

Session 2:

How a business makes money

Understanding a business

How to read an annual report

Extracting key metrics

How a business makes \$\$\$

1. Selling goods and services
2. Transaction fees (take a cut of every transaction)
3. Recurring revenue (SaaS, memberships, razor blade model)
4. Asset light vs Asset heavy

1. Selling goods and services

Coca cola



Supermarket (whole foods)

Education and classes

Consulting and coaching



2. Transaction Fees

Paypal



Stock brokerages

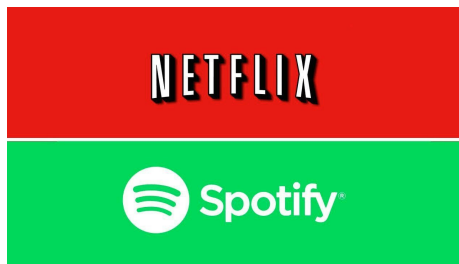
App or android store charges on developers



3. Recurring revenues/ subscriptions

By contract:

- Zoom video subscription
- Gym memberships
- Netflix/ spotify



By nature:

- Razor blades
- Printer and ink cartridges
- Elevator installation and maintenance



4. Asset light vs Asset heavy

Asset light:

- Ebay
- Taobao
- Airbnb
- Uber/ Grab



Asset heavy:

- Amazon shipping
- Tesla
- Manufacturing



Reading annual report (10K)

Why do we read an annual report for?

To understand the business and how it makes money

You cannot think and act like an OWNER if you don't know the business

Don't let the document length scare you. Know what to zoom in and what to ignore!

Duration: can usually be completed in 1 hour

AMAZON.COM, INC.
FORM 10-K
For the Fiscal Year Ended December 31, 2020
INDEX

PART I

Item 1.	 <u>Business</u>
Item 1A.	 <u>Risk Factors</u>
Item 1B.	<u>Unresolved Staff Comments</u>
Item 2.	<u>Properties</u>
Item 3.	<u>Legal Proceedings</u>
Item 4.	<u>Mine Safety Disclosures</u>

PART II

Item 5.	<u>Market for the Registrant's Common Stock, Related Shareholder Matters, and Issuer Purchases of Equity Securities</u>
Item 6.	<u>Selected Consolidated Financial Data</u>
Item 7.	<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>
Item 7A.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>
Item 8.	<u>Financial Statements and Supplementary Data</u>
Item 9.	<u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>
Item 9A.	<u>Controls and Procedures</u>
Item 9B.	<u>Other Information</u>

PART III

Item 10.	<u>Directors, Executive Officers, and Corporate Governance</u>
Item 11.	<u>Executive Compensation</u>
Item 12.	<u>Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters</u>
Item 13.	<u>Certain Relationships and Related Transactions, and Director Independence</u>
Item 14.	<u>Principal Accountant Fees and Services</u>

PART IV

Item 15.	<u>Exhibits, Financial Statement Schedules</u>
Item 16.	<u>Form 10-K Summary</u>
	<u>Signatures</u>

Reading annual report (10K)

Business section: Understand the business, what products it sells, how it makes \$\$\$, who are its customers

Risks: understand their potential risks and threats they face

Extract key metrics

Taken from the **quarterly earnings press release**

Pop Quiz: Why press release and NOT the 10-Q?

Extract the data for last 8 quarters at least. Why?

We'll share the template with you in the next session

Extract key metrics

Revenue

Gross profits

Operating profit or Adjusted EBITDA (for loss making business)

Operating cash flow

Free cash flow

Diluted share count

Other key metrics and KPIs (eg. customers, daily active users)

Cash and debt position

Quick DEMO + Week 2 Homework: Extract key metrics



Week 2 Homework: Extract key metrics

Last 8 Quarters: 2020 Q1-Q4 ; 2021 Q1-Q4

Revenue

Gross profit

Non GAAP operating profit

Net dollar retention for customers with >10 users

Number of paid enterprise customers with more than \$50k ARR

Diluted share count

Operating cash flow

Free cash flow

Cash and debt position

[Click here to access the spreadsheet](#)

[illegible]

Session 2: How to understand a business, key metrics to watch, how companies make money

Trainers: Max Koh and Thomas Chua

Disclaimer

This is neither a recommendation to purchase or sell any of the shares, securities or other instruments mentioned in this document or referred to; nor can this presentation material and/or document be treated as professional advice to buy, sell or take a position in any shares, securities or other instruments. The information contained herein is based on the study and research of the Zen Investing (“the Authors”)’ and are merely the written opinions and ideas of the Authors, and is as such strictly for educational purposes and/or for study or research only.

