Chapter 5

UNDERSTANDING CASH FLOW STATEMENTS

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LEARNING OUTCOMES

- compare cash flows from operating, investing, and financing activities and classify cash flow items as relating to one of those three categories given a description of the items;
- describe how non-cash investing and financing activities are reported;
- contrast cash flow statements prepared under International Financial Reporting Standards (IFRS) and US generally accepted accounting principles (US GAAP);
- distinguish between the direct and indirect methods of presenting cash from operating activities and describe arguments in favor of each method;
- describe how the cash flow statement is linked to the income statement and the balance sheet;
- calculate and interpret free cash flow to the firm, free cash flow to equity, and performance and coverage cash flow ratios.

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CONTENTS

1. Components and Format of the Cash Flow Statement
2. The Cash Flow Statement: Linkages and Preparation
   btw BS and CF
3. Cash Flow Statement Analysis
4. Summary

CONSOLIDATED STATEMENTS OF CASH FLOWS: MICROSOFT

⊕ cash come in ⊖ cash goes out

3 main activities

most companies use this method

indirect method → cannot tell how much cash they received from customers

direct method

increase in cash from stock issued

direct method

CASH FLOWS STATEMENTS

(In millions)

Year Ended June 30,	2023	2022	2021
① **Operations**			
Net income	$ 72,361	$ 72,738	$ 61,271
Adjustments to reconcile net income to net cash from operations:			
Depreciation, amortization, and other	13,861	14,460	11,686
Stock-based compensation expense	9,611	7,502	6,118
Net recognized losses (gains) on investments and derivatives	196	(409)	(1,249)
Deferred income taxes	(6,059)	(5,702)	(150)
Changes in operating assets and liabilities:			
Accounts receivable	(4,087)	(6,834)	(6,481)
Inventories	1,242	(1,123)	(737)
Other current assets	(1,991)	(709)	(932)
Other long-term assets	(2,833)	(2,805)	(3,459)
Accounts payable	(2,721)	2,943	2,798
Unearned revenue	5,535	5,109	4,633
Income taxes	(358)	696	(2,309)
Other current liabilities	2,272	2,344	4,149
Other long-term liabilities	553	825	1,402
Net cash from operations	87,582	89,035	76,740
③ **Financing**			
Cash premium on debt exchange	0	0	(1,754)
Repayments of debt	(2,750)	(9,023)	(3,750)
Common stock issued	1,866	1,841	1,693
Common stock repurchased	(22,245)	(32,696)	(27,385)
Common stock cash dividends paid	(19,800)	(18,135)	(16,521)
Other, net	(1,006)	(863)	(769)
Net cash used in financing	(43,935)	(58,876)	(48,486)
② **Investing**			
Additions to property and equipment	(28,107)	(23,886)	(20,622)
Acquisition of companies, net of cash acquired, and purchases of intangible and other assets	(1,670)	(22,038)	(8,909)
Purchases of investments	(37,651)	(26,456)	(62,924)
Maturities of investments	33,510	16,451	51,792
Sales of investments	14,354	28,443	14,008
Other, net	(3,116)	(2,825)	(922)
Net cash used in investing	(22,680)	(30,311)	(27,577)
Effect of foreign exchange rates on cash and cash equivalents	(194)	(141)	(29)
Net change in cash and cash equivalents	20,773	(293)	648
Cash and cash equivalents, beginning of period	13,931	14,224	13,576
Cash and cash equivalents, end of period	$ 34,704	$ 13,931	$ 14,224

Link to B/S

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CONSOLIDATED BALANCE SHEET: MICROSOFT

BALANCE SHEETS

(In millions)

CF statement tells you what happened during the period

Link to statement of cash flows

June 30,	2023	2022
Assets		
Current assets:		
Cash and cash equivalents	**$ 34,704**	$ 13,931
Short-term investments	**76,558**	90,826
Total cash, cash equivalents, and short-term investments	**111,262**	104,757
Accounts receivable, net of allowance for doubtful accounts of **$650** and $633	**48,688**	44,261
Inventories	**2,500**	3,742
Other current assets	**21,807**	16,924
Total current assets	**184,257**	169,684

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CLASSIFICATION OF ACTIVITIES ON THE STATEMENT OF CASH FLOWS

Operating activities: Deliver or produce goods for sale and provide services. Examples:

- Receive cash from customers
- Pay cash to suppliers
- Pay cash for operating expenses.

L/T

Investing activities: Buy or sell long-term assets and other investments. Examples: property, plant, and equipment (PP&E); other companies' securities (that are not cash equivalents).

Financing activities: Obtain or repay capital. Examples:

- Borrow from creditors and repay the principal
- Issue or repurchase stock
- Pay dividends

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If you classify investment as main operation → you should classify int income as operating activity too.

CLASSIFICATION OF CASH FLOWS UNDER IFRS VS. U.S. GAAP

mostly in operating because it shows up in P/L

↳ you can reclassify to compare two firms with different standard

Item	IFRS	U.S. GAAP
Interest received	Operating* or investing	Operating
Interest paid	Operating* or financing	Operating
Dividends received	Operating* or investing	Operating
Dividends paid	Operating or financing*	Financing
Taxes paid	Generally operating, but a portion can be allocated to investing or financing E.g. Sell a plant → Gain as they decided to discontinue the plant	Operating

tax paid jump only this year

↓

special event happen only one time

↓

can classify tax portion from the special event to be under investing / financing in line with the event

*most companies choose these classifications

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MICROSOFT: CASH FLOWS CLASSIFIED BY ACTIVITY

	2022	2021	2020
1 Net cash provided by operations	87,582	89,035	76,740
2 Net cash used in investing activities	(43,935)	(58,876)	(48,486)
3 Net cash used in financing activities	(22,680)	(30,311)	(27,577)
Effect of foreign exchange rate	(194)	(141)	(29)
Net change in cash and cash equivalent	20,773	(293)	648
Cash and cash equivalent, beginning of period	13,931	14,224	13,576
Cash and cash equivalent, end of period	34,704	13,931	14,224

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MICROSOFT'S OPERATING CASH FLOWS

Firm can choose direct or indirect method for operating activities in CF.

