

The Income Statement

The income statement measures a company's profit (or loss) over a specific period of time. A business is generally required to report and record the sales it generates for tax purposes. And, of course, taxes on sales made can be reduced by the expenses incurred while generating those sales. Although there are specific rules that govern when and how those expense reductions can be utilized, there is still a general concept:

$$\text{Profit} = \text{Revenue} - \text{Expenses}$$

A company is taxed on profit. So:

$$\text{NetIncome} = \text{Profit} - \text{Tax}$$

However, income statements have grown to be quite complex. The multifaceted categories of expenses can vary from company to company. As analysts, we need to identify major categories within the income statement in order to facilitate proper analysis. For this reason, one should always categorize income statement line items into nine major categories:

1. Revenue (sales)
2. Cost of goods sold
3. Operating expenses
4. Other income
5. Depreciation and amortization
6. Interest
7. Taxes
8. Non-recurring and extraordinary items
9. Distributions

No matter how convoluted an income statement is, a good analyst would categorize each reported income statement line item into one of these nine categories. This will allow an analyst to easily understand the major categories that drive profitability in an income statement and can further allow him or her to compare the profitability between several different companies—an analysis very important in determining relative valuation. This book assumes you have some basic understanding of accounting, so we will just briefly recap the line items.

REVENUE

Revenue is the sales or gross income a company has made during a specific operating period. It is important to note that when and how revenue is recognized can vary from company to company and may be different from the actual cash received. Revenue is recognized when “realized and earned,” which is typically when the products sold have been transferred or once the service has been rendered.

COST OF GOODS SOLD

Cost of goods sold (COGS) is the direct costs attributable to the production of the goods sold by a company. These are the costs most directly associated to the revenue. This is typically the cost of the materials used in creating the products sold, although some other direct costs could be included as well.

Gross Profit

Gross profit is not one of the nine categories listed, as it is a totaling item. Gross profit is the revenue less COGS and is helpful in determining the net value of the revenue after COGS is removed. One common metric analyzed is gross profit margin, which is the gross profit divided by the revenue. We will calculate these totals and metrics for Amazon later in the chapter.

A business that sells cars, for example, may have manufacturing costs. Let’s say we sell a car for \$20,000, and we manufacture the cars in-house. We must purchase \$5,000 in raw materials to manufacture the car. If we sell one car, \$20,000 is our revenue and \$5,000 is the COGS. That leaves us with \$15,000 in gross profit, or a 75% gross profit margin. Now let’s say in the first quarter of operations we sell 25 cars. That’s $25 \times \$20,000$, or

\$500,000 in revenue. Our COGS is $25 \times \$5,000$, or \$125,000, which leaves us with \$375,000 in gross profit.

| Car Co. | 1Q 2021 |
|------------------------------|------------------|
| Revenue | 500,000.0 |
| COGS | 125,000.0 |
| Gross Profit | 375,000.0 |
| <i>% Gross Profit Margin</i> | <i>75%</i> |

OPERATING EXPENSES

Operating expenses are expenses incurred by a company as a result of performing its normal business operations. These are the relatively indirect expenses related to generating the company's revenue and supporting its operations. Operating expenses can be broken into several other major sub-categories, the most common of which are:

- 1. Selling, General, and Administrative (SG&A).** These are all selling expenses and all general and administrative expenses of a company. Examples are employee salaries and rents.
- 2. Advertising and Marketing.** These are expenses relating to any advertising or marketing initiatives the company employs. Examples are print advertising and Google Adwords.
- 3. Research and Development (R&D).** These are expenses relating to furthering the development of the company's product or services.

Let's say in our car business, we have employees to whom we have paid \$75,000 in total in the first quarter. We also have rents to pay of \$2,500, and we ran an advertising initiative that cost us \$7,500. Finally, let's assume we have employed some R&D efforts to continue to improve the design of our car that cost roughly \$5,000 per quarter. Using the previous example, our simple income statement looks like this:

| Car Co. | 1Q 2021 |
|------------------------------|------------------|
| Revenue | 500,000.0 |
| COGS | 125,000.0 |
| Gross Profit | 375,000.0 |
| <i>% Gross Profit Margin</i> | <i>75%</i> |

(Continued)

| | |
|---------------------------------|-----------------|
| Operating Expenses | |
| SG&A | 77,500.0 |
| Advertising | 7,500.0 |
| R&D | 5,000.0 |
| Total Operating Expenses | 90,000.0 |

OTHER INCOME

Companies can generate income that is not core to their business. As this income is taxable, it is recorded on the income statement. However, since it is not core to business operations, it is not considered revenue. Let's take the example of the car company. A car company's core business is producing and selling cars. However, many car companies also generate income in another way: financing. If a car company offers its customers the ability to finance the payments on a car, those payments come with interest. The car company receives that interest. That interest is taxable and is considered additional income. However, as that income is not core to the business, it is not considered revenue; it is considered other income.

Another common example of other income is *income from noncontrolling interests*, also known as *income from unconsolidated affiliates*. This is income received when one company has a noncontrolling interest investment in another company. So when a company (Company A) invests in another company (Company B) and receives a minority stake in Company B, Company B distributes a portion of its net income to Company A. Company A records those distributions received as other income.

EBITDA

Earnings before interest, taxes, depreciation, and amortization (EBITDA) is a very important measure among Wall Street analysts. We will later see its many uses as a fundamental metric in valuation and analysis. It can be calculated as Revenue – COGS – Operating Expenses + Other Income.

It is debatable whether other income should be included in EBITDA. There are two sides to the argument:

1. *It should be included in EBITDA.* If a company produces other income, it should be represented as part of EBITDA, and other income should be listed above our EBITDA total. The argument here is that

other income, although not core to revenue, is still in fact operating and should be represented as part of the company's operations. There are many ways of looking at this. Taking the car example, we can maybe assume that the financing activities, although not core to revenue, are essential enough to the overall profitability to be considered as part of EBITDA.

2. *It should not be included in EBITDA.* If a company produces other income, it should not be represented as part of EBITDA, and other income should be listed below our EBITDA total. The argument here is that although it is a part of the company's profitability, it is not core enough to the operations to be incorporated as part of the company's core profitability.

Determining whether to include other income as EBITDA is not so simple and clear cut. It is important to consider if the other income is consistent and reoccurring. If it is not, the case can more likely be made that it should not be included in EBITDA. It is also important to consider the purpose of your particular analysis. For example, if you are looking to acquire the entire business, and that business will still be producing that other income even after the acquisition, then maybe it should be represented as part of EBITDA. Or maybe that other income will no longer exist after the acquisition, in which case it should not be included in EBITDA. As another example, if you are trying to compare EBITDA with the EBITDA of other companies, then it is important to consider if the other companies also produce that same other income. If not, then maybe it is better to keep other income out of the EBITDA analysis, to make sure there is a consistent comparison among all of the company EBITDAs.

Different banks and firms may have different views on whether other income should or should not be included in EBITDA. Even different industry groups within the same firm have been found to have different views on this topic. As a good analyst, it is important to come up with one consistent defensible view, and stick to it.

Let's assume in our car example the other income will be part of EBITDA.

| Car Co. | 1Q 2021 |
|------------------------------|------------------|
| Revenue | 500,000.0 |
| COGS | 125,000.0 |
| Gross Profit | 375,000.0 |
| % <i>Gross Profit Margin</i> | 75% |

(Continued)

| | |
|---------------------------------|------------------|
| Operating Expenses | |
| SG&A | 77,500.0 |
| Advertising | 7,500.0 |
| R&D | 5,000.0 |
| Total Operating Expenses | 90,000.0 |
| Other Income | 1,000.0 |
| EBITDA | 286,000.0 |
| <i>EBITDA Margin</i> | 57% |

Notice we have also calculated EBITDA margin, which is defined as EBITDA / Revenue.

DEPRECIATION AND AMORTIZATION

Depreciation is the accounting for the aging and depletion of fixed assets over a period of time. Amortization is the accounting for the cost basis reduction of intangible assets (intellectual property such as patents, copyrights, and trademarks, for example) over their useful life. It is important to note that not all intangible assets are subject to amortization. We will discuss depreciation and amortization (D&A) in Chapter 4.

EBIT

Similar to EBITDA, earnings before interest and taxes (EBIT) is also utilized in valuation. EBIT is EBITDA – Depreciation and Amortization. So let's assume the example car company has \$8,000 in D&A each quarter. So:

| Car Co. | 1Q 2021 |
|----------------------|-----------|
| EBITDA | 286,000.0 |
| <i>EBITDA Margin</i> | 57% |
| D&A | 8,000.0 |
| EBIT | 278,000.0 |
| <i>EBIT Margin</i> | 56% |

Notice we have also calculated EBIT margin, which is defined as EBIT divided by revenue.

INTEREST

Interest is composed of interest expense and interest income. Interest expense is the cost incurred on debt that the company has borrowed. Interest income is commonly the income received from cash held in savings accounts, certificates of deposits, and other investments.

Let's assume the car company had \$1MM in loans and incurs 10% of interest per year on those loans. So the car company has \$100,000 in interest expense per year, or \$25,000 per quarter. We can also assume that the company has \$50,000 of cash and generated 1% of interest income on that cash per year (\$500), or \$125 per quarter.

Often, the interest expense is netted against the interest income as net interest expense.

EBT

Earnings before taxes (EBT) can be defined as EBIT – Net interest.

| Car Co. | 1Q 2021 |
|----------------------|-----------|
| EBIT | 278,000.0 |
| <i>EBIT Margin</i> | 56% |
| Interest Expense | 25,000.0 |
| Interest Income | 125.0 |
| Net Interest Expense | 24,875.0 |
| EBT | 253,125.0 |
| <i>EBT Margin</i> | 51% |

Notice we have also calculated EBT margin, which is defined as EBT divided by revenue.

TAXES

Taxes are the financial charges imposed by the government on the company's operations. Taxes are imposed on earnings before taxes, as defined previously. In the car example, we can assume the tax rate is 35%.

Net Income

Net income is defined as EBT – Taxes. The complete income statement follows.

| Car Co. | 1Q 2021 |
|---------------------------------|-------------------|
| Revenue | 500,000.0 |
| COGS | 125,000.0 |
| Gross Profit | 375,000.0 |
| <i>% Gross Profit Margin</i> | <i>75%</i> |
| Operating Expenses | |
| SG&A | 77,500.0 |
| Advertising | 7,500.0 |
| R&D | 5,000.0 |
| Total Operating Expenses | 90,000.0 |
| Other Income | 1,000.0 |
| EBITDA | 286,000.0 |
| <i>EBITDA Margin</i> | <i>57%</i> |
| D&A | 8,000.0 |
| EBIT | 278,000.0 |
| <i>EBIT Margin</i> | <i>56%</i> |
| Interest Expense | 25,000.0 |
| Interest Income | 125.0 |
| Net Interest Expense | 24,875.0 |
| EBT | 253,125.0 |
| <i>EBT Margin</i> | <i>51%</i> |
| Tax | 88,593.75 |
| <i>Tax Rate (%)</i> | <i>35%</i> |
| Net Income | 164,531.25 |

NON-RECURRING AND EXTRAORDINARY ITEMS

Non-recurring and extraordinary items or events are expenses or incomes that are either one-time or not pertaining to everyday core operations. Gains or losses on sales of assets, or from business closures, are examples of non-recurring events. Such non-recurring or extraordinary events can be

scattered about in a generally accepted accounting principles (GAAP) income statement, and so it is the job of a good analyst to identify these items and move them to the bottom of the income statement in order to have EBITDA, EBIT, and net income line items that represent everyday, continuous operations. We call this “clean” EBITDA, EBIT, and net income. However, we do not want to eliminate those non-recurring or extraordinary items completely, so we move them to this section. From here on out, we will refer to both “non-recurring” and “extraordinary” items simply as “non-recurring items” to simplify.

DISTRIBUTIONS

Distributions are broadly defined as payments to equity holders. These payments can be in the form of dividends or noncontrolling interest payments, to name the major two.

Noncontrolling interests is the portion of the company or the company’s subsidiary that is owned by another outside person or entity. If another entity (Entity A) owns a noncontrolling interest in the company (Entity B), Entity B must distribute a portion of Entity B’s earnings to Entity A. (We will discuss noncontrolling interests in more detail later in the book.)

Net Income (as Reported)

Because we have recommended moving some non-recurring line items into a separate section, the net income listed prior is effectively an adjusted net-income, which is most useful for analysis, valuation, and comparison. However, it is important still to represent a complete net income with all adjustments included to match the original given net income. So, it is recommended to have a second net income line as a “sanity check,” defined as:

$$\text{Net income} - \text{Non-recurring events} - \text{Distributions}$$

SHARES

A company’s shares outstanding reported on the income statement can be reported as basic or diluted. The basic share count is a count of the number of shares outstanding in the market. The diluted share count is the number of shares outstanding in the market plus any shares that would be considered outstanding today if all option and warrant holders that are in-the-money

decided to exercise on their securities. The diluted share count is best thought of as a “What if?” scenario. If all the option and warrant holders who could exercise would, how many shares would be outstanding now?

