Mind Shaker Meeting
Economic and financial forecasts

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CAMERA DI COMMERCIO MILANO

Università Commerciale Luigi Bocconi

Milano Comune di Milano

speed up

I nostri mindshaker meeting

1. Team building
2. Reconsider your business plan

3. Economic and financial forecasts

4. Financial Needs and valuation
5. Operations & milestones
6. Lean start up
7. Reconsider your strategy
8. Market strategy
9. Investors and execution of the deal

10. elevator pitch day

Economic and financial forecasts

1. **How to present your forecasts**
   Economic and financial statements
2. **how to make estimates**
   Step by step, how to forecast the future
3. **mistakes to avoid**
   Focus on common mistakes: inconsistency and …
4. **what investors want**
   Detailed top line growth, clear operating structure and …

This skill requires knowledge of industry and sector and profound understanding of your company.

Economic and financial forecasts

Estimating the future outcome in economic and financial statements means forecasting **Sales, Operating costs and Capital spending**

This skill requires knowledge of finance and **accounting principles** and some basic rules:

1. **Be consistent**
2. **Be conservative**
3. **Be honest**
4. **Don’t be creative**
5. **Follow the practices used in your industry**

Economic and financial forecasts

Good business plans contain historical, current and future economic and financial figures:

Historical figures (not for startups)

- **recent past, max 3 years back, historical data from your annual reports**

Current Estimates

- **current year, usually split in months of quarters (better)**

Forecasts

- **Future periods, your predictions for the forthcoming years (in our case, 5 years)**

Economic and financial forecasts

These are the 7 fundamental steps for start up companies in writing estimates and forecasts

1. Basic assumptions and top line growh: **project your revenues**
2. Costs structure and operating profitability from your business model: identify the **operating costs**
3. **Investments**: identify the capital spending required to launch and develop your company
4. Derive a **Profit&loss** statement
5. Draw a **balance sheet** focusing on net financial position
6. Write a **Cash flow statement** focusing on cash generation
7. Find your **Capital needs**, use of funds and source of financing

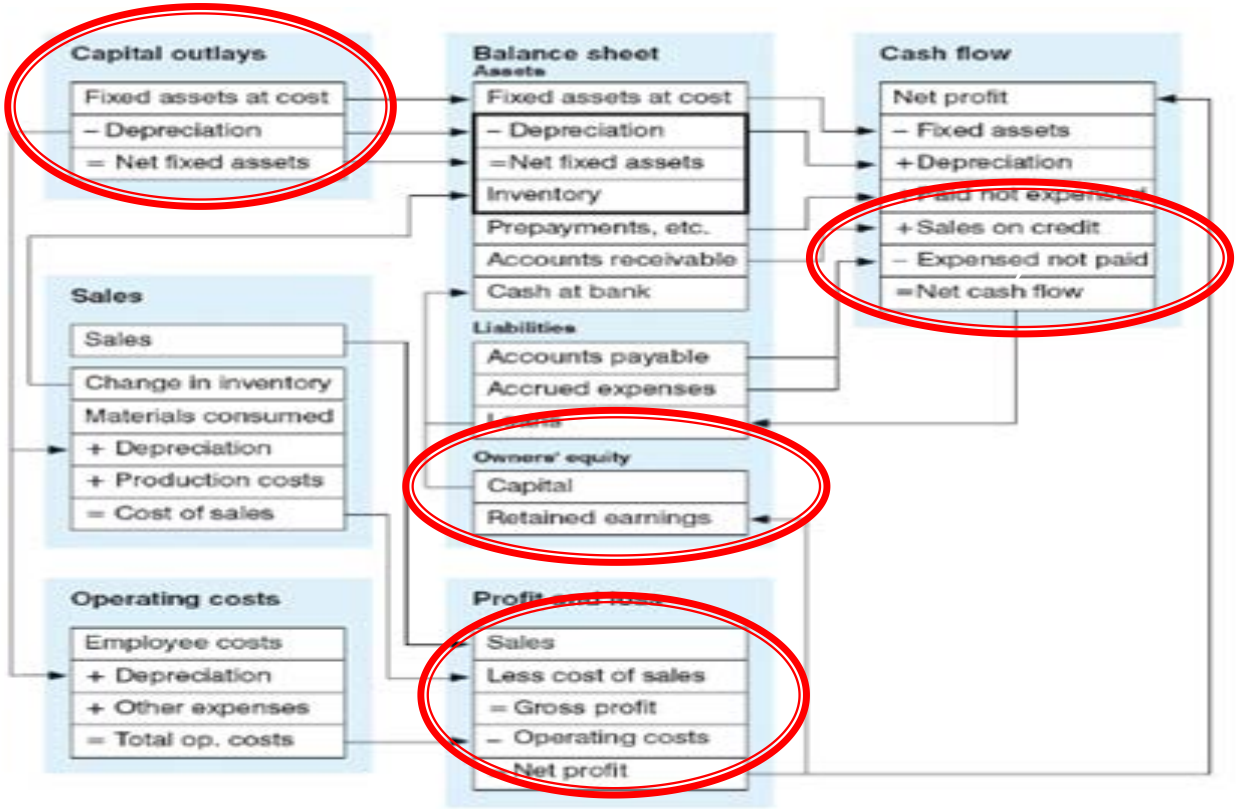
Economic and financial forecasts

- Each document (P&L, Cash flow and Balance Sheet) describes details of revenue, expenses, investments and capital increase, as well as any property and assets on the balance.

- The P&L account is considered to be the overall report that reflects most of the forecast.

- Numbers have to be in line with the business plan style and assumptions and have to be consistent with business plan targets

Economic and financial forecasts



Economic and financial forecasts

1. **Profit & Loss account**
2. **Cash flow statement**
3. **Balance sheet**
4. **Key ratios**

5 year horizon

…and for start up companies, additional info regarding :

- Financial needs
- Use of funds

Economic and financial forecasts

+**Revenues**

- COGS

= Gross profit

- Total costs , of which
    - Personnel costs
    - G&A
    - other operating costs

= EBITDA

- Amortization and depreciation

= EBIT

-Net financial charge (+ income)

= Pre-tax profits

- Taxes

= Net profit

Economic and financial forecasts

+ net profit (-net losses)
+ depreciation and amortization
+ other non cash items (i.e. provisions)
+/- Change in working capital (negative if it increases)
- capex and investments
= cash flow from operating activities

- dividend payment
+ disinvestments
+ equity financing (capital injection)
= cash flow of the period or change in net financial position

Economic and financial forecasts

+ Tangible fixed assets
+ Goodwill and other intangibles
+ Other fixed assets
= Total fixed assets

+ Net Working capital (Inventory + Trade receivables-Trade payables)
- Long term liabilities
= Net Capital employed

+ Book Value (or Net Equity)
+ Net financial debt (- Net cash)
= Net Capital employed