Indirect method

Year Ended June 30,	2023	2022	2021
Operations			
Net income	**$ 72,361**	$ 72,738	$ 61,271
Adjustments to reconcile net income to net cash from operations:			
Depreciation, amortization, and other — non-cash item → add back to net income	**13,861**	14,460	11,686
Stock-based compensation expense — non-cash item	**9,611**	7,502	6,118
Net recognized losses (gains) on investments and derivatives → should be classified in investment activities	**196**	(409)	(1,249)
Deferred income taxes	**(6,059)**	(5,702)	(150)
Changes in operating assets and liabilities:			
Accounts receivable	**(4,087)**	(6,834)	(6,481)
Inventories	**1,242**	(1,123)	(737)
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Differences between net income accrual basis and cash basis

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MICROSOFT'S FINANCING CASH FLOWS

	2023	2022	2021
Financing			
Cash premium on debt exchange	**0**	0	(1,754)
Repayments of debt	**(2,750)**	(9,023)	(3,750)
Common stock issued	**1,866**	1,841	1,693
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Net cash used in financing	**(43,935)**	(58,876)	(48,486)

firm mostly used its cash in stock repurchase & dividend paid

- Financing activities used $43,935 million of cash during 2023, less than the $58,876 million and $48,486 million during 2022 and 2021, respectively.
- The increase in cash used in 2022 compared to 2021 was primarily due to higher purchase of treasury stocks and repayment of debt.
- The decrease in cash used in 2023 compared to 2022 was primarily due to lower repayments of debt and purchase of treasury stocks.
- The amount of dividends paid has steadily increased over the past three years.

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MICROSOFT'S INVESTING CASH FLOWS

	2023	2022	2021
Investing			
Additions to property and equipment	**(28,107)**	(23,886)	(20,622)
Acquisition of companies, net of cash acquired, and purchases of intangible and other assets	**(1,670)**	(22,038)	(8,909)
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Maturities of investments	**33,510**	16,451	51,792
Sales of investments	**14,354**	28,443	14,008
Other, net	**(3,116)**	(2,825)	(922)
Net cash used in investing	**(22,680)**	(30,311)	(27,577)

a lot higher than 2023

because it aquired a company

- In every year, Microsoft's cash from operations was more than enough to cover its capital expenditures.
- Investing activities used $22,680 million in 2023, compared with $30,311 million and $27,577 million during 2022 and 2021, respectively.
  - The decrease in cash used in 2023 compared to 2022 was primarily due to acquisition of companies.
  - In 2022, Microsoft acquired ZeniMax Media and Nuance Company.
  - The increase in cash used in 2023 compared to 2022 was mainly due to purchase of investments and additions to property and equipment.

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COMMON-SIZE STATEMENT OF CASH FLOW FOR MICROSOFT

Each line item is presented **as a percentage of revenue**.

it is cash cow

	2023	2022	2021
Net income including non-controlling interests	34%	37%	36%
Net cash provided by operations	firm generated 41 cent from $1 revenue 41%	45%	46%
Net cash used in investing activities	invest -21%	-30%	-29%
Net cash used in financing activities	not finance from external -11%	-15%	-16%

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TECH DATA'S OPERATING CASH FLOWS: EXAMPLE OF DIRECT METHOD

Direct method

TECH DATA CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS
(In thousands)

Year ended January 31:	2018	2017	2016
Cash flows from operating activities:			
Cash received from customers	$ 42,981,601	$ 29,427,357	$ 28,119,687
Cash paid to vendors and employees	(41,666,356)	(28,664,222)	(27,819,886)
Interest paid, net	(86,544)	(22,020)	(20,264)
Income taxes paid	(131,632)	(84,272)	(85,645)
Net cash provided by operating activities	1,097,069	656,843	193,892

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MICROSOFT'S OPERATING CASH FLOWS

Indirect method

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time difference

Differences between revenue accrual basis and cash basis

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INDIRECT VS. DIRECT METHOD FOR PRESENTING OPERATING CASH FLOWS

Indirect method

- Begins with net income and adjusts to operating cash flows.
- Arguments for:
  - Clearly shows the reasons for differences between net income and operating cash flows.
  - Mirrors forecasting approach that begins with forecast of income, then derives cash flows.

Direct method

- Shows each cash inflow and outflow related to receipts and disbursements.
- Arguments for:
  - Provides information on the specific sources of operating cash receipts and payments.
  - Does not net.

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INDIRECT VS. DIRECT METHOD FOR PRESENTING OPERATING CASH FLOWS

Indirect method

- IFRS permit.
- U.S. GAAP permit.
- Used by the majority of companies, whether reporting under IFRS or U.S. GAAP.

Direct method

- IFRS encourage.
- U.S. GAAP encourage, but requires a reconciliation of net income to cash flow from operating activities.

