



**POLITECNICO**  
MILANO 1863

*Accounting, Finance & Control*

# CAPEX & Financial Budgets



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# Master Budget

Budgets	Content	Check	Final output
<b>Operating budgets</b>	They define the typical management of a business as they define the sales, the revenues, the economic flows of raw materials, labour, services etc.	<b>ECONOMIC equilibrium</b> تعادل Revenues vs Operating Costs	Budgeted EBIT
<b>Capital Expenditure (CAPEX) budgets</b>	They define the use of financial resources (cash outflows) to sustain the growth strategy – i.e., planned instalments for the purchase of assets	<b>TECHNICAL equilibrium</b> Available vs Needed Capacity	Budgeted CAPEX
<b>Financial budgets</b>	They define the impact of operating and investment plans on cash inflows and cash outflows	<b>CASH equilibrium</b> Cash Inflows vs Cash Outflows	Budgeted Cash Flow Statement

These documents are then used to prepare:

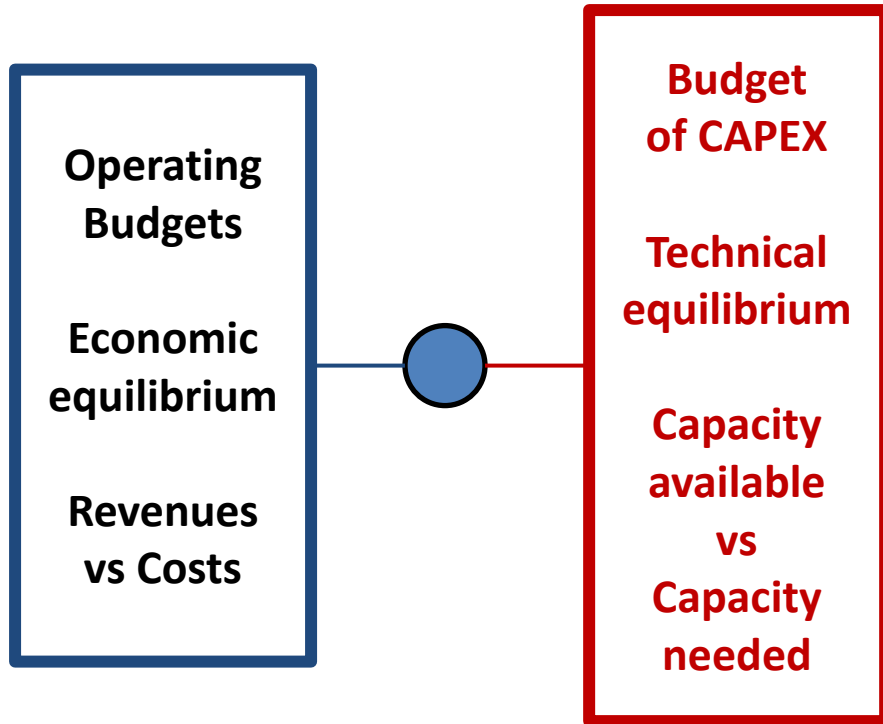
- Budgeted Income Statement
- Budgeted Balance Sheet
- Budgeted Cash Flow Statement



# ***Case study about budgeting (part II)***



# Budget of Capital Expenditures (1)



It outlines **amount** and **timing** of capital expenditures (CAPEX).

installment because of investments strategy  
cash flow from investing activity

Examples:

- Buying new equipment
- Acquiring new patents
- Building a new store
- Purchasing and installing a materials handling system



# Budget of Capital Expenditures (2)

to check if we have enough money to cover cash out flows

PORTFOLIO OF INVESTMENTS	Previous years	2024	2025	2026
<i>Approved in past years</i>				
- Investment 1	100,000	20,000	15,000	
- Investment 2	50,000	50,000	20,000	20,000
<i>Approved in the year</i>				
- Investment 3		80,000	40,000	20,000
- Investment 4		20,000	20,000	
<b>Total Approved</b>	<b>150,000</b>	<b>170,000</b> important to us cash outflow	<b>95,000</b>	<b>40,000</b>
<i>Waiting for approval</i>				
- Investment 5		75,000	125,000	100,000