Economic and financial forecasts

KPI (MC)	2009	2010	2011	2012	2013	2014
Profit & Loss						
Revenues	-	1,4	15,0	23,9	34,0	42,3
Contribution Margin	-	0,4	4,5	7,8	11,1	13,8
EBITDA	(0,0)	(0,4)	1,1	3,7	6,3	8,3
EBIT	(0,0)	(0,5)	0,6	2,8	5,0	6,6
Net Result	(0,0)	(0,6)	0,2	1,4	2,7	3,7
Cash Generation						
EBITDA	(0,0)	(0,4)	1,1	3,7	6,3	8,3
Capex	(0,1)	(1,2)	(1,8)	(1,8)	(1,8)	(1,8)
Operating Cash Flow	(0,0)	(2,5)	(3,8)	1,0	2,4	4,8
Net Cash generation (Absorption)	0,4	(1,2)	(2,7)	(0,5)	(0,1)	1,6
Balance Sheet						
Trade working capital	(0,1)	0,9	3,9	4,8	6,9	8,6
Net invested capital	0,0	2,0	6,4	8,3	11,1	13,2
Group Equity	0,4	1,1	2,9	4,3	7,0	10,6
Net Debt	(0,4)	0,9	3,5	4,0	4,2	2,6
Key Indicators						
ROS		-36%	4%	12%	15%	16%
EBITDA %		-25%	7%	15%	18%	20%
CM %		26%	30%	33%	33%	33%
Trade Working Capital %		64%	26%	20%	20%	20%
EBITDA - CAPEX / Sales		-107%	-5%	8%	13%	15%
ROI		-25%	10%	34%	45%	50%
ROE		-49%	6%	32%	38%	34%
Net Debt / Equity		0,8	1,2	0,9	0,6	0,2
Net Debt / EBITDA		(2,4)	3,3	1,1	0,7	0,3

how to make your estimates and forecasts :

Sales and basic assumptions

Economic and financial forecasts

These are the fundamental steps for start up companies in writing estimates and forecasts:

1. ***Basic assumptions and top line growth: project your revenues***
2. *Costs structure and operating profitability from your business model: identify the operating costs*
3. *Investments: identify the capital spending required to launch and develop your company*
4. *Write a Profit & loss statement*
5. *Draw a balance sheet focusing on net financial position*
6. *Write a Cash flow statement focusing on cash generation*
7. *Find your Capital needs, use of funds and source of financing*

Economic and financial forecasts

1. Top-Down

Size potential market

Estimate your market share

Estimate sales for each market/ service/ product

Calculate total Sales

2. Bottom-up

Calculate total Sales

Estimate sales per market/product/service

Estimate price per each market/ product/service

Calculate the number of sales volumes per each market/ product/service

3. Benchmarks

Calculate total Sales

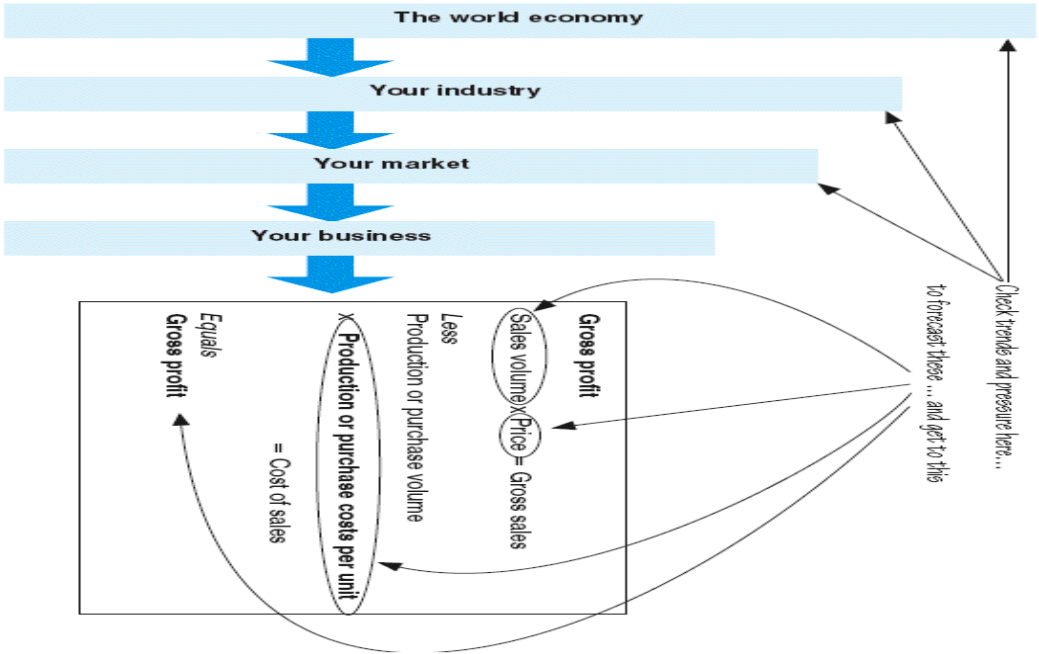
Apply benchmark market share to your market

Based on the mkt size of your benchmark find its mkt share (or correlation)

Calculate total sales of your benchmark and compare it to its market

Economic and financial forecasts

1. Top-Down approach



Economic and financial forecasts

1. Top-Down approach

1. State basic assumptions describing expectation for the economic environment.
2. Study market signs (focusing on volumes/sales growth) and find correlation to economic/external assumptions
3. Read industry research and talk to experts for more information about market size and trends to find the leading indicators
4. State market projection and explain reasons for the projected sales growth related to the leading indicators
5. State market share evolution focusing on industry trends and competitive environment
6. **Describe your future sales forecasts based on market analysis, leading indicators and market share and your assumptions on selling price**

Economic and financial forecasts

1. Top-Down approach

fundamental rules for making correct forecasts

- Laid down basic assumption on the planning period and use an economic/environment forecast to predict the leading indicators
- Use leading indicator to forecast demand for your product class and focus on changes in the pattern of demand
- forecast the way **external trends** will affect your product class based on :

1. Fundamental trends: long term economic growth
2. Economic cycles: medium term fluctuation or change in behavior
3. Political Environment : short term changes in rules and laws
4. Innovation : major changes in Technology
5. Seasonality variation : focus on monthly effects (Xmas, summer, ..)

