

Task IM-10.23: Cash Flow Statement, derivative Method

(Kapitalflussrechnung, Derivative Methode)

KATERNBERG (Pty) Ltd. is a furniture store (trading business). The company was established in 20X0. The business shows the statement of financial position like below:

KATERNBERG's SFP 31 Dec 20X5			
A		C,L	
N-cur Assets	[EUR]	SHs' capital	[EUR]
P,P,E	200.000	Issued capital	200.000
Int. assets		Reserves	58.500
Fin. assets		Retained ear.	20.650
cur Assets		Liabilities	
Inventory	330.000	Int. bear. liab.	150.000
Receivables	58.000	Payables	250.000
Prepaid exp.		Provisions	
Cash	100.000	Def. income	
		Tax liabilities	8.850
	<u>688.000</u>		<u>688.000</u>

Exhibit 1: Statement of financial position

In 20X6, KATERNBERG depreciates the non-current assets 50,000.00 EUR and buys new ones at the end of the Accounting period at 100,000.00 EUR on cash. Don't apply depreciation on the new machines. KATERNBERG buys furniture (inventory) at 200,000.00 EUR and sells furniture bought for 450,000.00 EUR at a selling price which amounts to triple the amount of the purchase price. (They sell a piece of furniture which has been bought at 1.00 EUR from the supplier at 3.00 EUR to the customers.) 75 % of the customers pay cash the remaining part pay during the next year. KATERNBERG pays 50 % of the purchases and the remaining amount in the next year. In 20X6, KATERNBERG manages to collect half of the receivables outstanding at the beginning of the year. Furthermore, KATERNBERG pays 168,000.00 EUR it owes the suppliers from last year still.

KATERNBERG pays the last year income taxes at the beginning of the year. It further pays 150,000.00 EUR for labour and 50,000.00 EUR for administration. The pay-off of the bank loan is 12,500.00 EUR. No interest is to be paid. The German revenue service (Finanzamt) requires a prepayment of 30,000.00 EUR for income taxes in 20X6.

The appropriation of profit based on the maximum of the distributable amount is 50 : 50 as dividend to be paid next year : reserves.

Required: Set up a Profit and Loss Account for the accounting period 20X6 and prepare a statement of financial position as at 31.12.20X6. Derive a cash flow statement by using the delta balance sheet account. Ignore VAT. Ignore §150 AktG - the company's act in Germany (legal reserves)

Das Unternehmen KATERNBERG (Pty) Ltd. ist ein Möbelhändler. Das Unternehmen wurde in 20X0 gegründet. Es zeigt die unten stehende Bilanz:

A KATERNBERG's Bilanz zum 31 Dec 20X5		C,L	
N-cur Assets	[EUR]	SHs' capital	[EUR]
Anlagevermögen	200,000	gez. Kapital	200,000
		Rücklagen	58,500
		JÜ/BG	20,650
cur Assets		Liabilities	
Vorräte	330,000	langfr. Schulden	150,000
Forderungen	58,000	kurzfr. Schulden	250,000
Vorauszahlungen		Rückstellungen	
Kasse/Bank	100,000	Steuerschulden	8,850
	<u>688,000</u>		<u>688,000</u>

Exhibit 1: Statement of financial position

In 20X6 schreibt KATERNBERG das Sachanlagevermögen mit 50.000,00 EUR ab und kauft bar neues Sachanlagevermögen am Ende der Abrechnungsperiode für 100.000,00 EUR. Wenden Sie keine Abschreibung auf die neuen Maschinen an.

KATERNBERG kauft neue Möbel (Vorräte) zu 200.000,00 EUR und verkauft Möbel, die es für 450.000,00 EUR gekauft hat, zu einem Preis, der das dreifache der Anschaffungskosten ausmacht. (Sie verkaufen ein Möbelstück, das für 1,00 EUR von einem Händler gekauft wurde, für 3,00 EUR an den Kunden). 75 % der Kunden zahlen bar, der Rest im nächsten Jahr. KATERNBERG selbst zahlt 50 % der Vorräte bar und den Rest im nächsten Jahr. In 20X6 gelingt es KATERNBERG, die Hälfte der Forderungen, die zum Jahresbeginn ausstehend waren, einzutreiben. Weiter zahlt KATERNBERG 168.000,00 EUR, die es noch vom letzten Jahr den Lieferanten schuldet.

