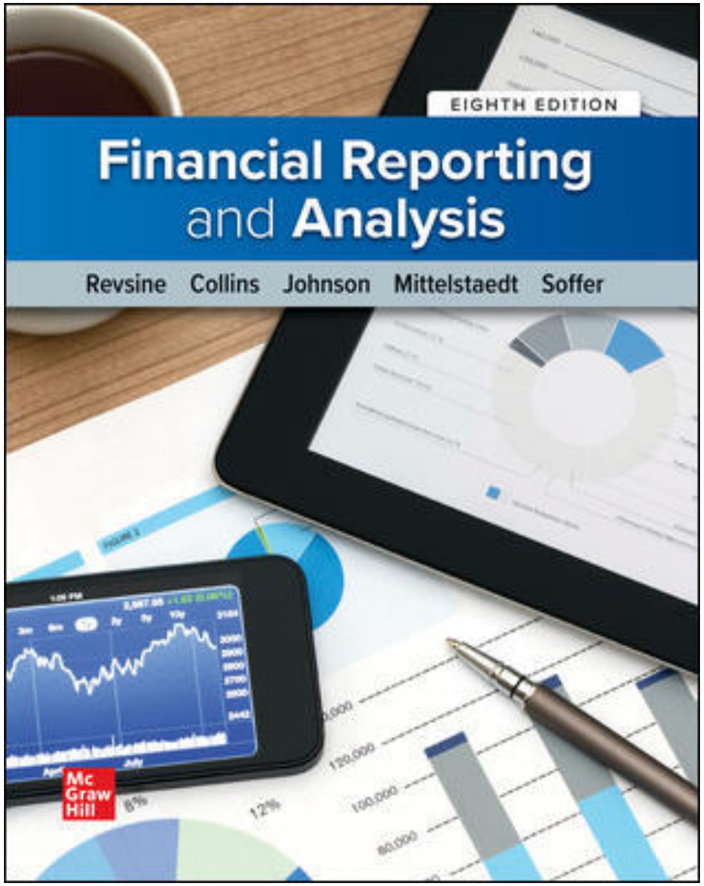
Structure of the Balance Sheet and Statement of Cash Flows

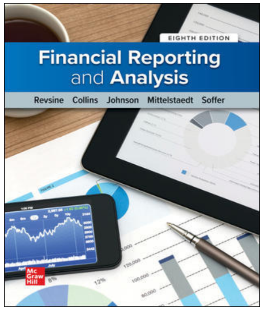


Revsine/Collins/Johnson/Mittelstaedt/Soffer: Chapter 4

Basic Acc definitions الكلام ده مهم بالكلام

Assets, liab, Equity, dividends,

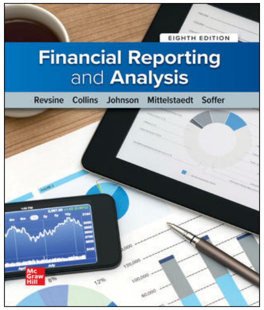
historical cost, fair value.



Learning Objectives

After studying this chapter, you will understand:

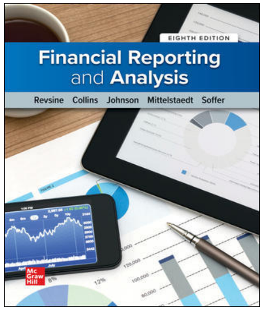
1. How the various asset, liability, and stockholders' equity accounts on a typical corporate balance sheet are measured and classified.
2. How to use balance sheet information to understand key differences in the nature of firms' operations and how those operations are financed.
3. Differences in balance sheet terminology and presentation format in countries outside the United States.
4. When and how contingent losses are recognized and disclosed.
5. How successive balance sheets and the income statement can be used to determine cash inflows and outflows for a period.



Learning Objectives, continued

After studying this chapter, you will understand:

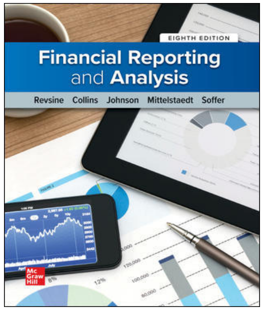
6. How information provided in the cash flow statement can be used to explain changes in noncash accounts on the balance sheet.
7. The distinction between operating, investing, and financing sources and uses of cash.
8. How changes in current asset and current liability accounts can be used to adjust accrual earnings to obtain cash flows from operations.
9. Subtle differences between IFRS and U.S. GAAP regarding where certain items are shown on the statement of cash flows.



Balance Sheet

- The balance sheet is made up of the following basic elements:
  - **Assets:** Probable future economic benefits obtained or controlled by an entity as a result of past transactions or events.
  - **Liabilities:** Probable future sacrifices of economic benefits arising from an entity's present obligations to transfer assets or provide services to other entities in the future as a result of past transactions or events.
  - **Equity:** The residual interest in an entity's assets that remains after deducting its liabilities.

whatever is left from the assets after we pay for the liab



Balance Sheet

A = L + O

2

a combination of

ASSETS	Measurement Bases	1 Historical cost
LIABILITIES + EQUITY		2 Current replacement cost
		Net realizable value
		Present values
		3 Fair values

A/R – All of D

A – L = O

Fair

The main challenge in measuring assets is between historical cost & fair value.

