03 Agenda

**Assets** 

Liabilities

Owners' Equity

Income

Income versus cash flows

Financial Leverage

# Things You Need to Know

- Assets are resources with probable future benefits controlled by the entity as a result of past events or circumstances.
- A resource can meet the definition of an asset and still not be reported on the entity's balance sheet.
- To be recognized on the balance sheet, a resource must meet two criteria: it must meet the definition of an asset and it must be possible to measure its financial value reliably.

### **Questions**

Answer the following question from the perspective of a representative student in your group.

#### You have a balance sheet:

- Measurement aside, what tends to be your 2-3 biggest assets?
- That is, what are the resources with probable future benefits you control as a result of past events or circumstances?

## **Questions**

Answer the following question from the perspective of a representative student in your group:

- Do you meet the definition of an asset on your parent's balance sheet?
- Do your apartments or dorm rooms meet the definition of assets on your balance sheet?
- Does a car leased for four years meet the definition of an asset on your balance sheet?
- Does a car rented for two days meet the definition of an asset on your balance sheet?

#### 06 Asset definition

#### Question

 Which assets on Intel's balance sheet most resemble cash and cars on students' balance sheets?

# INTEL CORPORATION CONSOLIDATED BALANCE SHEETS

December 31, 2011 and December 25, 2010		
(In MillionsExcept Par Value)	2011	 2010
Assets		
Current assets:		
Cash and cash equivalents	\$ 5,065	\$ 5,498
Short-term investments	5,181	11,294
Trading assets	4,591	5,093
Accounts receivable, net of allowance for doubtful accounts of \$36 (\$28 in 2010)	3,650	2,867
Inventories	4,096	3,757
Deferred tax assets	1,700	1,488
Other current assets	1,589	1,614
Total current assets	25,872	31,611
Property, plant and equipment, net	23,627	 17,899
Marketable equity securities	562	1,008
Other long-term investments	889	3,026
Goodwill	9,254	4,531
Identifiable intangible assets, net	6,267	860
Other long-term assets	4,648	4,251
Total assets	\$ 71,119	\$ 63,186
Liabilities and stockholders' equity		
Current liabilities:		
Short-term debt	\$ 247	\$ 38
Accounts payable	2,956	2,290
Accrued compensation and benefits	2,948	2,888
Accrued advertising	1,134	1,007
Deferred income on shipments to distributors	1,929	622
Other accrued liabilities	2,814	2,482
Total current liabilities	12,028	9,327
Long-term debt	7,084	2,077
Long-term deferred tax liabilities	2,617	926
Other long-term liabilities	3,479	1,426
Commitments and contingencies (Notes 23 and 29)	,	·
Stockholders' equity:		
Preferred stock, \$0.001 par value, 50 shares authorized; none issued		-
Common stock, \$0.001 par value, 10,000 shares authorized; 5000 issued and outstanding		
(5,581 issued and 5,511 outstanding in 2010) and capital in excess of par value	17,036	16,178
Accumulated other comprehensive income (loss)	(781)	333
Retained earnings	29,656	32,919
Total stockholders' equity	45,911	 49,430
Total liabilities and stockholders' equity	\$ 71,119	\$ 63,186

Intel's 2011 Form 10-K, page 45. www.sec.gov See accompanying notes in the 10-K.

#### 07 Asset definition

#### Question

• Is the patent for Intel's latest microprocessor chipset recognized on Intel's balance sheet?

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Total liabilities and stockholders' equity	\$ 71,119	\$ 63,186

Intel's 2011 Form 10-K, page 45. www.sec.gov See accompanying notes in the 10-K.

## Things You Need to Know

- A thousand objective measurement experts have agreed to measure the financial value of the assets identified earlier for a representative student.
- The representative student's assets are similar to those controlled by you and your classmates.
- The experts will interview your group to acquire information needed to complete this task.

#### Questions

Answer the following question from the perspective of a representative student in your group:

## For each of your assets:

- What will experts need to know to measure the financial value of the asset? How much uncertainty is there about these things?
- How reliable are their estimates: to what extent would the experts agree on the measurements?
  - Would their estimates be closely bunched together?
  - Widely dispersed?
  - Somewhere in between?

#### 09 Asset measurement

#### Question

 Compare the dispersions of objective experts' estimates of cash & cash equivalents and property, plant & equipment.