KATERNBERG zahlt die Einkommensteuer des Vorjahres zu Jahresbeginn. Sie zahlt weiter 150.000,00 EUR für Löhne und 50.000,00 EUR für Verwaltung. Die Tilgung für das Bankdarlehen beträgt 12.500,00 EUR. Es werden keine Zinsen gezahlt. Die Steuerbehörde verlangt eine Vorauszahlung auf die Einkommensteuer für 20X6 von 30.000,00 EUR.

Die Gewinnverwendung für den maximal ausschüttungsfähigen Betrag ist 50 : 50 wie im nächsten Jahr zu zahlende Dividende : Rücklagen.

Gefragt: Erstellen Sie ein Gewinn- und Verlustrechnungskonto und stellen Sie für die Abrechnungsperiode 20X6 eine Bilanz auf. Leiten Sie eine Kapitalflussrechnung über die Deltabilanz her. Ignorieren Sie die Umsatzsteuer. Ignorieren Sie § 150 AktG (Gesetzliche Rücklage).

Lösung (Solution)

Bookkeeping entries for the business activities in 20X6:

(1) Depreciation 50,000.00 EUR

(2) Acquisition of non-current assets: 100,000.00 EUR

(3) Purchase

DR Purchase	200,000.00 EUR
CR A/P	100,000.00 EUR
CR Cash/Bank	100,000.00 EUR

(4) Sales is $450,000 \cdot 3 = 1,350,000.00$ EUR. The payment is $75\% \cdot 1,350,000 = 1,012,500.00$ EUR.

DR Cash/Bank	1,012,500.00 EUR
DR A/R	337,500.00 EUR
CR Sales	1,350,000.00 EUR

(5) Half of the receivables amounts to $58,000/2 = 29,000.00$ EUR.

(6) Payments of payables: 168,000.00 EUR

(7) Paying income taxes: 8,850.00 EUR

(8) Labour: 150,000.00 EUR

(9) Administration: 50,000.00 EUR

(10) Pay-off of the bank loan: 12,500.00 EUR

(11) Prepayment for income taxes: 30,000.00 EUR

DR Income Tax Liabilities	30,000.00 EUR
CR Cash/Bank	30,000.00 EUR

See all relevant accounts in the exhibit below:

A KATERNBERG's SFP 31 Dec 20X6		C,L	
N-cur Assets	[EUR]	SHs' capital	[EUR]
P,P,E	250,000	Issued capital	200,000
Int. assets		Reserves	296,325
Fin. assets		Retained ear.	0
cur Assets		Liabilities	
Inventory	80,000	Int. bear. liab.	137,500
Receivables	366,500	Payables	419,825
Prepaid exp.		Provisions	
Cash	522,150	Def. income	
		Tax liabilities	165,000
	<u>1,218,650</u>		<u>1,218,650</u>

Exhibit 3: Statement of financial position

The delta B/S account looks like below. Observe how the cash flow is derived from that account in exhibit 4:

D Delta-SFP for 20X6		C	
20x5	[EUR]	20x5	[EUR]
Δ-P,P,E	50.000,00	Δ-Reserves	237.825,00
Δ-Inventory	(250.000,00)	Δ-R/E	(20.650,00)
Δ-A/R	308.500,00	Δ-IBL	(12.500,00)
Δ-Cash	422.150,00	Δ-A/P	169.825,00
		Δ-ITL	156.150,00
	<u>530.650,00</u>		<u>530.650,00</u>

Exhibit 4: Delta-SFP

Insert information from the register of non-current assets: Depreciation = 50,000.00 EUR and Acquisition = 100,000.00 EUR:

D Delta-SFP for 20X6		C	
20x5	[EUR]	20x5	[EUR]
Δ-P,P,E		Δ-Reserves	237.825,00
Δ-Inventory	(250.000,00)	Δ-R/E	(20.650,00)
Δ-A/R	308.500,00	Δ-IBL	(12.500,00)
Δ-Cash	422.150,00	Δ-A/P	169.825,00
		Δ-ITL	156.150,00
Acquisition PPE	100.000,00	Depr	50.000,00
	<u>580.650,00</u>		<u>580.650,00</u>

Exhibit 5: Delta-SFP

Undoing the appropriation of profit: Taking out 237,825.00 EUR from Reserves and from accounts payables. The changes in R/E get offset against the delta-R/E position: $475,650 - 20,650 = 455,000.00$ EUR.