Economic and financial forecasts

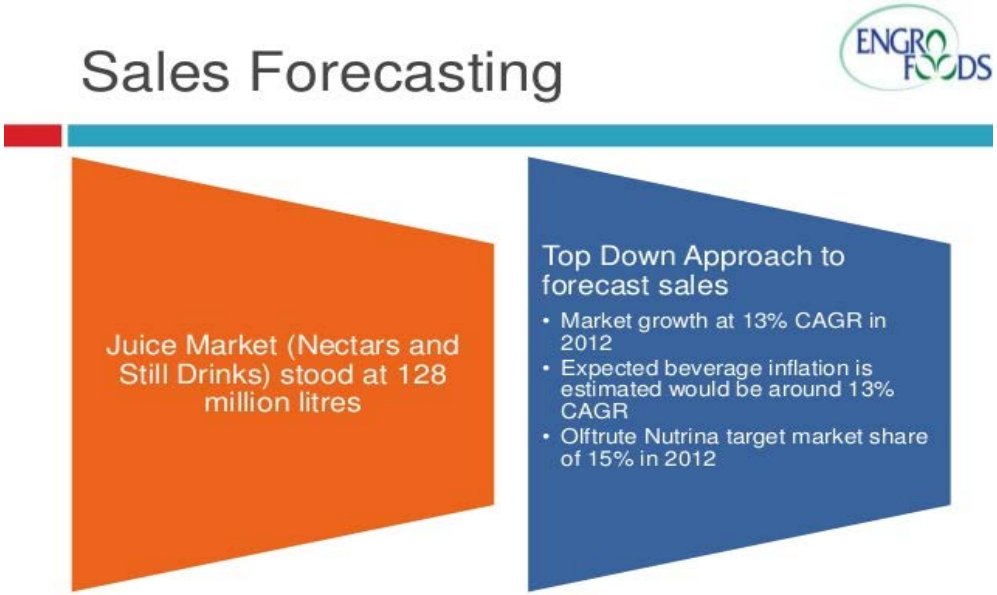
1. Top-Down approach

Why on these companies:

1. sector data easy to find and to forecast
2. Quasi stable mkt share and high visibility on data
3. Sectors strongly related to economic cycles
4. Company's figures strongly correlated with sector trends

Economic and financial forecasts

1. Top-Down approach



Economic and financial forecasts

2. Bottom up approach

1. Write Volumes expected with a break down based on:
   - Single product/service
   - Distribution channel
   - Market/Geographical area

2. Write your assumption on Pricing / price estimated per single product/service

3. State Revenues based on volumes * price per single product

4. State total revenues

Economic and financial forecasts

2. Bottom up approach

four fundamental rules for making correct forecasts

- Volumes : correlation with market trends and competitors figures
- Pricing : related to similar product/services already in the market
- Pricing : related to costs structure and economics of the company
- Revenues : focus on of the revenues b/d and clear analysis of the top line trend of the single product/services, distribution channel , market/ geographical area

Economic and financial forecasts

Small Entities Net Sales by P	2010	2011	2012	2013
linea 11	**48.118**	**73.620**	**82.602**	**92.680**
growth	*257,0%*	*53,0%*	*12,2%*	*12,2%*
% on SE net sales	9,4%	9,4%	9,4%	9,4%
units sold	8.736	13.104	14.414	15.856
growth	*250,0%*	*50,0%*	*10,0%*	*10,0%*
average price per item (Eu)	5,51	5,62	5,73	5,85
growth	*2,0%*	*2,0%*	*2,0%*	*2,0%*
linea 16	**135.933**	**207.978**	**233.351**	**261.820**
growth	*257,0%*	*53,0%*	*12,2%*	*12,2%*
% on SE net sales	26,6%	26,6%	26,6%	26,6%
units sold	12.656	18.984	20.882	22.971
growth	*250,0%*	*50,0%*	*10,0%*	*10,0%*
average price per item (Eu)	10,74	10,96	11,17	11,40
growth	*2,0%*	*2,0%*	*2,0%*	*2,0%*
linea 7	**261.232**	**399.684**	**448.446**	**503.156**
growth	*257,0%*	*53,0%*	*12,2%*	*12,2%*
% on SE net sales	51,1%	51,1%	51,1%	51,1%
units sold	73.878	110.817	121.899	134.089
growth	*250,0%*	*50,0%*	*10,0%*	*10,0%*
average price per item (Eu)	3,54	3,61	3,68	3,75
growth	*2,0%*	*2,0%*	*2,0%*	*2,0%*
Total	**511.380**	**782.411**	**877.865**	**984.964**
growth	*257,0%*	*53,0%*	*12,2%*	*12,2%*
% on SE net sales	100%	100%	100%	100%
units sold	151.466	227.199	249.919	274.911
growth	*250,0%*	*50,0%*	*10,0%*	*10,0%*
average price per item (Eu)	3,38	3,44	3,51	3,58
growth	*2,0%*	*2,0%*	*2,0%*	*2,0%*

2. Bottom up approach: start up compay

Why on these companies:

1. Sectors driven by innovation and high tech evolution
2. Sectors with low economic related trends and with figures hard to find

Economic and financial forecasts

3. Benchmarks approach

1. State your benchmark/competitors based on KPI, focusing on :
   - Revenues in a specific market
   - N. of clients on total market (mkt penetration)
   - Revenues per client and per product
2. Write your estimates/actual figures of your benchmark focusing on :
   - Market share
   - Market penetration and Arpu
3. Write your estimates/actual figures on your market focusing on
   - Market size
   - N. of clients and market penetration
4. Calculate Revenues based on your benchmark and your market size focusing on your normalized year

Economic and financial forecasts

3. Benchmarks approach

four fundamental rules for making correct forecasts

- Benchmark : find the company / competitor that has similarities with your start up…you need substitutes products
- KPI: focus on the best indicator on which you can easily find data (n° users, market share, mkt penetration , average sales per user, etc….)
- correlation: study market and industry of your benchmark and find the correlations based on KPI…make use of external sources
- From Your market to your start up : study your market/industry based on KPI and focusing on product trends and make estimates on your revenues