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OPERATING ACTIVITIES: INDIRECT METHOD

Net income → Net cash from operating activities

Three main adjustments

1) Non-cash items
2) Non-operating losses/gains (should be in investing activities)
3) Time differences (increase or decrease of current assets/current liability)

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OPERATING ACTIVITIES: INDIRECT METHOD

Additions	• Non-cash items
	  • Depreciation expense of tangible assets
	  • Amortization expense of intangible assets
	  • Depletion expense of natural resources
	  • Amortization of bond discount
	• Non-operating losses
	  • Loss on sale or write-down of assets
	  • Loss on retirement of debt
	  • Loss on investments accounted for under the equity method
	• Increase in deferred income tax liability
	• Changes in working capital resulting from accruing higher amounts for expenses than the amounts of cash payments or lower amounts for revenues than the amounts of cash receipts
	  • Decrease in current operating assets (e.g., accounts receivable, inventory, and prepaid expenses)
	  • Increase in current operating liabilities (e.g., accounts payable and accrued expense liabilities)

time difference

AR ↑ because customers haven't paid

should be reported under investing or financing activities

Subtractions	• Non-cash items (e.g., amortization of bond premium)
	• Non-operating items
	  • Gain on sale of assets
	  • Gain on retirement of debt
	  • Income on investments accounted for under the equity method
	• Decrease in deferred income tax liability
	• Changes in working capital resulting from accruing lower amounts for expenses than for cash payments or higher amounts for revenues than for cash receipts
	  • Increase in current operating assets (e.g., accounts receivable, inventory, and prepaid expenses)
	  • Decrease in current operating liabilities (e.g., accounts payable and accrued expense liabilities)

time difference

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STATEMENT OF CASH FLOWS: OPERATING ACTIVITIES-INDIRECT METHOD

The Walt Disney

CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	2021	2020	2019
OPERATING ACTIVITIES			
Net income (loss) from continuing operations	**$ 2,536**	$ (2,442)	$ 10,897
Depreciation and amortization	**5,111**	5,345	4,167
Goodwill and intangible asset impairments	**—**	4,953	—
Net gain on investments, acquisitions and dispositions	**(332)**	(920)	(4,733)
Deferred income taxes	**(1,241)**	(392)	117
Equity in the (income) loss of investees	**(761)**	(651)	103
Cash distributions received from equity investees	**754**	774	754
Net change in produced and licensed content costs and advances	**(4,301)**	397	(542)
Net change in operating lease right of use assets / liabilities	**46**	31	—
Equity-based compensation	**600**	525	711
Pension and postretirement medical amortization	**816**	547	278
Other, net	**144**	94	(124)
Changes in operating assets and liabilities, net of business acquisitions:			
Receivables	**(357)**	1,943	55
Inventories	**252**	14	(223)
Other assets	**171**	(157)	932
Accounts payable and other liabilities	**2,410**	(2,293)	191
Income taxes	**(282)**	(152)	(6,599)
Cash provided by operations - continuing operations	**5,566**	7,616	5,984

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try to compare

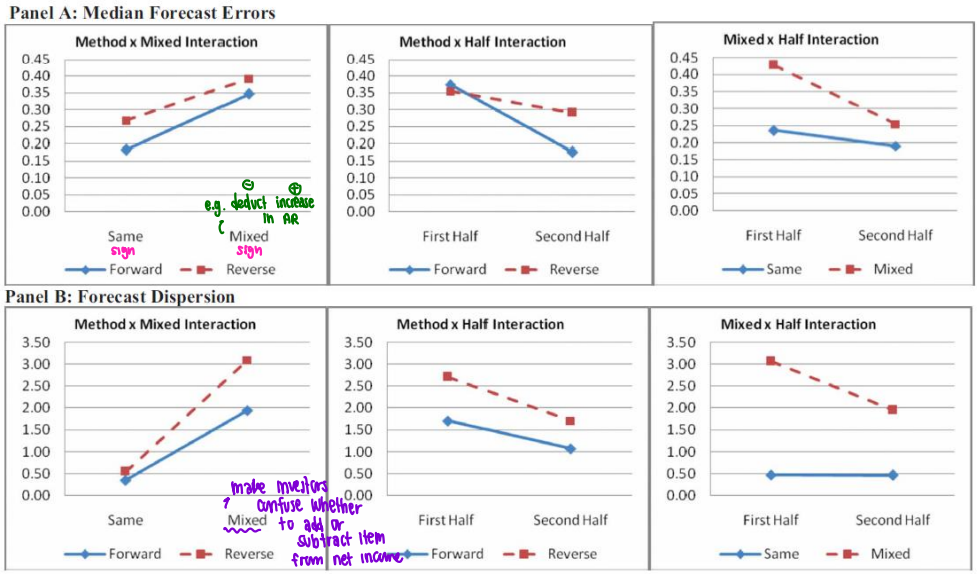
FIGURE 1

Format of Financial Information, Judgment Elicitation, and Feedback Screens across Conditions

FORWARD-ORDER		REVERSE-ORDER	
Researchers recommend to use this format		currently use for CF statement	
Statement of Cash Flows Screens			
YEAR 1 Cash Flows from Operations	XXX	YEAR 1 Operating Earnings (Net income)	[redacted]
YEAR 1 Increase (Decrease) in Non-Cash Operating Net Assets	YYY	YEAR 1 (Increase) Decrease in Non-Cash Operating Net Assets (this may be confusing)	(YYY)
YEAR 1 Operating Earnings	[redacted]	YEAR 1 Cash Flows from Operations	XXX
Judgment Screens			
Forecast of YEAR 2 Cash Flows from Operations	ZZZ	Forecast of YEAR 2 Cash Flows from Operations	ZZZ
Feedback Screens			
Cash Flows from Operations	XXX	YEAR 1 (Increase) Decrease in Non-Cash Operating Net Assets	(YYY)
YEAR 1 Increase (Decrease) in Non-Cash Operating Net Assets	YYY	Cash Flows from Operations	XXX
Your forecast of YEAR 2 Cash Flows from Operations	ZZZ	Your forecast of YEAR 2 Cash Flows from Operations	ZZZ
ACTUAL value of YEAR 2 Cash Flows from Operations	ACT	ACTUAL value of YEAR 2 Cash Flows from Operations	ACT
Percentage Error	%ERR	Percentage Error	%ERR

2x2 = Forward vs reverse; mixed sign vs same sign

all participants have to do forecast & researchers gather forecast error
- 1st group get forward-order format
- 2nd " —— " reverse " —— "



* Group that got forward-order CF → had less error

Half interaction: the subject estimated CFO in the first (last) 8 trials of the experiment

- Hodder, L., Hopkins, P.E. and Wood, D.A., 2008. The effects of financial statement and informational complexity on analysts' cash flow forecasts. *The Accounting Review*, *83*(4), pp.915-956.

