

**Questions:**

Is the increase in net profit the only influence on the share value?

**Answer:**

Manual, paragraph 166:

The company's shares are quoted on the Stock Exchange, and the latest share prices for all companies are quoted each quarter on the bottom line of the Management Report. Share price is influenced by several factors, which include.

- The company's net worth
- Profitability
- Dividend performance
- Liquidity
- Ability to pay interest charges
- Use and availability of resources
- Marketing and selling capability
- Ability to satisfy orders promptly

Therefore, there are several other variables included in the share value, although the net profit is a factor, it is not the only one.

**Question:**

How are unskilled workers' wages calculated?

**Answer:**

The calculation of the unskilled worker's wages can be done as follows:

Number of used hours in the last quarter + the breakdown time / number of machines to know the number of hours each machine worked.

Number of hours that each machine worked / number of shifts = the number of hours that each unskilled worker must be paid

Only by knowing how many hours each worker will work one can figure out if they will work only during the week or if they will have to work on Saturday and Sunday.

Paragraph 282 of the Manual

'Machinists' Wages': the number of machine hours used last quarter plus breakdown time, at the basic rate, Saturday overtime rate and Sunday overtime rate, for the shift level being worked, multiplied by the appropriate wage rate (based on a proportion of the skilled wage rate, see Table 17), all enhanced by the shift premium, and multiplied by four workers per machine. If the number of unskilled workers employed was greater than the number needed to operate your company's machines at the shift level being worked, these surplus workers

are paid at the same average rate as those manning the machines. Unskilled workers are paid for a minimum number of hours each, per quarter (see Table 17).

**Question:**

Is it possible to hire unskilled workers?

**Answer:**

The shift's leader has control over the recruitment. Each machine has 4 unskilled workers, multiplied by the number of shifts

**Question:**

When one decides to sell a machine, when does it stop being considered available?

**Answer:**

Paragraph 186 of the Manual:

When a decision (line L) is taken to sell a machine, the oldest is sold first at the beginning of next quarter, at its depreciated value last quarter. However, because of new legislation on environmental issues, the potential for contamination and the need for safe waste disposal, there will be a decommissioning charge (see table 18) whenever a machine is removed for sale. Any decommissioning costs are included under 'Other miscellaneous costs' (paragraph 272)

**Question:**

When and how much do you receive for each machine?

**Answer:**

Since one does not know if the machines were all built at the same time, the value may not be the same for all machines

Paragraphs in the Manual: 299, 292, table 18 e page 26 point a)

Paragraph 292:

When a decision (line L) is taken to sell a machine, the oldest is sold first at the beginning of next quarter, at its depreciated value last quarter. However, because of new legislation on environmental issues, the potential for contamination and the need for safe waste disposal, there will be a decommissioning charge (see table 18) whenever a machine is removed for sale. Any decommissioning costs are included under 'Other miscellaneous costs' (paragraph 272)

Paragraph 299:

'Value of Machines': the current depreciated value of your company's machines. The value of machines shown in the balance sheet for the quarter before last, plus the second part payment for any machines installed last quarter, less the depreciated value of any machines sold last quarter all reduced by the quarterly rate of depreciation; plus the full value of any first payment made on machines newly ordered last quarter. The depreciation rate is given in Table 18.

Table 18:

Cost of Machines

Total cost of a machine	€ 350 000
Payable at time of order	€ 175 000
Payable on installation	€ 175 000
Machine rate of depreciation per quarter	2.5 %
Decommissioning Charge	€ 70 000

**Question:**

Since we can only define the building time on the decision sheet, which is the time that will then be associated with the machinery?

**Answer:**

Paragraph 89 of the Manual:

The machining times, given in Table 5 are for producing a set of parts ready to be assembled into the finished product. These are the times expected from 100% efficient, new machines. As machines get older, or are used more, they become less efficient, and take longer to make the component parts for each product. This process of deterioration may be slowed or even reversed by the introduction of a preventive maintenance program, but eventually each machine will reach a level of inefficiency at which it may be better to sell it and replace it with a new one. A further consequence of ageing is that a machine will tend to break down more often, and productive hours will be lost till it can be repaired. Insurance assessment of lost sales looks first at Product 3 in EU, then NAFTA, and finally Internet; then Product 2 and finally Product 1, until all lost sales specifically attributable to loss of machine capacity are covered.