IFRS tend to favor fair value

US GAAP in genaral they were closer to historical cost.

the historical cost is what we paid for its reliable but with time hist. cost might be irrelevant (cost of buying a building) so fair value is less reliable because of lack of evidence. fair value is more relevant

Reliabity vs Relevance

the reality is fair value.

for stocks i can use fair value because its reliable from the SEC website while Equip & other assets we won't know the fair value until it sold.

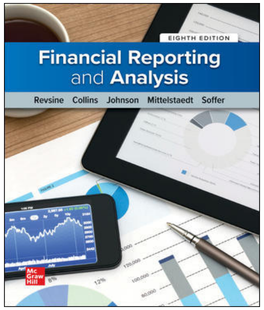
but as a company i cant sell my asset just to know its fv.

The operating cycle = is the elapsed time beginning with the initiation of productions and ending with the cash collection of the recievables from the sale of the product.

Assets are future benefits obtained by an entity as a result of past transactio.

liab = future sacrifices of eco. benefits arising from an entity

Impairment of non-CA = when the carrying amount is no longer recoverable through future cash inflow, the fixed asset is reduced to its lower fair value -



Balance Sheet

ordinary shares

ASSETS = **LIABILITIES** + **EQUITY**

ASSETS

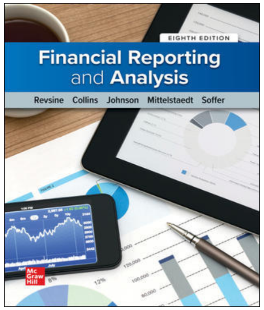
- **Current assets** Cash and other assets expected to be converted to cash within 12 months (or with the operating cycle, if longer)
- **Noncurrent assets** All other assets

LIABILITIES

- **Current liabilities** Liabilities expected to be settled within 12 months (or with the operating cycle, if longer)
- **Noncurrent or Long-term liabilities** All other liabilities

EQUITY

- **Common stock** The par value of shares issued and outstanding
- **Additional paid-in capital** The amount in excess of par value paid to the firm when its shares were originally issued
- **Retained earnings** The cumulative earnings less cumulative dividend distributions of the company since its inception.



Contingencies

Just read

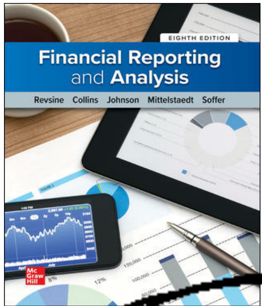
- Contingent liabilities, also referred to as loss contingencies have an uncertain outcome that will be resolved in the future.
  - An event that could give rise to a future loss must have already taken place.
- Contingent assets, or gain contingencies, also have an uncertain outcome that will be resolved in the future, but could potentially result in a gain.
  - An event that could give rise to a future gain must have already taken place.

RE beg

+ NI or − NL

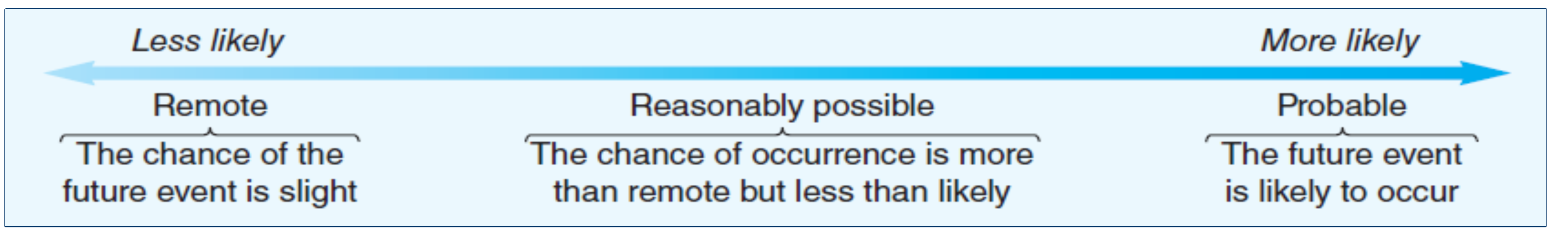
− Div paid → not cash

RE Ending

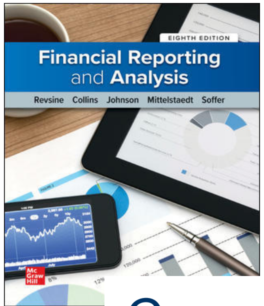


Measuring, Recognizing, and Disclosing Loss Contingencies

- GAAP states that a loss contingency should be accrued by a charge to income if **both** of the following conditions exist:
  1. It is probable that an asset has been impaired or a liability incurred at the financial statement date.
  2. The amount of the loss can be reasonably estimated.



