

(*) Cash Flow statement

البيان Cash Flow statement يعطينا معلومات عن التدفقات النقدية الخاصة بالشركة (أو الشركة بقبضه كما في وشو الشركة) بتدفع كل سنة من (Cash receipts and cash payments) خلال Accounting Period

يقارن

⇒ Contrasts with the accrual basis

البيان accrual basis يعطينا معلومات عن التدفقات النقدية

والبيان Cash Flow statement يعطينا معلومات عن التدفقات النقدية

وهذا يعطينا معلومات إذا الشركة قادرة على تحمل كافة من العيانات

⇒ ان Cash Flow statement يعطينا معلومات عن الشركة لكي

تتمكن من معرفة اذ هي قادرة على تمويل الاستثمارات وعمليات

التحويل

من جهة العيانات الاستثمار والتحويل يتخطى تسأل حالنا اننا نعلم

هل الاستثمارات التي قام بها الشركة يتم تمويلها (يعني هل

التي تأتي من العيانات السابقة ولا الشركة اقترصت عما نقوم

2) ~~البيان Cash Flow statement يعطينا معلومات عن التدفقات النقدية~~

(Cash receipts and cash payments)

⇒ Subsections ← Cash Flow statement

Operating Activities
Investing Activities
Financing Activities

Cash Flow statement

- 1 direct method
- 2 indirect method

2.1 - Classification of Cash Flows and Non Cash activities

Operating activities include

يشمل النشاطات اليومية التي تقوم بها الشركة وهي
النشاطات التي تؤديها الشركة أثناء عملها مثل بيع السلع أو تقديم
خدمات أو شراء سلع أو تقديم سلع على البيع تكون
Cost of good sold
Cost of good sold
operating Activities
تتم تصنيفها على أنها أنشطة كالتالي

Investing Activities

يشمل شراء وبيع الأصول طويلة الأجل والاستثمارات الأخرى

- 1 Property
- 2 Plant
- 3 equipment

4 intangible Asset

5 other long term assets
6 long term or short term investment in the equity and debt (bonds and loans)

investing activity

investing activities

⇒ investments in equity and Dept securities exclude

1] ~~long term assets and other investments~~

any securities considered cash equivalent (very short highly liquid term securities)

Treasury Bills

very short, highly liquid - Treasury Bills

investing activity marketable security

2] securities held for dealing or trading purposes

day to day activities operating Activities

• Financing Activities include obtaining or repaying capital

equity and long term dept

Financing + Financing

⇒ Two Primary sources of Capital

shareholders

Creditors

الجابیه

⇒ Cash Inflows ←

بيع الأسهم أو الحصول على قرض أو إصدار سندات

⇒ Cash outflows repurchase stock (Treasury stock

← إعادة شراء الأسهم (Treasury stock) أو دفع على الشركة

دفع الأرباح أو دفع ديون الشركة

Example:

Long term debt 300 000 → Financing activities

Purchase equipment 200 000 → cash out flow

loss sale of equipment 70 000 → Income statement

= 120 000 → Cash flow statement

equity earning 10 000 → Income statement

Investing Activities ←

$-200 000 + 120 = 80 000$

IFRS

and Dividends

interest receive

operating or Investing Activities is IFRS

Interest and Dividend Paid

operating and Financing

or Paid

Interest and Div received \uparrow US GAAP
operating Activited
Financing Divides Paid

(Bank overdrafts) IFRS

Cash equivalent

Financing US GAAP

وهو حساب اذا دفع الى المصرف بالحوالات
من البنوك حسب القوائم المالية كانت الشركة قد دفعه
على القوائم

(Taxes Paid) IFRS

operating investing or financing

US GAAP

Example

31/12/2009 الشركة اشترت Bond 30 000 ومدة 180 day

وال Copawn Payment = 8%

الشركة اشترت Inventory 11000 Bond

وال Copawn Payment = 10% equipment

① ~~operating~~ operation decrease 30 000

23 Direct and indirect method

The IFRS and US GAAP

Direct and indirect operating Activities

Direct and indirect (they are) two acceptable for reporting Cash Flow From (operating Activities)

