These notes correspond to Chapter 1 of the text.

1 Managerial Economics

What is economics? Any standard definition of economics will always contain two words: choice and scarcity. Economics can be viewed as the study of the choices people (firms, agents, decision-makers, etc.) make in order to allocate scarce resources. The underlying principle is that tradeoffs need to be made because resources are scarce (or limited). If resources were freely available and unlimited then there would be little need for economics – if I wanted 100 Ferraris I could just have them. But it's clearly not the case that resources are unlimited.

Hopefully it is apparent how economics can be used by managers in a business setting. Which product should a firm launch? Which competitor should a firm attempt to acquire? Should the firm expand into another industry? At an intrafirm level, how can a principal (firm owner) structure a contract so that the agent (manager) has the same goals as the principal? And, perhaps most importantly, how can a firm price its products to maximize profit? These are all questions that economics can help answer. Be aware that no two decisions are exactly the same, but the same guiding princples can be used.

A key concept in economics is opportunity cost. Opportunity cost is not a cost one will see on a balance sheet (at least I haven't seen it there). Opportunity cost asks the following question: What is the next best alternative that you could be doing? For instance, if a firm is thinking of spending $1 million on a product launch, we could ask what else the firm could be doing with that $1 million. Whatever the highest valued use of the $1 million is (not including the product launch) would be the opportunity cost of the product launch. In some cases it may be obvious what the opportunity cost is, in others less so. Then you can ask yourself the question – if I take that $1 million and invest it in a product launch and it turns into $1,001,000 next year, and if the next best alternative will turn that $1 million into $1,100,000 next year, should I really undertake the product launch? Perhaps more importantly, if it costs $10 to produce an item, should you base your price on the cost of the item – or on some combination of how much the next best alternative costs as well as the cost of your item?

At times during the course it may seem like we are very far away from some of these concepts, particularly in some of the more theoretical sections. The reason for some of the abstract modeling is that it (hopefully) drives home the underlying intuition, while at the same time allows the student to be aware of factors that may change that may shift the predictions of the model. And be patient – there is a plan to tie everything together.

1.1 Theory of the firm overivew

Some basic concepts that we will develop throughout the course:

Accounting vs. economic cost The key difference between an accounting balance sheet and an economic one lies in the opportunity cost of the resources that are tied up in the current business. For instance, if an individual running a business owns the storefront, then the economic balance sheet will need to incorporate the opportunity cost of that storefront. If the business owner could rent the storefront for $1000/month, then that opportunity cost is taken into account when calculating economic profit, but is not taken into account when calculating accounting profit.

Generally, because economic profit takes into consideration more costs than accounting profit, it will be lower than accounting profit. At some point in the course we will discuss the concept of "zero profit." Note that this profit means zero economic profit, not zero accounting profit. Having a zero economic profit is fine; having a zero accounting profit is usually not good.

Maximizing vs. satisficing Throughout the course we will discuss firms (and individuals) that wish to maximize profits. An alternative to maximizing profits is to "satisfice" or set a target and then stop once the target is reached. For instance, business owners sometimes set sales or profit targets for their managers. If a certain level is reached, then the manager receives a bonus.

There are a few reasons why we discuss maximizing behavior rather than satisficing behavior. One reason is that it makes the math easier – maximization is a relatively simple math problem. Another reason is because we still need a model of behavior once the satisfaction level is reached. Suppose there is a $25,000 sales target for the week. The manager reaches the target on Friday, with Saturday and Sunday still remaining. Now what does the manager do? It's possible the manager does nothing over the next two days because the target is reached. But if the manager is trying to make a good impression, then we need some model of what the manager is trying to do. Finally, twhile some firms may not be explicitly maximizing profits (as in calculating marginal revenue and marginal cost functions), the important idea is that firm's would prefer more profits to less. Thus, we use profit maximization as a guiding principle – it's a model of how firms behave, and it tends to predict behavior and outcomes well.

Role of profits in the economy The primary role of profits in the economy is to guide resources to places where they are most desirable. If one business is making large profits, then these profits signal to other individuals/firms that resources they own may produce larger returns if shifted to a different industry. Profits also serve as an incentive for individuals/firms to produce goods that people desire, and to reward those who produce goods efficiently.

Role of business in society Look at the last sentence above – "Profits ... reward those who produce goods efficiently." One way to interpret "efficiently" is "lowest possible cost." But efficiency also involves productivity – a firm can hire low cost workers, but it may be more efficient (and more profitable) to increase wages and attract better workers.

Also, firms may undertake some activities that impose costs on people who are not part of the production process, nor are they consumers of the firm's products. Air pollution by a firm is one such example; dumping waste into rivers and lakes is another. While these methods may seem low cost, the reality is that in today's business environment policies such as these are unlikely to go unnoticed, and may ultimately lead to a reduction in profits. The push towards more environment friendly processes has even led to some cost cutting moves being branded as environmentally friendly practices – I have seen plastic water bottles with labels mentioning how "green" the company is because they are now using 25% less plastic per bottle; or how in hotels they ask if the room occupant would like them to wash their towels every day, or if they want to be "green" and only wash the towels at the end of the stay (even though this is really a cost-cutting move because they are simply washing less laundry).