  - The facts and circumstances surrounding losses categorized as reasonably possible must be disclosed; however, no accrual is required.
  - Contingent losses categorized as remote require neither accrual nor disclosure.
- Gain contingencies, on the other hand, are not recorded until all uncertainty is removed. because of the conservatism



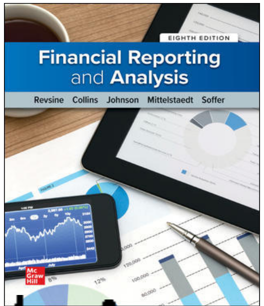
Loan Guarantees

Companies sometimes provide loan guarantees that require them to make payments to a lender on behalf of a borrower based on some future event.

> The Company has guaranteed a portion of certain loan obligations of certain franchisees in which the Company owns an interest. The Company assesses the likelihood of making any payments under the guarantees and records estimated liabilities for anticipated payments when the Company believes that an obligation to perform under the guarantees is probable and the amount can be reasonably estimated. No liabilities for the guarantees were recorded at the time they were issued because the Company believed the value of the guarantees was immaterial. As of February 3, 2013, the Company has recorded liabilities of approximately $1.6 million related to such loan guarantees. The aggregate outstanding principal balance that was guaranteed by the Company was approximately $2.1 million at that date. (*Source:* Krispy Kreme Doughnuts, Inc. Form 10-K filing for the fiscal year ended February 3, 2013)

FASB ASC Topic 460, "Guarantees," views this sort of arrangement as having two components that may affect the financial statements of Krispy Kreme (the guarantor):

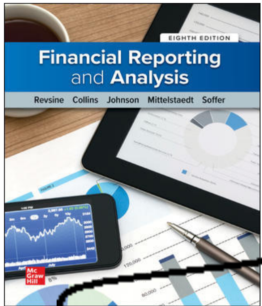
- A noncontingent "stand ready obligation" to meet the terms of the guarantee.
  - The "stand ready obligation" is recorded initially at fair value.
- A contingent obligation to make future payments if the triggering event occurs (e.g., the failure of the franchisee to repay the bank loan in full).
  - The contingent obligation is handled as an ordinary contingent loss as provided by FASB ASC Topic 450.



Analytical Insights: Understanding the Nature of a Firm’s Business

Common-Size Balance Sheet

- Presents each item as a percentage of total assets.
- Allows an analysts to compare companies in a way that factors out differences between balance sheet amounts due solely to differences in company size.
- The numbers and percentages tell a story about the company, its industry, its strategies, and its performance.



International Differences in Balance Sheet Presentation

U.S. Format

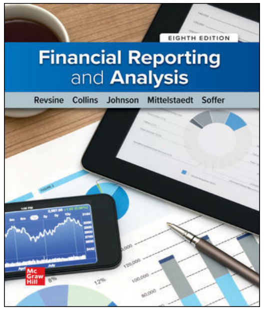
Assets listed from most to least liquid

Current Assets
+
Long-lived Assets
=
Current Liabilities
+
Non-current Liabilities
+
Stockholders' Equity

IFRS Format

(U.K. used as an example)
Allows ordering from least to most liquid

Noncurrent Assets
+
Current Assets
-
Non-current Liabilities
-
Current Liabilities
=
Total Equity



Global Vantage Point

IFRS guidance on accounting for contingencies is found in IAS 37 and is similar to U.S. GAAP except:

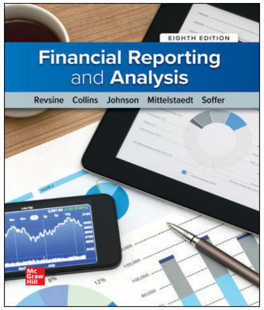
U.S. GAAP	IFRS
- Relies on income statement perspective - Probable means "likely to occur"	- Centers on the balance sheet - Probable means "more likely than not"

The amount of contingent loss to be recognized is also different.

- Suppose the probable loss is estimated by management to range between $450,000 and $650,000. No amount is a better estimate than any other.

U.S. GAAP: low end of $450,000

IFRS: midpoint of $550,000

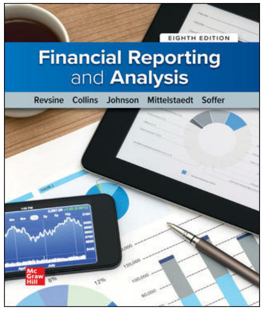


Statement of Cash Flows

most important statement. because lenders and banks rely on it because the most accepted asset is cash

- Because cash flows and accrual earnings can differ dramatically, firms must present a **statement of cash flows** in addition to an income statement and a balance sheet.
- The cash flow statement explains the causes for year-to-year changes in cash and cash equivalents.

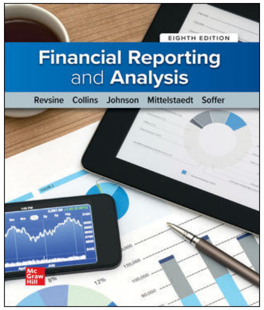
or guarantee they can easily sell the asset for lender to take their money, it's highly lequid. St of CF's is converting accrual Acc to cash basis accounting. [the operating section is the most important.