= Cash Flow From ~~operating~~ operating or operating cash flow

Direct method تفصيليا specific cash inflows and outflows

Direct method ال ال item ما يتصل كل item cash inflows and outflow ويتشوق و مر عليه تغييرات و بناء على ذلك تقدر inflows and outflow

item ال ال inflow و item ال ال outflow

و بالتالي راعينا تفهم بالزبط متوجب احية هاهي التدفقات لتفهم التدفقات القوية

Indirect method تفصيليا Cash Flows From operations

net income بعينه يتم تعديل لتدرج على net income ال ال

القوائم المالية

ال ال ال indirect method ال ال تفهم

net income اجابي

وقد يغير اجابي تدفقات نقدية

[2]

Forecasting

Direct and indirect Cash Flow statement ال الرجوع اليه ال

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indirect method ال US GAAP

indirect method ال Notes

Cash Basis ال Actual Basis

Cash Flow stat ال Balance sheet ال income stat

Beginning Balance sheet statement of Cash Flow ending Balance sheet

Beginning Cash + Cash receipts from ending Cash
 (Operating, investing, Financing Activities)
 - Cash Payment from

31/12/2020

X

200

بقي الحساب

1000

200

31/12/2021

X

300

900

$$100 + 200 = 300$$

$$= 900$$

Example 2

Beginning Balance sheet

+ Revenues

- Cash Flow

ending Balance sheet

Beginning account receivable

1000 \$

5000 \$

6000 \$

- Cash Collected From Customers

4000 \$

= ending Account Receivable

2000 \$



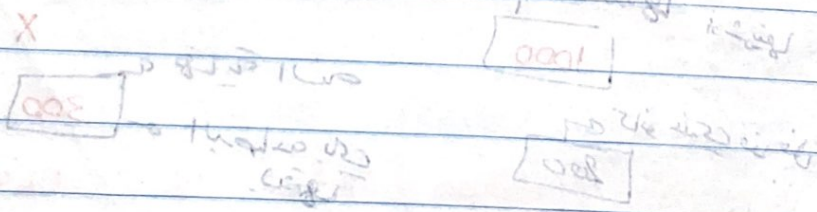
6000 - 4000

* steps for preparing the Cash Flow statement

1) income statement 2) Balance sheet

B. sh_t B. sh_{t-1}

* retained earning Beginning + Net income - Dividends = retained earning ending



3.2.1 : Operating Activities : Direct method

3.2.1.1 : Cash received from customers = Cash Collections
 = Cash Collections from Customers

كاش

$$\Rightarrow \text{Revenue} - \text{Increase in a/cnt receivable} = \text{Cash received from Customers (CCFC)}$$

\Rightarrow Cash received from customers affects the A.R as follows

$$\text{AR}_{\text{beg}} + \text{Revenues} - \text{Cash Collections} = \text{AR}_{\text{ending}}$$

$$\Rightarrow \text{CCFC} = \frac{\Delta \text{A.R}}{\text{Revenues}}$$

زيادة القيد بالدين (A.R) / زيادة القيد بالدين (Cash)

Example 3: revenues = 50 \$ million / total expenses = 35 \$ m
 net income = 15 \$ m / Δ A.R = 12 %

Decrease
 (CCFC)

$$\text{CCFC} = \text{Rev} - \Delta \text{AR}$$

$$= 50 \text{ m} - (-12) \text{ m} = 62 \text{ m}$$

Account liability = -7 m

outflow is also \oplus liability \leftarrow

3.2.1.2 \otimes Cash Paid to suppliers \otimes

\Rightarrow Cost of good sold = Purchases

OR \Rightarrow Cost of good sold + Δ inventory \rightarrow Δ Account Payable
= Cash paid to suppliers

\Rightarrow Beginning inventory + Purchases - Cost of good sold
= ending inventory

Account Payable

\Rightarrow Purchase from suppliers - Increase in Account Payable
= Cash Paid to suppliers

\Rightarrow The amount of cash paid to suppliers is reflected in the account payable account \otimes

Beginning \otimes account payable + Purchase - Cash paid to suppliers
= ending Account Payable

Example 4 \otimes Cost of good sold = 100 m / Total asset = +55 m
inventory = -6 m / Total liability = +45 m
Account Payable = -2 m

how much cash did the company pay to suppliers during the year?