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NON-CASH INVESTING AND FINANCING ACTIVITIES

Non-cash transaction: Any transaction that does not involve an inflow or outflow of cash (e.g., exchange of one non-monetary asset for another).

E.g. acquire another firm by equity not cash

- Not incorporated in the cash flow statement.
- *Must be disclosed*.

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CASH FLOW STATEMENT ANALYSIS: EVALUATION OF THE SOURCES AND USES OF CASH

1) The sources of cash for a company can vary with its stage of growth

- Mature companies
  - Operating activity is the primary source of cash flow.
  - Cash from operating activity can be used in either investing (good future projects/investments) or financing activities (return to capital providers)
- Growth companies → E.g. Tesla in early year, steaming service like Netflix in early year
  - Operating cash flow may be negative for early years as companies invest in assets to grow their businesses.

2) Examine determinants of operating cash flow.

- Companies are using or generating cash flow and why?
- Compare net income (more easy to manipulate) and operating cash flow. (→ hard to manipulate)
  - Large net income but poor operating cash flow may signal poor earnings quality (choose accounting choices to increase net income but not generating cash)
- How consistent are operating cash flow?

3) Evaluate each line item in investing activity to understand how companies receive cash (i.e. selling LT assets, investments) or how companies invest for future.

4) Evaluate each line item in financing activity to understand whether the company is raising capital or repaying capital.

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CASH FLOW STATEMENT ANALYSIS: EVALUATION OF THE SOURCES AND USES OF CASH

Full Consolidated Statements of Cash Flows of Groupe Danone shown in Exhibit 12 in the textbook

Years Ended December 31	2016	2017
Net income	1,827	2,563
Share of profits of associates net of dividends received	52	(54)
Depreciation, amortization, and impairment of tangible and intangible assets	786	974
Increases in (reversals of) provisions	51	153
Change in deferred taxes	(65)	(353)
(Gains) losses on disposal of property, plant, and equipment and financial investments	(74)	(284)
Expense related to Group performance shares	24	22
Cost of net financial debt	149	265
Net interest paid	(148)	(186)
Net change in interest income (expense)	—	80
Other components with no cash impact	13	(15)
Cash flows provided by operating activities, before changes in net working capital	**2,615**	**3,085**
(Increase) decrease in inventories	(24)	(122)
(Increase) decrease in trade receivables	(110)	(190)
Increase (decrease) in trade payables	298	145
Changes in other receivables and payables	(127)	40
Change in other working capital requirements	37	(127)
Cash flows provided by (used in) operating activities	**2,652**	**2,958**
Capital expenditure	(925)	(969)
Proceeds from the disposal of property, plant, and equipment	27	45
Net cash outflows on purchases of subsidiaries and financial investments	(66)	(10,949)
Net cash inflows on disposal of subsidiaries and financial investments	110	441
(Increase) decrease in long-term loans and other long-term financial assets	6	(4)
Cash flows provided by (used in) investing activities	**(848)**	**(11,437)**
Increase in capital and additional paid-in capital	46	47
Purchases of treasury stock (net of disposals) and DANONE call options	32	13
Issue of perpetual subordinated debt securities	—	1,245
Interest on perpetual subordinated debt securities	—	—
Dividends paid to Danone shareholders	(985)	(279)
Buyout of non-controlling interests	(295)	(107)
Dividends paid	(94)	(86)
Contribution from non-controlling interests to capital increases	6	1
Transactions with non-controlling interests	(383)	(193)
Net cash flows on hedging derivatives	50	(52)
Bonds issued during the period	11,237	—
Bonds repaid during the period	(638)	(1,487)
Net cash flows from other current and non-current financial debt	(442)	(564)
Net cash flows from short-term investments t-bill	(10,531)	9,559
Cash flows provided by (used in) financing activities	**(1,616)**	**8,289**
Effect of exchange rate and other changes	(151)	272
Increase (decrease) in cash and cash equivalents	**38**	**81**
Cash and cash equivalents at beginning of period	519	557
Cash and cash equivalents at end of period	557	638
Supplemental disclosures		
Income tax payments during the year	(891)	(1,116)

huge cash going out

e.g. due to maturity or sell it

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FREE CASH FLOW

Free Cash Flow: Excess of operating cash flow over capital expenditure

excess cash → to whole firm → to both debt & equity provider

Free Cash Flow to the Firm (FCFF): Cash flow available to the company's suppliers of capital (debt *and* equity).