This information should not and cannot be construed as or relied on and (for all intents and purposes) does not constitute financial, investment or any other form of advice. Any investment involves the taking of substantial risks, including (but not limited to) complete loss of capital. Every investor has different strategies, risk tolerances and time frames. You are advised to perform your independent checks, research or study; and you should contact a licensed professional before making any investment decisions.

The Authors make it unequivocally clear that there are no warranties, express or implied, as to the accuracy, completeness, or results obtained from any statement, information and/or data set forth herein. The Authors, its related and affiliate companies and/or their directors, executives and employees shall in no event be held liable to any party for any direct, indirect, punitive, special, incidental, or consequential damages arising directly or indirectly from the use of any of this material.

Who Offers The Best Prices?



Gross Margins: ?



Gross Margins: ?



Gross Margins: ?

Costco

$$\frac{192,052 - 170,684}{192,052} = 11.1\%$$

COSTCO WHOLESALE CORPORATION
CONSOLIDATED STATEMENTS OF INCOME
(amounts in millions, except per share data)

	52 Weeks Ended August 29, 2021	52 Weeks Ended August 30, 2020	52 Weeks Ended September 1, 2019
REVENUE			
Net sales	\$ 192,052	\$ 163,220	\$ 149,351
Membership fees	3,877	3,541	3,352
Total revenue	195,929	166,761	152,703
OPERATING EXPENSES			
Merchandise costs	170,684	144,939	132,886
Selling, general and administrative	18,461	16,332	14,994
Preopening expenses	76	55	86
Operating income	6,708	5,435	4,737

Walmart

$$\frac{555,233 - 420,315}{555,233} = 24.3\%$$

Walmart Inc. Consolidated Statements of Income

	Fiscal Years Ended January 31,		
	2021	2020	2019
<i>(Amounts in millions, except per share data)</i>			
Revenues:			
Net sales	\$ 555,233	\$ 519,926	\$ 510,329
Membership and other income	3,918	4,038	4,076
Total revenues	559,151	523,964	514,405
Costs and expenses:			
Cost of sales	420,315	394,605	385,301
Operating, selling, general and administrative expenses	116,288	108,791	107,147
Operating income	22,548	20,568	21,957

Target

$$\frac{104,611 - 74,963}{104,611} = 28.3\%$$

(millions, except per share data)	2021	2020	2019
Sales	\$ 104,611	\$ 92,400	\$ 77,130
Other revenue	1,394	1,161	982
Total revenue	106,005	93,561	78,112
Cost of sales	74,963	66,177	54,864
Selling, general and administrative expenses	19,752	18,615	16,233
Depreciation and amortization (exclusive of depreciation included in cost of sales)	2,344	2,230	2,357
Operating income	8,946	6,539	4,658

Which Company Made Most Money for its Shareholders?



