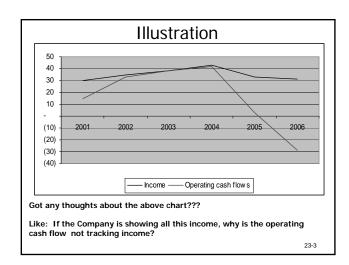


#### Overview

- BECAUSE of the SCF, users of the financial statements get the best of both worlds!
  - SCF bridges the gap created by "paper income" resulting from applying an accrual basis of accounting.
  - Reconciles GAAP income to operating cash flows and separately displays cash from investing and financing activities.

23-2

# 13:11



### Statement of Cash Flows- summary

This will mean more later, but a statement of cash flows is an analysis of the change in the balance sheet accounts.

- If you reconcile the change in each of your balance sheet accounts, your SCF will work!!
  - The key is presentation- Operating vs. Investing Vs. Financing activities.

#### Overview- how it works

#### Cash from operations:

- Shows the cash provided by operations
- Typical presentation called "indirect" because it reconciles the net income (accrual) to cash from operations.
- Think of it as net income, adjusted for non-cash activities, including changes in current assets

#### Cash from investing:

- Gross!
- Shows cash from investing activities
  - Think of it as cash from long-term assets, similar to unusual items in the income statement.

#### Cash from financing:

- Gross!
- Shows cash from financing activities
  - Think of it as cash from borrowing and equity transactions

# 13:11

#### Operating section- Indirect Method

- Reconciles net income to cash flows from operations by:
  - Starts with net income and seeks to reconcile that number to the cash actually generated from operations
  - Removes non-cash items, like depreciation & amortization
  - Removes items which will be presented in the investing and financing sections separately
    - i.e remove gains from sales of long-term assets
  - Shows changes in current assets
    - Think about it- if A/R increased \$100k, how does this impact cash?

| ASSUMED ACTIVITY: | Copening balance | 1,000,000 | Sales on credit | 10,000,000 | Cash sales | 100,000 | Collections | 9,500,000 | | (10,000,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,500,000) | (20,50

### Investing section

Now that the operating section reflects ONLY operating activities, this section shows just the cash from investing activities (principally buying and selling long-term assets)

- Presented gross-for instance a sale of a fixed asset for a gain:
  - The gain is shown as a reduction from net income in the operating section
  - The proceeds are shown as a source of cash
  - This works out to reflect the change in fixed assets. See next slide

23-9

Fixed asset							
Beginning of year	100,000						
Sold	(100,000)						
Ending	- ·						
Accumulated depreciation		_	_				
Beginning of year	70,000						
Cy Depreciation expense	5,000						
Sold	(75,000)						
Ending							
How much did fixed assets change by?	30,000						
In the operating section we pull out the		In the	statement o	of cash flo	vs we have a	ccounte	d for the
non-cash depreciation expense:		1		change	of \$30,000:		
Depreciation expense	5.000	Operatin	g section ac				
Gain on sale	75,000		eciation bac				5,00
		Gain	back-out				(75,00
Sell the thing for \$100k:		INVEST	ING section:	Proceeds	from sale		100,00
Purchase price	100,000	WOW-F	PRESENTIN	G IT THIS \	VAY REFLEC	TS THE	30,00
NBV at sale	(25,000)	CHANG	E!				
Gain on sale	75,000						
In the investing section we show:							
Cash proceeds from sale of fixed assets	100 000						

## 13:11

#### Financing section

- Now that the operating section reflects ONLY operating activities, this section shows just the cash from financing activities (principally cash received and paid to borrow money and complete equity transactions)
- Presented gross-for instance borrow \$1 million and repay \$250,000 under a line of credit:
  - The borrowings of \$1million are shown as cash provided by financing (positive cash);
  - The repayment of \$250,000 is shown as a repayment (negative cash)
  - NOTICE that combined they represent the change in that

FINANCING ACTIVITY EXAMPLE

Remember that we are trying to reconcile the change in each of the balance sheet accounts.

So if debt increased by \$10, but the company's activity were to borrow \$1 million and repaid \$999,990 (net \$10 change), the statement of cash flows would reflect the "activity" and would look like this:

Cash flows from financing activities:

Borrowings from bank \$1,000,000
Repayments under loans \$999,990
Cash flows from financing activities \$10

23-12

### SO HOW DO WE DO IT?

First, you need:

- Balance sheet
- Income statement
- Equity statement

Then, you compute the change in each item on the balance sheet.

For each change, allocate to:

Operating, investing or financing

Then you post them all over the the statement of cash flows!

