



## Cost Categories of Inventory

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### Lesson 01 – Costs of Capital

Cost categories of inventory lesson one. Costs of capital. This is usually the biggest component of carrying costs overall. It is a combination of costs of goods, interests and fees that occur to purchase the goods and it is expressed as a percentage of the business. you are holding inventory and instead of that you could have put that money on bank account or investment to get a return. So the return expected from buying the inventory should be bigger than the expected return from simply investing the money. Let's dive into how to actually calculate the weighted average capital cost with an example. You have the total company's equity \$50,000. The company's total debt is \$10,000 the cost of equity 11%. The cost of debt 8% and the tax rate is 25%. Therefore, the weighted average capital cost calculation will be calculated by solving the formula  $50,000 \div 60,000 \times 11\% + 10,000 \div 60,000 \times 8\% \times (1 - 25\%)$  solving that formula is 10.17%. So now therefore what is the result. What does that number tell you? The cost of capital for the business is 10.17%. The biggest lever to improve is to introduce the cost of equity by for example reducing the dividends paid to shareholders. But think about the potential effects to your stock price. You thank you for watching this video and I would You thank you for watching this video and I would be happy to see you in the next lesson. Cost categories of inventory. Lesson Two fix costs. Fixed costs are costs that occur on the same level no matter of your manufacturing and sales activity. Most common examples of that is the own warehouse. If you own the warehouse, this is a fixed cost. Property Taxes those are costs based on the current value of the property plus land and is calculated from the government of the property location. It is usually recalculated annually. We also have equipment leases. This should be computers, racks in the warehouse or any other equipment that you don't buy in full but lease it or therefore spread the costs over a fixed predetermined period of time. Therefore you have less impact on your working capital. Insurance premiums for such as inventory or building insurances are fixed, but worker compensations insurances could be variable. Depreciations. It is used for asset investments for which the value is decreasing over time. For example, you buy a machine that is expensed over the lifetime of it. The next example is software licenses. Those are fixed costs by definition as they don't vary

with the business activity, but rather on how many licenses you ordered with a fixed fee for it. Indirect labor salaries, especially for the manager who is independent from the manufacturing output. If you are using a service provider like a 3PL to handle your warehouse and you have a rental agreement of a definite amount of locators, this would be a fixed cost. But this is definitely not the best practice. You should go for rate per locator and movement disagreement and then it is getting a variable cost. Thank you for watching this video and I would be happy to see you in the next lesson.

**Cost categories of inventory. Lesson three variable costs**

variable costs are the counterpart of fixed costs as these costs vary depending on how many units you produce. Most common examples direct material. Those are the components used in your finished good. So this could be the wood that is used to construct the house. The external warehouse locator and the handling. So also variable cost because usually companies working with a warehouse service provider have agreements to be paid by movement of goods and utilize storage locators. The more activity you have, the more locators you utilize and the more movements of the goods between the three PL and you exist and will be charged.

MRO supplies. Those are maintenance, repair and operate costs such as electricity, grease, chemicals, workwear et cetera. The next example would be packaging such as cardboard boxes, standard pellets so not the exchanged Europellet but also straps, scotch, filling material, envelopes. The consumption of all of those are dependent on the level of activity. Shipping. Now as you have produced the goods you want to ship them to the end customer to convert it into revenue. As those are not fixed charges for a month but occur per handled volume. It is considered as a variable cost. It will be charged either by weight or volume and then to be considered the direct worker salary. Your workforce size varies on your activity level as you probably might have a base level of worker and hire more as sales increase different than the indirect manager who is in place no matter the level of activity. Short term equipment leases are also variable costs because they are only leased for short periods of time for example when you reach the peak in your activity. Thank you for watching this video and I would be happy to see you in the next lesson.

**Cost Categories of Inventory lesson four Cost of Inventory Revaluation and Depreciation**

In this lesson we are looking at changes in the net total value impact of your inventory. Examples Inventory revaluation is an accounting process that adjusts your inventory value based on changes in the standard costs, which can happen due to exchange rate changes. Example you're in Europe but buy parts in dollar when the exchange rate changes. This is inventory revaluation because your inventory will get a different value which can get higher or lower as well. Depreciation is used on assets investments like warehouse building a racks when the value in the books is reduced over time, there are usually two ways of

depreciation the linear and the reducing balance. One, you need to decide at time of purchase. The linear one is taking the value divided by the projected time of usage. This can vary from country to country. Giving you an example, the value of your PC is one and a half. Usage time is announced with five years. You can depreciate \$300 each year. In the reducing balance approach, you depreciate a percentage of the PC value every year, for example 50%, which results in higher depreciation at the beginning compared to the linear approach, but lower at the end until you can fully write it off. Thank you for watching this video and I would be happy to see you in the next lesson.

Cost categories of inventory. Lesson Five E&O. E&O is the acronym for excess and obsolete costs in inventory. Inventory is bought to cover demand in the future. When those expectations don't materialize, companies end up with excess which could turn into obsolete inventory. It's therefore also called dead inventory. Best way to improve this is to implement and master the S&OP process to get most precise planning information upfront. But in case you already have E&O inventory, you should highlight that in the S&OP process. So marketing and sales could consider a special market approach or sales to get orders for it. Compromise sometimes needs to be done on margin, but still better than disposing it in full. Like for example in the clothes industry they are always planning minimum two cycles ahead. Anything not sold as planned will need to go to the second market with less margin as they will be replaced by the next trend already produced and on the way. Thank you for watching this video and I would be happy to see you in the next lesson.

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