Gross Margins: 11.1%

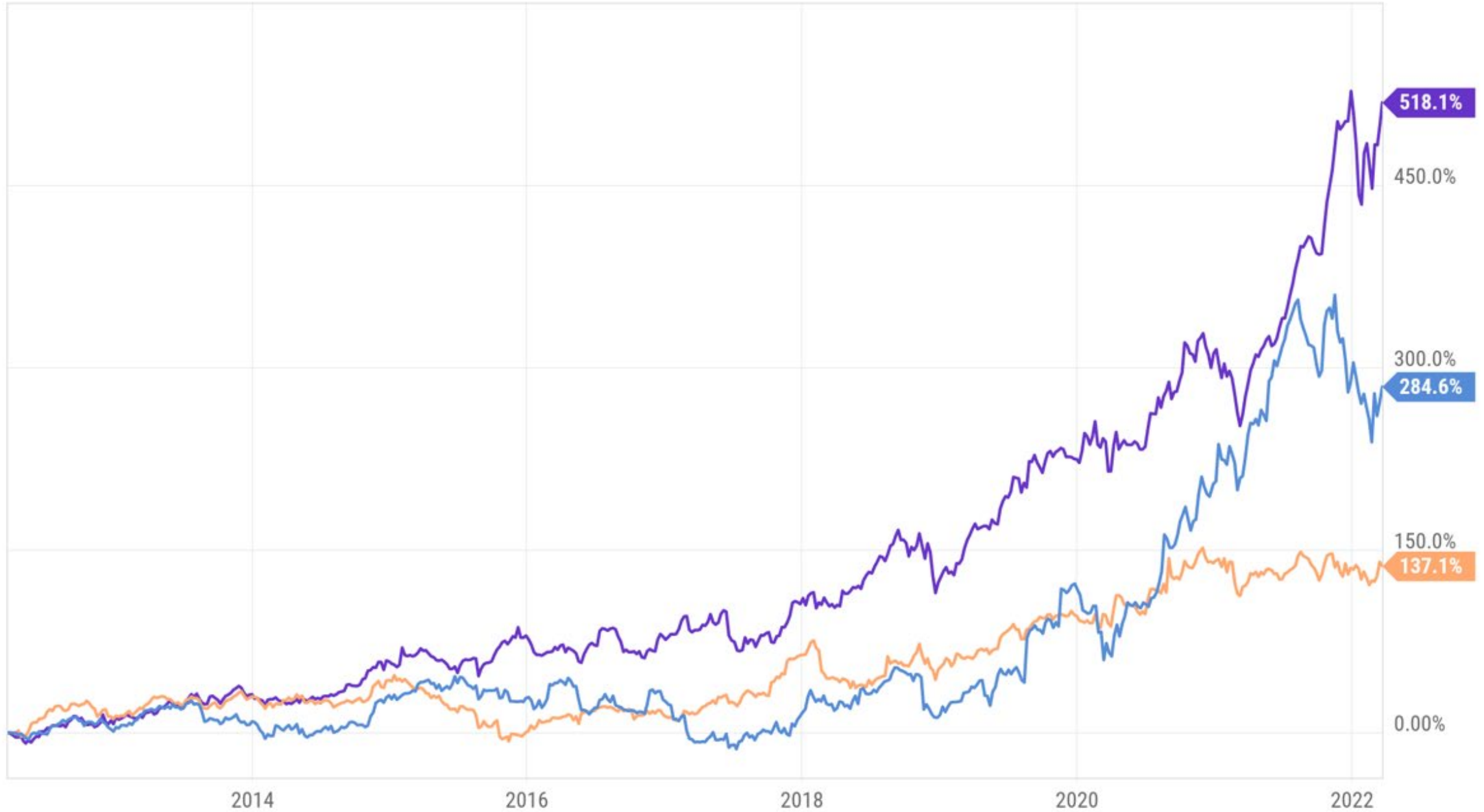


Gross Margins: 24.3%



Gross Margins: 28.3%

- Costco Wholesale Corp Price % Change
- Walmart Inc Price % Change
- Target Corp Price % Change



Three Types of Financial Statements

Income Statement



How much money made?

Cash Flow Statement



How much cash came in?

Balance Sheet



What do I own and owe?

Balance Sheet

- The balance sheet shows a company's total assets, liabilities and shareholders' equity at a specific point in time.
- It shows you what the company **owns (assets)**, **owes (liabilities)** and the **amount invested by shareholders (equity)**.

Question: Any guess why it is called the balance sheet?

The diagram consists of a large rectangle divided into three sections. On the left is a dark blue rectangle labeled 'ASSETS'. On the right is a vertical stack of two rectangles: an orange one labeled 'LIABILITIES' on top and a green one labeled 'EQUITY' on the bottom. All text is in white, bold, uppercase letters.

ASSETS

LIABILITIES

EQUITY

House (Asset)



Mortgage (Liabilities)



Down Payment (Equity)



Assets

- Assets are what the company owns.
- Classified into:
 - **Current assets** are assets that are expected to be converted into cash within *one year*.

E.g. Cash and inventories

- **Non-current assets** are *long-term assets* that a company expects to hold for *more than a year*.

E.g. Plant property and equipment

Current Assets

Cash and cash equivalents

- Most liquid form of assets

META PLATFORMS, INC.
CONSOLIDATED BALANCE SHEETS
(In millions, except for number of shares and par value)

	December 31,	
	2021	2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 16,601	\$ 17,576
Marketable securities	31,397	44,378
Accounts receivable, net	14,039	11,335
Prepaid expenses and other current assets	4,629	2,381
Total current assets	66,666	75,670
Equity investments	6,775	6,234
Property and equipment, net	57,809	45,633
Operating lease right-of-use assets	12,155	9,348
Intangible assets, net	634	623
Goodwill	19,197	19,050
Other assets	2,751	2,758
Total assets	\$ 165,987	\$ 159,316

Current Assets

Cash and cash equivalents

- Rising cash and cash equivalents (CCE) is generally good because it makes a company anti-fragile during difficult times.
- But excessive cash may suggest that management has no idea how to deploy the cash for growth and investments.
- This is an opportunity cost for investors. If management are unable to invest the excess cash they should return the capital to shareholders.