Solu

$$\begin{array}{ccccccc} 100 \text{ m} & + & -6 \text{ m} & - & -2 \text{ m} & = & 96 \text{ m} \\ \downarrow & & \downarrow & & \downarrow & & \downarrow \\ \text{Cost of} & & \Delta \text{ of} & = & \Delta \text{ of} & & \text{Cash Paid to suppliers} \\ \text{good sold} & & \text{inventory} & & \text{account Payable} & & \end{array}$$

3.2.1.3 : Cash paid to Employees

→ Salary and wages expense - Increase in salary and wages Payable
= Cash Paid to employees

→ Beg salary and wages Payable + Salary and wage expenses
- Cash Paid to employees
= Ending salary and wages Payable

3.2.1.4 : Cash Paid for other operating expenses

→ Other operating expenses - Decrease in Prepaid expenses
- Increase in other accrued liabilities
= Cash Paid for other operating expenses

Example 5 : other operating expenses = 30 \$ m

Prepaid insurance expense increased \Rightarrow + 4 m

Accrued Liability = - 7 m

how much cash did the company pay in the 00E2021

$$\Delta DP = \Delta L - \Delta M - \Delta A + \Delta CA$$

Solu

$$= 30m + 4m - 7 = 41m$$

\hookrightarrow Cash Paid for other operating expenses =
 other operating expenses + increase pre paid expense
 - Increase in other accrued liability
 = + decrease

3.2.1.58 Cash Paid for interest

$$\text{Interest expense} + \text{Decrease in interest payable} = \text{Cash Paid for interest}$$

$$\text{Beg interest payable} + \text{interest expense} - \text{Cash Paid for interest} = \text{ending interest payable}$$

3.2.1.68 Cash Paid for income tax (C.P.I.T)

$$\text{Income tax expenses} - \text{Increase in income tax payable} = \text{Cash Paid for income tax}$$

$$\Rightarrow TP_{\text{Beg}} + TE - CPIT = \text{Taxes Payable}_{\text{ending}}$$

$$\hookrightarrow \Rightarrow CPIT = \text{Tax expense (TE)} - \Delta TP$$

(*) interest received :

$$\Rightarrow \text{Beg interest receivable} + \text{interest income} - \text{cash interest received} = \text{received}$$

$$\Rightarrow \text{Cash interest received} = \text{interest received Beg} - \text{interest received ended} + \text{Interest income}$$

$$\begin{matrix} \text{C.I.R} \\ \swarrow \downarrow \\ \text{CFS} \end{matrix} = \text{Interest income} - \Delta \text{Interest received}$$

\downarrow IS \downarrow BSH

(*) Investing Activities

sale of equipment \downarrow Cash inflow \downarrow بيع المعدات \downarrow Cash inflow
Accumulated expenses \downarrow depreciation expenses
و \downarrow المصاريف المتراكمة \downarrow المصاريف المتراكمة

$$\Rightarrow \text{Historical Cost of equipment sold} = \text{Beg equipment} + \text{equipment purchased} - \text{ending equipment}$$

$$\Rightarrow \text{accumulated depreciation} = \text{Beg accumulated depreciation} + \text{Dep expense} - \text{ending accumulated dep}$$

Book value = Historical Cost - accumulated Dep

~~(Book value)~~ or Cash Collected from sale of equipment =
= Book value + gain on sale of equipment

Example 6 : gain on sale of equipment = 12 m

Dep. expense = 8 m

Capital expenditure = 15 m

	12/31/2009	12/31/2010	Change
equipment	100 m	109 m	9 m
Acc. Dep	30 m	36 m	6 m

سؤال how much ~~is~~ Cash did the company received from the equipment sale?