Structure of Cash Flow Statement

Cash Flow from Operating Activities	Comprises the increase or decrease in cash arising from the firm's profit-making activities NI
Cash Flow from Investing Activities	Comprises the decreases in cash resulting from investments made in productive assets or securities during the period, as well as the increases in cash when such investments are liquidated
Cash Flow from Financing Activities	Comprises changes in cash due to transactions related to the financing of the business, such as the issuance or repurchase of debt or equity securities and the payment of dividends*
Δ (change in) Cash and Cash Equivalents	The amount by which cash and cash equivalents changed from one balance sheet date to the next

* Although interest payments actually are due to financing activities, U.S. GAAP includes interest payments in operating cash flows.



Cash Flows from Operating Activities

There are two methods for presenting cash flow from operating activities:

→ schedule of the detail reconciliation

Direct Method

The operating section of the cash flow statement presents cash transactions related to the determination of net income.

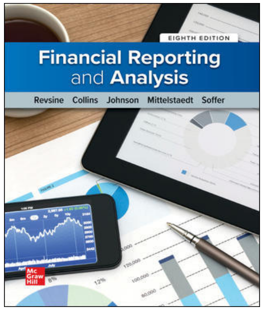
→ only for operating section of the st.

Indirect Method

The operating section begins with net income and then presents all the reasons why and amounts by which cash flow from operations differs from net income.

The resulting amount for cash flow from operating activities is the same under the two methods.

Both U.S. GAAP and IFRS encourage, but do not require, the use of the direct method.



Example of Indirect Method Cash Flow Statement

ch23 from another book with more details + comp

1. convert A/R if A/R ↓ → cash ↑ the opposite is A/P
↑ → (↓) A/P ↓ → cash ↓

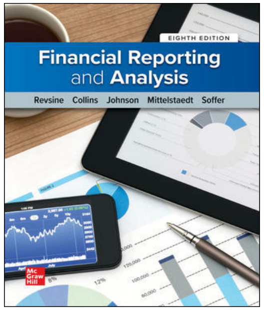
EXHIBIT 4.5 Walmart Inc. Consolidated Statements of Cash Flows

when doing CF statement always start with NI

(Amounts in millions)	Fiscal Years Ended January 31, 2018	2017	2016
Cash flows from operating activities:			
① Consolidated net income	$ 10,523	$ 14,293	$ 15,080
Adjustments to reconcile consolidated net income to net cash provided by operating activities:			
Depreciation and amortization	10,529	10,080	9,454
Deferred income taxes	(304)	761	(672)
Loss on extinguishment of debt	3,136	–	–
Other operating activities	1,210	206	1,410
Changes in certain assets and liabilities, net of effects of acquisitions:			
Receivables, net	(1,074)	(402)	(19)
Inventories	(140)	1,021	(703)
Accounts payable	4,086	3,942	2,008
Accrued liabilities	928	1,280	1,466
Accrued income taxes	(557)	492	(472)
Net cash provided by operating activities	28,337	31,673	27,552

Adjustments to convert accrual-basis earnings to cash-basis earnings

+ Dep Exp → non cash Exp so I add it back
= because i didn't actually pay it
same for amortization and taxes

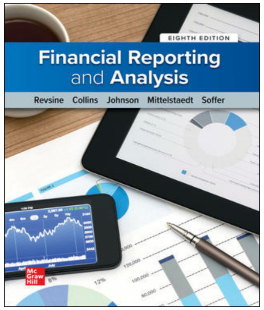


Example of Indirect Method Cash Flow Statement, concluded

EXHIBIT 4.5 **Walmart Inc. Consolidated Statements of Cash Flows**

	Fiscal Years Ended January 31,		
(Amounts in millions)	**2018**	**2017**	**2016**
Cash flows from investing activities:			
Payments for property and equipment	(10,051)	(10,619)	(11,477)
Proceeds from the disposal of property and equipment	378	456	635
Proceeds from the disposal of certain operations	1,046	662	246
Purchase of available for sale securities	–	(1,901)	–
Business acquisitions, net of cash acquired	(375)	(2,463)	–
Other investing activities	(58)	(122)	(79)
Net cash used in investing activities	(9,060)	(13,987)	(10,675)
Cash flows from financing activities:			
Net change in short-term borrowings	4,148	(1,673)	1,235
Proceeds from issuance of long-term debt	7,476	137	39
Repayments of long-term debt	(13,061)	(2,055)	(4,432)
Premiums paid to extinguish debt	(3,059)	–	–
Dividends paid	(6,124)	(6,216)	(6,294)
Purchase of Company stock	(8,296)	(8,298)	(4,112)
Dividends paid to noncontrolling interest	(690)	(479)	(719)
Purchase of noncontrolling interest	(8)	(90)	(1,326)
Other financing activities	(261)	(398)	(676)
Net cash used in financing activities	(19,875)	(19,072)	(16,285)
Effect of exchange rates on cash and cash equivalents	487	(452)	(1,022)
Net increase (decrease) in cash and cash equivalents	(111)	(1,838)	(430)
Cash and cash equivalents at beginning of year	6,867	8,705	9,135
Cash and cash equivalents at end of year	$ 6,756	$ 6,867	$ 8,705
Supplemental disclosure of cash flow information:			
Income taxes paid	6,179	4,507	8,111
Interest paid	2,450	2,351	2,540

Source: Walmart Inc. Form 10-K for the year ended January 31, 2018.