Current Assets

Accounts receivables

- A/R are what your customers owe you. Usually businesses extends credit terms that allows customer to pay the amount after a number of days.

META PLATFORMS, INC.
CONSOLIDATED BALANCE SHEETS
(In millions, except for number of shares and par value)

	December 31,	
	2021	2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 16,601	\$ 17,576
Marketable securities	31,397	44,378
Accounts receivable, net	14,039	11,335
Prepaid expenses and other current assets	4,629	2,381
Total current assets	66,666	75,670
Equity investments	6,775	6,234
Property and equipment, net	57,809	45,633
Operating lease right-of-use assets	12,155	9,348
Intangible assets, net	634	623
Goodwill	19,197	19,050
Other assets	2,751	2,758
Total assets	\$ 165,987	\$ 159,316

Current Assets

Accounts receivables

- Receivables (or trade debtors) are important for a company's liquidity.
- If a company is unable to collect its receivables, they may have problems having enough cash to pay for their business operations. The faster they can collect, the better.

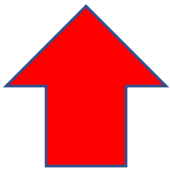
Question: If a company sales increase, would AR increase or decrease?

Red Flag: Sharp Increase in AR



Red Flag: Sharp Increase in AR

361 Degrees	2006	2007	2008	2009	2010	2011	2012
Revenue (millions)	262.92	373.35	1,317.07	3,446.59	4,330.80	2,382.80	4,950.58
AR (millions)	68.69	83.72	537.18	1,413.51	895.7	2,354.81	2,111.51



Red Flag: Sharp Increase in AR

(a) Ageing analysis

Trade debtors and bills receivable (net of allowance for doubtful debts) have the following ageing analysis, based on the date of invoice, as of the end of the reporting period:

	The Group	
	At	At
	31 December	30 June
	2011	2011
	RMB'000	RMB'000
Within 90 days	1,663,756	1,519,287
Over 91 days but within 180 days	609,612	62,371
Over 181 days but within 365 days	81,440	–
	2,354,808	1,581,658

Trade debtors and bills receivable are due within 30-180 days from the date of billing. Further details on the Group's credit policy are set out in note 27(a).

Red Flag: Sharp Increase in AR



Current Assets

Inventory

- Inventory refers to raw materials, work in progress (WIP) goods and finished goods that the business holds for production or sale to customers.
- Rising inventory without a proportionate rise in sales is a red flag!

Red Flag: Sharp Increase in Inventories



The New York Times

SUBSCRIBE NOW | LOG IN

H&M, a Fashion Giant, Has a Problem: \$4.3 Billion in Unsold Clothes



The fashion retailer H&M reported poor earnings on Tuesday, and is sitting on a huge pile of unsold clothes. Horacio Villalobos/Corbis, via Getty Images



By Elizabeth Paton

March 27, 2018



Red Flag: Sharp Increase in Inventories

H&M	2011	2012	2013	2014	2015	2016	2017
Revenue (millions)	109,999	120,799	128,562	151,419	180,861	192,267	200,004
Inventory (millions)	13,819	15,213	16,695	19,403	24,833	31,732	33,712
Inventory/ Revenue	12.56%	12.59%	12.99%	12.81%	13.73%	16.50%	16.86%