**Question:**

In case of bank overdraft, if we ask for a loan, will it be automatically used to reduce that overdraft?

**Answer:**

Paragraphs of the Manual: 170, 173 e 177

Paragraph 170:

A decision (line Q) can be made to start, or add to, a medium term loan at a fixed interest rate (see Table 20). In this type of loan, the money comes from investment institutions that are prepared to commit themselves to your company in long term, and become part of the funding structure of your company. The money is credited to you immediately at the beginning of next quarter as cash (or automatically used to repay all or part of any outstanding overdraft or unsecured loan which you may have [See Paragraphs 171 & 172].) These loans are long term and cannot be repaid during the period of the simulation.

Paragraph 173:

Both overdrafts and unsecured loans are issued and repaid automatically as your cash requirements require, unsecured loans being granted last and repaid first. No decisions are needed.

Paragraph 177:

Interest on term loans is fixed (Table 20) and is calculated from the first day of each quarter. Term loans are credited at the beginning of the quarter, immediately before investments are bought, so that cash available from the loan will be invested immediately, provided you make the appropriate investment decision.

**Question:**

Why is it that during the two "shipped to" decisions there is always a start (\*)? It is something that already occurred in the previous report and keeps happening.

**Answer:**

Paragraph 243 of the Manual

'Shipped to": the number of each product made and actually shipped to each marketing area and to your Internet distributor. This may be less than the number originally decided if your factory did not have sufficient production capacity, or products are lost or destroyed, as described above. Products will not be sent to markets where you do not have an organisation.

**Question:**

At the end of the 5 quarters, does the simulation have a long term effect, or does the company end?

**Answer:**

As it is referred to on page 5, the concept of the Share Price has a prospective effect, meaning that it reflects the company's situation in the future. Each team will run their company up until a certain point; however, this company will not end there. It is each team's responsibility to ponder on what they should

and should not do. The factors that influence the stock value continue the same since the beginning. Being an interactive simulation we cannot know the impact of certain decisions as because we do not know what actions the competition will take.

**Question:**

In the management report we verified that there are teams that do not pay dividends. What "handicap" do these teams have? Is it possible not to pay dividends?

**Answer:**

As it is in real life, it is not required. However, it is an important parameter and influences how your company's shares are quoted, as explained on Paragraph 166 of the Manual.

Paragraph 166:

The company's shares are quoted on the Stock Exchange, and the latest share prices for all companies are quoted each quarter on the bottom line of the Management Report. Share price is influenced by several factors which include:

- The company's net worth
- Profitability
- Dividend performance
- Liquidity
- Ability to pay interest charges
- Use and availability of resources
- Marketing and selling capability
- Ability to satisfy orders promptly

**Question:**

Why is it that some "shipped to" values are higher than "sold to" values, and when are the "sold to" values greater than the "shipped to" values? And why did the distributor not deliver the product?

**Answer:**

When the "shipped to" values are greater than the "sold to" values it means that you sent more products to your agent/distributor than the orders clients made. When the "sold to" values are greater it means that you had stock product.

Paragraphs 243 & 245 of the Manual

Paragraph 243:

'Shipped to': the number of each product made and actually shipped to each marketing area and to your Internet distributor. This may be less than the number originally decided if your factory did not have sufficient production capacity, or products

are lost or destroyed, as described above. Products will not be sent to markets where you do not have an organization.

Paragraph 245:

'Sold to': the number of each product sold in each area last quarter. Calculated as the lesser of: new orders plus any backlog from the quarter before last; or, deliveries last quarter plus any product stock carried forward for sale from the quarter before last.

**Question:**

How is it possible to specifically identify which products will be rejected in the next quarter?

**Answer:**

Paragraph 241 of the Manual:

'Rejected': the number of each product rejected from these produced because they were discovered to be substandard in your Quality Control department. These are sold off at scrap value (Table 8). If you have sufficient resources your production department will produce extra to replace the rejects.

**Question:**

How is it possible to specifically identify which products will be serviced to correct defects in the next quarter?

**Answer:**

Paragraph 249 of the Manual:

'Serviced under Guarantee': The number of each product serviced to correct defects, under the company's 12-month guarantee, by local servicing agents. This may include products returned for repair, resulting from poor design or inherent ecological problems in the products, and also similar repairs to product stock still in your distribution system (look for the "!" sign). The number of units returned for this reason is not given separately.