Economic and financial forecasts

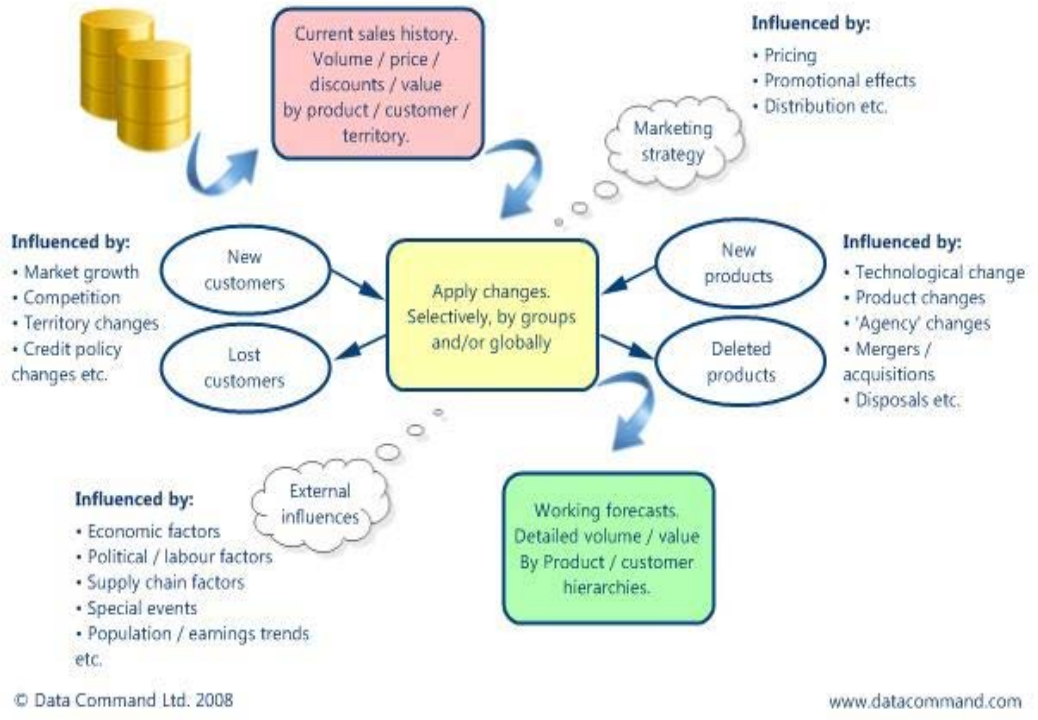
3. Benchmarks approach

Why on these company:

1. New products in a new sectors or new markets
2. Sector driven by innovation
3. Low entry barriers
4. Sector with high growth rates and product driven

Economic and financial forecasts

Sales forecasts : different approches are required



Economic and financial forecasts

Sales forecasts : different approches are required

How to write estimates

1. Start from bottom up for the first 2/3 years
2. Last years of your projection with top down or benchmark approach (your “normalized” sales)
3. Growth rates to get to your “normalized” revenues
4. Pricing in line with competitors/substitues

What investors want

1. Clear and well described basic assumptions
2. Long term forecasts justified by external sources
3. Top line growth consistent with company structure
4. Growth rate consistent with market and industry trends

Economic and financial forecasts

how to make your estimates and forecasts :

Costs structure and P&L

Economic and financial forecasts

- Based on your business plan, allocate your costs into well defined **area of activities**

- Study the **structure of costs** and define major factors such as fixed vs. variable costs, start up vs. operating costs investments vs. annual costs, etc.

- Describe future **costs related to sales**. The most common forecasting technique is a percent of sales method. By assuming the percentage as fixed, you may easily project revenues or expenses figures

Economic and financial forecasts

Costs analysis, step by step how to make estimates

- **Step 1**: Variable costs : Cost of good sold (COGS) per area of activity
- **Step 2**: Other Fixed and variable costs per area of activity
- **Step 3**: Fixed and variable costs related to personnel
- **Step 4**: Fixed costs related to General and administration activities (G&A)
- **Step 5**: Investments / capitalized costs, focusing on start up costs

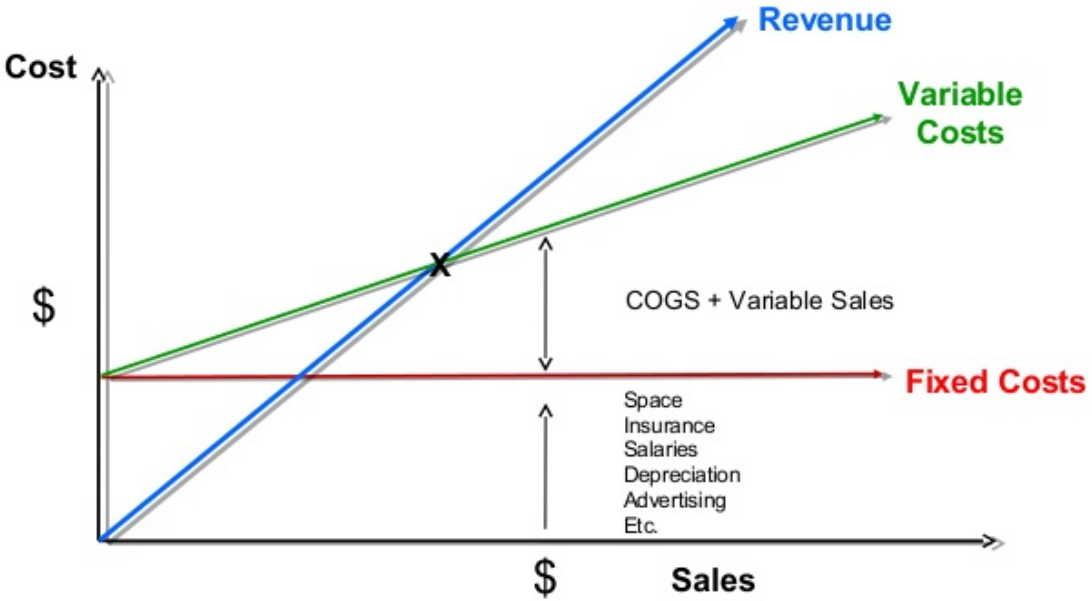
Economic and financial forecasts

Variable Costs analysis:

- In depth analysis of the internal and external variable costs related to sales volumes
- Estimate variable costs related to selling activities
- Estimate Variable costs related to raw materials/other goods to be sold
- Estimate variable costs related to production or purchasing activities

Economic and financial forecasts

Breakeven Point - Graph



"X" = Breakeven Point

Economic and financial forecasts

Fixed Costs analysis:

- Focus on fixed and variable costs not directly attributable to the sales volumes
- Divide these costs into functional areas
- In depth analysis of fixed costs related to core activity (internal and external)
- Estimate costs related to production activities
- Estimate costs related to selling activities (focusing on marketing and communication)

Economic and financial forecasts

Personnel costs analysis:

- Divide personnel costs into functional areas
- In depth analysis of fixed costs related to core activity (internal and external)
- Estimate n. of employees per functional area
- Estimate fixed employee costs per functional area (n. of employees * gross salaries)
- Estimate variable employee costs per functional area (bonuses, travel, etc..)

Economic and financial forecasts

Other non core (G&A) activities analysis:

- State your G&A and other non core activities
- In depth analysis of costs related to non core activity (internal and external)
- Estimate fixed G&A costs focusing on : office, utilities, accounting
- Estimate variable G&A costs based on contracts based on company size (i.e. accounting)

Economic and financial forecasts

Investments , how to make estimates:

- Classify required assets according to functional area (plan, computers, office)
- State capitalized cost
- Show their expected capex required
- Draw up a depreciation schedule
- Calculate the amortization and depreciation per year

Economic and financial forecasts

Most common costs to be considered as investments:

- Computer (3 years life period)
- Office equipment (5 years)
- Plant or industrial machinery (20years)
- Start up costs (from 3 to 5 years)
- R&D capitalized costs (life period of the product developed)
- Goodwill (typically 20 years)

… but for start up companies few costs are real investments!