	12/31/2004	12/31/2003	CHANGE	Operating	Net Income		For
Cash	10,000	12,000	(2,000)	N/A		n/a	
A/R	70,000	65,000	5,000	(5,000)			-
Inventory	500,000	425,000	75,000	(75,000)			-
Fixed assets	-	-					
Accumulated depr.		-					
TOTAL ASSETS	580,000	502,000					
A/P	75,000	70,000	5,000	5,000			-
Debt	400,000	400,000					
common stock	10,000	10,000					
retained earnings	95,000	22,000	73,000		73,000		-
TOTAL LIAB & EQTY	580,000	502,000					
	-	-					
NET INCOME FOR 200	4 WAS	73,000		B/C all acco	ounted for, we	are read	y to do SCF!
			XYZ. Inc.				
		Stateme	nt of Cash	Flows			
Cash flows from operati	ng acitivities:		nt of Cash				
Cash flows from operati	ng acitivities:		nt of Cash				73,000
Net income Adjustments to rec	oncile net inco	Year Ende	nt of Cash d December	31, 2004			.,
Net income	oncile net inco	Year Ende	nt of Cash d December	31, 2004			(5,000)
Net income Adjustments to rec Increase in acc Increase in inv	oncile net inco counts receiva entory	Year Ender ome to net ca ble	nt of Cash d December	31, 2004			(5,000) (75,000)
Net income Adjustments to rec Increase in ac Increase in inv Increase in ac	oncile net inco counts receiva entory counts payable	Year Ender me to net ca ble	ent of Cash d December sh from ope	31, 2004			(5,000) (75,000) 5,000
Net income Adjustments to rec Increase in ac Increase in inv Increase in ac	oncile net inco counts receiva entory	Year Ender me to net ca ble	ent of Cash d December sh from ope	31, 2004			(5,000) (75,000)
Net income Adjustments to rec Increase in ac Increase in in Increase in ac Cash Ifows from investi	oncile net inco counts receiva entory counts payable JSED in opera ng and financi	Year Ender me to net ca ble ting activities	ent of Cash d December sh from ope	31, 2004			(5,000) (75,000) 5,000
Net income Adjustments to rec Increase in act Increase in inv Increase in act Net cash t	oncile net inco counts receiva entory counts payable JSED in opera ng and financi	Year Ender me to net ca ble ting activities	ent of Cash d December sh from ope	31, 2004			(5,000) (75,000) 5,000
Net income Adjustments to rec Increase in act Increase in inv Increase in act Net cash I Cash flows from investi NONE IN THIS EX	oncile net inco counts receiva entory counts payable JSED in opera ng and financi	Year Ender me to net ca ble ting activities	ent of Cash d December sh from ope	31, 2004			(5,000) (75,000) 5,000
Net income Adjustments to rec Increase in ac Increase in inv Increase in ac Increase in ac Increase in inv Increase in ac Net cash I Cash flows from investi NONE IN THIS EX Net decre	oncile net inco counts receiva entory counts payable JSED in opera ng and financi AMPLE	Year Ender me to net cable ting activities	ent of Cash d December sh from ope	31, 2004			(5,000) (75,000) 5,000 (2,000)
Net income Adjustments to rec Increase in ac Increase in in Increase in ac Net cash I Cash flows from investi NONE IN THIS EX Net decres Cash at th	oncile net inco counts receiva entory counts payable JSED in opera ng and financi AMPLE ase in cash	Year Ender	ent of Cash d December sh from ope	31, 2004			(5,000) (75,000) 5,000 (2,000)

# 13:11

### OKAY, MORE DIFFICULT

Prepare the statement of cash flows for ABC, Inc. based on the following information:

- The comparative balance sheet and income statement are on the next slide.
- Equity transactions are as follows:
  - Sold stock for \$10,000 cash
  - Declared and paid dividends of \$5,000
- Declared and paid dividends of \$5,000
   Long-term assets and liabilities
   Borrowed \$100,000, repaid \$50,000
   Purchased a warehouse with \$1 million in cash and assumed an existing \$8 million loan;
   Sold equipment for \$200,000 resulting in a gain of \$190,000 (net book value was 10,000 representing 500,00 of equipment with 490,000 of accumulated depreciation).

	ABC, li Balance S Decembe	heets			ABC, Inc. Income statemer Year Ended December	
SALANCE SHEET & INC. STMT	Cash Accounts receivable Inventory Prepaid expenses Total current assets Fixed assets At cost accumulated depreciation Lease commissions At cost accumulated amortization Total assets Account spayable Accounts payable Accurrent portion of debt	2004 225,000 1,000,000 1,000,000 15,000,000 15,000,000 18,500,000 (6,210,000) 12,290,000 1,250,000 (725,000) 14,315,000 150,000 10,050,000	2003 100,000 250,000 500,000 12,000 862,000 10,000,000 (6,500,000) 3,500,000 1,250,000 (700,000) 4,912,000 500,000 2,000,000	S S III	Sales OS Fores Profit SG&A expense Interest expense Interest expense Interest expense Interest expense Income from recurring op's Sain on disposal of f. assets Income before income taxes Income tax provision Idet income  Equity transactions are as Sold stock for \$10,000 Declared and paid divi Long-term assets and liab Borrowed \$100,000, re	cash dends of \$5,000 illities:
<sup>@</sup>	Common stock	110,000	100,000	ı	Purchased a warehous	e with \$1 million assumed an
	Retained earnings  Total liabilities & Equity	3,522,000	2,087,000		existing \$8 million loar Sold equipment for \$2 a gain of \$190,000 (no 10,000 representing 50 equipment with 490,000 depreciation).	00,000 resulting in et book value was 00,00 of