Earnings per Share (EPS)

Earnings per share (EPS) is defined as the net income divided by the number of shares outstanding. A company typically reports a basic EPS and a diluted EPS, divided by basic shares or diluted shares, respectively. It is important to note that each company may have a different definition on what exactly to include in net income when calculating EPS. In other words, is net income before or after noncontrolling interests used? Or before or after dividends? For investors, it is common to use net income before dividends have been paid but after noncontrolling interest investors have been paid. However, we recommend backing into the company’s historical EPS to identify the exact formula they are using. We will illustrate this process with Amazon next.

$$\text{Basic EPS} = \text{Net income} / \text{Basic shares}$$

$$\text{Diluted EPS} = \text{Net income} / \text{Diluted shares}$$

AMAZON’S INCOME STATEMENT

There are several ways to obtain a public company’s financial information. We would first recommend going to the company’s website and locating the “Investor Relations” section. Amazon’s website has a lot of menu options and links, and the layout can change, but as of writing this book, the Investor Relations link can be found toward the bottom of their website under the “Get to Know Us” section. See Figure 1.1. One can also google “Amazon Investor Relations” to get to its site.

The “SEC Filings” section takes you to Amazon’s government filings. I tend to prefer a company’s SEC filing over the Annual Report as the SEC filing may not contain all exhibits that could provide extra and important detail (Figure 1.2).

To obtain the latest annual SEC filing (Figure 1.3), or the “10-K,” select the dropdown box “Annual Filings” under “Group” and “2021” under “Filing Year.” You can then select the pdf icon to download the document.

You can also go to the US Securities and Exchange Commission (SEC) website (www.sec.gov), where all public company filings are published, and search for Amazon’s specific filings.

Note that by the time this book is published, Amazon may have changed its website. If so, you can download a copy of the 2020 Amazon 10-K on the

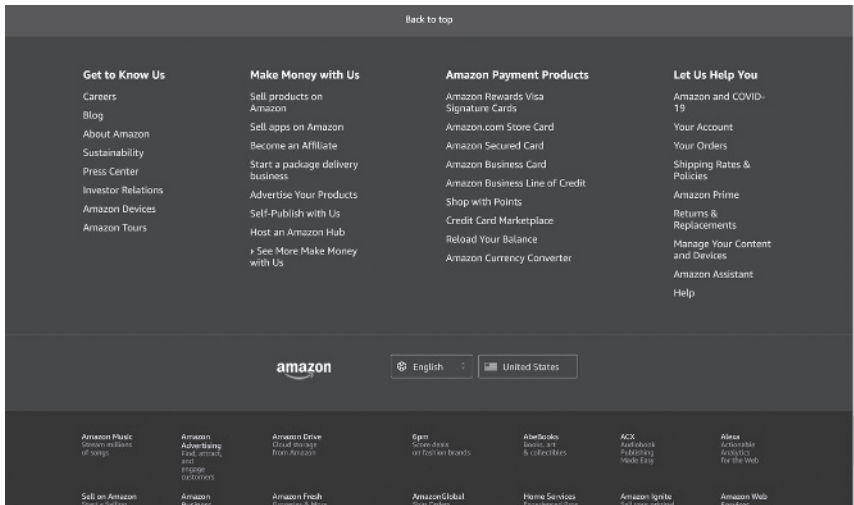


FIGURE 1.1 Amazon’s Home Page

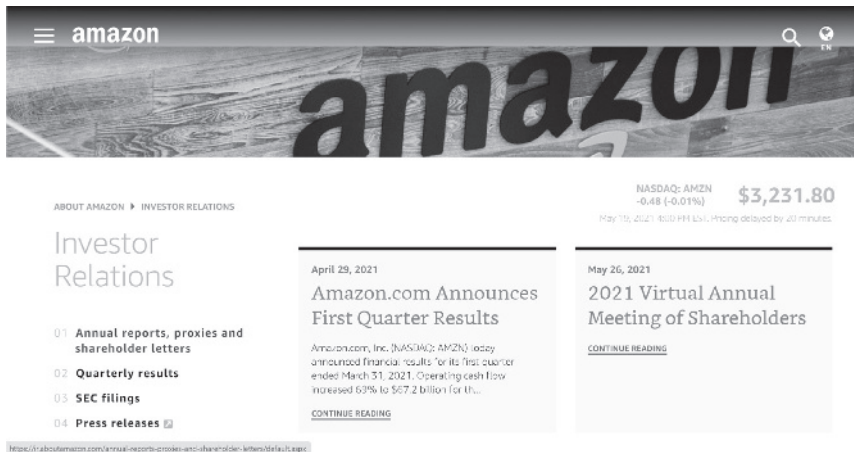


FIGURE 1.2 Amazon’s Investor Relations

companion website associated with this book, or you can simply rely on the exhibits and examples throughout this book.

If you have downloaded the correct document, scroll down to locate the income statement. Make sure you have identified the company’s complete *income statement* and not its *financial summary*. These are easy to confuse.

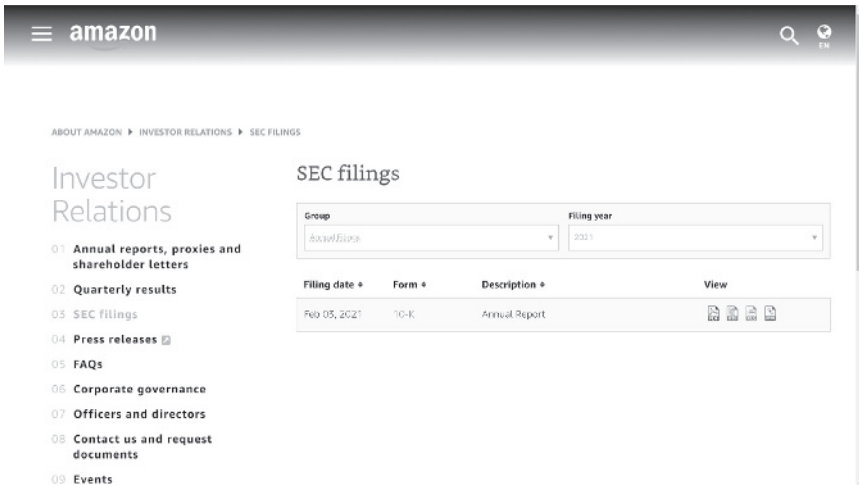


FIGURE 1.3 Amazon’s SEC Filings

The financial summary does contain income statement information, but it is not as detailed as the actual income statement. The financial summary also typically contains a longer period (5–10 years) of historical data, whereas the more-detailed income statement typically contains only two or three years’ worth. Figure 1.4 is Amazon’s financial summary section, taken from page 18 of the company’s 10-K. You can easily see that it does not contain all the necessary line items such as costs and expenses to properly create a model. You will also notice that it is labeled as “Selected Consolidated Financial Data.”

If you continue to scroll through the filing, you will find the complete income statement on page 39. You will also notice that it is properly labeled as “Consolidated Statements of Operations.” We will use the income statement found in Figure 1.5 to analyze Amazon’s historical financial position. It is standard to have three years of financials in a company model, so we will create a model from years 2018–2020.

Revenue

When looking at the income statement in Figure 1.5, you want to first identify all the major line items as referenced earlier in this chapter, beginning with sales. We can see that Amazon has two lines of Revenues: “Net Product Sales” and “Net Service Sales.” We will list both separately.

Item 6. Selected Consolidated Financial Data

The following selected consolidated financial data should be read in conjunction with the consolidated financial statements and the notes thereto in Item 8 of Part II, "Financial Statements and Supplementary Data," and the information contained in Item 7 of Part II, "Management's Discussion and Analysis of Financial Condition and Results of Operations." Historical results are not necessarily indicative of future results.

| | Year Ended December 31, | | | | |
|--|--------------------------------------|------------|------------|------------|------------|
| | 2016 | 2017 (1) | 2018 | 2019 | 2020 |
| | (in millions, except per share data) | | | | |
| Statements of Operations: | | | | | |
| Net sales | \$ 135,987 | \$ 177,866 | \$ 232,887 | \$ 280,522 | \$ 386,064 |
| Operating income | \$ 4,186 | \$ 4,106 | \$ 12,421 | \$ 14,541 | \$ 22,899 |
| Net income (loss) | \$ 2,371 | \$ 3,033 | \$ 10,073 | \$ 11,588 | \$ 21,331 |
| Basic earnings per share (2) | \$ 5.01 | \$ 6.32 | \$ 20.68 | \$ 23.46 | \$ 42.64 |
| Diluted earnings per share (2) | \$ 4.90 | \$ 6.15 | \$ 20.14 | \$ 23.01 | \$ 41.83 |
| Weighted-average shares used in computation of earnings per share: | | | | | |
| Basic | 474 | 480 | 487 | 494 | 500 |
| Diluted | 484 | 493 | 500 | 504 | 510 |
| Statements of Cash Flows: | | | | | |
| Net cash provided by (used in) operating activities (3) | \$ 17,203 | \$ 18,365 | \$ 30,723 | \$ 38,514 | \$ 66,064 |
| | December 31, | | | | |
| | 2016 | 2017 | 2018 | 2019 (4) | 2020 |
| | (in millions) | | | | |
| Balance Sheets: | | | | | |
| Total assets | \$ 83,402 | \$ 131,310 | \$ 162,648 | \$ 225,248 | \$ 321,195 |
| Total long-term obligations | \$ 20,301 | \$ 45,718 | \$ 50,708 | \$ 75,376 | \$ 101,406 |

- (1) We acquired Whole Foods Market on August 28, 2017. The results of Whole Foods Market have been included in our results of operation from the date of acquisition.
- (2) For further discussion of earnings per share, see Item 8 of Part II, "Financial Statements and Supplementary Data — Note 1 — Description of Business, Accounting Policies, and Supplemental Disclosures"
- (3) As a result of the adoption of new accounting guidance, we retrospectively adjusted our consolidated statements of cash flows to add restricted cash to cash and cash equivalents, which restated cash provided by operating activities by \$(69) million in 2016 and 2017.
- (4) As a result of the adoption of new accounting guidance on January 1, 2019, we recognized lease assets and liabilities for operating leases with terms of more than twelve months. Prior period amounts were not adjusted and continue to be reported in accordance with our historic accounting policies.

FIGURE 1.4 Amazon's Five-Year Financial Summary

AMAZON.COM, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in millions, except per share data)

| | Year Ended December 31, | | |
|--|-------------------------|------------|------------|
| | 2018 | 2019 | 2020 |
| Net product sales | \$ 141,915 | \$ 160,408 | \$ 215,915 |
| Net service sales | 90,972 | 120,114 | 170,149 |
| Total net sales | 232,887 | 280,522 | 386,064 |
| Operating expenses: | | | |
| Cost of sales | 139,156 | 165,536 | 233,307 |
| Fulfillment | 34,027 | 40,232 | 58,517 |
| Technology and content | 28,837 | 35,931 | 42,740 |
| Marketing | 13,814 | 18,878 | 22,008 |
| General and administrative | 4,336 | 5,203 | 6,668 |
| Other operating expense (income), net | 296 | 201 | (75) |
| Total operating expenses | 220,466 | 265,981 | 363,165 |
| Operating income | 12,421 | 14,541 | 22,899 |
| Interest income | 440 | 832 | 555 |
| Interest expense | (1,417) | (1,600) | (1,647) |
| Other income (expense), net | (183) | 203 | 2,371 |
| Total non-operating income (expense) | (1,160) | (565) | 1,279 |
| Income before income taxes | 11,261 | 13,976 | 24,178 |
| Provision for income taxes | (1,197) | (2,374) | (2,863) |
| Equity-method investment activity, net of tax | 9 | (14) | 16 |
| Net income | \$ 10,073 | \$ 11,588 | \$ 21,331 |
| Basic earnings per share | \$ 20.68 | \$ 23.46 | \$ 42.64 |
| Diluted earnings per share | \$ 20.14 | \$ 23.01 | \$ 41.83 |
| Weighted-average shares used in computation of earnings per share: | | | |
| Basic | 487 | 494 | 500 |
| Diluted | 500 | 504 | 510 |

See accompanying notes to consolidated financial statements.

FIGURE 1.5 Amazon's Income Statement

Now is a good time to open the model template titled “NYSF—Amazon—Template.xls.” Notice the first six tabs each represent a financial schedule we will build to properly analyze the business. A well-built model contains at least these six major statements:

1. Income statement
2. Cash flow statement
3. Balance sheet
4. Depreciation schedule
5. Working capital schedule
6. Debt schedule

For this chapter, we will focus on the Income Statement tab. In this tab, we can enter the three years of each revenue stream, as shown in Figure 1.5. We will simply *hardcode* or type the numbers directly into the model as represented in the 10-K.

Before doing so, it is important to mention the first two important rules of modeling etiquette:

1. All hardcoded numbers and assumption drivers should be entered in blue font.
2. All formulas should be entered in black font.

When we mention hardcoded numbers, we mean numbers that are typed directly into a cell (that is, not links or formulas). All other formulas in the model are dependent on hardcodes, so should remain black. So, for example, the historical numbers we will now enter are hardcoded. These should be colored blue. However, the formulas that are simply summing hardcoded numbers should be in black font, as those are formulas. This is a standard on the Street and makes a model easier to analyze. It is important to be able to quickly zero in on the numbers and assumptions that drive the model projections (the blue numbers).