- After all operating expenses (including taxes) have been paid.
- After all operating investments have been made for fixed capital *and* working capital.

cashflow before distributed to debt & equity providers

net income already paid interest

non-cash items e.g. Depre

amount that distributed to debt providers

CAPEX

FCFF = NI + NCC + INT(1- TAX RATE) – FCInv – WCInv

net CF

EBIT (1-T)

NI = net income

NCC = non-cash charges (such as depreciation and amortization)

INT = interest expense

FCInv = capital expenditures (fixed capital such as equipment)

WCInv = working capital expenditures

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FCFF CAN ALSO BE COMPUTED FROM CASH FLOW FROM OPERATING ACTIVITIES

Net Income

+ Non-cash charges

– Working capital investment

= Cash from operating activities

+ Interest expense × (1 – Tax rate)

– Fixed capital investments

= FCFF

CFO already has added non-cash items to net income and deducted working capital investment

Interest, a cash flow available to one of the capital providers, which has been deducted from net income, so it must be added back.

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FREE CASH FLOW

↱ to shareholders

Free Cash Flow to Equity (FCFE): Cash flow available to the company's *common stockholders*.

- After all operating expenses (including taxes) have been paid.
- After borrowing costs (principal and interest) have been paid.
- After all operating investments have been made for fixed capital *and* working capital.

subtract all items related to debt

FCFE = CFO – FCInv + Net borrowing

FCFE = CFO – FCInv - Net repayment

FCInv = capital expenditures (fixed capital such as equipment)

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COMPUTE FCFE

Net Income

+ Non-cash charges

– Working capital investment

– Fixed capital investment

+ Net new borrowing (or minus net debt repayments)

= FCFE

Positive FCFE means that the company has an excess of operating cash flow over amounts needed for capital expenditures and repayment of debt.

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Cash flow from operating activities:	
Cash received from customers	$23,543
Cash paid to suppliers	(11,900)
Cash paid to employees	(4,113)
Cash paid for other operating expenses	(3,532)
Cash paid for interest	(258)
Cash paid for income tax	(1,134)
Net cash provided by operating activities	2,606
Cash flow from investing activities:	
Cash received from sale of equipment	762
Cash paid for purchase of equipment	(1,300)
Net cash used for investing activities	(538)
Cash flow from financing activities:	
Cash paid to retire long-term debt	(500)
Cash paid to retire common stock	(600)
Cash paid for dividends	(1,120)
Net cash used for financing activities	(2,220)
Net increase (decrease) in cash	(152)
Cash balance, December 31, 2017	1,163
Cash balance, December 31, 2018	$1,011

ACME CORPORATION

Also add this

cash firm received from sale of PPE

FCFF

CFO

Interest exp (1 - T)

= 2,606 +258**(1-0.34*)+ (762-1,300)

net PPE

= 2,238

*Tax rate = tax expense/pretax income

**cash paid for interest expense = 246+12

FCFE

= 2,606 + (762-1,300) - 500

= 1,568

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CASH FLOW PERFORMANCE RATIOS

operating activities

Ratio	Calculation	What It Measures
Cash flow to revenue	CFO ÷ Net revenue	Operating cash generated per dollar of revenue
Cash return on assets	CFO ÷ Average total assets	Operating cash generated per dollar of asset investment
Cash return on equity	CFO ÷ Average shareholders' equity	Operating cash generated per dollar of owner investment
Cash to income	CFO ÷ Operating income	Cash generating ability of operations
Cash flow per share	(CFO – Preferred dividends) ÷ Number of common shares outstanding	Operating cash flow on a per-share basis

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CASH FLOW COVERAGE RATIOS

Ratio	Calculation	What It Measures
Debt coverage	CFO ÷ Total debt	Financial risk and financial leverage
Interest coverage whether we have enough cash from operation to cover interest expense	operation (CFO + Interest paid + Taxes paid) ÷ Interest paid	Ability to meet interest obligations
Reinvestment	CFO ÷ Cash paid for long-term assets	Ability to acquire assets with operating cash flows
Debt payment	CFO ÷ Cash paid for long-term debt repayment	Ability to pay debts with operating cash flows
Dividend payment	CFO ÷ Dividends paid	Ability to pay dividends with operating cash flows
Investing and financing	CFO ÷ Cash outflows for investing and financing activities	Ability to acquire assets, pay debts, and make distributions to owners

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SUMMARY

- The cash flow statement provides information about a company's *cash receipts* and *cash payments* during an accounting period.
- Cash flows are categorized as operating, investing, and financing.
- Compared with U.S. GAAP, IFRS provide companies with more choices in classifying some cash flow items as operating, investing, or financing activities.
- The operating activities section of the statement of cash flows can be presented using the direct method or the indirect method.
- Two approaches to developing common-size cash flow statements are the total cash inflows/total cash outflows method and the percentage of net revenues method.
- Cash flow ratios measure a company's profitability, performance, and financial strength.

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Appendix

LINKAGES OF THE CASH FLOW STATEMENT WITH THE INCOME STATEMENT AND BALANCE SHEET

Asset = Liability + Equity

- The statement of cash flows show the change in cash during an accounting period

Beginning Balance Sheet at December 31, 20X8	**Statement of Cash Flows for Year Ended December 31, 20X9**		**Ending Balance Sheet at December 31, 20X9**
Beginning cash	Plus: Cash receipts (from operating, investing, and financing activities)	Less: Cash payments (for operating, investing, and financing activities)	Ending cash

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LINKAGES OF THE CASH FLOW STATEMENT WITH THE INCOME STATEMENT AND BALANCE SHEET

- The current assets and current liabilities normally reflect a company's operating activities.
- Differences between the accrual basis and cash basis of accounting for an operating transactions result in an increases or decrease in some (usually) current assets or liabilities on the balance sheet.

Beginning Balance Sheet at December 31, 20X8	Income Statement for Year Ended December 31, 20X9	Statement of Cash Flows for Year Ended December 31, 20X9	Ending Balance Sheet at December 31, 20X9
Beginning accounts receivable	Plus: Revenues	Minus: Cash collected from customers	Equals: Ending accounts receivable

AR↓ as firm collected cash from customer

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PREPARATION OF THE STATEMENT OF CASH FLOWS: STEPS

Step 1. Determine the change in cash.