# Budget of Capital Expenditures (3)

## AFC Case Study:

- *On 01/01/2024 the company will buy another equipment for 10,000 €, depreciation over 10 years. This asset will be paid as follows: 5,000 € in 2024 and 5,000 € in 2025.*
- *On 01/01/2024 the company will buy an information system for production scheduling for 5,000 € that will be paid in the second semester of 2024. This investment will be depreciated over 5 years from 2024.*

PORTFOLIO OF INVESTMENTS	2024	2025
<i>Approved in the year</i>		
New equipment	5,000€	5,000€
New information system	5,000€	
<b>Total Approved</b>	<b>10,000€</b>	<b>5,000€</b>



# *Financial Budgets (1)*

The basic document is the **cash budget**, which aims at evaluating the budgeted inflows and outflows of the organization

There are two ways for calculating a cash budget:

❖ **Direct Approach** small company use this one.

Registration line-by-line of future cash inflows  
and cash outflows

❖ **Indirect Approach**

From the EBIT by adjusting accrual principle  
into financial principle



# Financial Budgets (2)

The Cashflow Statement classifies cash inflows / cash outflows in three categories:

- **Cash flow from operating activities**, i.e. cashflows generated by the operating, financial and fiscal activities  
bank interest      translation of income statement
- **Cash flow from investing activities**, i.e. cashflows generated by the acquisition or disposal of non-current assets  
capital expenditures
- **Cash flow from financing activities**, i.e. cashflows generated by changes in the equity capital and financial debts  
issue new shares or decrease equity ...      variation in equity statements





# Budgeted Cash Flow Statement through an indirect approach

from IS to  
CFS

<b>EBIT (t)</b>
+ D&A (t)
+ $\Delta$ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)
- Paid Taxes (t)
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends) (t)
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>



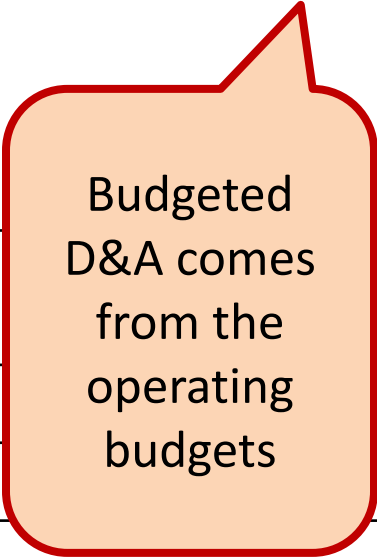
## Financial Budgets (3)

The final step is to evaluate the closing CASH availability to verify the **financial equilibrium** for the next 12 months

Opening CASH (t) = Closing CASH (t-1)
+ CASH FLOW FROM OPERATING ACTIVITIES (t)
+ CASH FLOW FROM INVESTING ACTIVITIES (t)
+ CASH FLOW FROM FINANCING ACTIVITIES (t)
Closing CASH (t)



<b>EBIT (t)</b>	<b>+ 8,440</b> <small>calculated before</small>
+ D&A (t)	
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	<div>Budgeted EBIT comes from the operating budgets</div>
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	
- Paid Taxes (t)	
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)	
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends) (t)	
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

<b>EBIT (t)</b>	+ 8,440
<b>+ D&amp;A (t)</b>	<b>+ 3,000</b>
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	 <p>Budgeted D&amp;A comes from the operating budgets</p>
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	
- Paid Taxes (t)	
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)	
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends) (t)	
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

EBIT (t)	+ 8,440
+ D&A (t)	+ 3,000
+ $\Delta$ NET OPERATING WORKING CAPITAL =	
- Account Receivable (t) + Account Receivable (t-1)	- 2,500
- Inventories (t) + Inventories (t-1)	
+ Account Payable (t) - Account Payable (t-1)	
+ Cash inflows from financial revenue (t)	
- Cash outflows from financial expenditure (t)	
- Paid Taxes (t)	
= CASH FLOW FROM OPERATING ACTIVITIES	
+ Cash inflows from disinvestment (t)	
- Cash outflows from investment (t)	
= CASH FLOW FROM INVESTING ACTIVITIES	
+ Cash inflows for increase in share capital (t)	
- Cash outflows from decrease in equity (e.g., dividends) (t)	
+ Cash inflows for new financial debts/bonds (t)	
- Cash outflows for closing financial debts/bonds (t)	
= CASH FLOW FROM FINANCING ACTIVITIES (t)	