May 28, 2022
2:12 AM GMT+8
Last Updated a month
ago

U.S. Markets

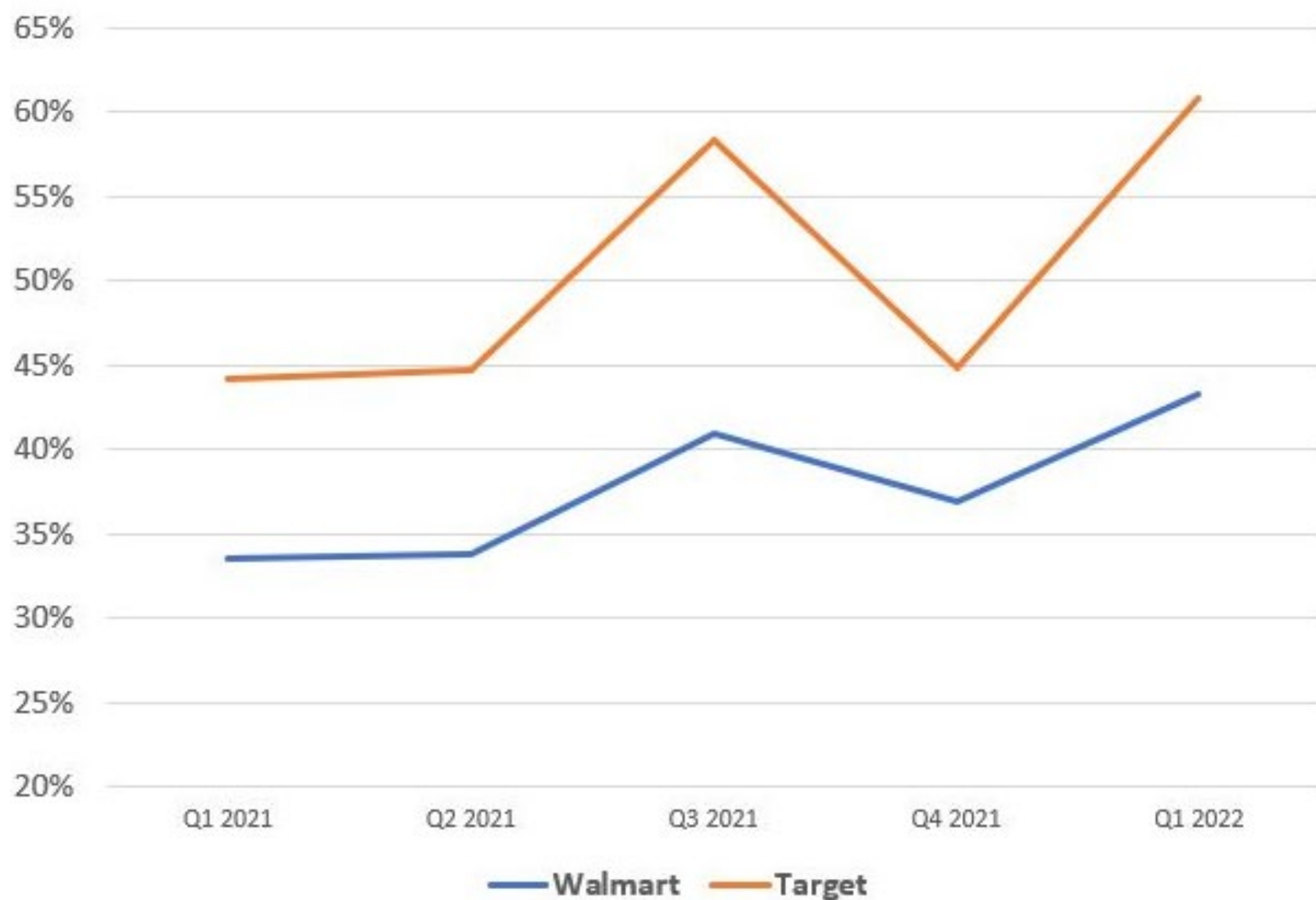
U.S. retailers' ballooning inventories set stage for deep discounts