# INTEL CORPORATION CONSOLIDATED BALANCE SHEETS

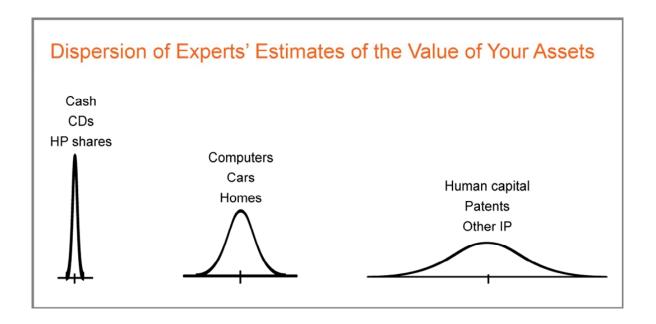
(In MillionsExcept Par Value)		2011		2010
Assets Current assets:				
	\$	5,065	\$	5,498
Cash and cash equivalents Short-term investments	φ	5,003 5,181	φ	-
		•		11,294
Trading assets		4,591 3,650		5,093
Accounts receivable, net of allowance for doubtful accounts of \$36 (\$28 in 2010)  Inventories		3,030 4,096		2,86
Deferred tax assets		•		3,75
		1,700		1,48
Other current assets		1,589	-	1,61
Total current assets		25,872		31,61
Property, plant and equipment, net		23,627		17,89
Marketable equity securities		562		1,00
Other long-term investments		889		3,02
Goodwill		9,254		4,53
Identifiable intangible assets, net		6,267		86
Other long-term assets	Φ.	4,648		4,25
Total assets	\$	71,119	\$	63,18
Liabilities and stockholders' equity				
Current liabilities:	•	0.4=	•	_
Short-term debt	\$	247	\$	3
Accounts payable		2,956		2,29
Accrued compensation and benefits		2,948		2,88
Accrued advertising		1,134		1,00
Deferred income on shipments to distributors		1,929		62
Other accrued liabilities		2,814		2,48
Total current liabilities		12,028		9,32
Long-term debt		7,084		2,07
Long-term deferred tax liabilities		2,617		92
Other long-term liabilities		3,479		1,42
Commitments and contingencies (Notes 23 and 29)				
Stockholders' equity:				
Preferred stock, \$0.001 par value, 50 shares authorized; none issued				-
Common stock, \$0.001 par value, 10,000 shares authorized; 5000 issued and outstanding				
(5,581 issued and 5,511 outstanding in 2010) and capital in excess of par value		17,036		16,17
Accumulated other comprehensive income (loss)		(781)		33
Retained earnings		29,656		32,91
Total stockholders' equity		45,911		49,43
Total liabilities and stockholders' equity	\$	71,119	\$	63,180

Intel's 2011 Form 10-K, page 45. www.sec.gov See accompanying notes in the 10-K.

#### 10 Asset measurement

#### Take Aways

- Experts need to know a good deal about the measurement context and there can be significant related uncertainty.
- The dispersion of objective experts' estimates of the values of various assets can differ greatly.



## Things You Need to Know

- Liabilities are an entity's obligations to sacrifice, or otherwise stand ready to sacrifice, economic benefits to other entities in the future.
- The obligations may be legal or social obligations where the entity is bound by contract, promise, or moral responsibility.
- To be recognized on balance sheets, obligations must be probable, meet the definition of a liability, and it must be possible to measure its financial value reliably.

### **Questions**

Answer the following question from the perspective of a representative student in your group:

- Putting aside measurement, what tends to be your biggest liabilities?
- That is, what are the biggest legal or social obligations you have that will require sacrifices of future benefits?

## 12 Liability definition

#### Question

 Which of Intel's liabilities most resemble credit cards and college loans on students' balance sheets?

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Long-term debt	7,084	2,077
Long-term deferred tax liabilities	2,617	926
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Total liabilities and stockholders' equity	\$ 71,119	\$ 63,186

Intel's 2011 Form 10-K, page 45. www.sec.gov See accompanying notes in the 10-K.

## 13 Liability measurement

#### **Questions**

Answer the following question from the perspective of a representative student in your group:

For each of your liabilities identified earlier:

- What will experts need to know to measure the financial value of the liability? How much uncertainty is there about these things?
- How reliable are their estimates: to what extent would the experts agree on the measurements?
  - Would their estimates be closely bunched together?
  - Widely dispersed?
  - Somewhere in between?

## 14 Liability measurement

#### Question

 Compare the dispersions of objective experts' estimates of Short-term debt and Long-term debt.

# INTEL CORPORATION CONSOLIDATED BALANCE SHEETS

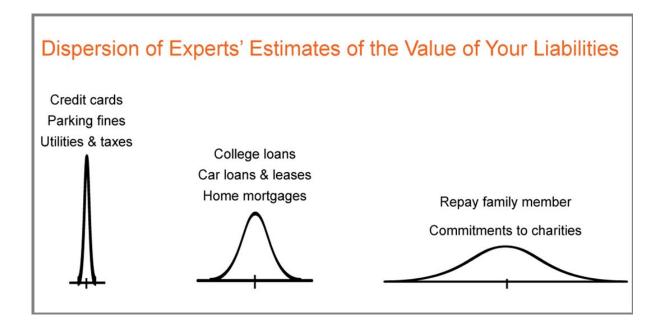
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Total liabilities and stockholders' equity	\$ 71,119	\$ 63,186

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## 15 Liability measurement

#### Take Aways

- Experts need to know a good deal about the measurement context and there can be significant related uncertainty.
- The dispersion of objective experts' estimates of the values of various liabilities can differ greatly.