So, in Row 7, marked “Net Product Sales,” we can type in 141,915; 160,408; and 215,915 for 2018, 2019, and 2020, or cells D7, E7, and F7, respectively. Remember to color the font of these blue, as they are hard codes. Later, we will look to the company’s historical trends as a clue to estimating projections. So, let’s calculate the historical growth of the company’s net sales. The formula for growth in a current year is:

$$\text{Current Year Growth} = \text{Current Year}/\text{Previous Year} - 1$$

So we can calculate the 2019 net sales growth by entering the following into Cell E8:

Calculating 2019 Net Sales Growth (Cell E8)

| Excel Keystrokes | Description |
|------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell E7 | 2019 Net Product Sales |
| type “/” | Divides |
| select Cell D7 | 2018 Net Product Sales |
| type “-1” | Subtracts 1 |
| type “Enter” | End |
| Formula Result | =E7/D7-1 |

This should give you a 13.0% net sales growth in 2019. This process can be repeated for the net sales in 2020, or you can simply cut and paste the 2020 formula and copy it to the right. There are several ways to copy formulas to the right:

1. Click and drag the 2019 formula over to 2020. With the mouse, you can select the bottom right corner of Cell E8, and while holding down the left mouse button, you can drag the formula over to Cell F8.
2. Select the 2019 Growth in Cell E8. Select “Copy” from the menu bar (or hit “Ctrl” + “C”). Then select the 2020 Growth (Cell F8), and select “Paste” from the menu bar (or hit “Ctrl” + “V”).
3. Preferred method:
 - a. Highlight both the 2019 Growth in Cell E8 and the empty 2020 Growth in Cell F8. This can be done two ways:
 - i. With the mouse: By selecting Cell E8, making sure to select the center of the cell, not the bottom right corner, and while holding down the left mouse button continue to move the mouse to the right, or;
 - ii. With the keyboard: By selecting Cell E8, then holding down the “Shift” key while tapping the right arrow until the desired cells are selected.
 - b. Hit “Ctrl” + “R,” which stands for “copy right.”

Modeling Tip

We strongly recommend you use keyboard hotkeys (such as “Ctrl” + “R”) as often as possible. The more comfortable you become with using the keyboard as opposed to the mouse, the more efficient a modeler you will become. (Please see Appendix 3 for a list of Excel hotkeys.)

TABLE 1.1 Amazon Historical Net Sales

| Consolidated Income Statements (in US\$ millions except per share amounts) | | | |
|--|-----------|-----------|-----------|
| Period Ending December 31 | Actuals | | |
| | 2018A | 2019A | 2020A |
| Revenue | | | |
| Net product sales | 141,915.0 | 160,408.0 | 215,915.0 |
| <i>Y/Y growth (%)</i> | | 13.0% | 34.6% |

Note that there is also a hotkey called “Ctrl” + “D,” which stands for “copy down.” Unfortunately, there is no “copy left” or “copy up.” (See Table 1.1.)

We can now continue by entering the “Net Service Sales” numbers, and calculating the respective growth as we had done with the net sales.

We can then total the two sales line items into the total net sales line in Row 11. (See Table 1.2.)

Calculating 2018 Total Net Sales (Cell D11)

| Excel Key Strokes | Description |
|-------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D7 | 2018 Net Product Sales |
| type “+” | Adds |
| select Cell D9 | 2018 Net Service Sales |
| type “Enter” | End |
| Formula result | =D7+D9 |

TABLE 1.2 Amazon Historical Total Net Sales

| Consolidated Income Statements (in US\$ millions except per share amounts) | | | |
|--|------------------|------------------|------------------|
| Period Ending December 31 | Actuals | | |
| | 2018A | 2019A | 2020A |
| Revenue | | | |
| Net product sales | 141,915.0 | 160,408.0 | 215,915.0 |
| <i>Y/Y growth (%)</i> | | 13.0% | 34.6% |
| Net service sales | 90,972.0 | 120,114.0 | 170,149.0 |
| <i>Y/Y growth (%)</i> | | 32.0% | 41.7% |
| Total Net Sales | 232,887.0 | 280,522.0 | 386,064.0 |
| <i>Y/Y net sales growth (%)</i> | | 20.5% | 37.6% |

This will give us \$232,887.0 in total net sales for Amazon in 2018. We can now calculate total net sales' growth using the same growth formulas, as already demonstrated. We can also copy these formulas to the right through 2020 using one of the previous copy methods. (See Table 1.2.)

Getting to EBITDA

Below the revenue section we see "Operating Expenses," the first of which is "Cost of Sales." When referencing the categories earlier in this chapter, we see "Cost of Sales" clearly as category 2, "Cost of Goods Sold," and the rest as category 3, "Operating Expenses." I always recommend listing each cost line item as the company has done in an operating expense section, much like what we had done with revenue.

Digging up Depreciation

When identifying all expenses on an income statement, it is important to also locate the depreciation expense. Companies that have depreciating assets would generally record that depreciation as an expense to reduce taxes. So, if a company has depreciation, it should be represented on the income statement. However, not every company lists depreciation as a separate line item. A good analyst needs to do some more hunting to locate depreciation. Amazon certainly depreciates its assets. If you are unsure if the company you are analyzing depreciates assets, you should research the company's assets. An easy way to begin is by performing a word search for "depreciation" on the company's 10-K, or you can go to the cash flow statement to see if a depreciation line item exists. Depreciation is located in several places in the company's 10-K. In Figure 1.6, we use the example from page 38. This is the company's cash flow statement. You can clearly see there is a line item right after the "Adjustments to reconcile net income to net cash from operating activities" section titled "*Depreciation* and amortization of property and equipment and capitalized content costs, operating lease assets, and other." The existence of this line item clearly indicated depreciation is present, but just not separated out in the income statement. It is often the case that depreciation will show up directly on the cash flow statement yet not on the income statement. We will discuss why that may be the case in the next chapter when we learn about how the cash flow statement works.

In Figure 1.6, we can see depreciation and amortization for the consolidated business is \$15,341, \$21,789, and \$25,251 for 2018, 2019, and 2020, respectively.

Once we have identified depreciation, we must determine where that depreciation is in the income statement. We have proven depreciation exists,

AMAZON.COM, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

| | Year Ended December 31, | | |
|--|-------------------------|------------------|------------------|
| | 2018 | 2019 | 2020 |
| | \$ | \$ | \$ |
| CASH, CASH EQUIVALENTS, AND RESTRICTED CASH, BEGINNING OF PERIOD | 21,856 | 32,173 | 36,410 |
| OPERATING ACTIVITIES: | | | |
| Net income | 10,073 | 11,588 | 21,331 |
| Adjustments to reconcile net income to net cash from operating activities: | | | |
| Depreciation and amortization of property and equipment and capitalized content costs, operating lease assets, and other | 15,341 | 21,789 | 25,251 |
| Stock-based compensation | 5,418 | 6,864 | 9,208 |
| Other operating expense (income), net | 274 | 164 | (71) |
| Other expense (income), net | 219 | (249) | (2,582) |
| Deferred income taxes | 441 | 796 | (554) |
| Changes in operating assets and liabilities: | | | |
| Inventories | (1,314) | (3,278) | (2,849) |
| Accounts receivable, net and other | (4,615) | (7,681) | (8,169) |
| Accounts payable | 3,263 | 8,193 | 17,480 |
| Accrued expenses and other | 472 | (1,383) | 5,754 |
| Unearned revenue | 1,151 | 1,711 | 1,265 |
| Net cash provided by (used in) operating activities | 30,723 | 38,514 | 66,064 |
| INVESTING ACTIVITIES: | | | |
| Purchases of property and equipment | (13,427) | (16,861) | (40,140) |
| Proceeds from property and equipment sales and incentives | 2,104 | 4,172 | 5,096 |
| Acquisitions, net of cash acquired, and other | (2,186) | (2,325) | (2,325) |
| Sales and maturities of marketable securities | 8,240 | 22,681 | 50,237 |
| Purchases of marketable securities | (7,100) | (31,812) | (72,479) |
| Net cash provided by (used in) investing activities | (12,369) | (24,281) | (59,611) |
| FINANCING ACTIVITIES: | | | |
| Proceeds from short-term debt, and other | 886 | 1,402 | 6,796 |
| Repayments of short-term debt, and other | (813) | (1,518) | (6,177) |
| Proceeds from long-term debt | 182 | 871 | 10,525 |
| Repayments of long-term debt | (155) | (1,166) | (1,553) |
| Principal repayments of finance leases | (7,449) | (9,628) | (10,642) |
| Principal repayments of financing obligations | (337) | (27) | (53) |
| Net cash provided by (used in) financing activities | (7,686) | (10,066) | (1,104) |
| Foreign currency effect on cash, cash equivalents, and restricted cash | (351) | 70 | 618 |
| Net increase (decrease) in cash, cash equivalents, and restricted cash | 10,317 | 4,237 | 5,967 |
| CASH, CASH EQUIVALENTS, AND RESTRICTED CASH, END OF PERIOD | <u>\$ 32,173</u> | <u>\$ 36,410</u> | <u>\$ 42,377</u> |

See accompanying notes to consolidated financial statements.

FIGURE 1.6 Amazon's Cash Flow Statement

and we assume it must be somewhere in the income statement, although not directly shown. Be careful not to simply add the depreciation expense to the income statement. The depreciation amounts we have found previously are most likely buried in one of the expense items we have already identified. But how do we know which expense line item contains depreciation? Unfortunately, in many cases, it is not easy to tell.

A quick word search on depreciation in the 10-K reveals this quote under the “Technology and Content” expense section (page 45):

TECHNOLOGY AND CONTENT

Technology and content costs include payroll and related expenses for employees involved in the research and development of new and existing products and services, development, design, and maintenance of our stores, curation and display of products and services made available in our online stores, and infrastructure costs. Infrastructure costs include servers, networking equipment, and data center related depreciation and amortization, rent, utilities, and other expenses necessary to support AWS and other Amazon businesses. Collectively, these costs reflect the investments we make in order to offer a wide variety of products and services to our customers.

This is the only expense item that makes mention of depreciation. However, this is not the best and most complete indicator that all of the depreciation expense has been combined in the “Technology and Content” expense item.

Quite often, depreciation is a part of the cost of goods sold or sales, general, and administrative expenses, or spread out between the two. It is also often that one cannot identify exactly where depreciation is buried. It should be comforting to know, however, that whether we end up extracting the depreciation expense from cost of goods sold; sales, general, and administrative expenses; or both, it will not affect our EBITDA, which is most crucial for our valuation.

So, since the only mention of depreciation is in the “Technology and Content” section, we will assume depreciation should be removed from this line item. When we get to this line item, we will reduce the amount of those expenses by the value of depreciation.

We now have enough information to lay out a historical income statement for three years down to EBITDA.

Cost of Goods Sold

Amazon reports COGS as “Cost of Sales,” and records 139,156, 165,536, and 233,307, for 2018, 2019, and 2020, respectively. Let us type those numbers into Cells D14, E14, and F14 now.

Notice there is a metric, “COGS as a % of Net Sales,” in row 15. We will discuss later how calculating an expense as a percentage of revenue may or may not be a good indicator of future performance. To best prepare us for that discussion, let’s calculate this metric now. The 2018 COGS as a percentage of net sales will be:

Calculating 2018 COGS as a % of Net Sales (Cell D15)

| Excel Keystrokes | Description |
|------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D14 | 2018 COGS |
| type “/” | Divides |
| select Cell D11 | 2018 Total Net Sales |
| type “Enter” | End |
| Formula Result | =D14/D11 |

This gives us 59.8% in 2018. We can now copy this formula to the right.

Gross Profit

Gross profit is revenue less cost of goods sold.

Calculating 2018 Gross Profit (Cell D16)

| Excel Keystrokes | Description |
|------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D11 | 2018 Total Net Sales |
| type “-” | Subtracts |
| select Cell D14 | 2018 COGS |
| Type “Enter” | End |
| Formula Result | =D11-D14 |

We can calculate the gross profit margin as explained earlier in this chapter.

Calculating 2018 Gross Profit Margin (Cell D17)

| Excel Keystrokes | Description |
|------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D16 | 2018 Gross Profit |
| type “/” | Divides |
| select Cell D11 | 2018 Total Net Sales |
| type “Enter” | End |
| Formula Result | =D16/D11 |

We can copy both formulas to the right and move on to operating expenses (see Table 1.3).

TABLE 1.3 Amazon Historical Gross Profit

| Consolidated Income Statements (in US\$ millions except per share amounts) | | | |
|--|------------------|------------------|------------------|
| Period Ending December 31 | Actuals | | |
| | 2018A | 2019A | 2020A |
| Revenue | | | |
| Net product sales | 141,915.0 | 160,408.0 | 215,915.0 |
| <i>Y/Y growth (%)</i> | | 13.0% | 34.6% |
| Net service sales | 90,972.0 | 120,114.0 | 170,149.0 |
| <i>Y/Y growth (%)</i> | | 32.0% | 41.7% |
| Total Net Sales | 232,887.0 | 280,522.0 | 386,064.0 |
| <i>Y/Y net sales growth (%)</i> | | 20.5% | 37.6% |
| Cost of Goods Sold | | | |
| Cost of Goods Sold | 139,156.0 | 165,536.0 | 233,307.0 |
| <i>COGS as a % of net sales</i> | 59.8% | 59.0% | 60.4% |
| Gross Profit | 93,731.0 | 114,986.0 | 152,757.0 |
| <i>Gross profit margin (%)</i> | 40% | 41% | 40% |

Fulfillment

In row 19, we can hardcode the three historical years for fulfillment expenses. We should have \$34,027, \$40,232, and \$58,517 in years 2018, 2019, and 2020, respectively. We can then calculate fulfillment as a % of net sales as explained earlier in this chapter.