Economic and financial forecasts

+ Total Revenues

- COGS (COsts of Goods Sold)

= gross margin

gross margin in % on total revenues

- Total Other costs

= **EBITDA** (Earning Before Interest Taxes Depreciation and Amortization)

Ebitda in % on total revenues

- Amortization and depreciation

= EBIT

Ebit in % on total revenues

Economic and financial forecasts

Getting to Operating margin

How to write estimates

1. From your business model, develop operating costs structure
2. Find correlation with sales volumes and other drivers
3. Focus on labor costs and your operating structure
4. Focus on other costs and their growth trend

What investors want

1. Realistic operating costs structure
2. Both variable and fixed costs consistent with company's development
3. Don't underestimate marketing & comm.
4. Very details assumptions on labor cost

Economic and financial forecasts

Getting to Net profit

How to write estimates

1. State assumptions on investments and capitalized costs
2. Calculate depreciation
3. Focus on financials and currency
4. Write you tax rate assumptions

What investors want

1. Minimize start up investments
2. Ordinary capex should be ordinary costs
3. Don’t take currency risks
4. Detailed assumptions on financial charges with respect to Net Financial Position

Economic and financial forecasts

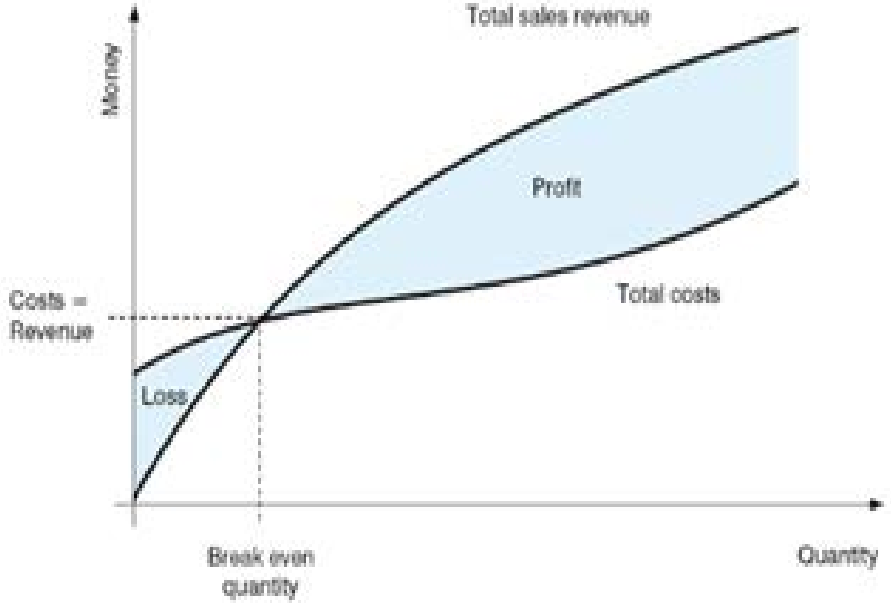
- You also may use **sensitivity analysis** to see how external changes can influence a company's overall economic / financial performance by changing some critical data.

- Sensitivity analysis is a good examination for possible scenarios when actual outcome turns out to be different from initial assumptions.

- From your sensitivity analysis you can easily calculate your **break even point**