# 16 Owners' equity definition

## Things You Need to Know

 Owners' equity is a residual claim on an entity's assets, which equals its assets less its liabilities.

#### **Questions**

Answer the following question from the perspective of a representative student in your group:

- What do you need to know to estimate the financial value of your owners' equity?
- What determines the dispersion of experts' estimates of the financial value of your owners' equity?

## Take Aways

- Owners' equity measures are determined once asset and liability measures are determined.
- The dispersion of experts' estimates of the value of owners' equity depends on the entity's assets and obligations.

## Things You Need to Know

The market value of Intel's owners' equity was approximately \$121 billion at the end of 2011.

(5.0 billion shares x \$24.25 per share market price)

#### Question

 Why does the \$121 billion market value of Intel's owners' equity differ from the \$71 billion recognized on Intel's balance sheet at the end of 2011?

# INTEL CORPORATION CONSOLIDATED BALANCE SHEETS

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Common stock, \$0.001 par value, 10,000 shares authorized; 5,581 issued and 5,511				
outstanding (5,523 issued and outstanding in 2009) and capital in excess of par value		17,036		16,178
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Retained earnings		29,656		32,919
Fotal stockholders' equity		45,911		49,430
		, -		,

Intel's 2011 Form 10-K, page 45. www.sec.gov See accompanying notes in the 10-K.

#### Take Aways

- Assuming the book and market values of Intel's liabilities are the same, \$25 billion, the market value of Intel's assets can be derived from the balance sheet equation: Assets = Liabilities + Owners' Equity.
- Thus, the market value of Intel's assets is \$146 billion (\$25 liabilities plus \$121 owners' equity).

INTEL CORPORATION			
CONSOLIDATED BALANCE SHEETS			
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Preferred stock, \$0.001 par value, 50 shares authorized; none issued			-
Common stock, \$0.001 par value, 10,000 shares authorized; 5,581 issued and 5,511			
outstanding (5,523 issued and outstanding in 2009) and capital in excess of par value		17,036	16,17

## Take Aways

- There are two reasons why the market value of Intel's assets is approximately \$75 billion more than the book value (\$146 \$71):
  - Several assets are not recognized on the balance sheet
  - Some assets are recognized at historical costs that are considerably less than their fair values, in conformity with GAAP

## **DEFINITION**

Increase in owners' equity during a reporting period, excluding changes associated with transactions with owners.

## **QUESTION**

What factors will likely have the biggest impact on you and your classmates' income statements for the reporting period that starts today and ends May 31st?

## **QUESTION**

To what extend does income and cash flow typically differ for students?

# **QUESTION**

The expression "cash is king" is frequently heard on Wall Street by analysts and investors who believe cash flows measure performance better than income. Will your performance between now and May 31 be measured better by your income or your cash flows?

#### **DEFINITION**

Financial leverage measures the extent to which a company's assets are financed with debt rather than equity. The more debt, the more shareholders' equity claims are risky.

## **CONSEQUENCES**

The consequences of financial leverage for owners, both good and bad, depend directly on the riskiness of the company's assets: the required debt payments are the same regardless of how well the company performs.

### **BEAR STEARNS**

You may have heard of Bear, Stearns & Co. Inc., a global investment banking, securities trading and brokerage firm. The owners of Bear Stearns' common stock realized the risks associated with financial leverage in March, 2008 when the value of their shares fell to \$2

per share, after being worth more than \$90 per share just two months earlier.

When measured as liabilities divided by assets, Bear Stearns' financial leverage was 97% on November 30, 2007 (the end of the fiscal year prior to the company's downfall) and a good deal of its assets were susceptible to risks associated with mortgages.

## **QUESTION**

To what extent are students' balance sheets typically leveraged?

### 26 Closing thoughts

- Balance sheets are often described as pictures of companies' financial positions at points in time.
- This is true, but they tend to be fuzzy pictures that resemble medical images such as X-rays and MRIs more than photographs.
- Just as medical images can help doctors determine a great deal about their patients' health, balance sheets help investors and analysts determine a great deal about companies' financial health.
- Just as it takes doctors years to become proficient at analyzing medical images, investors and analysts take years to become proficient at analyzing balance sheets.