**Question:**

How can the Insurances' participation be calculated?

**Answer:**

This value cannot be calculated.

The insurance covers all risks: raw materials, products, breakdowns, accidents, etc. (paragraph 187).

So, when the company communicates the damage, the insurance company calculates the compensation based on the value of all the secured assets and the value of the destroyed assets.

Paragraph 187 of the Manual:

Your company's activities are at risk from a variety of random events which can disrupt its operations:

- Some or all of the raw materials held in your own warehouse can be accidentally destroyed by careless handling, theft, flooding or fire
- Similar risks can destroy all or part of stocks of raw material in transit or in your own local warehouse
- Key assembly workers can suffer from serious home or workplace accidents, which might disrupt your production capacity
- Machines can suffer from catastrophic breakdown, which takes them out of production for periods of time
- Badly designed products can be distributed or sold which are later found to be environmentally dangerous, and need to be withdrawn for modification.

These events can be identified in the Management Reports by “!” (exclamation sign) alongside relevant figures.

**Question:**

The value on the balance sheet on the item 'machines' is the liquid value of depreciations?

**Answer:**

Paragraph 299 of the Manual:

'Value of Machines': the current depreciated value of your company's machines. The value of machines shown in the balance sheet for the quarter before last, plus the second part payment for any machines installed last quarter, less the depreciated value of any machines sold last quarter all reduced by the quarterly rate of depreciation; plus the full value of any first payment made on machines newly ordered last quarter. The depreciation rate is given in Table 18.

**Question:**

Do the results from the last round have any human intervention in order to adjust the final results in any way?

**Answer:**

There is no human intervention in any Global Management Challenge decision.

If and when any team is in a situation where they feel the simulator is being inefficient, we request that you present a detailed summary of such incident in order for us to analyze it and respond more efficiently.

**Question:**

What happens if we place a "0" on the number of doors?

**Answer:**

Placing a zero (0) on the number of doors means that you intend to abandon the Internet market as mentioned on paragraphs 71 and 130 of the Manual. You should also read related paragraphs 65, 66, 67 and 68.

Paragraph 65:

If you have no agents or distributors working for you will get no orders from the European or the NAFTA markets. Should you have no agents or distributors and you want to appoint some, you must decide one quarter in advance how many agents and distributors you want to try to recruit, and what support and commission you are offering, so that potential agents and distributors can see what the terms are before joining your network. Support and commission are paid when starting operating in the market.

Paragraph 66:

Reduction in the number of agents you have must also be notified one quarter in advance.

Paragraph 67:

There are fees to be paid for recruiting, and for closing down agents and distributors (see Table 3).

Paragraph 68:

The same should apply to Internet operations, but you only need one distribution agent. The agent is appointed automatically when you start to operate on the internet, and should you close down your Internet operation the agent will be dismissed.

If your company chooses to join the market again, it is recommended that you read the following paragraphs from the manual: 69, 70, 73, 126, 127, 128 and 129.

**Question:**

Is it possible to alter skilled workers wages? And why is the wages' value starred (\*)?

**Answer:**

The star (\*) points out that you tried implementing something with no success -this is found on the decision sheet, point c.



Paragraph 156 of the Manual:

Skilled assembly workers are paid at a basic hourly rate, decided (Decision Sheet line N) at the beginning of each quarter. This basic rate is subject to an agreement with the trade union, which does not permit wage rates to be reduced. At the same time, the employers' association works together to hold wages down, so that any wage increase decided is held to a maximum of approximately 15% of the highest rate last quarter. An increase in the basic wage rate is implemented at the beginning of next quarter.

**Question:**

For calculating the number of hours to pay, the "Absenteeism" should be deduced to "Hours Worked Last Quarter"?

**Answer:**

For the purpose of calculating skilled workers' wages, only the hours used in the last quarter are accounted for.

Paragraphs 149 of the Manual:

The number of hours of work from a given size of work force can also be reduced by absenteeism. In the case of unskilled workers, this has no apparent effect, but it does affect skilled workers. Hours can be lost in the assembly shop because of genuine sickness, disaffection caused by too much overtime, and low motivation brought on by poor quality products and poor management.

Paragraph 150 of the Manual:

Assembly workers may become ill, or suffer serious accidents so that they are off work for a significant length of time. When this happens, you continue to pay them as normal, but their post is temporarily filled with skilled workers hired from an agency, who charge twice the assembly wage rate. The cost of the agency workers can be covered by insurance.