Economic and financial forecasts

Sensitivity analysis: profit related to sales volumes

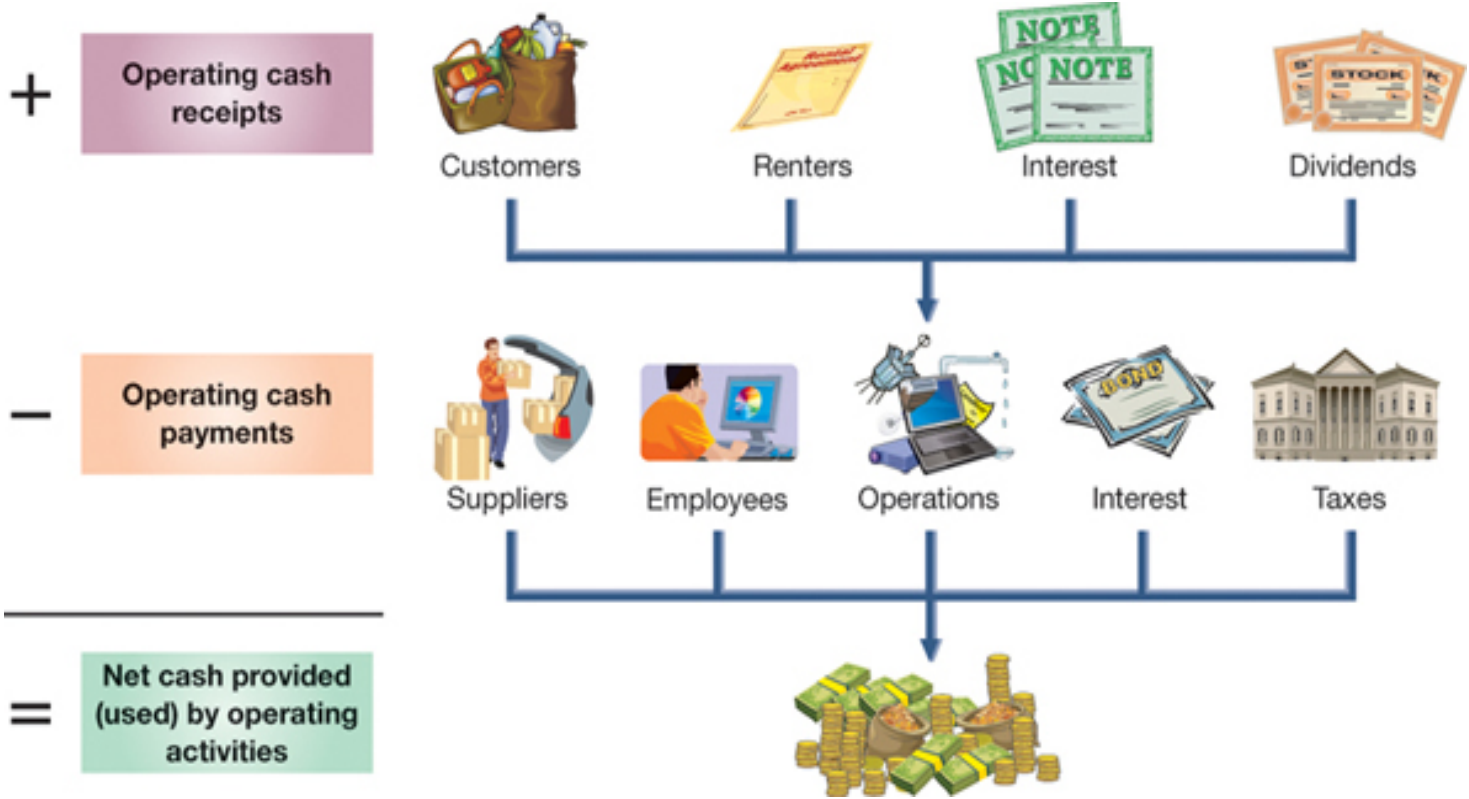


Economic and financial forecasts

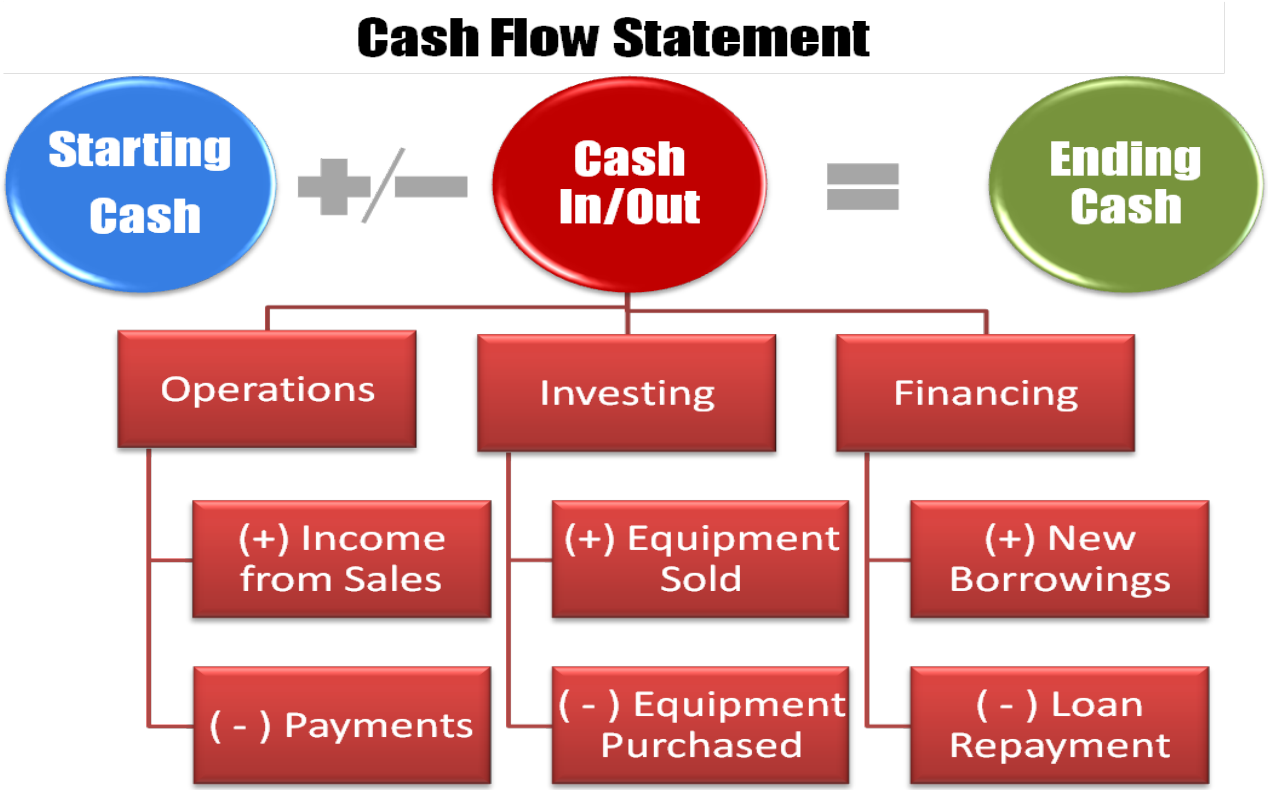
how to make your estimates and forecasts :

Cash Flow statement

Economic and financial forecasts



Economic and financial forecasts



Economic and financial forecasts

Cash Flow statement

How to write estimates

1. Cash flow is the most important issue for a start up
2. From your net profit, calculate your gross cash flow (net profit +depr.)
3. Focus on capex, Change in net working capital and other non cash items
4. Calculate Net cash flow generation/ absorption

What investors want

1. Very detailed operating cash flow (quarterly figures for the first 2 years)
2. Minimize capex and other non cash items
3. Change in net working capital consistent with sales growth
4. Calculate burn rate for the first 2 years

Economic and financial forecasts

Consolidated Cash Flow (€ mn)	2007	2008E	2009E
Net Profit pre minorities	172,5	124,1	117,6
D&A	223,3	269,0	305,1
Financial assets writedowns -net	(0,4)	0,0	0,0
Provisions	0,0	0,0	0,0
Change in NWC	(69,8)	96,9	(10,0)
Operating Cash Flow	**325,6**	**490,0**	**412,7**
Capex Fixed and Intangible Assets	(278,2)	(331,5)	(252,0)
Disposals	48,1	10,7	0,0
Investments in New subsidiaries	(334,3)	(1.034,0)	0,0
Net Change in Other Financial Assets	9,6	0,0	0,0
Dividend Payments	(101,8)	(76,3)	0,0
Forex	76,0	130,7	(106,7)
Others	(126,7)	(79,3)	0,0
Net Cash Flow	**(381,6)**	**(889,6)**	**54,0**
Initial Net Financial Position	(781)	(1.162)	(2.052)
Final Net Financial Position	(1.162)	(2.052)	(1.998)
Average Financial Position	(895)	(1.429)	(2.036)

General basis for your Cash Flow forecasts :