By Siddharth Cavale and Arriana McLymore

4 minute read



Inventory to sales

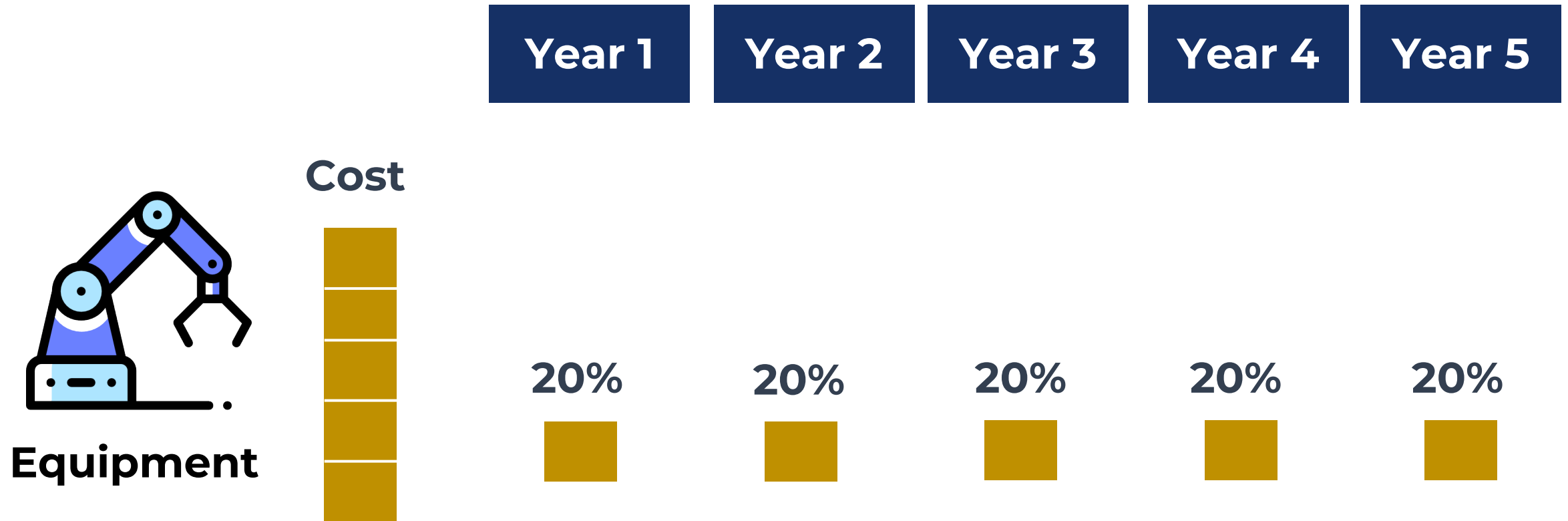


Non-Current Assets

Property, Plant & Equipment (PPE)

- PPE consists of long-term fixed assets such as land, vehicles, buildings, machinery, and equipment — which are used to manufacture products or to help provide the company's services to customers.
- PPE are capitalized on the balance sheet rather than expensed, meaning that the **cost of the asset is spread over a number of years it is used (known as depreciation)**.

How Depreciation Works



Non-Current Assets

Intangible Assets

- Intangible assets are non-physical assets like patents, trademarks, copyrights, and intellectual property (IP) — the values of intangibles are recorded post-acquisition.

Long-Term Investments

- Investments such as bonds, notes, or equity that the company intends to hold for more than a year.

Non-Current Assets

	December 31,	
	2021	2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 16,601	\$ 17,576
Marketable securities	31,397	44,378
Accounts receivable, net	14,039	11,335
Prepaid expenses and other current assets	4,629	2,381
Total current assets	66,666	75,670
Equity investments	6,775	6,234
Property and equipment, net	57,809	45,633
Operating lease right-of-use assets	12,155	9,348
Intangible assets, net	634	623
Goodwill	19,197	19,050
Other assets	2,751	2,758
Total assets	\$ 165,987	\$ 159,316

Liability

- Liability is what the company owes to fund the purchase and maintenance of assets.
- Classified into:
 - **Current liabilities** are obligations or debts owed by the company to suppliers and banks that are repayable within a year.

E.g. Account payables, short term debts
 - **Non-current liabilities** are obligations or debts owed by the company to suppliers and banks that are repayable beyond a year.
 - E.g. Long term loans