**Question:**

How do we calculate the average wage per skilled worker, per week worked, i.e., how many hours has a week?

**Answer:**

A week has 49 hours.

If you look at Table 16 you may verify that  $420 + 84 + 84 = 588$

If you then divide 588 by 12 weeks/per quarter = 49 hours a week.

Paragraph 159 of the Manual references the 12 weeks per quarter: The skilled assembly workers operate only a single shift, but they can work overtime up to the limit shown in Table 16. They are paid only at the single shift rate. There is no guaranteed minimum number of hours worked for skilled workers, but a trade union agreement requires that the average weekly earnings of skilled employees (based on the number of weeks out of twelve worked) should not be less than that paid to unskilled workers, and any deficiency that occurs is made up by a 'parity payment'.

When the teams have inquiries about their calculations, they should present their calculation attempt for the organization to analyze it.

**Question:**

When we recruit skilled assembly workers, when are they available?

**Answer:**

Paragraph 141 of the Manual:

To find skilled assembly workers, decisions (Line P) can be taken to try to recruit them directly, either from the pool of unemployed labour, or from skilled assembly workers already employed by other companies. Trying to recruit people does not necessarily mean that you will get the number you want (you may not get any at all!). Because of the time taken to advertise for, and interview workers, anyone you recruit will not begin to work for you until the beginning of the quarter after next.

**Question:**

When we train the unskilled unemployed people, when will they be available?

**Answer:**

Paragraph 144 of the Manual:

As an alternative to direct recruitment of experienced people, unskilled unemployed people can be trained to the standard required for assembly workers. Training takes place in the company's own training school at the factory. This limits the number that can be trained to nine per quarter. After decisions (line P) to train people have been taken, they are brought in from the local unemployed labour pool at the beginning of next quarter, complete the course and become available to work at the

beginning of the quarter after next. The cost of training (see Table 15) covers the trainees' wages, materials and training-staff. Training people is more expensive than recruiting them directly, but it ensures that you get the number you want, and that they stay and work for you for at least one quarter after training is complete before they can be tempted away by better conditions at other companies.

**Question:**

How are Insurance premiums calculated?

**Answer:**

Paragraph 189 of the Manual:

Insurance premiums are calculated as a percentage of the value of certain of your fixed assets taken from last quarter's Balance Sheet - the total of Property, Machines, Material Stocks and Product Stocks. The percentage that is applied varies with the amount of insurance excess that you are prepared to accept yourself, before a claim is passed to the insurance company. The larger the proportion of the risk that you are prepared to take on, the less the insurance premium will be on the remaining asset value to be covered. Table 22 lists four plans, in which the proportion of insurance excess which your company takes on itself rises successively from 0.1% to 0.4%, and the corresponding percentage premium which the insurance company will charge to cover the remaining asset value.

**Question:**

How does Guarantee Servicing work?

**Answer:**

Paragraph 249 of the Manual:

'Serviced under Guarantee': The number of each product serviced to correct defects, under the company's 12-month guarantee, by local servicing agents. This may include products returned for repair, resulting from poor design or inherent ecological problems in the products, and also similar repairs to product stock still in your distribution system (look for the "!" sign). The number of units returned for this reason is not given separately.

**Question:**

The shift Premium is based only on the basic wage or in the basic wage plus the Saturday and Sunday wages?

**Answer:**

Paragraph 160 of the Manual:

If you decide to work double or treble shifts, all of your machines are manned fully on all of the shifts, and the rates of pay for all unskilled workers are increased by a shift premium (see Table 16). Unskilled workers are paid at a basic rate, agreed with the trade union, which is set as a fixed proportion of the basic skilled rate (see Table 17).

**Question:**

How does the management budget works?

**Answer:**

Paragraph 164 of the Manual:

There is a minimum allowable management budget per quarter (see Table 17). Any increase in expenditure will be implemented at the beginning of next quarter, but a decrease requires one quarter's advance notice and is limited to 10% reduction in any one quarter

**Question:**

How is Investment paid?

**Answer:**

Paragraph 175 of the Manual:

Investments earn interest at the same annual rate as the European Central Bank Rate for next quarter. Interest on investments is calculated from the first day of each quarter. If you do not have cash available, any decision you make to invest will be implemented from your overdraft, up to the level of your overdraft limit set last quarter (see Paragraph 178).