Cash Flow statement: Autogrill

Economic and financial forecasts

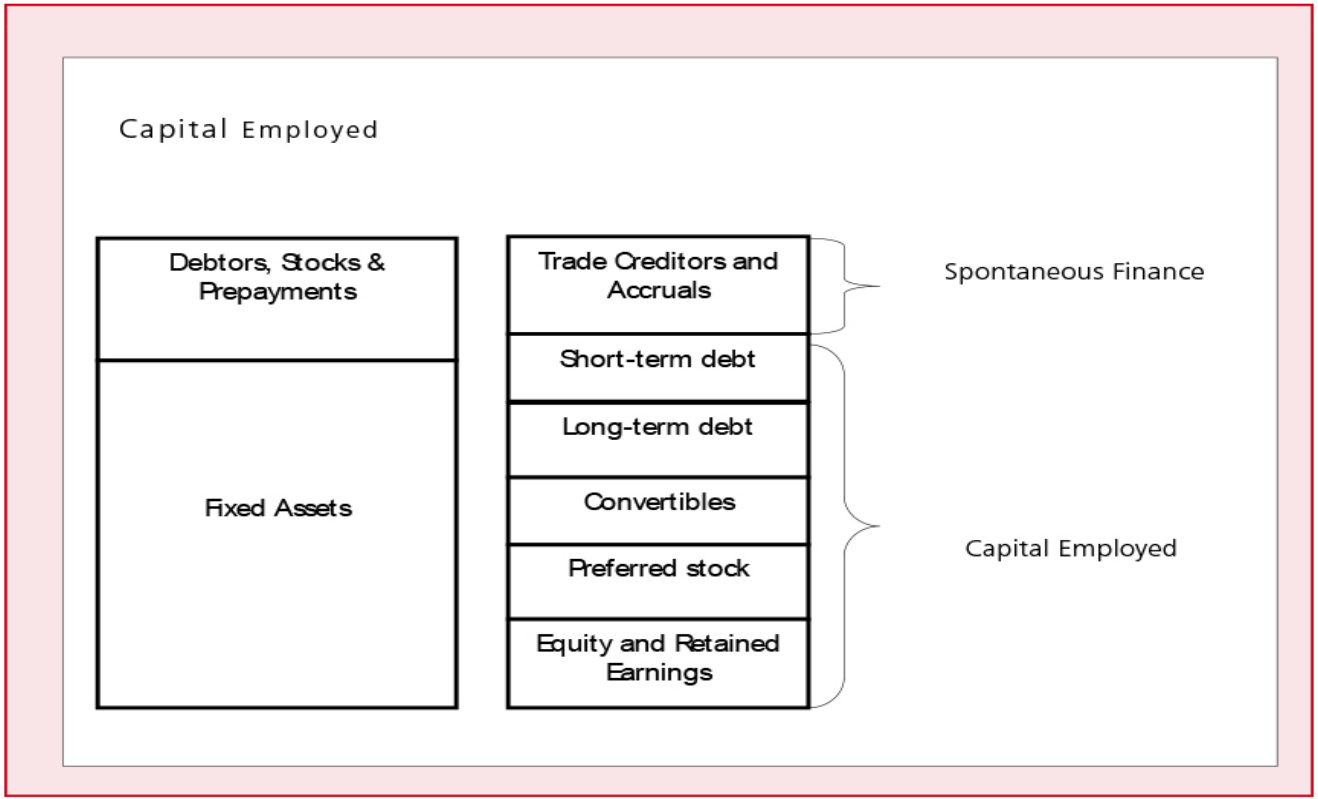
how to make your estimates and forecasts :

Balance Sheet

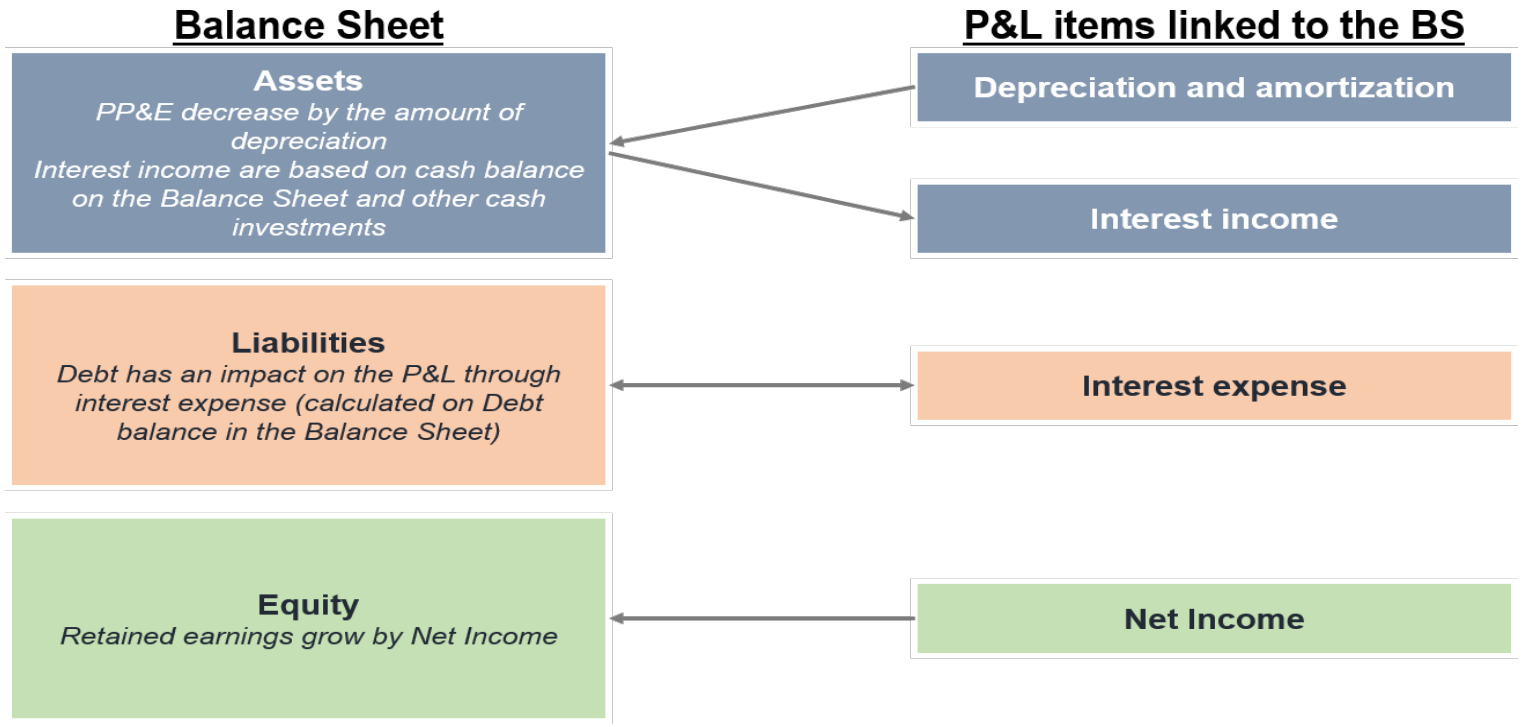
Economic and financial forecasts

Closing Balance Sheet as at 31. December of Year 2011	
Assets	**Liabilities**
Fixed assets	**Equity capital=shareholders' funds**
1. tangible assets (e.g. land, building, plant) 2. intangible assets (e.g. patent, licence, brands, goodwill)	1. share capital 2. cumulated retained profit (reserve) 3. annual retained profit (surplus or deficit)
	Liabilities
Current assets	1. long-term liabilities (e.g. loans, financial lease) 2. current (short-term) liabilities (e.g. trade creditors, bank overdraft, tax payable, dividend payable)
1. inventories (stocks) 2. debtors 3. cash or cash equivalent	
Total Assets	**Total Liabilities & Equity**