solu

⇒ Historical cost of equipment sold
= 100m + 15m - 109m = 6 m

⇒ Acc Deb = 30m + 8m - 36m = 2m

⇒ Book value = 6m - 2m = 4m

⇒ Cash collected from sale of equipment =

4 m + 12m

= ~~16 m~~
16 m

(*) Financing Activities

3.2.3.1 Long Term Debt and Common Stock

3.2.3.2 Dividends

⇒ Beg retained earning + NI - Dividends = end retained earning

Beg R.e = 2876 \$

net income = 2210 \$

Div (271)?

end R.e = -3966

solu

$$2876 + 2210 - \text{Div} = -3966 \Rightarrow \text{Dividends} = 1120 \$$$

3.2.4 Overall statement of Cash Flow & Direct method

~~Net~~ Cash Flow from Operating Activities = 23548 \$ (*)

+ Cash received from customers = (11900 \$)

+ Cash paid to suppliers = (4113 \$)

+ = = = employees expenses = (4113 \$)

+ = = = for other operating activities = (3512 \$)

+ = = = interest = (258 \$)

+ = = = income tax = (1134 \$)

net cash provided by operating activities = 2606 \$

Cash Flow from investing Activities

* Cash received from sale of equipment	762	(*)
= Paid = Purchase =	(1300)	
net cash used for investing Activities	(538)	

Cash Flow from Financing Activities

Cash Paid to to relate long-term debt	(500)
= = for Div	(1120)
Net Cash used for Financing Activities	(2200)

net increase (decrease) in cash	(152)
Cash Balance balance 31/Dec/2018	1168
	1016

⇒ net cash = 2606 - 538 - 2226 = **(152)**

(*) Indirect method

2210 = net income

⊖ any non operating Activities - reconciliation

⊖ Gain on Sale of equipment

inflow ← Dep

⊖ any non Cash expenses

⊖ changes in operating working Capital items

NI = 2216
 - Gain on sale of equipment (205)
 + Dep € 1052

Account receivables (55)

Δ in inventory (707)

Prepaid expenses 23

Cash inflow

Cash outflow

Liability

Liability \uparrow NI \downarrow

Liability \downarrow NI \uparrow

Asset

Δ Account Payable 263

Δ Salary and Wage Payable 10

Interest Payable (12)

Δ Income tax

(*) Non Cash items include

- ① Dep expense
- ② Amortisation expense
- ③ Depletion expense
- ④ Amortisation of bond discount

(*) Non operation losses

- ① Loss on sale or write down of Assets
- ② Loss on retirement of dept
- ③ Loss on investments

inflow
سراج نقیبرہا ←

(*) Increase in deferred income tax Liability

(*) Changes in working Capital

- (1) Decrease in current operating assets
- (2) Increase in Liabilities

(*) Non Cash items (ex: amortisation of bond premium)

(*) Non operating items

- (1) Gain on sale of Assets
- (2) Gain on retirement of debt
- (3) Income on Investments

(*) Decrease in deferred income tax Liability

(*) change in working Capital

(1) Increase in current operating Asset

(2) Decrease in current operating Liabilities

(*) Non operating losses

- (1) Loss on sale of Assets
- (2) Loss on retirement of debt
- (3) Loss on investments

"... 10-2000 ..."

Example 7 : Page 245 / slides : 78

MI = 30 m

Dep = 7 m

Balance sheet	12/31/2008	2009	Δ change
Account Receivable	15 m	30 m	15 m
Inventory	16 m	13 m	(3 m)
Account Payable	10 m	20 m	10 m

Dep = 7

Δ A.R = 15 m

Δ inventory = 3 m

Δ A.P = 10 m

Σ → 15 → net adjustment

Activities

net Cash Flow from operating ↑ (11) 151
 = 35 m ⇒ 30 m + 5 m

(*) Conversion of Cash Flows from the indirect method to Direct method

income statement + Balance sheet

income stat

Total revenue ⊖ total expenses

non operating and non Cash items

” وعسى ان تركهوا شيئاً وهو خير لكم “

Adjustment

accrual amount of revenues and expenses

cash flow amounts of receipts and payments

Payments

Direct indirect

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4. Evaluation of the sources and uses of Cash