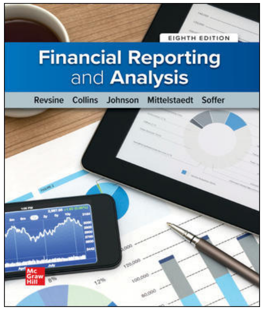
Example of Direct Method Cash Flow Statement:
Operating Activities Section

EXHIBIT 4.6 CVS Health Corporation Cash Flow Statement

CVS HEALTH CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	For the Year Ended December 31, 2017	2016	2015
Cash flows from operating activities:			
Cash receipts from customers	$ 176,594	$ 172,310	$ 148,954
Cash paid for inventory and prescriptions dispensed by retail network pharmacies	(149,279)	(142,511)	(122,498)
Cash paid to other suppliers and employees	(15,348)	(15,478)	(14,035)
Interest received	21	20	21
Interest paid	(1,072)	(1,140)	(629)
Income taxes paid	(2,909)	(3,060)	(3,274)
Net cash provided by operating activities	8,007	10,141	8,539

Actual cash inflows and cash outflows



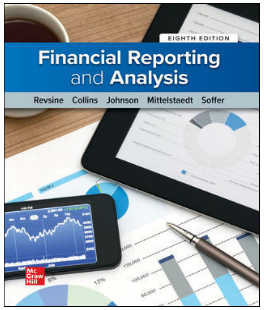
Example of Direct Method Cash Flow Statement:

Investing and Financing Activities Sections

EXHIBIT 4.6 **CVS Health Corporation Cash Flow Statement**

CVS HEALTH CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Year Ended December 31,		
(In millions)	2017	2016	2015
Cash flows from investing activities:			
Purchases of property and equipment	(1,918)	(2,224)	(2,367)
Proceeds from sale-leaseback transactions	265	230	411
Proceeds from sale of property and equipment and other assets	33	37	35
Acquisitions (net of cash acquired) and other investments	(1,287)	(539)	(11,475)
Purchase of available-for-sale investments	(86)	(65)	(267)
Maturities of available-for-sale investments	61	91	243
Net cash used in investing activities	(2,932)	(2,470)	(13,420)
Cash flows from financing activities:			
Increase (decrease) in short-term debt	(598)	1,874	(685)
Proceeds from issuance of long-term debt	–	3,455	14,805
Repayments of long-term debt	–	(5,943)	(2,902)
Purchase of noncontrolling interest in subsidiary	–	(39)	–
Payment of contingent consideration	–	(26)	(58)
Dividends paid	(2,049)	(1,840)	(1,576)
Proceeds from exercise of stock options	329	296	362
Payments for taxes related to net share settlement of equity awards	(71)	(72)	(63)
Repurchase of common stock	(4,361)	(4,461)	(5,001)
Other	(1)	(5)	(3)
Net cash provided by (used in) financing activities	(6,751)	(6,761)	4,879

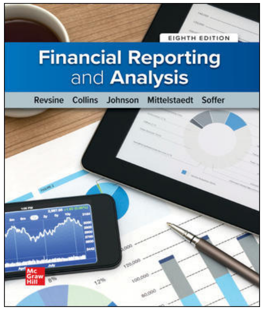


Example of Direct Method Cash Flow Statement:
Change in Cash and Cash Equivalents

EXHIBIT 4.6 CVS Health Corporation Cash Flow Statement

CVS HEALTH CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In millions)	For the Year Ended December 31, 2017	2016	2015
Effect of exchange rate changes on cash and cash equivalents	1	2	(20)
Net increase (decrease) in cash and cash equivalents	(1,675)	912	(22)
Cash and cash equivalents at the beginning of the period	3,371	2,459	2,481
Cash and cash equivalents at the end of the period	$ 1,696	$ 3,371	$ 2,459



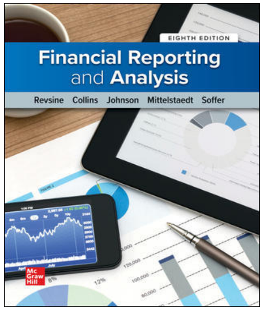
Example of Direct Method Cash Flow Statement:
Additional Required Disclosures

EXHIBIT 4.6 **CVS Health Corporation Cash Flow Statement**

CVS HEALTH CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In millions)	For the Year Ended December 31, 2017	2016	2015
Reconciliation of net income to net cash provided by operating activities:			
Net income	$ 6,623	$ 5,319	$ 5,239
Adjustments required to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	2,479	2,475	2,092
Goodwill impairments	181	—	—
Losses on settlements of defined benefit pension plans	187	—	—
Stock-based compensation	234	222	230
Loss on early extinguishment of debt	—	643	—
Deferred income taxes	(1,334)	18	(252)
Other noncash items	53	135	(14)
Change in operating assets and liabilities, net of effects from acquisitions:			
Accounts receivable, net	(941)	(243)	(1,594)
Inventories	(514)	(742)	(1,141)
Other current assets	(341)	35	355
Other assets	3	(43)	2
Accounts payable and claims and discounts payable	1,710	2,189	2,834
Accrued expenses	(371)	131	892
Other long-term liabilities	38	2	(104)
Net cash provided by operating activities	$ 8,007	$ 10,141	$ 8,539

Source: CVS Health Corporation 2017 Form 10-K.