$\text{Receivables (2024)} = 70,000 \text{ }^{\text{revenue}} * 3 / 12 = 17,500$   
 $\text{DSO} = 3 \text{ months}$  last 3 month will be received in 2024  
 $\text{Receivables (2023)} = 15,000$   
 $- \text{Receivables (2024)} + \text{Receivables (2023)}$   
 $= - 17,500 + 15,000 = - 2,500$

EBIT (t)	+ 8,440
+ D&A (t)	+ 3,000
+ <b>Δ NET OPERATING WORKING CAPITAL =</b> - Account Receivable (t) + Account Receivable (t-1) - <b>Inventories (t) + Inventories (t-1)</b> + Account Payable (t) - Account Payable (t-1)	- 2,500 <b>- 2,020</b>
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	
- Paid Taxes (t)	
<b>= CASH FLOW FROM OPERATING</b>	
+ Cash inflows from disinvestment - Cash outflows from investment	
<b>= CASH FLOW FROM INVESTING</b>	
+ Cash inflows for increase in share - Cash outflows from decrease in share	
+ Cash inflows for new financial debt - Cash outflows for closing financial debts/bonds (t)	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

Inventories\_finished goods (2024) =  
3,000 + 50 \* 38.4 = 4,920  
Inventories\_raw materials (2024) =  
1,000 + 50 \* 2 = 1,100  
  
Total inventories (2023) = 4,000  
  
- Inventories (2024) + Inventories (2023)  
= - 6,020 + 4,000 = - 2,020

EBIT (t)	+ 8,440
+ D&A (t)	+ 3,000
+ <b>Δ NET OPERATING WORKING CAPITAL =</b> - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + <b>Account Payable (t) - Account Payable (t-1)</b>	- 2,500 - 2,020 <b>+ 2,750</b>
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	
- Paid Taxes (t)	
<b>= CASH FLOW FROM OPERATING</b>	
+ Cash inflows from disinvestment - Cash outflows from investment	
<b>= CASH FLOW FROM INVESTING</b>	
+ Cash inflows for increase in share - Cash outflows from decrease in share	
+ Cash inflows for new financial - Cash outflows for closing financial	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

Purchases (2024) = (950\*6 + 50) \* 2 = 11,500  
DPO = 6 months  
Payables (2024) = 11,500 \* 6 / 12 = 5,750  
  
Payables (2023) = 3,000  
  
+ Payables (2024) - Payables (2023)  
= 5,750 – 3,000 = + 2,750

<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
<b>+ Δ NET OPERATING WORKING CAPITAL =</b> - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	<b>- 1,770</b>
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	
- Paid Taxes (t)	
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)	
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends) (t)	
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	



<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600
- Paid Taxes (t)	
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)	
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends) (t)	
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600 - 1,200
- Paid Taxes (t)	
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	
+ Cash inflows from disinvestment - Cash outflows from investment	
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	
+ Cash inflows for increase in share capital - Cash outflows from decrease in equity (e.g., dividends) (t)	
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

Bond Coupons (2024) = 400

Interests to banks = 8,000 \* 10% = 800  
kd = 10%

Financial expenses = 400 + 800 = 1,200

<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600 - 1,200
- Paid Taxes (t)	- 4,520 <small>it's not real.</small>
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	
+ Cash inflows from disinvestment - Cash outflows from investment i	
<b>= CASH FLOW FROM INVESTING A</b>	
+ Cash inflows for increase in shar - Cash outflows from decrease in	
+ Cash inflows for new financial d - Cash outflows for closing financi	
<b>= CASH FLOW FROM FINANCING AC</b>	