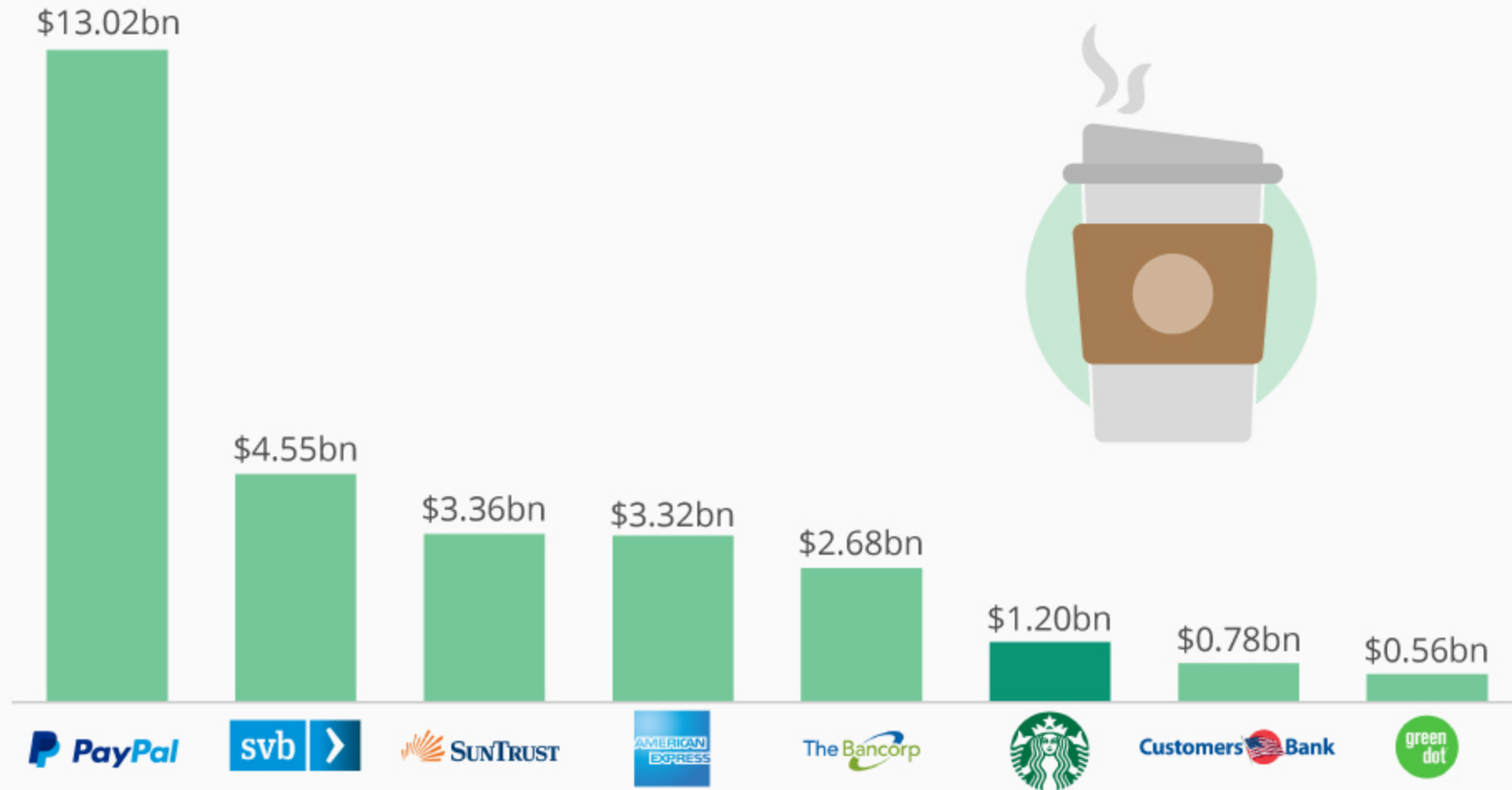
Current Liability

- **Accounts payable** is the total unpaid bills owed to suppliers and vendors for products/services already received.
- **Accrued expenses** often refers to employee wages or utilities yet to be paid off in cash.
- **Deferred Revenue** is created when a company receives cash payment in advance for goods or services not yet delivered to the customer.

E.g. Starbucks prepaid card.

Starbucks Holds More Cash Than Many Banks

Consumer cash held by institutions in 2016 (billion U.S. dollars)



Current Liability

Liabilities and stockholders' equity

Current liabilities:

Accounts payable	\$	4,083	\$	1,331
Partners payable		1,052		1,093
Operating lease liabilities, current		1,127		1,023
Accrued expenses and other current liabilities		14,312		11,152
Deferred revenue and deposits		561		382
Total current liabilities		21,135		14,981

Operating lease liabilities, non-current		12,746		9,631
Other liabilities		7,227		6,414
Total liabilities		41,108		31,026

Non-Current Liability

- **Long-term loans, debentures**
- **Long-term lease obligations**

Non-Current Liability

Liabilities and stockholders' equity			
Current liabilities:			
Accounts payable	\$	4,083	\$ 1,331
Partners payable		1,052	1,093
Operating lease liabilities, current		1,127	1,023
Accrued expenses and other current liabilities		14,312	11,152
Deferred revenue and deposits		561	382
Total current liabilities		21,135	14,981
Operating lease liabilities, non-current		12,746	9,631
Other liabilities		7,227	6,414
Total liabilities		41,108	31,026

Shareholders' Equity

- **Shareholders' equity** is the value of all assets after all liabilities are paid.
- Generally, the higher the more valuable a company is.