Cash Flow Statement and Financial Statement Articulation

- A complete statement of cash flows explains the changes in every balance sheet account during the period, not just cash.
- Algebraically, the balance sheet equation is used as follows:

		Assets	=	Liabilities			+	Stockholders' equity
1	Cash	+	Non-cash assets	=	Liabilities		+	Stockholders' equity
2	Cash	=	Liabilities	-	Non-cash assets		+	Stockholder's equity
	ΔCash	=	Δ Liabilities	-	Δ Non-cash assets		+	Δ Stockholders' equity

450 (−)

- As such, every line item of a cash flow statement relates to a change in one or more balance sheet accounts other than cash. Analyzing why each account changed provides each component of the cash flow statement.

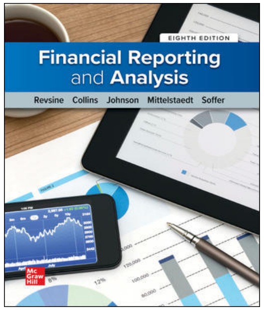
Cashflowst is mainly dependant on the Statement of financial Position

1. We seperate cash from non cash assets.

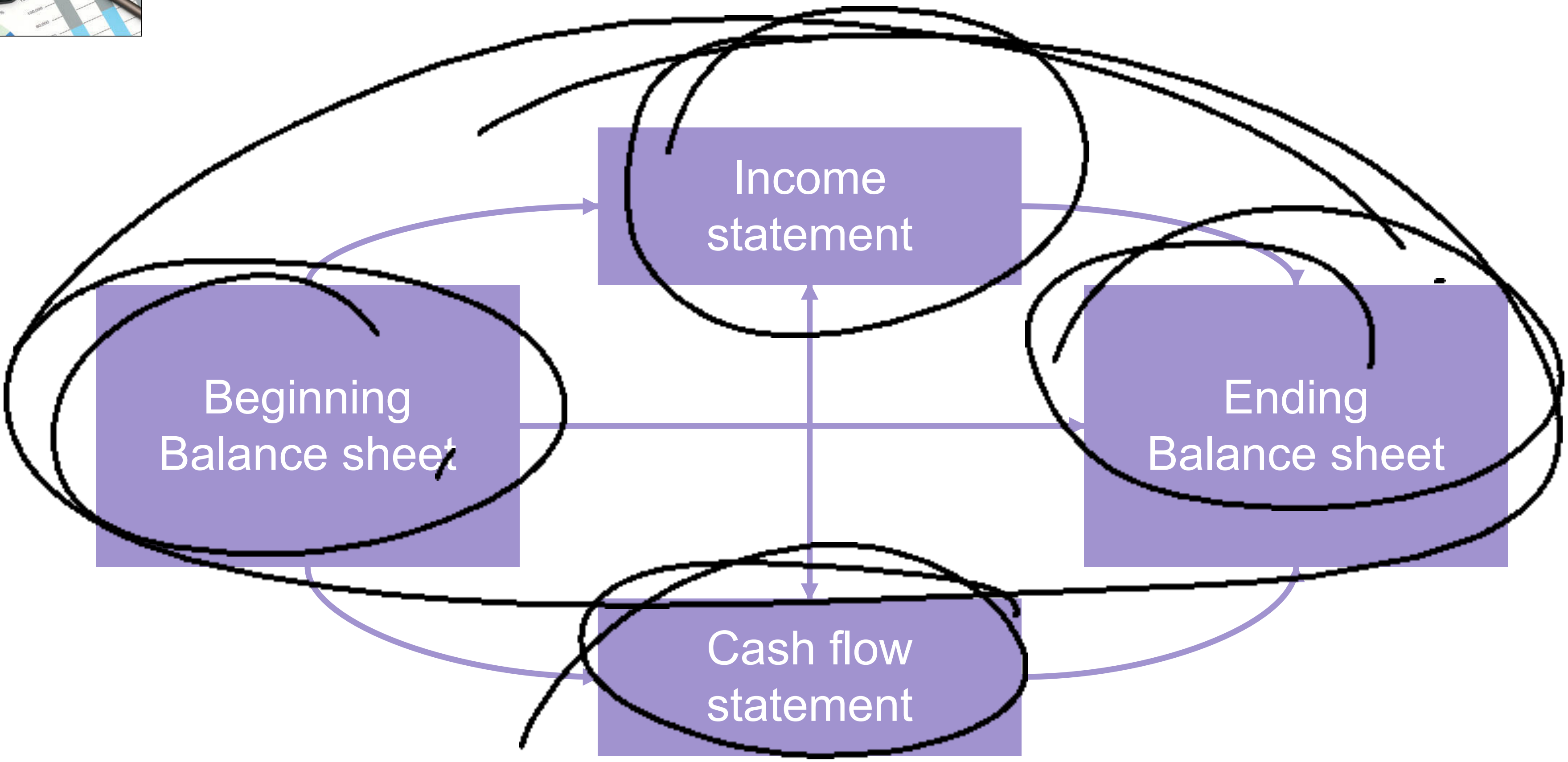
beg balance 31/12/2023 cash

for 2024 1/1/2024

Δ cash 31/1/2024

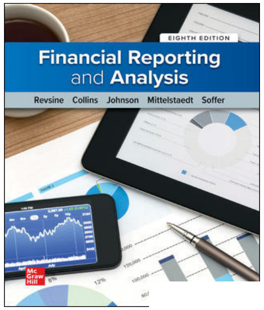


Deriving Cash Flow Information



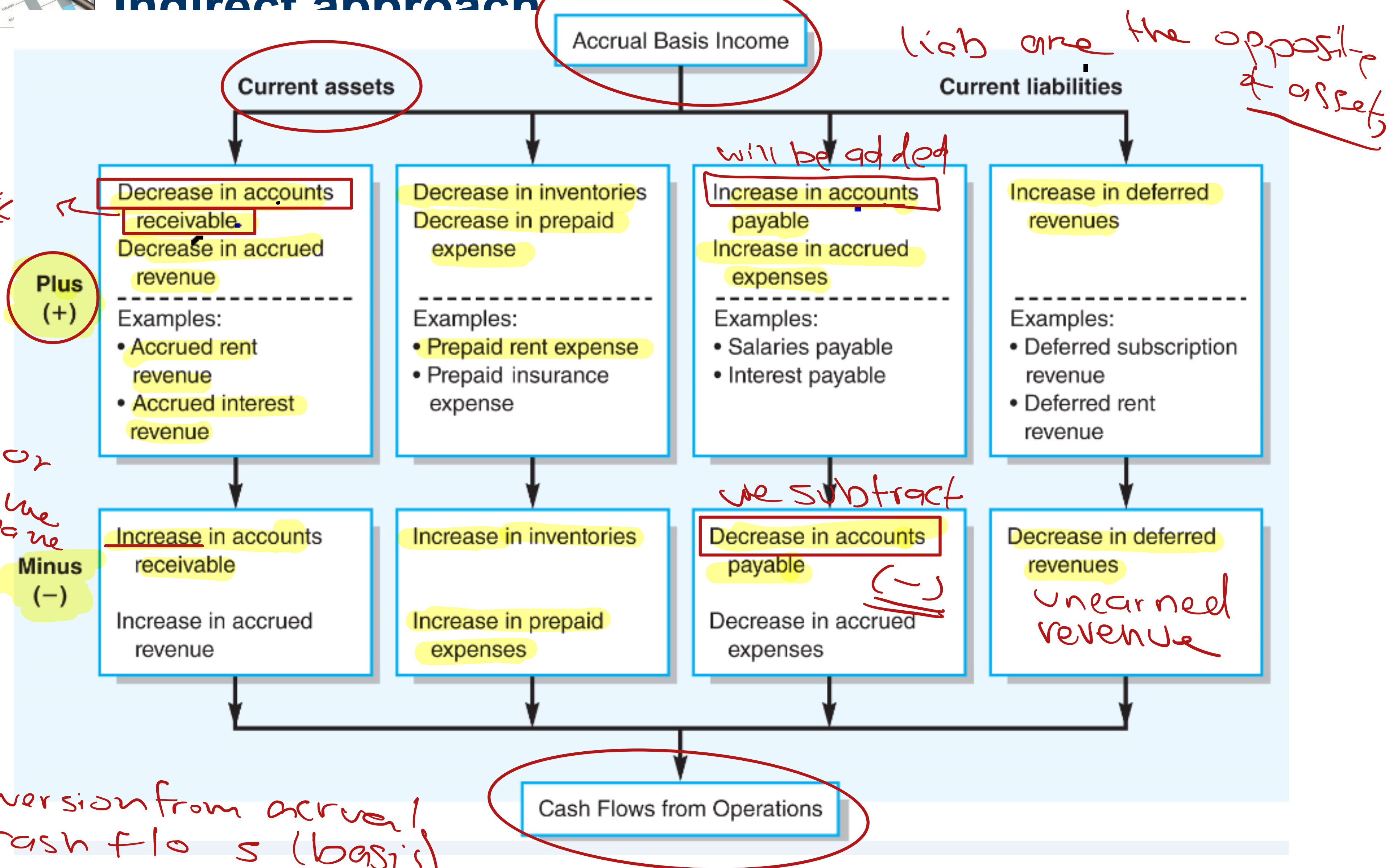
You can *always* derive any one financial statement from information available in the other three statements.

increase
Decrease



Deriving Cash Flows from Operations:

Indirect approach



Conversion from accrual to cash flows (basis)

CA ↑ A/R we ↓ (−)
↓ A/R we (+)

main role of statement of cash flows

---

liab

↑ A/P we (+)

↓ A/P we (−)

1

Dr A/R	Cr
+1000	500
Bal. 500	
if 1600	
2100	

↑ inc in bal of A/R

or

Entry will be:

A/R 1000
Revenue 1000

Cash 500
A/R 500

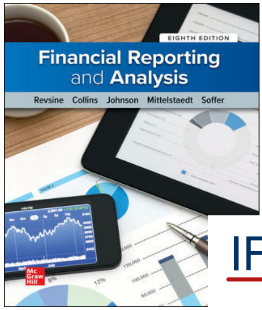
So A/R ↓ because we recieved cash but it affected NI by an increase of 500

So if we don't realize A/R, we subtract it in CF statement.

