoted to this industry only, allowing for a better valuation method.

**(1) P/E**

The price to earnings ratio or P/E ratio shows the earnings stockholders are willing to pay for one share of the company. The P/E ratio for the semiconductor industry is 44.241 and the P/E ratio is 29.79 which ultimately gives Intel a forwarded price of $43.37. Having said that it is evident that Intel’s low P/E ratio, wich is less than the industry average, means that the company is undervalued.

1 Sarath. (2022, February 24). *Price to earnings (p/E) ratios by industry*. Eqvista. Retrieved December 14, 2022, from https://eqvista.com/price-to-earnings-pe-ratios-by-industry/

**(2) EV/EBITDA**

The EV/EBITDA ratio measure the dollars in the enterprise value (EV) for each dollar of EBITDA. In other words, it is used to compare the capital structure of the company with the different levels of debt. The industry average for the EV/EBITDA multiple in the semiconductor industry is 15.211 and the ratio for Intel is 50.19. This gives Intel a forwarded price of $57.37 which, from an investing perspective, shows a strong revenue and EBITDA growth. This might be since Intel is planning on investing into other areas, such as Europe, in order to increase their cash flows. Due to the several investments planned in the future then it can be assumed that the EV/EBITDA multiple will be less than the industry average meaning, yet again, that Intel is undervalued and that their stock 5 years from now will increase in price and be attractive to shareholders.

1 Admin. (2022, October 18). *EV/EBITDA (enterprise multiple) by Sector/Industry (U.S. large cap)*. Siblis Research. Retrieved December 14, 2022, from https://siblisresearch.com/data/ev-ebitda-multiple/

**(3) P/S**

The price to sale ratio is used to compare the market capitalization to the sales which gives a valuation regarding the price of the stock per dollar given the company’s sales. An accepted P/S ratio among investors lies between 1 and 2 and given the projections for Intel, the company has a P/S ratio of 2.29. This is not too bad given that the industry average is 8.341 which gives Intel a forwarded price of $106.49. In addition, the high P/S ratio for Intel means that the company will display a strong market price.

1 *Revenue multiples by sector (US)*. Price to Sales Ratios. (n.d.). Retrieved December 14, 2022, from https://pages.stern.nyu.edu/~adamodar/New\_Home\_Page/datafile/psdata.html

**(4) P/B**

The price to book ratio compares the current market capitalization to the accounting value. The P/B ratio for the semiconductor industry is 7.451 and the P/B ratio for Intel is 1.21 giving the company a forwarded price of $180.40. This means that buying Intel’s stock provides a margin of safety and, yet again, means that Intel’s stock is undervalued.

1*Price and value to book ratio by sector (US)*. Price to Book Ratios. (n.d.). Retrieved December 14, 2022, from https://pages.stern.nyu.edu/~adamodar/New\_Home\_Page/datafile/pbvdata.html

**(5) P/CF**

**3) Explanation of Financial Ratio Analysis (at least 10 ratios, section 8 on the Excel part)**

(1) EVA

(2) ROA

(3) …

(4) …

(5) …

(6) …

(7) …

(8) …

(9) …

(10) …

**4) Investment Proposal with Target Price with all the information combined (section 9 on Excel part. How to set up the Final target price and why?).**

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