Cash	Change 125.000	To Operating	Gain	Deprec. & Amort.	Cash Purchase	N-Cash Purchase	Proceeds sale asset	Borrow	Repay	Stock Sale	Dividends	Net incom	LEFTO)
Accounts receivable	15,000	(15,000)											
Inventory	500,000	(500,000)											
Prepaid expenses	(2,000)	2.000											
Fixed assets, net	8.790.000		(190.000)	200.000	(1.000.000)	(8 000 000)	200.000						
Cap. Corr At cost	(25,000)		()	25.000	(1,000,000)	(0,000,000)	200,000						
Accounts payable	(67,000)	(67.000)											
Accrued expenses	(25.000)	(25,000)											
All debt	8.050.000	(20,000)				8.000.000		100.000	(50.000)				
Common stock	10,000								(,)	10.000			
Retained earnings	1,435,000										(5,000)	1,440,000	
		ABC, Inc.											
		ment of Cash led December											
Cash flows from open													
Net Income	any activities					1.440.000							
Adjustments to rec	oncile net inc	ome to net or	arb from one	venting activ	ition:	1,440,000							
	on & amortiza		aan nom ops	many acces	inco.	225.000							
	sposal of fixe					(190,000)							
	n accounts re					(15,000)							
	n inventory	Currana				(500,000)							
	in prepaid ex	nenses				2,000							
	in accounts o					(67,000)	_	_		_			
	in accrued e					(25,000)		٠/١			1 ( ) N		
	Cash provid	led by operati	ing activities			870,000		$\mathbf{v}$	LU		١O١	V	
Cash flows from inves	tion activities						_	_		•		-	
Purchase of wareh						(1.000.000)							
Proceeds from sal		ate.				200,000							
r roceeds main sair		in investing a	ctivities			(800,000)							
Cash flows from finan	cing activities												
Borrowings						100,000							
Repayments						(50,000)							
Stock sold for cast	1					10,000							
Dividends paid						(5,000)							
	Cash provid	fed by financi	ng activities			55,000							
	Net increas					125,000							
		beginning of end of the ve				100,000							
Supplemental disclosi		, .				3,000							
Supplemental disclosi Portion of warehouse						8,000,000							
	,					0,000,000							3-17

## DIRECT VS. INDIRECT

Everything we just did is the "Indirect" method. The INDIRECT METHOD which is by far the most common. There is a "Direct" method as well.

- The only difference is in the operating section- financing and investing sections are exactly the same either way
- The indirect method is called "indirect" because it reconciles net income to cash from operations—i.e indirectly determines cash from operations by starting with a non-cash-based number and reconciling to the cash-based number:
  - Strength: highlights the differences between net income and operating cash flows
- The direct method is called "direct" because it only shows the cash flows, rather than reconciling to them.
  - Strength: prominently displays cash receipts and payments.

23-18

## 13:11

### DIRECT METHOD: LOOKS LIKE Cash flows from operating activities: Cash received from customers \$765,000 Cash payments: (550,000) To suppliers For operating expenses (148,000)For income taxes ( 48,000) Net cash provided by operating activities \$ 19,000 23-19

	Indirect		Direct				
OPERATING SECTION	Net income		Cash received from customers				
	Adjustments to net income, such as		Cash paid for inventory				
	Depreciation		Cash paid for operating expense				
	Gains on I-term assets		Cash paid for income taxes				
	Changes in current assets & liabilities						
	THE ABOVE ITEMS ADD UP TO THE SA	ME AMOUN	FOF OPERATING CASH FLOW				
NVESTING SECTION	SAME	FOR BOTH					
INANCING SECTION	SAME	FOR BOTH					
	-						

## How do you compute:

You simply perform a roll-forward for the operating assets and liabilities. (works on the same premise as reconciling from net income, but in reverse)

If a Company has sales of \$1,000,000 and accounts receivable went from \$100,000 to \$110,000, then cash received from customers is:

 Beginning A/R
 \$ 100,000

 Plus sales
 1,000,000

 Less Ending
 (110,000)

 Cash received MUST be
 \$ 990,000

23-21

### REQUIRED DISCLOSURE ETC.

- If reconciling cash and cash equivelants, use the term cash and cash equivelants in the SCF
- Show cash paid for interest, and cash paid for income taxes at the bottom of the statement
- Don't forget to disclose non-cash investing and financing activities at the bottom of the statement

23-22

# 13:11