D		Delta-SFP for 20X6		C	
20X5	[EUR]	20X5	[EUR]		
Δ-P,P,E		Δ-Reserves			
Δ-Inventory	(250.000,00)	Δ-R/E			
Δ-A/R	308.500,00	Δ-IBL	(12.500,00)		
Δ-Cash	422.150,00	Δ-A/P			
		Δ-ITL	156.150,00		
Acquisition PPE	100.000,00	Depr	50.000,00		
		Δ-A/P	(68.000,00)		
		Δ-R/E	455.000,00		
	580.650,00		580.650,00		

Exhibit 6: Delta-SFP

Inserting the Profit and Loss-Statement:

D		Delta-SFP for 20X6		C	
20X5	[EUR]	20X5	[EUR]		
Δ-P,P,E		Δ-Reserves			
Δ-Inventory	(250.000,00)	Δ-R/E			
Δ-A/R	308.500,00	Δ-IBL	(12.500,00)		
Δ-Cash	422.150,00	Δ-A/P			
		Δ-ITL	156.150,00		
Acquisition PPE	100.000,00	Depr	50.000,00		
		Δ-A/P	(68.000,00)		
		Δ-R/E			
Material exp	450.000,00	Sales	1.350.000,00		
Depr	50.000,00				
Labour	150.000,00				
Admin	50.000,00				
Income tax	195.000,00				
	1.475.650,00		1.475.650,00		

Exhibit 7: Delta-SFP

In the last step, offsetting is done:

(1) Material expenses less changes in inventory results from purchase: $450,000 - 250,000 = 200,000.00$ **EUR**.

(2) Cancelling out depreciation

(3) Income tax liabilities from last year (= 8,850) have been paid: Tax payment for 20X6 amounts to:
 $156,150 + 8,850 - 195,000 = 30,000.00$ **EUR**.

Delta-SFP for 20X6			
D			C
20x5	[EUR]	20x5	[EUR]
Δ-P,P,E		Δ-Reserves	
Δ-Inventory		Δ-R/E	
Δ-A/R	308.500,00	Δ-IBL	(12.500,00)
Δ-Cash	422.150,00	Δ-A/P	
		Δ-ITL	
Acquisition PPE	100.000,00	Depr	
		Δ-A/P	(68.000,00)
		Δ-R/E	
Material exp		Sales	1.350.000,00
Depr			
Labour	150.000,00		
Admin	50.000,00		
Income tax			
Purchase	200.000,00		
Tax payments	38.850,00		
	1.269.500,00		1.269.500,00

Exhibit 8: Delta-SFP

The resulting cash flow statement looks as in exhibit 9:

Katernberg Ltd's STATEMENT of CASH FLOWS for 20X6

	20X6
	[EUR]
CF from operating activities	
Sales	1.350.000,00
Labour	(150.000,00)
Admin	(50.000,00)
Purchase	(200.000,00)
Changes in A/R	(308.500,00)
Changes in A/P	(68.000,00)
Tax payments	(38.850,00)
	<u>534.650,00</u>
CF from investing activities	
PPE acquisition	(100.000,00)
	<u>(100.000,00)</u>
CF from financing activities	
Pay-off	(12.500,00)
	<u>(12.500,00)</u>
Total cash flow:	<u>422.150,00</u>

Exhibit 9: Cash flow statement

The amounts for purchase and sales on credit are not determinable. In order to check the amount you can use the information provided by the task:

(a) Purchase on credit: $68,000 - 168,000 = \mathbf{(100,000.00 \text{ EUR})}$. (Payment made)

(b) Sales on credit: $308,500 + 29,000 = \mathbf{337,500.00 \text{ EUR}}$ (payment received)

Reconciliation statement, not required:

**Katernberg Ltd's
RECONCILIATION of EARNINGS
before TAXATION with CFoA
for year ended 31.12.20X6**

Profit for the period	650,000.00
add: depreciation	50,000.00
	<u>700,000.00</u>
Finance payments	0.00
	<u>700,000.00</u>
Changes in working capital	
(1) Changes in A/R	(308,500.00)
(2) Changes in inventory	250,000.00
(3a) Changes in Tax liab.	(38,850.00)
(3b) Changes in A/P	(68,000.00)
	<u>534,650.00</u>
Changes in VAT	
(1) VAT receivable	0.00
(2) VAT payable	0.00
	<u>534,650.00</u>

Exhibit 10: Reconciliation statement