Step 2. Determine the net cash flow from operating activities. Use both the current year's *income statement* and information on *current assets and liabilities* from the comparative balance sheets.

Step 3. Determine net cash flows from investing and financing activities. Examine all other changes in the balance sheet accounts.

Step 4. Include summary of net increase (decrease) in cash, cash at beginning, and cash at end.

Step 5. Disclose any significant non-cash transactions separately at the bottom of the statement.

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PREPARATION OF THE STATEMENT

EXHIBIT 6 Acme Corporation Income Statement
Year Ended December 31, 2018

Revenue (net)		$23,598
Cost of goods sold		11,456
Gross profit		12,142
Salary and wage expense	$4,123	
Depreciation expenses	1,052	
Other operating expenses	3,577	
Total operating expenses		8,752
Operating profit		3,390
Other revenues (expenses):		
Gain on sale of equipment	205	
Interest expense	(246)	(41)
Income before tax		3,349
Income tax expense		1,139
Net income		$2,210

	2018	2017	Net Change
Cash	$1,011	$1,163	$(152)
Accounts receivable	1,012	957	55
Inventory	3,984	3,277	707
Prepaid expenses	155	178	(23)
Total current assets	6,162	5,575	587
Land	510	510	—
Buildings	3,680	3,680	—
Equipment*	8,798	8,555	243
Less: accumulated depreciation	(3,443)	(2,891)	(552)
Total long-term assets	9,545	9,854	(309)
Total assets	$15,707	$15,429	$278
Accounts payable	$3,588	$3,325	$263
Salary and wage payable	85	75	10
Interest payable	62	74	(12)
Income tax payable	55	50	5
Other accrued liabilities	1,126	1,104	22
Total current liabilities	4,916	4,628	288
Long-term debt	3,075	3,575	(500)
Common stock	3,750	4,350	(600)
Retained earnings	3,966	2,876	1,090
Total liabilities and equity	$15,707	$15,429	$278

* During 2018, Acme purchased new equipment for a total cost of $1,300. No items impacted retained earnings other than net income and dividends.

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OPERATING ACTIVITIES: DIRECT METHOD

- **CASH RECEIVED FROM CUSTOMERS**

REVENUE	23,598
INCREASE IN A/R (-)	-55
CASH RECEIVED FROM CUSTOMER	23,543

time differences

Beginning A/R + Revenue – Cash collection = Ending A/R

Cash collection = Revenue - Ending A/R + Beginning A/R

= Revenue – (Ending A/R - Beginning A/R)

= Revenue – increase in A/R

means firm received cash from customers

= Revenue + decrease in A/R

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OPERATING ACTIVITIES: DIRECT METHOD

- **CASH PAID TO SUPPLIERS**

occurs when firm sell inventory

Beginning inventory + Purchase – Costs of goods sold = Ending inventory

Purchase = Costs of goods sold + Ending inventory – Beginning inventory

= Costs of goods sold + increase in inventory

= Costs of goods sold - decrease in inventory

make AP↑ if firm buy on credit

Cash paid to suppliers for purchase of inventory

Beginning A/P + Purchase – Cash paid to suppliers = Ending A/P

Cash paid to suppliers = Purchase – Ending A/P + Beginning A/P

= Purchase – increase in A/P

= Purchase + decrease in A/P

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OPERATING ACTIVITIES: DIRECT METHOD

- **CASH PAID TO SUPPLIERS**

COSTS OF GOODS SOLD	11,456
INCREASE IN INVENTORY	707
PURCHASE FROM SUPPLIERS	12,163
INCREASE IN ACCOUNTS PAYABLE	263
CASH PAID TO SUPPLIERS	11,900

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OPERATING ACTIVITIES: DIRECT METHOD

Beginning payable + expense – cash paid to XXX = Ending payable

Cash paid to XXX = Expense + Beginning payable –Ending payable

= Expense - (Ending payable – Beginning payable)

= Expense - Increase in payable

= Expense + Decrease in payable

- **CASH PAID TO EMPLOYEES**

SALARY AND WAGE EXPENSES		4,123
INCREASE IN SALARY AND WAGE PAYABLE	-10	
CASH PAID TO EMPLOYEES		4,113

- **CASH PAID FOR INTEREST**

INTEREST EXPENSE	246
DECREASE IN INTEREST PAYABLE	12
CASH PAID FOR INTEREST	258

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OPERATING ACTIVITIES: DIRECT METHOD

- **CASH PAID FOR INCOME TAXES**

INCOME TAX EXPENSE	1,139
INCREASE IN INCOME TAX PAYABLE	-5
CASH PAID FOR INTEREST	1,134

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OPERATING ACTIVITIES: DIRECT METHOD

- **CASH PAID FOR OTHER OPERATING EXPENSES**

OTHER OPERATING EXPENSES	3,577
DECREASE IN PREPAID EXPENSES	-23
INCREASE IN OTHER ACCRUED LIABILITES	-22
CASH PAID FOR OTHER OPERATING EXPENSES	3,522

Beginning prepaid expense + cash payment – expense = Ending prepaid expense

Cash payment = Ending prepaid expense – Beginning prepaid expense + expense

= Expense + Increase in prepaid expense + Beginning accrued

= Expense - Decrease in prepaid expense + Beginning accrued liabilities + expense –cash payment = Ending accrued liabilities

Cash payment = Beginning accrued liabilities – Ending accrued liabilities + expense

= Expense – Increase in accrued liabilities

= Expense + Decrease in accrued liabilities

INVESTING CASH FLOWS

Determine investing cash flows by examining changes in long-term assets. In this example, we want to find cash received from sale of equipment

Beginning PP&E + Purchases – Dispositions = Ending PP&E

Disposition = Beginning PP&E + Purchases -Ending PP&E

= 8,555+1,300 – 8,798

= 1,057

Beginning A/D + Depreciation - A/D on equipment sold = Ending A/D

A/D on equipment sold = Beginning A/D + Depreciation – Ending A/D

= 2,891 + 1,052 -3,443

= 500

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INVESTING CASH FLOWS

Book value of equipment sold

= Historical cost of equipment sold – A/D on equipment sold

= 1,057 – 500

= 557

Cash received from sales of equipment

= Book value of equipment sold + gain on sale of equipment

= 557 +205

= 762

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FINANCING CASH FLOWS

Determine financing cash flows by examining changes in debt and equity accounts.