Unpaid taxes = 600

tax rate = 50%

EBT = EBIT – net financial interests

EBT = 8,440 – (1,200 – 600) = 7,840

Taxes = 7,840 \* 50% + 600 = 4,520

<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600 - 1,200
- Paid Taxes (t)	- 4,520
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	<b>+ 4,550</b>
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)	
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends) (t)	
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600 - 1,200
- Paid Taxes (t)	- 4,520
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	<b>+ 4,550</b>
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)	0
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends)	
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

The case study does not provide information about planned disposals of non-current assets

EBIT (t)			+ 8,440
+ D&A (t)			+ 3,000
+ Δ NET			- 1,770
- Accou	<div> <div>PORTFOLIO OF INVESTMENTS</div> <div>2024</div> <div>2025</div> <div>Approved in the year</div> <div>New equipment</div> <div>5,000€</div> <div>5,000€</div> <div>New information system</div> <div>5,000€</div> <div></div> <div>Total Approved</div> <div>10,000€</div> <div>5,000€</div> </div>		
- Invent			
+ Accou			
+ Cash			
- Cash			
- Paid T			+ 600
			- 1,200
			- 4,520
= CASH			+ 4,550
+ Cash inflows from disinvestment in non-current assets (t)			0
- Cash outflows from investment in non-current assets (t)			- 10,000
= CASH FLOW FROM INVESTING ACTIVITIES (t)			
<div> <div>**Risk =&gt; cfo is not covering investments</div> <div>so we need cash flow from the financing</div> </div>			
+ Cash inflows for increase in share capital (t)			
- Cash outflows from decrease in equity (e.g., dividends) (t)			
+ Cash inflows for new financial debts/bonds (t)			
- Cash outflows for closing financial debts/bonds (t)			
= CASH FLOW FROM FINANCING ACTIVITIES (t)			

in A&L it  
increase  
15000,  
as it's  
accrual

<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600 - 1,200
- Paid Taxes (t)	- 4,520
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	<b>+ 4,550</b>
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)	0 - 10,000
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	<b>- 10,000</b>
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends) (t)	
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600 - 1,200
- Paid Taxes (t)	- 4,520
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	<b>+ 4,550</b>
+ Cash inflows from disinvestments (t) - Cash outflows from investments (t)	0 - 10,000
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	<b>- 10,000</b>
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends) (t)	0
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

The case study does not provide information about planned increases in share capital



<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600 - 1,200
- Paid Taxes (t)	- 4,520
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	<b>+ 4,550</b>
+ Cash inflows from disinvestments (t) - Cash outflows from investments (t)	0 - 10,000
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	<b>- 10,000</b>
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends) (t)	0 - 1,000
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

Net profit (2023) = 2,000

Dividends = 2,000 \* 50% = 1,000

<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600 - 1,200
- Paid Taxes (t)	- 4,520
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	<b>+ 4,550</b>
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)	0 - 10,000
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	<b>- 10,000</b>
+ Cash inflows for increase in debt capital (t) - Cash outflows from decrease in debt capital (t)	0 - 1,000
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	<b>0</b>
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

The case study does not provide information about planned increases in debt capital

<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600 - 1,200
- Paid Taxes (t)	- 4,520
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	<b>+ 4,550</b>
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)	0 - 10,000
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	<b>- 10,000</b>
+ Cash inflows for increases in financial liabilities (t) - Cash outflows from decreases in financial liabilities (t)	0 - 1,000
+ Cash inflows for new financial issues (t) - Cash outflows for closing financial debts/bonds (t)	0 <b>- 2,000</b>
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	

Repayment of bonds for 2,000€

<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600 - 1,200
- Paid Taxes (t)	- 4,520
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	<b>+ 4,550</b>
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)	0 - 10,000
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	<b>- 10,000</b>
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends) (t)	0 - 1,000
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	0 - 2,000
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	<b>+ 3,000</b>

company is not financially sustainable!!!