Calculating 2018 Fulfillment as a % of Net Sales (Cell D20)

| Excel Keystrokes | Description |
|------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D19 | 2018 Fulfillment |
| type “/” | Divides |
| select Cell D11 | 2018 Total Net Sales |
| type “Enter” | End |
| Formula Result | =D19/D11 |

We can copy both formulas to the right and move on to the next expense line item.

See Table 1.4 as a guide.

Technology and Content

Given the previous discussion on depreciation, we have assumed the depreciation expense is contained within Technology and Content. So in row 21, we should hardcode the technology and content expenses *less* the depreciation expense. We had earlier identified depreciation expense to be \$15,341, \$21,789, and \$25,251 for 2018, 2019, and 2020, respectively. In 2018, for example, we should have \$28,837 – 15,341. Then 2019 would be \$35,931 – 21,789, and for 2020, \$42,740 – 25,251. We can calculate these expenses as a percentage of net sales, as we did with the Fulfillment.

Calculating 2018 Technology and Content as a % of Net Sales (Cell D22)

| Excel Keystrokes | Description |
|------------------|-----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D21 | 2018 Technology and Content |
| type “/” | Divides |
| select Cell D11 | 2018 Total Net Sales |
| type “Enter” | End |
| Formula Result | =D21/D11 |

TABLE 1.4 Amazon Historical EBITDA

| Consolidated Income Statements (in US\$ millions except per share amounts) | | | |
|--|------------------|------------------|------------------|
| Period Ending December 31 | Actuals | | |
| | 2018A | 2019A | 2020A |
| Revenue | | | |
| Net product sales | 141,915.0 | 160,408.0 | 215,915.0 |
| <i>Y/Y growth (%)</i> | | 13.0% | 34.6% |
| Net service sales | 90,972.0 | 120,114.0 | 170,149.0 |
| <i>Y/Y growth (%)</i> | | 32.0% | 41.7% |
| Total Net Sales | 232,887.0 | 280,522.0 | 386,064.0 |
| <i>Y/Y net sales growth (%)</i> | | 20.5% | 37.6% |
| Cost of Goods Sold | | | |
| Cost of Goods Sold | 139,156.0 | 165,536.0 | 233,307.0 |
| <i>COGS as a % of net sales</i> | 59.8% | 59.0% | 60.4% |
| Gross Profit | 93,731.0 | 114,986.0 | 152,757.0 |
| <i>Gross profit margin (%)</i> | 40% | 41% | 40% |
| Operating Expenses | | | |
| Fulfillment | 34,027.0 | 40,232.0 | 58,517.0 |
| <i>Fulfillment as a % of net sales</i> | 14.6% | 14.3% | 15.2% |
| Technology and Content | 13,496.0 | 14,142.0 | 17,489.0 |
| <i>Technology and content as a % of net sales</i> | 5.8% | 5.0% | 4.5% |
| Marketing | 13,814.0 | 18,878.0 | 22,008.0 |
| <i>Marketing as a % of net sales</i> | 5.9% | 6.7% | 5.7% |
| General and administrative | 4,336.0 | 5,203.0 | 6,668.0 |
| <i>General and administrative as a % of net sales</i> | 1.9% | 1.9% | 1.7% |
| Other operating expense (income), net | 296.0 | 201.0 | (75.0) |
| <i>Other operating expense as a % of net sales</i> | 0.1% | 0.1% | 0.0% |
| Total operating expenses | 65,969.0 | 78,656.0 | 104,607.0 |
| EBITDA | 27,762.0 | 36,330.0 | 48,150.0 |
| <i>EBITDA margin (%)</i> | 11.9% | 13.0% | 12.5% |

We can copy both formulas to the right and move on to the next expense line item. See Table 1.4 as a guide.

Marketing, General and Administrative, Other Operating Expense (Income), Net

The next three expense line items can be hardcoded as we have done with the Fulfillment expenses. For each line item, we can then calculate the respective margins. (See Table 1.4 as a guide.)

Once complete, all expense line items can be totaled.

Total Operating Expenses

We can now total each of these operating expense line items, taking care not to include the margin metrics.

Calculating 2018 Total Operating Expenses (Cell D29)

| Excel Keystrokes | Description |
|------------------|--|
| type “=” | Enters into “formula” mode |
| select Cell D19 | Selects the first expense, “Fulfillment” |
| type “+” | Adds |
| select Cell D21 | Selects the next expense, “Technology and Content” |
| type “+” | Adds |
| select Cell D23 | Selects the next expense, “Marketing” |
| type “+” | Adds |
| select Cell D25 | Selects the next expense, “General and Administrative” |
| type “+” | Adds |
| select Cell D27 | Selects the next expense, “Other Operating Expense” |
| type “Enter” | End |
| Formula Result | =D19+D21+D23+D25+D27 |

Copy this formula to the right.

EBITDA

We can now calculate EBITDA as gross profit less the operating expenses.

Calculating 2018 EBITDA (Cell D30)

| Excel Keystrokes | Description |
|------------------|-------------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D16 | 2018 Gross Profit |
| type “-” | Subtracts |
| select Cell D29 | 2018 Total Operating Expenses |
| type “Enter” | End |
| Formula Result | =D16-D29 |

We can calculate the EBITDA margin.

Calculating 2018 EBITDA Margin (Cell D31)

| Excel Keystrokes | Description |
|------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D30 | 2018 EBITDA |
| type “/” | Divides |
| select Cell D11 | 2018 Total Net Sales |
| type “Enter” | End |
| Formula Result | =D30/D11 |

We can copy both formulas to the right. (See Table 1.4.)

Beyond EBITDA

Once we have EBITDA, we can continue identifying the rest of Amazon’s income statement line items.

Depreciation and Amortization

We have already identified the depreciation. We can hardcode \$15,341, \$21,789, and \$25,251 for 2018, 2019, and 2020, respectively into Row 32. See Table 1.5.

TABLE 1.5 Amazon Historical EBIT

Consolidated Income Statements (in US\$ millions except per share amounts)

| Period Ending December 31 | Actuals | | |
|-------------------------------|----------|----------|----------|
| | 2018A | 2019A | 2020A |
| EBITDA | 27,762.0 | 36,330.0 | 48,150.0 |
| <i>EBITDA margin (%)</i> | 11.9% | 13.0% | 12.5% |
| Depreciation and amortization | 15,341.0 | 21,789.0 | 25,251.0 |
| EBIT | 12,421.0 | 14,541.0 | 22,899.0 |
| <i>EBIT margin (%)</i> | 5.3% | 5.2% | 5.9% |

EBIT

EBIT is EBITDA less depreciation. We can also calculate the EBIT margin, as we have done previously.

Calculating 2018 EBIT (Cell D33)

| Excel Keystrokes | Description |
|------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D30 | 2018 EBITDA |
| type “-” | Subtracts |
| select Cell D32 | 2018 Depreciation |
| type “Enter” | End |
| Formula Result | =D30-D32 |

We can calculate the EBIT margin.

Calculating 2018 EBIT Margin (Cell D34)

| Excel Keystrokes | Description |
|------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D33 | 2018 EBIT |
| type “/” | Divides |
| select Cell D11 | 2018 Total Net Sales |
| type “Enter” | End |
| Formula Result | =D33/D11 |

See Table 1.5.

Other Income

We can now hardcode other income. It is important here to consider the impact that other income has on the income statement. Notice how every expense line item is shown as a positive number even though the expense is *reducing* net income. Sometime, other line items like other income or non-recurring events are also listed as positive but may be *increasing* net income. This can lead to much confusion and erroneous reporting. My strong recommendation is, no matter how these line items are represented on the original set of financials, to simply show every expense or reduction in net income as positive (of course, except for revenue), and every income or increase in net income as negative. This will first ensure one who is analyzing the financials can at a glance identify which line items are actually increasing versus reducing income and second keep a consistent formulae flow in that EBITDA, EBIT, and net income are always subtracting from each individual line item. Had we not adjusted to this consistent logic we would have to add some line items and subtract others – and this can lead to common mistakes. We will, at the end of the income statement, make sure we can match the Net Income we calculate to Amazon’s net income to ensure all is flowing properly.

Here it clearly states by the line-item name “Other Income” (expense), that an expense is shown in parenthesis. I would like to stick to the logic of the other above expenses showing an expense as a positive number. So, in 2018, “183” should be hardcoded; and the opposite for 2019, “(203)” where the positive number is actually income. (See Table 1.6.)

TABLE 1.6 Amazon Historical EBT

Consolidated Income Statements (in US\$ millions except per share amounts)

| Period Ending December 31 | Actuals | | |
|-----------------------------|--------------|--------------|----------------|
| | 2018A | 2019A | 2020A |
| EBIT | 12,421.0 | 14,541.0 | 22,899.0 |
| <i>EBIT margin (%)</i> | 5.3% | 5.2% | 5.9% |
| Other Income | 183.0 | (203.0) | (2,371.0) |
| Interest | | | |
| Interest expense | 1,417.0 | 1,600.0 | 1,647.0 |
| Interest income | (440.0) | (832.0) | (555.0) |
| Net Interest Expense | 977.0 | 768.0 | 1,092.0 |
| Earnings before Tax (EBT) | 11,261.0 | 13,976.0 | 24,178.0 |
| <i>EBT margin (%)</i> | 4.8% | 5.0% | 6.3% |

Interest

Amazon, like most companies, reports interest expense separate from interest income. As already mentioned with other income, some companies report interest expense as a positive number and others as a negative number. I strongly recommend staying consistent with the logic of all expenses shown as positive. (See Table 1.6.)

Now we can sum both the interest expense and interest income together to calculate net interest expense in line 39.

Calculating 2018 Net Interest Expense (Cell D39)

| Excel Keystrokes | Description |
|------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D37 | 2018 Interest Expense |
| type “+” | Adds |
| select Cell D38 | 2018 Interest Income |
| type “Enter” | End |
| Formula Result | =D37+D38 |

Note typing “Alt” + “=” is a quick way to sum up line items in sequence. Refer to Table 1.6 as a guide.

EBT

Remember the formulas:

$$\text{EBIT} - \text{Other Income} - \text{Interest} = \text{EBT}$$

$$\text{EBT margin} = \text{EBT} / \text{Total Revenue}$$

Calculate EBT and refer to Table 1.6 as a guide.

This number should match the “Income before income taxes” from Amazon’s income statement. This is a good “sanity check” to be sure all hardcoded numbers have been properly input and everything is flowing correctly. (See Table 1.7.)

Taxes

Take note of the total number of taxes on Amazon’s income statement, listed as “Provision for Income Taxes.” After hardcoding, we can calculate the tax

TABLE 1.7 Amazon Historical Net Income from Continuing Operations

Consolidated Income Statements (in US\$ millions except per share amounts)

| Period Ending December 31 | Actuals | | |
|---------------------------------------|----------|----------|----------|
| | 2018A | 2019A | 2020A |
| Earnings before Tax (EBT) | 11,261.0 | 13,976.0 | 24,178.0 |
| <i>EBT margin (%)</i> | 4.8% | 5.0% | 6.3% |
| Income tax expense | 1,197.0 | 2,374.0 | 2,863.0 |
| <i>All-in effective tax rate (%)</i> | 10.6% | 17.0% | 11.8% |
| Net Income from Continuing Operations | 10,064.0 | 11,602.0 | 21,315.0 |

rate, necessary for our projections and further analysis, as taxes divided by EBT. Refer to Table 1.7.

Calculating 2018 Tax Rate (Cell D43)

| Excel Keystrokes | Description |
|------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell D42 | 2018 Income Tax Expense |
| type “/” | Divides |
| select Cell D40 | 2018 EBT |
| type “Enter” | End |
| Formula Result | =D42/D40 |

We can now copy this formula to the right.

Net Income from Continuing Operations

Remember, EBT – Taxes = Net Income. (See Table 1.7.)

Non-Recurring and Extraordinary Items

Amazon has not clearly defined any non-recurring or extraordinary items. I kept this section in the model with some standard examples of line items you might see in an income statement. Leave them “0” for this model. You can then total each line item into the “Total Non-Recurring Events” line item.

Net Income (after Non-Recurring Events)

We now calculate the net income after non-recurring events as net income from continuing operations less non-recurring events. (See Table 1.8.)

Distributions

The next line item in Amazon's income statement after tax is Equity-method investment activity (net of tax). This is effectively noncontrolling interest. Be careful of the flow, as \$9MM in 2018 is actually increasing the net income. So to stay within our standard practice of having an *expense* as positive and *income* as negative, we want to reverse the signs hardcoding "(9)" in 2018 and so on for the next years.

Although Amazon does not pay dividends, I left the line item here in row 53 to illustrate where it should be located, as it is a relatively common line item to have. This can stay hardcoded at "0." (See Table 1.8.)

Net Income (as Reported)

We can now calculate the net income (as reported) as net income (after non-recurring events) less equity method investment activity and dividends.