- Cash paid to retire long-term debt = 500 (decrease in LT debt)
- Cash paid to retire common stock = 600 (decrease in C/S)

- Cash paid for dividends

= Beginning R/E + Net income – Ending R/E

= 2,876 + 2,210 – 3,966

= 1,120

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CASH FLOW STATEMENT ANALYSIS: COMMON-SIZE ANALYSIS

- A percentage of total inflows (outflows) of cash
- A percentage of net revenue

Acme corporation 2018

Panel A. Direct Format for Cash Flow		
Inflows		Percentage of Total Inflows
Receipts from customers	$23,543	96.86%
Sale of equipment	762	3.14
Total	$24,305	100.00%
Outflows		Percentage of Total Outflows
Payments to suppliers	$11,900	48.66%
Payments to employees	4,113	16.82
Payments for other operating expenses	3,532	14.44
Payments for interest	258	1.05
Payments for income tax	1,134	4.64
Purchase of equipment	1,300	5.32
Retirement of long-term debt	500	2.04
Retirement of common stock	600	2.45
Dividend payments	1,120	4.58
Total	$24,457	100.00%
Net increase (decrease) in cash	($152)	
Panel B. Indirect Format for Cash Flow		
Inflows		Percentage of Total Inflows
Net cash provided by operating activities	$2,606	77.38%
Sale of equipment	762	22.62
Total	$3,368	100.00%
Outflows		Percentage of Total Outflows
Purchase of equipment	$1,300	36.93%
Retirement of long-term debt	500	14.20
Retirement of common stock	600	17.05
Dividend payments	1,120	31.82
Total	$3,520	100.00%
Net increase (decrease) in cash	($152)	

		Percentage of Net Revenue
Cash flow from operating activities:		
Net income	$2,210	9.37%
Depreciation expense	1,052	4.46
Gain on sale of equipment	(205)	(0.87)
Increase in accounts receivable	(55)	(0.23)
Increase in inventory	(707)	(3.00)
Decrease in prepaid expenses	23	0.10
Increase in accounts payable	263	1.11
Increase in salary and wage payable	10	0.04
Decrease in interest payable	(12)	(0.05)
Increase in income tax payable	5	0.02
Increase in other accrued liabilities	22	0.09
Net cash provided by operating activities	$2,606	11.04%
Cash flow from investing activities:		
Cash received from sale of equipment	$ 762	3.23%
Cash paid for purchase of equipment	(1,300)	(5.51)
Net cash used for investing activities	$(538)	(2.28)%
Cash flow from financing activities:		
Cash paid to retire long-term debt	$(500)	(2.12)%
Cash paid to retire common stock	(600)	(2.54)
Cash paid for dividends	(1,120)	(4.75)
Net cash used for financing activities	$(2,220)	(9.41)%
Net decrease in cash	$(152)	(0.64)%

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ถูกต้อง 1/1 คะแนน

1

The sale of a building for cash would be classified as what type of activity on the cash flow statement?

- Investing ✓
- Operating
- Financing
- Operating or Investing

ถูกต้อง 1/1 คะแนน

2

When computing net cash flow from operating activities using the indirect method, an addition to net income is most likely to occur when there is a:

- decrease in a deferred tax liability.
- gain on the sale of an asset.
- increase in prepaid expense
- loss on the sale of investment ✓

ถูกต้อง 1/1 คะแนน

3

12:29 ส. 2 ก.ย. 90%
2604647_1/2023.Group

ถูกต้อง 1/1 คะแนน

3

Mabel Corporation (MC) reported accounts receivable of $66 million at the end of its second fiscal quarter. MC had revenues of $72 million for its third fiscal quarter and reported accounts receivable of $55 million at the end of its third fiscal quarter. Based on this information, the amount of cash MC collected from customers during the third fiscal quarter is:

- $61 million.
- $72 million.
- $83 million. ✓
- $66 million.

ถูกต้อง 1/1 คะแนน

4

Which of the following is an appropriate method of computing free cash flow to the firm?

- Deduct both after-tax interest payments and capital expenditures from operating cash flows.
- Deduct fixed capital investment and repayment from operating cash flows.
- Add operating cash flows to after-tax interest payments and deduct capital expenditures. ✓
- Add operating cash flows to capital expenditures and deduct after-tax interest payments.

ถูกต้อง 1/1 คะแนน

5

Golden Cumulus Corp., a commodities trading company, reported interest expense of

กิจกรรม การแชท ทีม งานที่มอบหมาย ปฏิทิน การโทร เพิ่มเติม

✓ ถูกต้อง 1/1 คะแนน

5

Golden Cumulus Corp., a commodities trading company, reported interest expense of $19 million and taxes of $6 million. Interest payable increased by $3 million, and taxes payable decreased by $4 million over the period. How much cash did the company pay for interest and taxes?