Paragraph 178 of the Manual:

The maximum overdraft available to you next quarter is shown in the Management Report for last quarter. This limit is calculated as shown in Table 19. Additional funds available through your overdraft will be automatically credited to your account as needed, up to the maximum allowed, to cover the balance of your funding requirements.

**Question:**

**By increasing the number of shifts and have more hours available, the production has not increased like we expected. Why has this happened?**

**Answer:**

Paragraph 136 of the Manual:

The company's products are made by unskilled machine operators and assembled by skilled workers. In order to meet your delivery

schedule, skilled workers need to be recruited in sufficient numbers to cope with any expansion in production which may be planned, and to counteract the loss of any workers retiring or leaving to work for other companies.

**Question:**

When is the financial statement supplied?

**Answer:**

Paragraph 343 of the Manual:

A Financial Statement of all the companies is supplied every six months.

**Question:**

What information is available when paid for?

**Answer:**

Paragraphs 15 e 16 of the Manual

Paragraph 15 of the Manual:

Apart from this free information, you can decide (Decision Sheet line S) to subscribe to 'Audit Research', an organisation which monitors the sales of each product and provides information about how the market is divided between you and your competitors. This will cost you a fixed sum (given in Table 2) each time you ask for it. The information gives market shares by volume of sales by each of the competing companies in:

- The European market.
- The NAFTA market.
- The Internet

Paragraph 16 of the Manual:

You can also decide (Decision Sheet line S) to commission research about your competitors' activities and products. This information costs you a fixed sum (given in Table 2) every time you ask for it. It includes:

- Total amounts spent on advertising
- Total amounts spent on product research and development
- A consumer assessment rating of the product design quality
- A consumer assessment of the quality of your website (if you are selling on the Internet)

**Question:**

Why sometimes the absenteeism hours aren't covered by insurance?

**Answer:**

Paragraph 207 of the Manual:

'Hours Absenteeism': the number of skilled man-hours lost through workers being sick, or not turning up for work for other reasons. Where part of absenteeism is due to serious illness or accident, the cost of cover may be covered by insurance. Look for "!" alongside to show that you have had a problem which may be covered by insurance if your cover is sufficient. The precise number of hours attributable to serious illness is not shown.

**Question:**

What is the backlog of unfulfilled orders? And what is the method of calculation?

**Answer:**

Paragraphs 246 e 247 no Manual

Paragraph 246 of the Manual:

'Order Backlog': the number of unsatisfied orders (backlog) for each product in Europe and NAFTA carried over from last quarter because of poor delivery. There can be no backlog of orders on the Internet. Note that these quantities are only half of the actual number of dissatisfied orders, as the other half will have cancelled their order. These have not gone directly to your competitors, but are likely to do so indirectly at some time in the future. If, in the meantime, you decide to raise your price, or reduce the assembly time for your products, your backlog of orders may fall still further at the beginning of next quarter (See next paragraph for method of calculation.).

Paragraph 247 of the Manual:

'Warehouse Stocks': the number of each product warehoused in each area and available for sale next quarter. Redundant stocks of any product may be sold at the beginning of next quarter if you decide in the meantime to take up a reported major product improvement for that product. 'Warehouse Stocks' or 'Backlog' for each product in each area, is calculated as:

- Product Stocks from the quarter before last,
- plus Deliveries last quarter,
- minus Backlog from the quarter before last
- minus Orders received last quarter.

A positive result means that you have product stocks in that area available for sale next quarter. A negative result means that you had unsatisfied orders in that area, half of which will have been cancelled, so that the result will have been divided by two before being shown as Backlog, to be carried forward. A negative result in the Internet area will be ignored.





**Question:**

In case I reduce the number of shifts from 2 to 1, the Simulator automatically dismisses the excess unskilled workers? Or do we have to do that?

**Answer:**

The Simulator does that automatically in the case of reducing the number of machines or shifts.

Paragraph 163 of the Manual:

Your team assumes the role of the company's Board of Directors and can consist of a Chief Executive, and executives who are responsible for Marketing, Production, HRM and Finance. You share a management budget, which determines your level of spending on outside services and expertise, directors' salaries, and general management expenses. The management budget influences the general quality of management, and this in turn affects efficiency in all parts of the company.