TABLE 1.8 Amazon Historical Net Income

| Period Ending December 31 | Actuals | | |
|---|-----------------|-----------------|-----------------|
| | 2018A | 2019A | 2020A |
| Consolidated Income Statements (in US\$ millions except per share amounts) | | | |
| Non-Recurring Events | | | |
| Discontinued operations | 0.0 | 0.0 | 0.0 |
| Extraordinary items | 0.0 | 0.0 | 0.0 |
| Effect of accounting changes | 0.0 | 0.0 | 0.0 |
| Other items | 0.0 | 0.0 | 0.0 |
| Total Non-Recurring Events | 0.0 | 0.0 | 0.0 |
| Net Income (after Non-Recurring Events) | 10,064.0 | 11,602.0 | 21,315.0 |
| Equity-method investment activity, net of tax | (9.0) | 14.0 | (16.0) |
| Dividends paid on common stock | 0.0 | 0.0 | 0.0 |
| Net Income (as Reported) | 10,073.0 | 11,588.0 | 21,331.0 |

This net income should match with the net income on Amazon's income statement in the 10-K. This again is a great way to make sure that you not only have every line item properly hardcoded into the model but have all income and expenses properly flowing in the correct direction. (See Table 1.8.)

Shares and EPS

We can now hardcode in the basic and diluted shares as Amazon has reported into Rows 59 and 60 before calculating EPS. We can then calculate the basic EPS by dividing the net income (as reported) by the number of basic shares outstanding, and the diluted EPS by dividing the net income (as reported) by the number of diluted shares outstanding. The purpose of calculating EPS here is to ensure we have metrics that match what the company reported for accuracy in our analysis. It is, however, common to calculate EPS using our adjusted net income depending on the purpose of the analysis.

Calculating 2018 Basic EPS (Cell D56)

| Excel Keystrokes | Description |
|------------------|-------------------------------|
| type "=" | Enters into "formula" mode |
| select Cell D54 | 2018 Net Income (as reported) |
| type "/" | Divides |
| select Cell D59 | 2018 Basic Shares |
| type "Enter" | End |
| Formula Result | =D54/D59 |

We repeat the same process for the diluted EPS, using diluted shares in place of basic shares.

Calculating 2018 Diluted EPS (Cell D57)

| Excel Keystrokes | Description |
|------------------|-------------------------------|
| type "=" | Enters into "formula" mode |
| select Cell D54 | 2018 Net Income (as reported) |
| type "/" | Divides |
| select Cell D60 | 2018 Diluted Shares |
| type "Enter" | End |
| Formula Result | =D54/D60 |

TABLE 1.9 Amazon Historical EPS

| Consolidated Income Statements (in US\$ millions except per share amounts) | | | |
|--|---------|-------|-------|
| Period Ending December 31 | Actuals | | |
| | 2018A | 2019A | 2020A |
| Earnings per Share (EPS) | | | |
| Basic | 20.68 | 23.46 | 42.66 |
| Diluted | 20.15 | 22.99 | 41.83 |
| Average Common Shares Outstanding | | | |
| Basic | 487 | 494 | 500 |
| Diluted | 500 | 504 | 510 |

We now have a complete historical income statement for Amazon. We are now ready to make projections. (See Table 1.9.)

Notice that although the net income matches the Amazon financials, the EPS is slightly off in some cases. This is likely because the share count given is rounded to millions. Had we been given actual share counts, we could match EPS to the decimal. This is not a significant issue, as EPS is not used throughout the model; this is just output for valuation. The small difference will not affect our analysis.

INCOME STATEMENT – MAKING PROJECTIONS

Making projections is no easy task. One needs to spend much time understanding and researching the core business model, how it generates revenue, its cost structure, and beyond to best get a handle on the next years of its performance. Ideally, a Wall Street research analyst will have had years of experience following and keeping close watch on the business, and would have a good handle on its future trends in order to make good projections. That being said, there are methods to make fair generalizations, though broad, but strong enough to use as tools to assess overall company valuation. Remember: A good model is a functional and flexible one, and is one that is designed to easily be adjusted, to grow, and to evolve as we gain more knowledge and insight into the inner workings of business, therefore slowly honing a perfect valuation.

Revenue

Revenue, for example, can be quite difficult to predict. Amazon posted \$386,064 million in 2020 total net sales, a 37.6% increase from 2019. How will we know what revenue will be in 2021? The truth is, it is almost

impossible to be 100% sure. We will need to make an assumption with the understanding that that assumption will come with a degree of uncertainty, and may therefore change.

So how can you best make rational predictions for 2021? It is important to research and understand the company's business model, gathering as much information as you can to make your own best judgment. Revenue, for example, is almost always driven by a product of pricing and volume. So, when thinking about projecting revenue, your research should focus on understanding the company's pricing and volume. What initiatives is the company taking to increase its volume in 2021? Is it increasing its advertising? Is it acquiring other businesses or customers? What outside forces could affect the company's pricing model? Is it increasing its prices? Is it facing tremendous market competition and must lower its prices?

In addition to the research, we recommend the following sources:

1. *Investor presentations.* Try to look for a recent investor presentation on the investor relations section of the company website. These presentations are typically designed to explain recent and future performance to existing or future investors of the company's stock. These presentations can contain high-level projections.
2. *Earnings calls.* One can easily find when the next earnings call is on the investor relations section of the website. At the earnings call, you can listen to the management speak about the company's most recent financial performance. Management also sometimes gives guidance on the company's future performance.
3. *Wall Street research.* If you can get your hands on an equity research report written by a Wall Street analyst who has followed the company for several years, that report would contain estimated future performance.
4. *Data sources.* Yahoo! Finance, Thomson, First Call, and Bloomberg are examples of data sources that contain Wall Street consensus estimates. Yahoo! Finance is a free resource, so, if you do not have access to a paid service, this can serve as a good reference.

These are just several examples of where one can get guidance. We recommend not depending on any one single source of information, but gathering as many sources as you can and cross-checking with your research to make the strongest educated estimates possible.

For purposes of this analysis, and knowing that the research can take a considerable amount of time, we can take a first-guess assumption and leave the detailed research for once the model is complete. We can, for example,

assume that revenue will continue to grow at its historical 37.6% rate into 2021.

We can also go to a data source such as Yahoo! Finance. One can, for example, go to finance.yahoo.com and type “AMZN” (the ticker for Amazon) in the “Quote Lookup” bar. There is a lot of great information here that can be used as a first cut assumption. It is not the best source, but it is a free source, so it is a good starting point.

You can now select “Analysis” in the menu bar. This data is a consensus by several Wall Street analysts who follow Amazon. (See Figure 1.7.) The second table from the top, titled “Revenue Est.,” gives us the consensus revenue. On the far right, we can see the average revenue estimates for 2021 and 2022 are \$490.35Bn and \$581.65Bn, respectively. It is also important to note the high and low estimates underneath the average.

As a “first cut,” we should expect our projected revenue to be within the high and low range, and near the average. (It does not have to match exactly.) So, our earlier assumption of taking 2020’s 37.6% growth for 2021 ($\$386,064 \times 1.376$) will give us \$531,224 – significantly above the average and well above even the high estimate of \$508.88. So, for Amazon’s case,

The screenshot shows the Yahoo! Finance website for Amazon (AMZN). The 'Analysis' tab is selected, displaying two tables of estimates. The first table is 'Earnings Estimate' and the second is 'Revenue Estimate'. Both tables compare current and next quarter estimates, current year, and next year (2022) estimates. The revenue table shows a significant increase in the average estimate from 2021 to 2022.

| yahoo! finance | | | | |
|---------------------------------------|-------------------------|----------------------|---------------------|------------------|
| Search for news, symbols or companies | | | | |
| Summary | Company Outlook | Chart | Conversations | Statistics |
| Historical Data | Profile | Financials | Analysis | Options |
| Currency in USD | | | | |
| Earnings Estimate | Current Qtr. (Jun 2021) | Next Qtr. (Sep 2021) | Current Year (2021) | Next Year (2022) |
| No. of Analysts | 36 | 36 | 46 | 46 |
| Avg. Estimate | 12.21 | 12.92 | 55.74 | 72.09 |
| Low Estimate | 9.77 | 6.84 | 42.68 | 45.11 |
| High Estimate | 15.18 | 17.7 | 71.13 | 96.53 |
| Year Ago EPS | 10.3 | 12.37 | 41.83 | 55.74 |
| <hr/> | | | | |
| Revenue Estimate | Current Qtr. (Jun 2021) | Next Qtr. (Sep 2021) | Current Year (2021) | Next Year (2022) |
| No. of Analysts | 36 | 36 | 45 | 45 |
| Avg. Estimate | 115.17B | 118.7B | 490.35B | 581.65B |
| Low Estimate | 112.15B | 110.97B | 473.77B | 547.19B |
| High Estimate | 120.76B | 123.56B | 508.88B | 612.25B |
| Year Ago Sales | 88.91B | 96.14B | 386.06B | 490.35B |
| Sales Growth (year/est) | 29.50% | 23.50% | 27.00% | 18.60% |

FIGURE 1.7 Yahoo! Finance AMZN Estimates

taking the last year's revenue growth may be too aggressive. Notice at the bottom of the table a consensus revenue growth estimate is provided for the two years of 27.0% and 18.6% for 2021 and 2022, respectively. These percentages are quite a drop from the prior year's 37.6%. It's not unusual to see growth percentages, especially if they are so large, to scale down over time; we can use this to our benefit when projecting after the next two years. Let's use these consensus projections for now. This, of course, needs to be adjusted based on all our further research on the company. So, we will note that our assumptions are pending further research.

Note that the information found online changes frequently. If you find this information online yourself, it is likely to have changed. If you are building the model as you are reading this book, which we recommend, you should use the data in the exhibits found in this book to match your numbers to our solution.

In this model, we are going to project the total revenue, not the individual revenue line items "Net product sales" and "Net service sales." It is up to you to decide how detailed you would like your analysis to be. In many cases, revenue can be broken out by product, volume, and even geography. It is also not uncommon to have a completely separate revenue schedule and analysis that will feed into the income statement. Let's keep our revenue projections at this high level for now until we decide further detail is needed.

We can now start inputting our revenue projections into Excel.

So, we can type 27.0% into Cell G12. 27.0% as a hardcode and an assumption driver; remember to color the font blue. This percentage will drive the actual 2021 total net sales projection. We want the 2021 total net sales to be driven off our assumption or:

$$2021 \text{ Total Net Sales} = 2020 \text{ Total Net Sales} \times (1 + 2021 \text{ Net Sales Growth Assumption}\%)$$

Calculating 2021 Total Net Sales (Cell G11)

| Excel Keystrokes | Description |
|------------------|---|
| type "=" | Enters into "formula" mode |
| select Cell F11 | 2020 Total Net Sales |
| type "*" | Multiplies |
| type "(1+" | Begins the $(1 + x\%)$ portion of the formula |
| select Cell G12 | 2021 Growth Assumption |
| type ")" | Closes the $(1 + x\%)$ portion of the formula |
| type "Enter" | End |
| Formula Result | $=F11*(1+G12)$ |

This will give us 2021 total revenue of \$490,301.3. Notice this is very close to the average revenue projection in 2021 from Figure 1.7.

We can copy the revenue growth formula (Cell G11) to the right all the way through to 2025. We don't want to copy G12, however, because we will be adjusting these assumptions each year.

Using the analyst estimates, we can hardcode the 18.6% for the 2022 estimate into cell H12, giving us a 2022 net sales value of \$581,497.3, again right in line with the analyst estimates.

What can we now do for the next years? One idea is to find a trend for the year-over-year reduction in net sales growth. Let's calculate what that would be for 2021 and 2022 and assess. We first want to create a new line in the template underneath the "Y/Y Net Sales Growth (%)" line.

A quick way to add a row is by moving the cursor to row 13 where we want the new row to be located. The "Add row" option may be in a different location depending on which version of Excel you have. For the Microsoft 365 version, it is located in "Home," "Insert," then "Insert Sheet Row." You can also try using the hotkeys: while holding down "Shift," tap the "Spacebar" and let go of all keys. This will highlight the entire row. Now you can use the hotkey combination "Ctrl" + "Shift" + "+," which adds a row. Once the row has been added, we can title it "Y/Y Growth (%) Decline" in cell C13. "Ctrl" + "I" is a quick way to italicize the title. We can then calculate the percentage decline in 2021 and 2022 for analysis.

Calculating 2021 Total Net Sales % Decline (Cell G13)

| Excel Keystrokes | Description |
|------------------|--|
| type "=" | Enters into "formula" mode |
| select Cell G12 | 2021 Total Net Sales Growth (%) |
| type "/" | Divides |
| select Cell F12 | 2020 Total Net Sales Growth (%) |
| type "-1" | Finalizes the percent change calculation |
| type "Enter" | End |
| Formula Result | = G12 / F12 - 1 |

We can copy this formula *one cell* to the right into H13; we don't want to copy into 2023 because we will be making our own assumptions after 2022.

This should give a 28.2% *decline* in 2021 and a 31.1% *decline* in 2022. So, there is a fairly consistent projected decline of ~30% that we can model going forward. We can use this projected decline to estimate future revenue growth.

Let's simply take the 31.1% projected decline forward by linking Cell I13 from Cell H13; Cell I13 will read "=H13." Even though the assumption in Cell I13 is not a hardcoded, we still want to color it blue to indicate it is an assumption driver.

Note: Another option would be to just type "31.1%" into cell I13. I chose to link directly in, which I prefer, so that it is completely explicit where the assumption is coming from. Just be aware that if you type "31.1%" into the model as opposed to linking in from cell H13, your numbers will be slightly different due to rounding of the decimal. I would recommend linking the cell in as I have done so you can tie to the rest of the numbers in the book.

We can also now copy cell I13 to the right all the way through 2025 since we will continue this same assumption going forward. Some may feel it is easier to have rounded the decline down to an even 30%. That would have also been okay; it's a small difference so this will not impact the billion-dollar value estimate at the end of this analysis.