من اذ ان اطلع من وقت عم رجبنا كاشن + وبت

بيع الاكاشن

sources and uses Cash operating, investing, financing

operating

Negative كان الشركة لان تقترض

لا استنار

Cash اذا الشركة عنها فربما انها تنمو بتخدم ال

Div

Cash بيع ال

net cash flow from O.A > MI

وسا عننا تقسيم النوع دخل الشركة وبت

جودة هذا الدخل

1

2

3

4

4.2.8 Common Size Analysis of the stat of cash flow

Common size \rightarrow في طريق حساب ال

① Direct method
 ان \rightarrow Cash flow stat \rightarrow وينسب
 ان Total Cash inflows وال Total Cash outflows

ويعرف ما بقى كل رقم على ال Total

② Percentage of net revenues
 items \rightarrow بها 5 Percentage

Forecasting ال \rightarrow الطريقة بتسهل ال

Example 8 \rightarrow اساليد 90

investing Activities \rightarrow Cash \rightarrow operating cash flows

net income \rightarrow operating cash flows

\rightarrow مؤشر ايجابي

net income \rightarrow ال دخل الربحية للشركة ايجاب من ال

ولكن 2009 ان شركة كانت ببيع مبلغ كبير من

investments \rightarrow كانت ببيعها \rightarrow اذ ان ال

investments activity \rightarrow تسجين (+) Cash Flows في سنة ال 2009

\rightarrow الشركة كانت مصدرة اذم في ال 2009 كتر

بجرد كبير من long term dept كانت عليها

وسمى كان في long term Bond بتسحق في ال 2009

والناسك الشركة كانت بحاجة كبيع كبير من ال

الشركة بتسدد short term liabilities على طول

لأنه يوافق المصارف الأخرى بخليتيه في أن الشركة

عندها short term dept

ال (+) operating cash flow < الجزء الموجود في Financing Activities

الشركة عندها Liquidity ratios عالية

هذه الخيارات بظلمة تستخدم أو الشركة من قدر

الالتزام على

الشركة كل سنة بعد capital expenditure

الشركة غير بتدفع ال Financial Liabilities على

طريقة ال indirect method في حسابها الكلي بنوع

Cash Flow From operating activity

وغيرها بتجمع منه ايج Cash Flow From other financial activities

inflows / و من ايجها مجموع ال operating activities

و من ايجها مجموع ال outflows / Total

Example 9 :- $\text{Change in Cash From operating activity}$

Change in Cash From operating activity

change in Cash From investing activity (+)

Change in Cash From investing activity (+)

4.3: Free Cash to the Firm and Free Cash Flow to equity

Free Cash Flow = operating Cash Flow - Capital expenditure

↳ $\text{المبلغ المتاح بعد الاستهلاك}$

↳ Purposes: valuation a Company or its equity securities

* FCFF :-

$$FCFF = NI + NCC + Int (1 - \text{Tax rate}) - FC Inv - WC Inv$$

\downarrow net income
 \downarrow non cash charges as depreciation and amortisation
 \downarrow Interest expense
 \downarrow Capital expenditure as (fixed capital) as equipments
 \downarrow working capital expenditure

is a cash flow available to suppliers of debt Capital as well as equity Capital

$$\rightarrow FCFF = CF_0 + Int (1 - \text{Tax rate}) - FC Inv$$

Example 8 108 ✓

→ effective tax rate = $\frac{\text{income tax expense}}{\text{income before tax}}$

income before tax

→ FCFF available to the Company's Common Shareholders after all operating expense and borrowing costs

$$FCFF = CFO - FCInv + \text{net borrowing}$$

$$CFO = 2606$$

$$FCInv = (538) \Rightarrow 1300 - 762$$

$$- \text{Debt repayment } (500)$$

$$FCFF = 1568 \$$$

4.4.8 Cash Flow ratio

Cash Flow to revenue

$CFO \div \text{Net revenue} \rightarrow \text{net revenue}$

Cash return on asset

$CFO \div \text{average total Asset}$

= = = equity

$CFO \div \text{average shareholder's equity}$

Cash to income

$CFO \div \text{operating income}$

Cash Flow Per share

$(CFO - \text{Preferred dividends}) \div \# \text{ of Common share outstanding}$