Dep when acquiring the asset we allocate the cost over time.

if Dep Exp increases, we add it (+)
because i didn't pay it cash
any ↑ in exp, we add it back

if ↓ Dep Exp, we (−)



Global Vantage Point

IFRS (IAS 7) encourages, but does not require, entities to report cash flows from operating activities using the direct method.

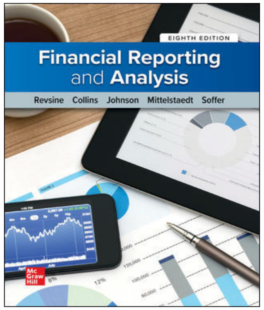
Why: believed to provide information that is not available under the indirect method

Both FASB and IASB tabled a proposal to mandate the use of the direct method for reporting operating cash flows since most computer systems aren't set up to efficiently to process the requisite data.

Subtle differences between IFRS and U.S. GAAP: one is how to report cash interest from investments

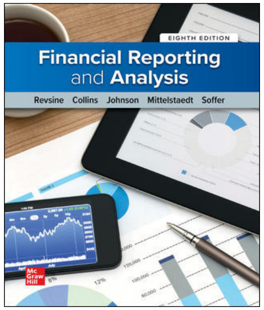
U.S. GAAP reports these as part of operating cash flows

IAS 7 allows the option to report these as cash flows from investing activities



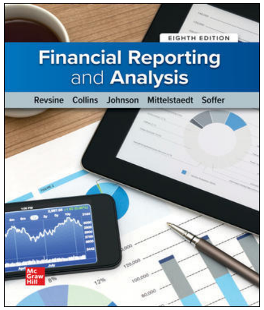
Summary

- The balance sheet and statement of cash flows are two of the primary financial statements required under GAAP.
- The balance sheet shows the assets owned by a company at a given point in time and how those assets are financed (debt versus equity). A variety of measurement bases are used to report the various asset, liability, and stockholders' equity accounts.
- When making intercompany comparisons, financial statement users must be careful to recognize how the different measurement bases affect key financial ratios and how account titles and statement formats vary across countries.
- The statement of cash flows shows the change in cash for a given period broken down into operating, investing, and financing activities.



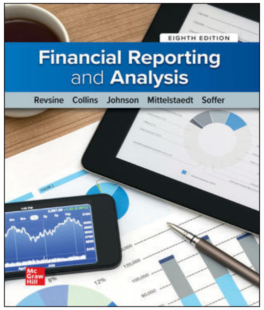
Summary, continued

- Successive balance sheets and the statement of cash flows articulate with one another meaning changes in noncash balance sheet accounts can be used to explain changes in cash for a period.
- Analysis of changes in selected balance sheet accounts also can be used to explain why operating cash flows differ from accrual income.
- Conversely, the statement of cash flows provides information that enables users to understand changes in balance sheet accounts that have occurred over the reporting period.
- Understanding the interrelationships between successive balance sheets and the statement of cash flows and being able to exploit these interrelationships to derive unknown account balances are important skills for analysts and lending officers.



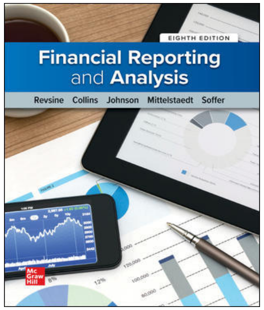
Summary, concluded

- Understanding the basic differences between the direct and indirect approach to presenting cash flows from operations, and differences between where certain items are reported on a cash flow statement under IFRS versus U.S. GAAP are also important skills.



Appendix 4A: Worksheet Approach to Indirect Method Cash Flow Statement

The worksheet approach to creating cash flow statements is identical to that described in the chapter in that it relies on analyzing the changes in all of the balance sheet accounts.



Worksheet Approach: Steps

- The top and bottom rows of the analysis present the balance sheets at the beginning and end of the period for which a cash flow statement is desired.
  - Debit balances are shown as positive amounts and credit balances are shown as negative amounts.
- Next, the analyst must reconcile each of the balance sheet accounts *other than cash*, so that the entire change from the beginning balance to the ending balance is explained.
  - Each change is placed in the column for that balance sheet item, again using positive/negative notation to represent debits/credits.
  - The amounts are entered into rows that will correspond to line items in the cash flow statement.
  - When the cell shows a zero, the reconciliation of the corresponding column is complete.