

# **Resource Allocation for Consumers**

by Sophia Tutorial

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### WHAT'S COVERED

This tutorial will cover resource allocation for consumers, exploring the choices consumers make and identifying the constraints faced when making those choices.

Our discussion breaks down as follows:

- 1. Consumer Choices
- 2. Constraints
- 3. Labor/Leisure Trade-Off
- 4. Income and Budget Constraints

# 1. Consumer Choices

Let's begin by noting that consumers and households are two interchangeable terms.

Now, households have to make three basic decisions:

- 1. How much to buy, referring to goods and services
- 2. How much to work, to afford those goods and services
- 3. How much to spend or save for the future

For the purposes of this tutorial, we will focus on the first two--how much to buy and how much to work.

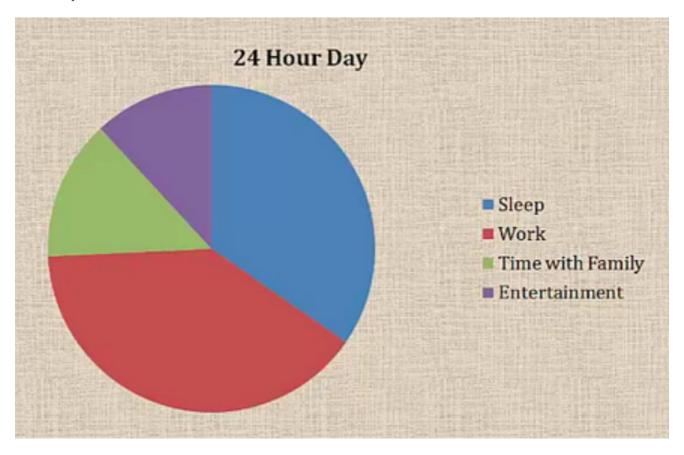
## 2. Constraints

Now, we all face **constraints** in our lives, which are elements that create parameters which may interrupt the achievement of a goal.



What are some constraints in your life? Most people would likely agree that two of the biggest constraints in their lives are time and money.

Suppose time is your most valuable resource, being both limited and scarce. Consider the pie chart below, which divides a 24-hour day into wedges allocated to various activities, such as sleep, work, spending time with family and entertainment.



There are many other things that a person needs or wants to do in a day. What activities would you include in a typical day, and how would you allocate them in a 24-hour period?

Notice that if you decide to sleep more, for instance, then that area of the pie chart would get bigger, but at the expense of another area. You would either have to work less, or spend less time with your family that day, or shrink your window of entertainment.



### Constraints

An element that creates parameters which may interrupt the achievement of a goal

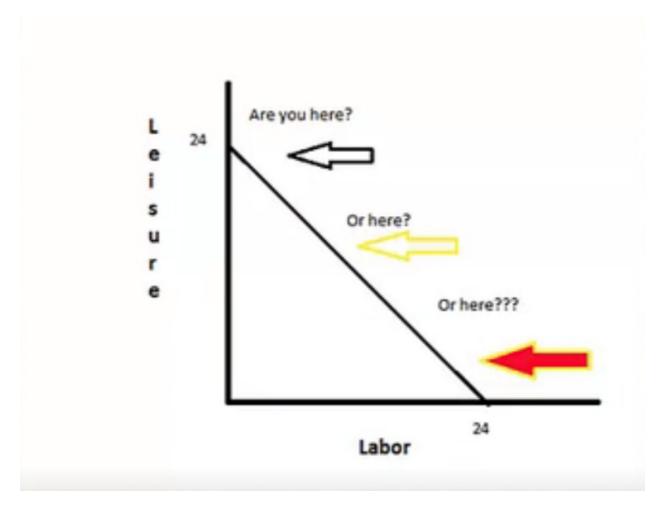
# 3. Labor/Leisure Trade-Off

This labor/leisure trade-off is a comparison between time spent working and earning income, versus time spent participating in non-work activities and earning value in satisfaction.

So, the time we spend working is to earn money to buy the things that we want. The time we spend in leisure doesn't garner a wage, but it does earn satisfaction, meaning we get gratification or utility out of that leisure time.

Here is a labor/leisure trade-off graph. Note that the extremes on each axis are at the 24-mark, which would represent spending 24 hours of a day in either labor (x-axis)--with no leisure time--or leisure (y-axis), with no

time for work.



If you decide to work a few more hours, for instance, you are trading off your leisure time in order to get more labor. Conversely, if you decide to cut back on your work hours, then you move up the line towards leisure. Most of us are likely somewhere in the middle.

The point is that we all have different preferences, and make different choices depending on those preferences and our situations, such as our needs, our family's needs, etc.



### Labor/Leisure Trade-Off

Comparison between time spent working and earning income, versus time spent participating in non-work activities and earning value in satisfaction

# 4. Income and Budget Constraints

Making different choices surrounding labor/leisure trade-off leads us to the topic of**income**, because we all make these decisions based on how much income we need.

Income is our other constraint; it is a monetary input in exchange for capital or labor within a particular time interval.

Now, most of you probably have some type of budget. Here is an example of a budget constraint, which

outlines possible budget choices of a person earning \$2,000 per month, given different parameters such as rent paid, food expenses, etc.

Option	Rent	Food	Other	Total	Afford?
А	\$800	\$500	\$700	\$2000	Yes
В	\$1200	\$400	\$400	\$2000	Yes
С	\$1400	\$300	\$300	\$2000	Yes
D	\$2000	\$200	\$200	\$2400	No

Notice that as this individual spends more money on rent, they have to cut down on food and the "other" category.

So, the first three would be within the budget constraint, because they add up to the amount of money earned in a month.

The last option, D, however, would not be affordable; therefore, we would say that it is outside of the budget constraint.



So, which option would you choose? Every person's choices will vary based on his or her individual preferences. The idea is that each person seeks to maximize their own utility. For example, perhaps you might not mind living in a low-end apartment, but you definitely care about the food that you purchase; therefore, you opt for option A. Or, you might be quite concerned with where you live and therefore sacrifice in the other areas.

Again, we are all constrained by our choices, because we can't have it all. We have to make important choices and we seek to maximize our utility, which, remember, is the gratification we receive.

Clearly, our constraints are going to vary depending on what we do for a living.

EXAMPLE Let's assume an attorney makes around \$200,000 per year. Therefore, their income might not be as much of a constraint, because they can probably purchase a lot of goods and services. However, they might have a considerable time constraint, working many long hours.

A teacher making \$45,000 per year, on the other hand, might have more time on their hands, because they work fewer days of the year and possibly have summers off. However, their income will be a much greater constraint, because they can't purchase as much with \$45,000 as an attorney can with \$200,000.



#### Income

Money earned in exchange for capital or labor within a particular time interval

# SUMMARY

Today we learned that time and **income/budget** are consumers' two biggest resources, as well as **constraints**. We learned that consumers must make a **labor/leisure trade-off**, between hours working

and hours enjoying leisure. Lastly, we learned that **consumer choices** differ due to preferences, but we all seek to maximize our utility.

Source: Adapted from Sophia instructor Kate Eskra.



## TERMS TO KNOW

### Constraints

An element that creates parameters which may interrupt the achievement of a goal.

#### Income

Money earned in exchange for capital or labor within a particular time interval.

### Labor/Leisure Trade-Off

Comparison between time spent working and earning income, versus time spent participating in non-work activities and earning value in satisfaction.