Shareholders' Equity

Stockholders' equity:

Common stock, \$0.000006 par value; 5,000 million Class A shares authorized, 2,328 million and 2,406 million shares issued and outstanding, as of December 31, 2021 and 2020, respectively; 4,141 million Class B shares authorized, 413 million and 443 million shares issued and outstanding, as of December 31, 2021 and 2020, respectively

	—	—
Additional paid-in capital	55,811	50,018
Accumulated other comprehensive income (loss)	(693)	927
Retained earnings	69,761	77,345
Total stockholders' equity	124,879	128,290



Stress-Testing a Company

1. Are they in a net cash position?

Net Cash = Cash & Cash Equivalents – Debt

Assets	
Current assets:	
Cash and cash equivalents	\$ 16,601
Marketable securities	31,397
Accounts receivable, net	14,039
Prepaid expenses and other current assets	4,629
Total current assets	66,666
Equity investments	6,775
Property and equipment, net	57,809
Operating lease right-of-use assets	12,155
Intangible assets, net	634
Goodwill	19,197
Other assets	2,751
Total assets	\$ 165,987

Liabilities and stockholders' equity

Current liabilities:	
Accounts payable	\$ 4,083
Partners payable	1,052
Operating lease liabilities, current	1,127
Accrued expenses and other current liabilities	14,312
Deferred revenue and deposits	561
Total current liabilities	21,135
Operating lease liabilities, non-current	12,746
Other liabilities	7,227
Total liabilities	41,108

Stress-Testing a Company

2. What is their Debt-to-Equity ratio?

Debt/Equity Ratio = Total Debt / Total Shareholder's Equity

Rule of thumb, look for companies with a ratio below 0.5.

Above 1 indicates that company is highly leveraged & aggressive with using debt to finance business.

Exception for companies with highly predictable cash flows.

Liabilities and stockholders' equity

Current liabilities:

Accounts payable	\$	4,083
Partners payable		1,052
Operating lease liabilities, current		1,127
Accrued expenses and other current liabilities		14,312
Deferred revenue and deposits		561
Total current liabilities		21,135
Operating lease liabilities, non-current		12,746
Other liabilities		7,227
Total liabilities		41,108

Commitments and contingencies

Stockholders' equity:

Common stock, \$0.000006 par value; 5,000 million Class A shares authorized, 2,328 million and 2,406 million shares issued and outstanding, as of December 31, 2021 and 2020, respectively; 4,141 million Class B shares authorized, 413 million and 443 million shares issued and outstanding, as of December 31, 2021 and 2020, respectively		—
Additional paid-in capital		55,811
Accumulated other comprehensive income (loss)		(693)
Retained earnings		69,761
Total stockholders' equity		124,879
Total liabilities and stockholders' equity	\$	165,987

Stress-Testing a Company

3. Interest Coverage Ratio

$$\text{Interest Coverage Ratio} = \frac{\text{Operating Cash Flow}}{\text{Interest Expense}}$$

Measures a company's ability to pay its interest on outstanding debt. The higher the ratio, the better it is able to pay its interest.

Red flag: ICR below 1.5 is considered extremely risky.
Above 3 is considered safe.

Domino's Pizza, Inc. and Subsidiaries
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	For th
	January 2, 2022
Cash flows from operating activities:	
Net income	\$ 510,467 \$
Adjustments to reconcile net income to net cash provided by operating activities:	
Depreciation and amortization	72,923
Loss on sale/disposal of assets	1,189
Amortization of debt issuance costs	7,509
Provision (benefit) for deferred income taxes	1,988
Non-cash equity-based compensation expense	28,670
Excess tax benefits from equity-based compensation	(18,911)
Provision for losses on accounts and notes receivable	659
Unrealized gain on investments	(36,758)
Changes in operating assets and liabilities:	
Changes in accounts receivable	(8,107)
Changes in inventories, prepaid expenses and other	(9,420)
Changes in accounts payable and accrued liabilities	51,346
Changes in insurance reserves	6,216
Changes in operating lease assets and liabilities	1,210
Changes in advertising fund assets and liabilities, restricted	45,225
Net cash provided by operating activities	654,206
Interest expense	(191,806)