Opening CASH (t) = Closing CASH (t-1)	+ 2,000
+ CASH FLOW FROM OPERATING ACTIVITIES (t)	+ 4,550
+ CASH FLOW FROM INVESTING ACTIVITIES (t)	- 10,000
+ CASH FLOW FROM FINANCING ACTIVITIES (t)	- 3,000
Closing CASH (t)	- 5,850

CASH UNBALANCE ...  
There is **NOT** a financial equilibrium

Cash unbalance covered  
**with new bank debt = + 10,000 €**  
10% interest rate,  
duration: 3 years

We need to **adjust the**  
**previous forecasts**  
**considering**  
**the new bank debt**



EBIT (t)		+ 8,440
+ Debt	Additional financial expenses = - 10,000 * 10% = - 1,000	+ 3,000
+ Δ		- 1,770
- Accounts Payable (t) - Accounts Payable (t-1)	Financial expenses = - 1,200 - 1,000 = - 2,200	
- Investments (t) - Investments (t-1)		
+ Account Payable (t) - Account Payable (t-1)		
+ Cash	Unpaid taxes = 600	+ 600
- Cash		- 2,200
- Paid	tax rate = 50%	- 4,020
= C		
	EBT = EBIT – net financial interests	
+ Cash		0
- Cash	EBT = 8,440 – (2,200 – 600) = 6,840	- 10,000
= C		- 10,000
	Taxes = 6,840 * 50% + 600 = 4,020	
+ Cash inflows for increase in share capital (t)		0
- Cash outflows from decrease in equity (e.g. dividends) (t)		- 1,000
+ Cash inflows for new financing	New bank debt = + 10,000€	+ 10,000
- Cash outflows for closing		- 2,000
= CASH FLOW FROM FINANCING ACTIVITIES (t)		

<b>EBIT (t)</b>	+ 8,440
+ D&A (t)	+ 3,000
+ Δ NET OPERATING WORKING CAPITAL = - Account Receivable (t) + Account Receivable (t-1) - Inventories (t) + Inventories (t-1) + Account Payable (t) - Account Payable (t-1)	- 1,770
+ Cash inflows from financial revenues (t) - Cash outflows from financial expenses (t)	+ 600 - 2,200
- Paid Taxes (t)	- 4,020
<b>= CASH FLOW FROM OPERATING ACTIVITIES (t)</b>	<b>4,050</b>
+ Cash inflows from disinvestment in non-current assets (t) - Cash outflows from investment in non-current assets (t)	0 - 10,000
<b>= CASH FLOW FROM INVESTING ACTIVITIES (t)</b>	<b>- 10,000</b>
+ Cash inflows for increase in share capital (t) - Cash outflows from decrease in equity (e.g., dividends) (t)	0 - 1,000
+ Cash inflows for new financial debts/bonds (t) - Cash outflows for closing financial debts/bonds (t)	+ 10,000 - 2,000
<b>= CASH FLOW FROM FINANCING ACTIVITIES (t)</b>	<b>+ 7,000</b>

<b>Opening CASH (t) = Closing CASH (t-1)</b>	<b>+ 2,000</b>
<i>+ CASH FLOW FROM OPERATING ACTIVITIES (t)</i>	<i>+ 4,050</i>
<i>+ CASH FLOW FROM INVESTING ACTIVITIES (t)</i>	<i>- 10,000</i>
<i>+ CASH FLOW FROM FINANCING ACTIVITIES (t)</i>	<i>+ 7,000</i>
<b>Closing CASH (t)</b>	<b>+ 3,050</b>

CASH BALANCE !!!  
There is a financial equilibrium





# Financial Budgets (3)

quarter based because of different due time

- The cash flow statement does not highlight the situation of **sub-periods** across the year:
  - e.g.: cash inflows concentrated at the year end
    - *Problem of liquidity at the beginning of the year*
- We can define a different cash budget detailing the situation throughout the year:
  - e.g.: per semester, per quarter, per monthly



# *Budgeted Financial Statements*

The last step in the Master Budget is drafting the complete Budgeted Financial Statements:

- *Completing **Income Statement***
- *Defining **Balance Sheet***
- *Defining **Cashflow Statement***

Once we will have all Budgeted Financial Statements, we will apply Financial Analysis through Ratios/Absolute Indicators to verify that the plan of action will meet shareholders' goals