Economic and financial forecasts

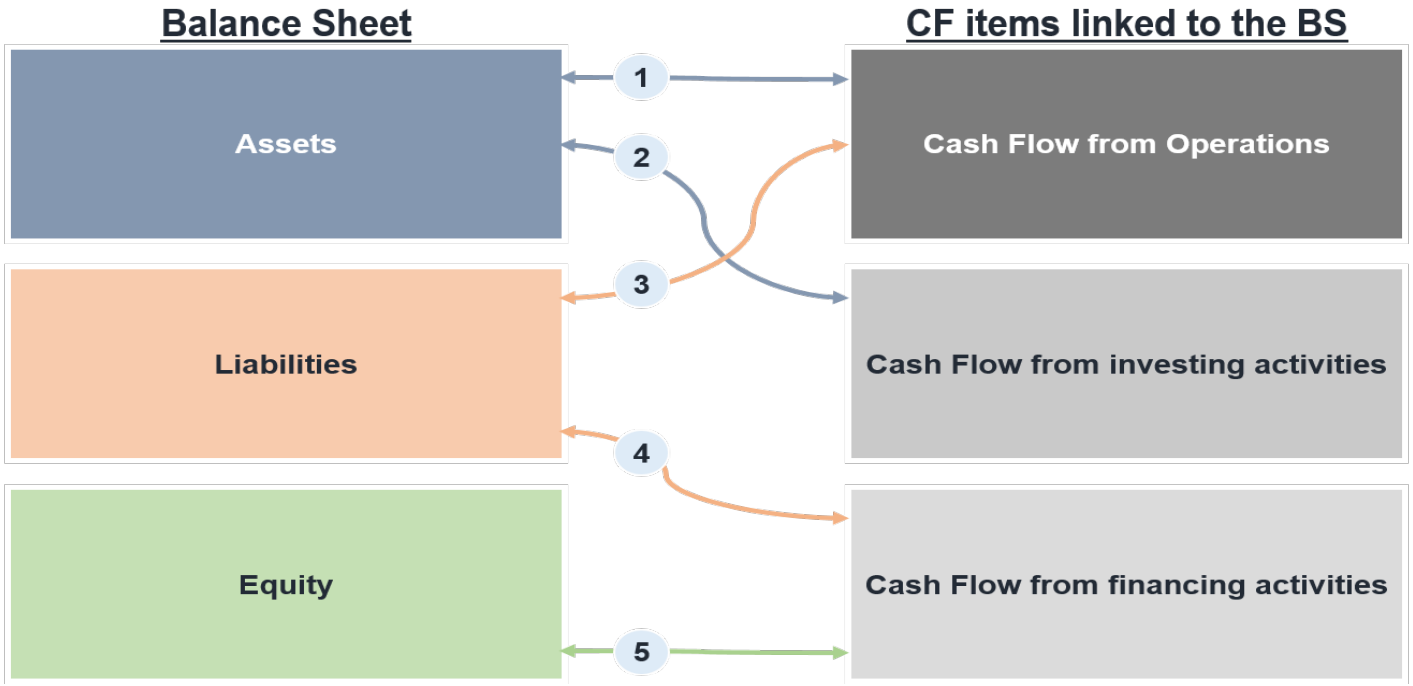


Economic and financial forecasts



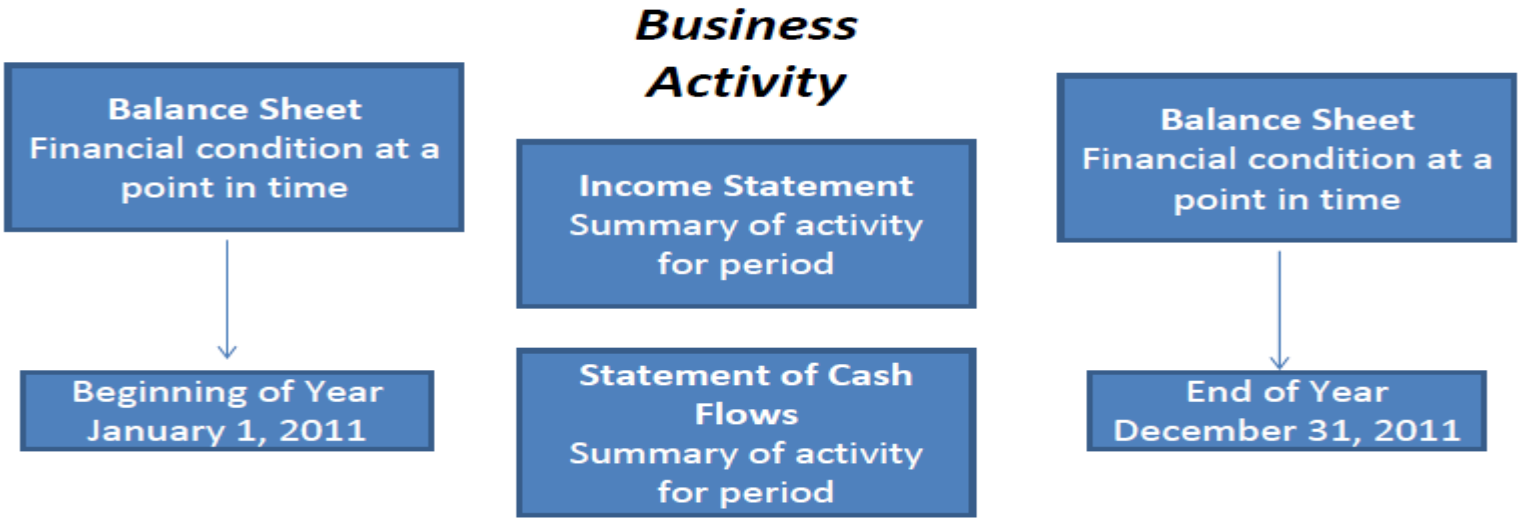
Economic and financial forecasts

MAIN LINKS BETWEEN THE BALANCE SHEET AND CASH FLOW STATEMENT



Economic and financial forecasts

Financial Statements Relation to the Passage of Time



Economic and financial forecasts

Balance Sheet

How to write estimates

1. Start from your Net working capital: inventories, commercial credits and debts
2. Long term assets from your investments
3. Focus on intangible assets
4. Book value evolution driven by net result

What investors want

1. Start up companies have no accountable assets (you are the asset!)
2. Net working capital and its evolution is very critical
3. Capital employed is your book value
4. Don’t start with liabilities and net debt

Economic and financial forecasts

Consolidated Balance Sheet (€ mn)	2007	2008E	2009E
Inventories	197	286	305
Trade Accounts Receivable	105	132	135
Trade Account Payable	(529)	(715)	(734)
Commercial NWC	**(228)**	**(297)**	**(294)**
Other current activities	193	217	235
Other current liabilities	(363)	(429)	(440)
NWC	**(398)**	**(509)**	**(499)**
Fixed Assets	908	1052	1040
Intangible Assets	1404	2475	2433
Financial Assets	23	32	32
Deferred Tax Assets / Assets Held for Resale	51	64	64
TFR & Provisions	(201)	(388)	(282)
Net Capital Employed	**1.787,8**	**2.725**	**2.789**
Net debt	**(1.162)**	**(2.052)**	**(1.998)**
Minorities	58	77	95
Shareholders' Equity	567	596	696
Group's Net Equity	**626**	**673**	**791**
Net Capital Employed	**1.787,8**	**2.725**	**2.789**

General basis for your Balance Sheet forecasts

Balance Sheet Autogrill