Now that we have hardcoded growth percent decline estimated, we can calculate our projected revenue growth for 2023.

Calculating 2023 Y/Y Net Sales Growth (Cell I12)

| Excel Keystrokes | Description |
|------------------|--|
| type "=" | Enters into "formula" mode |
| select Cell H12 | 2022 Y/Y Net Sales Growth (%) |
| type "*" | Multiplies |
| type "(1+" | Begins the (1 + x%) portion of the formula |
| select Cell I13 | 2023 Assumption |
| type ")" | Closes the (1 + x%) portion of the formula |
| type "Enter" | End |
| Formula Result | =H12*(1+I13) |

This would give us a 12.8% sales growth and \$656,006.5MM sales in 2023.

We can copy Cell I12 and I13 to the right all the way through 2025. (See Table 1.10.)

Cost of Goods Sold

Next let's look at the costs. Again, fully understanding and researching each cost is important in best estimating its future performance. However, such

TABLE 1.10 Amazon Projected Revenue

| Period Ending December 31 | Actuals | | | | | Estimates | | | | |
|---|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--|--|
| | 2018A | 2019A | 2020A | 2021E | 2022E | 2023E | 2024E | 2025E | | |
| Consolidated Income Statements (in US\$ millions except per share amounts) | | | | | | | | | | |
| Revenue | | | | | | | | | | |
| Net product sales | 141,915.0 | 160,408.0 | 215,915.0 | | | | | | | |
| <i>YY growth (%)</i> | | 13.0% | 34.6% | | | | | | | |
| Net service sales | 90,972.0 | 120,114.0 | 170,149.0 | | | | | | | |
| <i>YY growth (%)</i> | | 32.0% | 41.7% | | | | | | | |
| Total Net Sales | 232,887.0 | 280,522.0 | 386,064.0 | 490,301.3 | 581,497.3 | 656,006.5 | 713,912.0 | 757,323.5 | | |
| <i>YY net sales growth (%)</i> | | 20.5% | 37.6% | 27.0% | 18.6% | 12.8% | 8.8% | 6.1% | | |
| <i>YY growth (%) decline</i> | | | | (28.2%) | (31.1%) | (31.1%) | (31.1%) | (31.1%) | | |

detail may be as difficult to project as the revenue. There are a couple of ways to estimate future costs. First, it is important to consider whether the costs are fixed or variable. A fixed cost is relatively static and may grow a certain percentage year over year. Rent, for example, can be considered a fixed cost as it may only increase 5–10% each year, independent of the growth in revenue. In contrast, a variable cost will increase in direct proportion to the growth of the business, most commonly determined by the revenue growth. In other words, if the revenue is increasing by 10%, the costs will also increase by 10%. If the revenue decreases by 4%, the costs will also decrease by 4%.

Quite often, cost of goods sold is considered a variable cost. If your revenue is declining, you are most likely selling less product, so your costs should also be decreasing. Conversely, if your revenue is increasing, you are most likely selling more product, so cost of goods sold should be increasing in direct proportion to the revenue. There are, however, exceptions. For example, a revenue increase could be due to an increase in pricing, not because more product has been sold. In this case maybe costs should not be increasing at all (no change in volume). Or, a further twist, maybe the company is raising its prices because the manufacturer who is providing raw materials has raised its prices, so effectively both revenue and costs should be increasing proportionally. This is where a deeper understanding of the company's business model and cost structure comes in handy.

Historical trends can help us determine how best to make initial projections, with the knowledge that we can later tweak as we build a more fundamental understanding of the business. If we analyze the historical cost of goods sold as a percentage of revenue over the past three years, we notice the costs have been around 60% of total revenue each year. This consistent trend is a strong indicator that the cost of goods sold could be variable, growing at the same rate as revenue. If the percentages had not been consistent over the past three years, further research would need to be done to better understand the reasons for the variability. The company could have significantly changed its business model or taken other initiatives to significantly increase or decrease its costs in relation to its revenue. In that case, one could listen to the last earnings call or earnings release to get management's views on whether costs of goods sold is expected to increase or decrease.

So, for next year, we want to make an assumption based on the prior year's trends, adjusted based on our research. There are several common methods:

1. Take an average percentage of the last three years.
2. Take a maximum percentage of the last three years (conservative approach).
3. Take a minimum percentage of the last three years (aggressive approach).
4. Take the last year's percentage.
5. Have the percentages steadily increase or decrease year over year.

Note that these are five of the most common methods, but you may look for and identify other trends that may work better based on the individual company's past performance such as percentages decreasing for the next year then staying constant for the next four years.

We always recommend a conservative approach as long as the most conservative approach is within logical reason, so we immediately eliminate option #3. We acknowledge that taking the average over the past three years (option #1) can be a good approach, but we notice that the maximum percentage of the last three years also happens to be the same as the last year's percentage, which satisfies two conditions (options #2 and #4), which is preferred. We do acknowledge that the percentages are slightly increasing year over year, but caution that a further increase without solid evidence could be too much of an increase. So let's take 60.4% as the projection for 2021–2025. Note that all of the methods in the list can be considered accurate; our recommended approach is simply a suggestion. Remember, the point is to build out a complete model with broad assumptions, then go back and tweak such assumptions as you research and get a stronger understanding of the business.

We can link cell F16 into cell G16 by typing “=F16” into cell G16. Or you can simply select Cell G16, type the equals sign, then select cell F16 and hit enter. We will make this blue because, although it is not a hardcode, it is an assumption.

Now we can calculate the projections. The formula for projecting cost of goods sold in 2021 will be:

$$2021 \text{ COGS} = 2021 \text{ COGS as a \% of net sales} \times 2021 \text{ Total net sales}$$

Calculating 2021 COGS (Cell G15)

| Excel Keystrokes | Description |
|------------------|-------------------------------|
| type “=” | Enters into “formula” mode |
| select Cell G16 | 2021 COGS as a % of Net Sales |
| type “*” | Multiplies |
| select Cell G11 | 2021 Total Net Sales |
| type “Enter” | End |
| Formula Result | =G16*G11 |

This will give us 2021 COGS of \$296,299.9. We can copy Cell G15 and G16 to the right all the way through 2025. We can also now calculate future gross profit and the gross profit margin. We have already calculated these formulas in 2010 through 2012, so we can just copy Cells F17 and F18 through 2025 as well. (See Table 1.11.)

Operating Expenses

This same procedure can be repeated for each cost item on the income statement: conducting adequate research, analyzing the historical trends, and considering whether each cost is fixed or variable in order to best determine which of the five methods should be used to project the costs forward.

Let's analyze the company's fulfillment expense. If we look at the historical expense as a percentage of revenue over the past three years, we notice the costs were 14.6%, 14.3%, and 15.2% for 2018, 2019, and 2020, respectively. The costs have been slightly bouncing around; it is not certain if the 2019 drop to 14.3 was a one-time dip or if the 15.2 was a defined increase that will continue. This is where further research may reveal a management discussion on these expenses clarifying. Unfortunately, I could not find any clear determination on 2021 outlook. An average of the three years would give us 14.7, which may be a good assumption. However, taking the maximum of the past three years is most conservative, which we like. It is also the same as the least-year approach. I always prefer when more than one method points to the same assumption. So, let's go with the maximum or last-year approach for now, which both point to 15.2, keeping in mind that taking the average or using another approach would not necessarily be wrong; we can always go back and tweak our model as we get to know more about the company.

We can take the 2020 15.2% as our future assumption for 2021–2025. Link cell F21 into cell G21, by typing “=F21” in cell G21. Then we can use the formula below to make our projections.

$$2021 \text{ Fulfillment} = 2021 \text{ Fulfillment as a \% of Net Sales} \times 2021 \text{ Total Net Sales}$$

Calculating 2021 Fulfillment (Cell G20)

| Excel Keystrokes | Description |
|------------------|--------------------------------------|
| type “=” | Enters into “formula” mode |
| select Cell G21 | 2021 Fulfillment as a % of Net Sales |
| type “*” | Multiplies |
| select Cell G11 | 2021 Total Net Sales |
| type “Enter” | End |
| Formula Result | =G11*G21 |

This gives us \$74,316.6 in 2021. We can copy Cells G20 and G21 to the right.

We can repeat this procedure for each operating expense, namely, “Technology and Content,” “Marketing,” “General and Administrative,” and “Other operating expense (income), net.” For each expense, take the 2020 percentage of net sales as the future assumption and use that assumption to calculate the projected expense. Let’s go through it one more time for “Technology and Content.” For the rest, you can look to Table 1.12 as a guide.

We can take the 2020 4.5% as our future assumption for 2021–2025. Link cell F23 into cell G23, by typing “=F23” in cell G23. Then we can use the formula below to make our projections.

$$\begin{aligned} \text{2021 Technology and Content} &= \text{2021 Technology and Content} \\ &\text{as a \% of Net Sales} \times \text{2021 Total Net Sales} \end{aligned}$$

Calculating 2021 Technology and Content (Cell G22)

| Excel Keystrokes | Description |
|------------------|---|
| type “=” | Enters into “formula” mode |
| select Cell G23 | 2021 Technology and Content as a % of Net Sales |
| type “*” | Multiplies |
| select Cell G11 | 2021 Total Net Sales |
| type “Enter” | End |
| Formula Result | =G11*G23 |

This gives us \$22,211.0 in 2021. We can copy Cells G22 and G23 to the right.

Repeat this for all Operating Expenses using Table 1.12 as a guide.

We can then copy the Total Operating Expenses, EBITDA, and EBITDA margin % formulas to the right through 2025, cells F30, F31, and F32. We now have an Amazon model complete up through EBITDA. (See Table 1.13.)

Depreciation and Amortization

When building a complete financial model it is recommended to leave projected depreciation empty for now. We will build a depreciation schedule that will contain projected depreciation expense to be linked in here. We can, however, copy the EBIT and EBIT margin % formulas, rows 34 and 35, from 2020 to the right through 2025. (See Table 1.13.)

TABLE 1.12 Amazon Projected Operating Expenses

| Period Ending December 31 | Actuals | | | | | Estimates | | | | |
|---|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|--|--|
| | 2018A | 2019A | 2020A | 2021E | 2022E | 2023E | 2024E | 2025E | | |
| Operating Expenses | | | | | | | | | | |
| Fulfillment | 34,027.0 | 40,232.0 | 58,517.0 | 74,316.6 | 88,139.5 | 99,433.1 | 108,210.0 | 114,790.0 | | |
| <i>Fulfillment as a % of net sales</i> | 14.6% | 14.3% | 15.2% | 15.2% | 15.2% | 15.2% | 15.2% | 15.2% | | |
| Technology and Content | 13,496.0 | 14,142.0 | 17,489.0 | 22,211.0 | 26,342.3 | 29,717.6 | 32,340.8 | 34,307.3 | | |
| <i>Technology and Content as a % of net sales</i> | 5.8% | 5.0% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% | | |
| Marketing | 13,814.0 | 18,878.0 | 22,008.0 | 27,950.2 | 33,148.9 | 37,396.4 | 40,697.3 | 43,172.1 | | |
| <i>Marketing as a % of net sales</i> | 5.9% | 6.7% | 5.7% | 5.7% | 5.7% | 5.7% | 5.7% | 5.7% | | |
| General and administrative | 4,336.0 | 5,203.0 | 6,668.0 | 8,468.4 | 10,043.5 | 11,330.4 | 12,330.5 | 13,080.3 | | |
| <i>General and administrative as a % of net sales</i> | 1.9% | 1.9% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | | |
| Other operating expense (income), net | 296.0 | 201.0 | (75.0) | (95.3) | (113.0) | (127.4) | (138.7) | (147.1) | | |
| <i>Other operating expense as a % of net sales</i> | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | |
| Total Operating Expenses | 65,969.0 | 78,656.0 | 104,607.0 | 132,850.9 | 157,561.2 | 177,750.0 | 193,439.9 | 205,202.6 | | |

TABLE 1.13 Amazon Projected EBITDA and EBIT

| Period Ending December 31 | Actuals | | | | | Estimates | | | | |
|-------------------------------|----------|----------|----------|----------|----------|-----------|----------|----------|--|--|
| | 2018A | 2019A | 2020A | 2021E | 2022E | 2023E | 2024E | 2025E | | |
| EBITDA | 27,762.0 | 36,330.0 | 48,150.0 | 61,150.5 | 72,524.5 | 81,817.3 | 89,039.3 | 94,453.6 | | |
| EBITDA margin (%) | 11.9% | 13.0% | 12.5% | 12.5% | 12.5% | 12.5% | 12.5% | 12.5% | | |
| Depreciation and amortization | 15,341.0 | 21,789.0 | 25,251.0 | | | | | | | |
| EBIT | 12,421.0 | 14,541.0 | 22,899.0 | 61,150.5 | 72,524.5 | 81,817.3 | 89,039.3 | 94,453.6 | | |
| EBIT margin (%) | 5.3% | 5.2% | 5.9% | 12.5% | 12.5% | 12.5% | 12.5% | 12.5% | | |

Other Income

Next we have “Other income.” In order to properly project this line item, we would need a better understanding of what exactly “Other income” is. “Other” is quite vague and could be a composite of many varying line items. Further research reveals this note from page 29 of the 10-K:

“The primary components of other income (expense), net are related to equity warrant valuations, equity securities valuations and adjustments, and foreign currency.”