# *Budgeted Income Statement*

<b>+ Revenues</b>	<b>+ 70,000</b>
<b>- Cost of Goods Sold</b>	<b>- 39,060</b>
<b>= Gross Margin</b>	<b>+ 30,940</b>
<b>- Period Costs</b>	<b>- 22,500</b>
<b>= EBIT</b>	<b>+ 8,440</b>
<b>+ Financial revenues</b>	<b>+ 600</b>
<b>- Financial costs</b>	<b>- 2,200</b>
<b>= EBT</b>	<b>+ 6,840</b>
<b>- Taxes (50%)</b>	<b>- 3,420</b>
<b>= Net Profit</b>	<b>+ 3,420</b>



# Budgeted Balance Sheet (1)

ASSETS		EQUITY & LIABILITIES	
Non-current Assets		Shared Capital	+ 24,000
Non-current financial assets	+ 3,000	Reserves	
Receivables	+17,500	2023 Profit	+ 3,420
Inventories	+ 6,020	Bank debts	
Cash	+ 3,050	Bonds	
		Payables	
Total Assets	66,570	Equity & Total Liabilities	66,570



## Budgeted Balance Sheet (2)

ASSETS		EQUITY & LIABILITIES	
Non-current Assets	+ 37,000	Shared Capital	+ 24,000
Non-current financial assets	000	Reserves	
Receivables	500	2023 Profit	+ 3,420
Inventories	0	Bank debts	
Cash			
Total Ass			70

NON CURRENT ASSETS (t) =  
 Non-current Assets (t-1) + New non-current Assets (t) – D&A (t)

$$25,000 + 10,000 + 5,000 - 3,000 = 37,000$$

accrual logic



## Budgeted Balance Sheet (3)

$$\text{BANK DEBTS (t)} = 8,000 + 10,000 = + 18,000$$

New bank debt for 10,000

		LIABILITIES	
			+ 24,000
Receivables	+17,500	2022 Profit	+ 3,420
Inventories	+ 6,020	Bank debts	+ 18,000
Cash	+ 3,050	Bonds	+ 2,000
		Payables	
Total Assets	66,570	Equity & Total Liabilities	66,570

$$\text{BONDS (t)} = 4,000 - 2,000 = + 2,000$$

Repayment of bonds for 2,000



## Budgeted Balance Sheet (4)

ASSETS		EQUITY & LIABILITIES	
Non-current Assets	+ 37,000	Shared Capital	+ 24,000
Non-current financial assets	+ 3,000	Reserves	
Receivables	+17,500	2022 Profit	+ 3,420
Inventories	+ 6,020	Bank debts	+ 18,000
Cash	+ 3,050	Bonds	+ 2,000
		Payables	+ 10,750
Total Assets	66,570	Equity & Total Liabilities	66,570

$$\text{PAYABLES (t)} = 5,750 + 5,000 = 10,750$$

Trade payables +  
payables due to the supplier for the new equipment



## Budgeted Balance Sheet (5)

ASSETS		EQUITY & LIABILITIES	
Non-current Assets	+ 37,000	Shared Capital	+ 24,000
Non-current financial assets	+ 3,000	Reserves	+ 8,400
Receivables	+17,500	2022 Profit	+ 3,420
Inventory			18,000
Cash			2,000
			0,750
<b>Total</b>			<b>,570</b>

$$\text{RESERVES (t)} = 7,400 + 1,000 = 8,400$$

$$\begin{aligned} \text{Retained earnings} &= \text{Net profit (2023)} - \text{Dividends (2024)} = \\ &2,000 - 1,000 = 1,000 \end{aligned}$$





## Budgeted Balance Sheet (6)

ASSETS		EQUITY & LIABILITIES	
Non-current Assets	+ 37,000	Shared Capital	+ 24,000
Non-current financial assets	+ 3,000	Reserves	+ 8,400
Receivables	+17,500	2022 Profit	+ 3,420
Inventories	+ 6,020	Bank debts	+ 18,000
Cash	+ 3,050	Bonds	+ 2,000
		Payables	+ 10,750
Total Assets	66,570	Equity & Total Liabilities	66,570

$$ROA = \frac{EBIT}{ASSETS} = \frac{8,440}{66,570} \cong 12,7\% > 10\%$$