- $22 million for interest and $10 million for taxes.
- $16 million for interest and $2 million for taxes.
- $16 million for interest and $10 million for taxes. ✓
- $22 million for interest and $2 million for taxes.

✓ ถูกต้อง 1/1 คะแนน

6

Based on the following information for Star Inc., what are the total net adjustments that the company would make to net income in order to derive operating cash flow?

		Year Ended	
Income Statement Item		12/31/2018	
Net income		$20 million	
Depreciation		$ 2 million	
Balance Sheet Item	12/31/2017	12/31/2018	Change
Accounts receivable	$25 million	$22 million	($3 million)
Inventory	$10 million	$14 million	$4 million
Accounts payable	$ 8 million	$13 million	$5 million

12:29 ส. 2 ก.ย. 90%
2604647_1/2023.Group

✓ ถูกต้อง 1/1 คะแนน

6

Based on the following information for Star Inc., what are the total net adjustments that the company would make to net income in order to derive operating cash flow?

		Year Ended	
Income Statement Item		12/31/2018	
Net income		$20 million	
Depreciation		$ 2 million	
Balance Sheet Item	12/31/2017	12/31/2018	Change
Accounts receivable	$25 million	$22 million	($3 million)
Inventory	$10 million	$14 million	$4 million
Accounts payable	$ 8 million	$13 million	$5 million

- Add $2 million.
- Add $6 million. ✓
- Subtract $6 million.
- Subtract $2 million.

✓ ถูกต้อง 1/1 คะแนน

7

The following information is extracted from Sweetfall Incorporated's financial statements.

7

The following information is extracted from Sweetfall Incorporated's financial statements. The amount of cash Sweetfall Inc. paid to suppliers is:

Income Statement		Balance Sheet Changes	
Revenue	$56,800	Decrease in accounts receivable	$1,324
Cost of goods sold	27,264	Decrease in inventory	501
Other operating expense	562	Increase in prepaid expense	6
Depreciation expense	2,500	Increase in accounts payable	1,063

- $25,700. ✓
- $26,702.
- $27,826.
- $28,828.

ถูกต้อง 1/1 คะแนน

8

Interest paid is classified as an operating cash flow under:

- IFRS but may be classified as either operating or financing cash flows under US GAAP.
- US GAAP but may be classified as either operating or financing cash flows under IFRS. ✓
- US GAAP but may be classified as either operating or investing cash flows under IFRS.
- IFRS but may be classified as either operating or investing cash flows under US GAAP.

ถูกต้อง 1/1 คะแนน

ถูกต้อง 1/1 คะแนน

9

A benefit of using the direct method rather than the indirect method when reporting operating cash flows is that the direct method:

- is easier and less costly.
- provides specific information on the sources of operating cash flows. ✓
- mirrors a forecasting approach.
- All answers are correct.

ถูกต้อง 1/1 คะแนน

10

A conversion of a face value $1 million convertible bond for $1 million of common stock would most likely be:

- reported as supplementary information to the cash flow statement. ✓
- reported as a $1 million investing cash inflow and outflow.
- reported as a $1 million financing cash outflow and inflow.
- no action required.

กลับไปยังหน้าขอบคุณ

เนื้อหานี้ถูกสร้างขึ้นโดยเจ้าของฟอร์ม ข้อมูลที่คุณส่งจะถูกส่งไปยังเจ้าของฟอร์ม Microsoft จะไม่รับผิดชอบต่อความเป็นส่วนตัวหรือแนวทางปฏิบัติด้าน

3

The following information is extracted from Sweetfall Incorporated's financial statements. The amount of cash Sweetfall Inc. paid to suppliers is: (1 คะแนน)

Income Statement		Balance Sheet Changes	
Revenue	$56,800	Decrease in accounts receivable	$1,324
Cost of goods sold	27,264	Decrease in inventory	501
Other operating expense	562	Increase in prepaid expense	6
Depreciation expense	2,500	Increase in accounts payable	1,063

- (●) $25,700.
- ( ) $26,702.
- ( ) $27,826.
- ( ) $28,828.

27,264 - 501 - 1063

= 25,700

5

Based on the following information for Star Inc., what are the total net adjustments that the company would make to net income in order to derive operating cash flow? (1 คะแนน)

		Year Ended	
Income Statement Item		12/31/2018	
Net income		$20 million	
Depreciation		$ 2 million	
Balance Sheet Item	12/31/2017	12/31/2018	Change
Accounts receivable	$25 million	$22 million	($3 million)
Inventory	$10 million	$14 million	$4 million
Accounts payable	$ 8 million	$13 million	$5 million

- ( ) Add $2 million.
- (●) Add $6 million.
- ( ) Subtract $6 million.
- ( ) Subtract $2 million.

2 + 3 - 4 + 5 = 6

4

Golden Cumulus Corp., a commodities trading company, reported interest expense of $19 million and taxes of $6 million. Interest payable increased by $3 million, and taxes payable decreased by $4 million over the period. How much cash did the company pay for interest and taxes? (1 คะแนน)

- ( ) $22 million for interest and $10 million for taxes.
- ( ) $16 million for interest and $2 million for taxes.
- (●) $16 million for interest and $10 million for taxes.
- ( ) $22 million for interest and $2 million for taxes.

int paid = 19 - 3 = 16

tax paid = 6 + 4 = 10

6

When computing net cash flow from operating activities using the indirect method, an addition to net income is most likely to occur when there is a: (1 คะแนน)

- ( ) decrease in a deferred tax liability.
- ( ) gain on the sale of an asset.
- ( ) increase in prepaid expense
- (●) loss on the sale of investment

เคยนักออกไปแล้ว → ต้องบวกกลับ net income ใน operating CF
↳ ไปอยู่ใน IA