Although this is not the most explicit explanation, we can get the sense that this income is related to securities, foreign currency, items that may be dependent on market dynamics. Quite often you will come across these line items that will not be clearly identified and may prove to be difficult to project. In such instances we recommend several possible methods to project such line items.

Seven Methods of Projections Again, there will be times where we will come across many line items that are difficult to define and, moreover, difficult to project. In the example of “Other Income,” knowing that the line item may be dependent on market fluctuations, it can be very difficult if not impossible to accurately project. However, in my experience, no matter how the projections of a particular line item could ultimately be derived, there are seven common ways to project a line item:

1. Conservative (the maximum of the past three years)
2. Aggressive (the minimum of the past three years)
3. Average (the average of the past three years)
4. Last year (recent performance)
5. Repeat the cycle
6. Year-over-year growth
7. Project out as a percentage of an income statement or balance sheet line item

These are similar to the five methods mentioned earlier. However, those methods were relating to projecting variable operating expenses driven by revenue generation, so we had a better idea of their nature. These more-complete seven methods apply to projecting all, including more obscure line items such as Other Income that may depend on market fluctuations.

1. *Conservative.* A greater expense would be more conservative. So, taking the maximum amount from the last three years may not be the most accurate, but it is a conservative approach. You can use the “maximum” formula in Excel. For example, “=max(x, y, z)” will give you the largest amount of *x*, *y*, and *z*.

2. *Aggressive.* This is probably not the most recommended method, but it is a possible method, so we will note it. Assuming lower expenses is more aggressive, we would take the minimum amount from the last three years. You can use the “minimum” formula in Excel; “=min(x, y, z)” will give you the minimum amount of x, y, and z.
3. *Average.* This is a popular method, but be warned that quite often, the average of the past three years does not always give the best indication of next year’s performance, especially if one of the past three years was unusual. We mention this specifically, as we see many analysts using the average method as the safety method. We recommend better to carefully go through all various methods before considering the average method. You can use the “average” formula in Excel; “=average(x, y, z)” will give you the average amount of x, y, and z.
4. *Last year.* This is based on the underlying assumption that the company’s performance last year is most indicative of its future performance. If one does not know the business or the specific line item well, it may not be easy to determine if this is the correct method to use. However, a combination of this method and the conservative method is a quite useful indicator. In other words, if last year’s performance also happens to be the most conservative of the last three years, then we have two supporting methodologies that point to the same number. The more support we have, the better.
5. *Repeat the cycle.* Quite often, the last three years’ numbers will be quite volatile, swinging from positive to negative or from a very small value to a large value. Although it is often difficult to identify exactly why, some companies can plan more significant cash flow events every second or third year. For example, companies can make larger capital expenditure investments every third year, and smaller investments in the other years. In this case, you may want to continue this trend. The easiest way to do this is to have the projected 2021 year to equal the first historical year (2018). This way, when copied right, 2022 will equal the 2019 value, 2023 will equal the 2020 value, and so on.
6. *Year-over-year growth.* Here we can assume some year-over-year growth rate to project the line item going forward. The growth rate can be dependent on what exactly that “other” line item is. If it is rent, for example, we can assume the rent will increase by a standard 5% each year. You can also take a look at the historical trends much like what we had done with revenue and apply those trends to the projections.

7. *Project out as a percentage of an income statement or balance sheet line item.* “Other” line items can sometimes grow dependent on another income statement or balance sheet line item. For example, if “other” is made up of employee salaries, you may want to project this line item based on a percentage of SG&A. One way to determine if this can be an appropriate method is by looking at the historical percentage of SG&A. If the percentages have been fairly consistent over the past three years, then this could be a good indication.

It is also important to add comments in Excel describing the exact method you are using. A good analyst should always add explicit detail and explanations to assumptions to the model for clarity.

It is not easy to determine exactly which method to use. But it is important to note that quite often these “other” items are insignificant to the overall valuation. To prove this, choose one of the previous methods, and highlight that line item to be revisited once the model and valuation is complete. Then, try to change your assumptions using one of the methods and see if it significantly changes your valuation. If it does, it is worth further research.

So to give you a good idea as to the thought process, let’s walk through how to analyze the “Other Income” line item.

- **Conservative:** The conservative method, the maximum of three years, would give us 183 from 2018. We like conservative models, so this may be the way to go, but we should first consider all options.
- **Aggressive:** An aggressive approach is not recommended. So let’s cross this one out.
- **Average:** The average method could work, but 2020 is extremely large compared to the prior two years. In fact, there may have been an extraordinary or one-time event in 2020. So the average in this case will not be the best indicator of next year’s performance, as 2020 will skew the results.
- **Last year:** Last year’s value of (2,371) seems to be unusually large, and is income, not an expense, which would be *very* conservative. Let’s rule this one out.
- **Repeat the cycle:** Repeat the cycle is a method to consider, as the 2018 value of 182 is positive yet the 2019 value is negative. It is often the case when line items are dependent on securities that one sees positive and negative swings. Whether it’s related to buying securities in one

year and selling off in the next, or readjusting valuation up in one year and down in the next, the idea of positive and negative swings for this line item may work, with the exception of 2020's unusually large income.

- **Year-over-year growth:** Given the volatility of these numbers, there are clearly no smooth growth trends.
- **Project out as a percentage of an income statement or balance sheet line item:** Given this line item is dependent on market valuation and currency, as opposed to operating line items that are based on revenue growth, we don't believe this would be an accurate method. Therefore, we should also cross this one off.

So, we are left with conservative or repeat the cycle. Since this line item is based off of market dynamics, valuation, currency, I would expect this to continue to swing from positive to negative in the future. Although I typically prefer 100% conservative models, these swings are inevitable. To prove this further, I pulled up some prior reports from Amazon's investor relations site to be sure there were continued historical swings, and there were. The only exception is the large \$2.5Bn 2020 income, which I will assume to be extraordinary. So, I will choose the "repeat the cycle" method but make an exception to repeat only 2018 and 2019 going forward.

This is not an easy decision, as there is not too much support for analysis; if it gives more comfort, we can highlight this assumption, and once the model is complete, try to run the projections both ways to see if that changes our analysis. This will make the process 100% thorough.

So, I would take G36 and link it from D36, effectively taking the 2018 *expense* for 2021. I would then take H36 and link it from E36, taking the 2019 *income* for 2022. Now if we were to copy this to the right, the 2020 assumption would come into play; we want to skip this assumption as an outlier. So, I recommend taking the 2021 assumption for 2023, linking I36 from G36. This can be copied to the right to continue the cycle. This may sound confusing, so please refer to Figure 1.8, where I have laid out the proper formulas for reference.

| | 2021E | 2022E | 2023E | 2024E | 2025E |
|---------|-------|-------|-------|-------|-------|
| Formula | =D36 | =E36 | =G36 | =H36 | =I36 |
| Value | 183 | (203) | 183 | (203) | 183 |

FIGURE 1.8 Amazon Projected Other Income

Modeling Tip

We strongly recommend saving deeper research until the model is completely linked through. I have often seen analysts one or two days after receiving a model assignment still researching the company to best home in on revenue and cost assumptions. It is, as a result, not excusable to mention to your superior that you are still conducting research, when asked to see the model and there is no model to review. It is preferable to first have a completely linked model with even the most general assumptions, and then later go back to tweak and hone assumptions.

Interest Income

When building a complete financial model, it is recommended to leave projected interest expense and interest income empty. We will build a debt schedule that will help us better project interest expense and interest income to be linked in here. We can, however, copy the net interest expense, EBT and EBT margin % formulas, rows 40, 41, and 42, from 2020 to the right through 2025. See Table 1.14.

Taxes

We typically look at the historical taxes as a percentage of EBT to make our projections. However, you may note the historical tax projections are quite low and volatile. First, a low 10.6% in 2018, jumping to a slightly more reasonable 17% in 2019, back down to 11.8% in 2020. Note the typical statutory tax rate in the U.S. is 35%; understand that companies may benefit from several areas of deductions to reduce that rate. This needs some further research. Performing a word search on “Tax Rate” in the 2020 10-K reveals some notes on deductions but no explanation on the actual rate reduction. I would imagine, given the 2020 pandemic, the company taxes may not be standard. Performing the same word search on the 2019 10-K reveals the following note from page 63:

“This amount was primarily comprised of the remeasurement of federal net deferred tax liabilities resulting from the permanent reduction in the US statutory corporate tax rate to 21% from 35%.”

So here Amazon disclosed a 21% tax rate. This seems a bit more reasonable than the 2020 11.8%. For a second strong data point, the company

TABLE 1.14 Amazon Projected EBT

| Consolidated Income Statements (in US\$ millions except per share amounts) | Actuals | | | | | Estimates | | | | |
|--|----------|----------|-----------|----------|----------|-----------|----------|----------|--|--|
| | 2018A | 2019A | 2020A | 2021E | 2022E | 2023E | 2024E | 2025E | | |
| Period Ending December 31 | 183.0 | (203.0) | (2,371.0) | 183.0 | (203.0) | 183.0 | (203.0) | 183.0 | | |
| Other Income | | | | | | | | | | |
| Interest | | | | | | | | | | |
| Interest expense | 1,417.0 | 1,600.0 | 1,647.0 | | | | | | | |
| Interest income | (440.0) | (832.0) | (555.0) | | | | | | | |
| Net Interest Expense | 977.0 | 768.0 | 1,092.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Earnings before Tax (EBT) | 11,261.0 | 13,976.0 | 24,178.0 | 60,967.5 | 72,727.5 | 81,634.3 | 89,242.3 | 94,270.6 | | |
| EBT margin (%) | 4.8% | 5.0% | 6.3% | 12.4% | 12.5% | 12.4% | 12.5% | 12.4% | | |

released their first quarterly report while I was writing this book. Pulling up their Q1 income statement, I calculated an implied tax rate of 20.99%, which, of course, rounds up to 21% – exactly what was stated in 2019.

So let's use 21.0%, hardcoding into Cell G44. We can then calculate the projected income tax expense.

Calculating 2021 Income Tax Expense (Cell G43)

| Excel Keystrokes | Description |
|------------------|----------------------------|
| type “=” | Enters into “formula” mode |
| select Cell G44 | 2021 Tax Rate % |
| type “*” | Multiplies |
| select Cell G41 | 2021 EBT |
| type “Enter” | End |
| Formula Result | =G44*G41 |

This gives us an income tax expense of \$12,803.2. We can copy cells G43 and G44 to the right. (See Table 1.15)

Cell F45 (“Net Income from Continuing Operations”) can now be copied through 2025.

You may have noticed that the 2021 taxes appear very high compared to 2020. Remember, we still do not have depreciation and interest expense in our projections. Once those are linked in, the tax expense will be reduced.

Non-Recurring Events

We have no identified non-recurring events for Amazon, so we can just copy the 0 assumptions, totals, and the “Net Income (after non-recurring events)” Cells F47 through F52 to the right.

Distributions

Equity Method Investment Activity The next line “Equity Method Investment Activity, net of Tax” is difficult to project. As it is related to equity, or possibly valuation, like with “Other Income” we will have to turn to the seven methods. And with the same logic as with “Other Income,” because both were based on equity fluctuations, we see once again positive and negative swings. So, without further deduction, we can easily see the “repeat the cycle” method can work here.

So, we can have G53 as “=D53” and we can copy this to the right.

TABLE 1.15 Amazon Projected Net Income

| Period Ending December 31 | Consolidated Income Statements (in US\$ millions except per share amounts) | | | | | | | | | |
|--|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--|--|
| | Actuals | | | | | Estimates | | | | |
| | 2018A | 2019A | 2020A | 2021E | 2022E | 2023E | 2024E | 2025E | | |
| Earnings before Tax (EBT) | 11,261.0 | 13,976.0 | 24,178.0 | 60,967.5 | 72,727.5 | 81,634.3 | 89,242.3 | 94,270.6 | | |
| <i>EBT margin (%)</i> | 4.8% | 5.0% | 6.3% | 12.4% | 12.5% | 12.4% | 12.5% | 12.4% | | |
| Income Tax Expense | 1,197.0 | 2,374.0 | 2,863.0 | 12,803.2 | 15,272.8 | 17,143.2 | 18,740.9 | 19,796.8 | | |
| <i>All-in effective tax rate (%)</i> | 10.6% | 17.0% | 11.8% | 21.0% | 21.0% | 21.0% | 21.0% | 21.0% | | |
| Net Income from Continuing Operations | 10,064.0 | 11,602.0 | 21,315.0 | 48,164.3 | 57,454.7 | 64,491.1 | 70,501.4 | 74,473.8 | | |
| Non-Recurring Events | | | | | | | | | | |
| Discontinued operations | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Extraordinary items | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Effect of accounting changes | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Other items | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Total Non-Recurring Events | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Net Income (after Non-Recurring Events) | 10,064.0 | 11,602.0 | 21,315.0 | 48,164.3 | 57,454.7 | 64,491.1 | 70,501.4 | 74,473.8 | | |
| Income attributable to equity method investments | (9.0) | 14.0 | (16.0) | (9.0) | 14.0 | (16.0) | (9.0) | 14.0 | | |
| Dividends paid on common stock | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Net Income (as Reported) | 10,073.0 | 11,588.0 | 21,331.0 | 48,173.3 | 57,440.7 | 64,507.1 | 70,510.4 | 74,459.8 | | |

Dividends Since Amazon does not pay dividends, we can simply carry the “0” to the right.

We can now copy F55, the Net Income (as reported) to the right. (See Table 1.15.)

Shares

Basic Shares Outstanding Before calculating earnings per share on rows 57 and 58, we need projected share counts. The best way to project the share count is to first get the most current count of basic shares outstanding. This comes from the first page of the most recent filing (in this case, the Amazon 10-Q report). You can find such additional reports for Amazon by selecting “SEC Filings” in the investor relations section of its website. (See Figure 1.9.)

Adjusting the “Group” dropdown box to “Quarterly Filings” reveals the 10-Q dated April 30, 2021. The bottom of the first page of this report lists the share count of 504,323,736. (See Figure 1.10.) We will use this as the 2021 basic share count in Cell G60. Note that we need to divide this number by 1,000,000 in order to be at equivalent units as the prior years, or hardcode “504.323736.”

Diluted Shares Outstanding and the Treasury Method Diluted shares outstanding is a count of all the shares outstanding in the market plus any stock options or warrants that are exercisable today. What if every stock option

amazon

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Investor Relations

- 01 Annual reports, proxies and shareholder letters
- 02 Quarterly results
- 03 SEC filings
- 04 Press releases
- 05 FAQs
- 06 Corporate governance
- 07 Officers and directors
- 08 Contact us and request documents
- 09 Events

SEC filings

Group: Filing year:

| Filing date | Form | Description | View |
|--------------|------|------------------|---|
| Apr 30, 2021 | 10-Q | Quarterly Report | View Download Print Share |

FIGURE 1.9 Amazon SEC Filings

Washington, D.C. 20549

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2021

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____
Commission File No. 000-22513

AMAZON.COM, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

91-1648660
(I.R.S. Employer Identification No.)

410 Terry Avenue North, Seattle, Washington 98109-5210
(206) 266-1000
(Address and telephone number, including area code, of registrant's principal executive offices)

Securities registered pursuant to Section 12(b) of the Act:

| Title of Each Class | Trading Symbol(s) | Name of Each Exchange on Which Registered |
|--|-------------------|---|
| Common Stock, par value \$0.01 per share | AMZN | Nasdaq Global Select Market |

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| | | | |
|-------------------------|-------------------------------------|---------------------------|--------------------------|
| Large accelerated filer | <input checked="" type="checkbox"/> | Accelerated filer | <input type="checkbox"/> |
| Non-accelerated filer | <input type="checkbox"/> | Smaller reporting company | <input type="checkbox"/> |
| | | Emerging growth company | <input type="checkbox"/> |

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

504,323,736 shares of common stock, par value \$0.01 per share, outstanding as of April 21, 2021

FIGURE 1.10 Amazon 10-Q

holder who holds in-the-money option contracts decides to exercise on those options today? How many shares would be in the market? The diluted share count attempts to estimate that number of shares. There are several resources we can use to obtain the total number of Walmart diluted shares outstanding, but the best way to obtain that diluted share count is to calculate the number ourselves. The best starting point is to pull the most recently reported annual report. Although the Amazon quarterly report is more recent, the quarterly report typically does not contain the option and warrant detail. But it is always worth taking a look first. Now, to get a count of diluted shares, we need to find all notes regarding options and warrants that may be held. Unfortunately performing a quick word search on "options" does not reveal much valuable information. We could also try "warrants" or simply "stock" to uncover some option tables, but nothing is revealed. Ideally, we would get an option table that would indicate all the in-the-money options available. Note in my previous book on Walmart that

| (Shares in thousands) | Restricted Stock and Performance Share Awards | | Restricted Stock Rights | | Stock Options ⁽¹⁾ | |
|--|--|---|-------------------------|---|------------------------------|---|
| | Shares | Weighted-Average Grant-Date Fair Value Per Share | Shares | Weighted-Average Grant-Date Fair Value Per Share | Shares | Weighted-Average Exercise Price Per Share |
| | | | | | | |
| Outstanding at February 1, 2011 | 13,617 | \$52.33 | 16,838 | \$47.71 | 33,386 | \$49.33 |
| Granted | 5,022 | 55.03 | 5,826 | 47.13 | 2,042 | 42.90 |
| Vested/exercised | (3,177) | 51.26 | (3,733) | 47.26 | (13,793) | 50.22 |
| Forfeited or expired | (2,142) | 52.55 | (1,310) | 47.92 | (1,483) | 48.01 |
| Outstanding at January 31, 2012 | 13,320 | \$53.56 | 17,621 | \$47.76 | 20,152 | \$48.21 |
| Exercisable at January 31, 2012 | | | | | 13,596 | \$50.49 |

(1) Includes stock option awards granted under the Stock Incentive Plan of 2010, the Colleague Share Ownership Plan 1999 and the ASD4 Sharesave Plan 2000.

FIGURE 1.11 Walmart Option Table

there is a good example of an options table and an analysis on converting stock options for projections. I've added Walmart's option table here as an example of what to look for.

Figure 1.11 represents all outstanding options and their respective exercise price. If the options are “in-the-money” (meaning the options are exercisable) or the current stock price is above the exercise price, then technically these options could be exercised and should be included into our diluted share count. Now, the Walmart stock price was \$61.36 on January 31, 2012, which was well above any of the strike prices indicated. Notice, however, that only 13,596 of the shares were exercisable. Why not all? It is most likely because many of the stock options listed previously have certain restrictions, such as timing, preventing one from exercising the stock.

If you recall from the beginning of the Making Projections section in this chapter, I mention several valuable resources for making projections. One, which we are using most often, is the filings; the other was market data (we used Yahoo! Finance as an easy example). We have yet to look into investor presentations. If you go to the “Quarterly Results” section of the Amazon's investor relations site, you will find several documents, including “Presentation.” The investor presentation is another valuable resource as it sometimes contains projected information from company management. Because we are looking for stock option information, we would like to use the latest presentation filed, which at the time of writing this book was as of Q1 2021. (See Figure 1.12.)



Q1 2021 Financial Results
Conference Call Slides

FIGURE 1.12 Amazon Q1 2021 Presentation

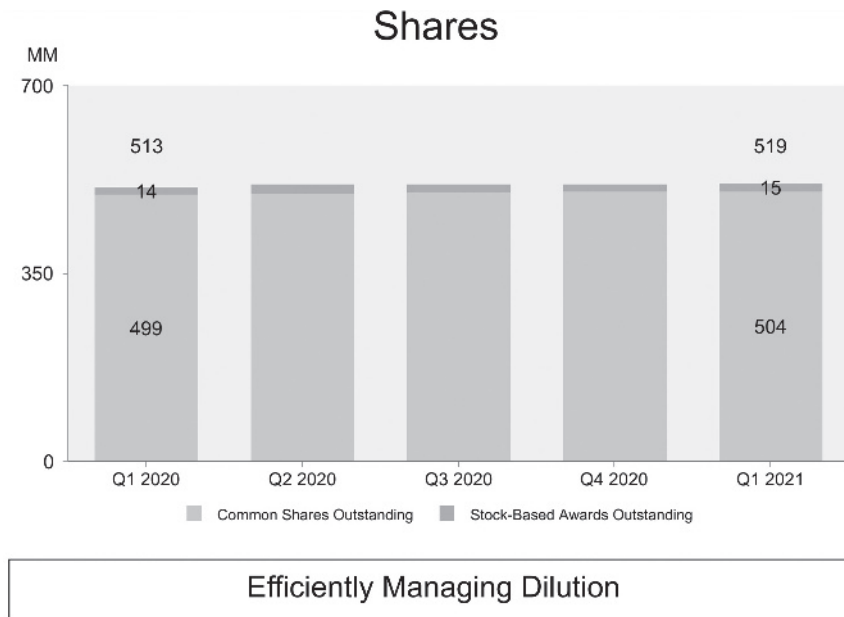


FIGURE 1.13 Amazon Shares

Scrolling down to page 6 reveals a very valuable share chart. See Figure 1.13. Each bar displays the number of shares outstanding in orange and above in blue, the diluted options. The rightmost bar, for Q1 2021, indicates 15MM options outstanding. Although it would be ideal to have more concrete data – a table with a full breakout like Walmart had in Figure 1.11 – this is also direct from the company and the best information we can get at this time. Again, a good analyst would highlight this assumption and continue to research as new and more specific data emerge. So let’s use this information for our diluted share count. In Cell G61 we can simply type “=G60+15.” It is very important when making an assumption like this that the source is noted.

We can have 2022 simply link from 2021 by having H60 equal to G60 and H61 equal to G61. Copy to the right. (See Table 1.16.)

Earnings per Share

We can calculate the projected earnings per share using the same formulas as the historical. It is easiest to just copy the formulas over to the right, from Cells F57 and F58. (See Table 1.16.)

We now have as much of the income statement as we can complete at this point. (See Table 1.17.)

We will continue on to the cash flow and revisit tweaking the income statement assumptions once the model is complete.

TABLE 1.16 Amazon Projected Earnings per Share

| Period Ending December 31 | Actuals | | | | | Estimates | | | | |
|--|---------|-------|-------|-------|--------|-----------|--------|--------|--|--|
| | 2018A | 2019A | 2020A | 2021E | 2022E | 2023E | 2024E | 2025E | | |
| Consolidated Income Statements (in US\$ millions except per share amounts) | | | | | | | | | | |
| Earnings per Share (EPS) | | | | | | | | | | |
| Basic | 20.68 | 23.46 | 42.66 | 95.52 | 113.90 | 127.91 | 139.81 | 147.64 | | |
| Diluted | 20.15 | 22.99 | 41.83 | 92.76 | 110.61 | 124.21 | 135.77 | 143.38 | | |
| Average Common Shares Outstanding | | | | | | | | | | |
| Basic | 487 | 494 | 500 | 504 | 504 | 504 | 504 | 504 | | |
| Diluted | 500 | 504 | 510 | 519 | 519 | 519 | 519 | 519 | | |

| | | | | | | | | |
|---|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Technology and content | 13,496.0 | 14,142.0 | 17,489.0 | 22,211.0 | 26,342.3 | 29,717.6 | 32,340.8 | 34,307.3 |
| <i>Technology and content as a % of net sales</i> | 5.8% | 5.0% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% | 4.5% |
| Marketing | 13,814.0 | 18,878.0 | 22,008.0 | 27,950.2 | 33,148.9 | 37,396.4 | 40,697.3 | 43,172.1 |
| <i>Marketing as a % of net sales</i> | 5.9% | 6.7% | 5.7% | 5.7% | 5.7% | 5.7% | 5.7% | 5.7% |
| General and administrative | 4,336.0 | 5,203.0 | 6,668.0 | 8,468.4 | 10,043.5 | 11,330.4 | 12,330.5 | 13,080.3 |
| <i>General and administrative as a % of net sales</i> | 1.9% | 1.9% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% | 1.7% |
| Other operating expense (income), net | 296.0 | 201.0 | (75.0) | (95.3) | (113.0) | (127.4) | (138.7) | (147.1) |
| <i>Other operating expense as a % of net sales</i> | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Total Operating Expenses | 65,969.0 | 78,656.0 | 104,607.0 | 132,850.9 | 157,561.2 | 177,750.0 | 193,439.9 | 205,202.6 |
| EBITDA | 27,762.0 | 36,330.0 | 48,150.0 | 61,150.5 | 72,524.5 | 81,817.3 | 89,039.3 | 94,453.6 |
| <i>EBITDA margin (%)</i> | 11.9% | 13.0% | 12.5% | 12.5% | 12.5% | 12.5% | 12.5% | 12.5% |
| Depreciation and amortization | 15,341.0 | 21,789.0 | 25,251.0 | | | | | |
| EBIT | 12,421.0 | 14,541.0 | 22,899.0 | 61,150.5 | 72,524.5 | 81,817.3 | 89,039.3 | 94,453.6 |
| <i>EBIT margin (%)</i> | 5.3% | 5.2% | 5.9% | 12.5% | 12.5% | 12.5% | 12.5% | 12.5% |
| Other income | 183.0 | (203.0) | (2,371.0) | 183.0 | (203.0) | 183.0 | (203.0) | 183.0 |

(Continued)

| | | | | | | | | | | |
|--|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------|------------|
| Other items | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Non-recurring Events | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Net Income (after Non-recurring Events) | 10,064.0 | 11,602.0 | 21,315.0 | 48,164.3 | 57,454.7 | 64,491.1 | 70,501.4 | 74,473.8 | | |
| Income attributable to equity method investments | (9.0) | 14.0 | (16.0) | (9.0) | 14.0 | (16.0) | (9.0) | 14.0 | | |
| Dividends paid on common stock | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| Net Income (as Reported) | 10,073.0 | 11,588.0 | 21,331.0 | 48,173.3 | 57,440.7 | 64,507.1 | 70,510.4 | 74,459.8 | | |
| Earnings per Share (EPS) | | | | | | | | | | |
| Basic | 20.68 | 23.46 | 42.66 | 95.52 | 113.90 | 127.91 | 139.81 | 147.64 | | |
| Diluted | 20.15 | 22.99 | 41.83 | 92.76 | 110.61 | 124.21 | 135.77 | 143.38 | | |
| Average common shares outstanding | | | | | | | | | | |
| Basic | 487 | 494 | 500 | 504 | 504 | 504 | 504 | 504 | | |
| Diluted | 500 | 504 | 510 | 519 | 519 | 519 | 519 | 519 | | |

