# Labor-leisure model in the everyday life 

## ASSIGN BUSTER

Labor-Leisure Model in the Everyday Life I like many other college students am not currently seeking work in the labor force. As a student athlete playing golf I am constantly juggling my time between my studies as a senior Economics major, and maximizing my golfing potential and chasing my ultimate dream of becoming a professional golfer. Throughout this paper I will explain how I maximize my utility in different circumstances using the labor-leisure model.

As I am not actively looking for work in the labor market my indifference curve is so steep there are no tangencies to my reservation wage, which is defined as the " lowest wage rate at which a worker is willing to accept a job. " By dedicating all my time to studying and practise, and none to the labor force my indifference curve has no tangency to my constraint. As a rational person who wants to maximize utility; the current wage rate is not high enough for me to substitute work for things I prefer to do inmy free time, such as playing golf or studying for a test.

I am fortunate enough that my parents have the opportunity to help me financially during my time at college, so I have a source of " unearned income" that I receive for working zero hours in the labor market. This " unearned income" is shown by the spike in figure 1 below. As mentioned above because of my high regard for leisure and the modest wages I am offered as a student with somecollege experience; my indifference curve has no tangencies to my constraint. Figure 1 depicts where utility is maximized at point $A$.

As a utility maximizer it suits my personal preferences to accept the unearned income given to me by my parents and consume more leisure
time. " Point [A] represents the highest utility that can be reached by [myself], given the budget constraint. " The labor-leisure model makes the assumption that leisure is a desirable product, which in my case it is. Furthermore, substituting three or four hours in the labor force for more hours of leisure time is an easy decision for a utility maximizer to make. The government faces similar problems with modern day welfare.

Because of the modest wages offered to unskilled workers, and size of recent welfare packages many people maximize utility by removing themselves from the labor force, and accept benefits offered by the government whilst consuming more leisure time. As mentioned above, during school I am constantly dividing my time between practising for golf, and studying my current classes. Using the Production Possibilities frontier (shown in Figure 2 below) I can graphically show the choices I make in a variety of scenarios as a utility maximizer.

Like most economic models it is a simplification of reality that represents " economic processes by a set of variables and a set of logical quantitative relationships between them. " To maintain the simplicity of the model I am assuming my average day consists of 16 hours, of which I divide my time between either practising golf or studying. I rarely dedicate all my waking hours to specifically golf or studying, but for the consistency of this model that assumption will be made.

Figure 2 shows my personal production possibilities frontier, which " shows the alternative outputs of [golf practise] and [studying] that can be produced" by myself in any given day. " The production possibility curve clearly exhibits the notion of technical efficiency. " Any point inside the curve
is considered inefficient, and any point outside the curve is unachievable. The production possibility frontier clearly shows that depending on how I allocate my time directly affects my productivity in both areas.

For example, if I dedicate a disproportionate amount of time to studying my golf performance will decline as my grades increase, and vice-versa. As shown in Figure 2 there are many different combinations of golf practise and studying. Maximizing utility in this model is my selection of the most appropriate combination of studying and golf practise for the circumstances of that day. One of the biggest advantages of playing an individual sport is having the ability to design a schedule that suits my day to day activity.

Points A, B, C, D and E all represent possible utility maximizing schedules on my production possibilities frontier. There are many factors that could affect my everyday schedule. For example, If I have a particularly important tournament coming up I may find it utility maximizing to substitute some hours studying for some hours practising at the golf course. This schedule would make my indifference curve steeper than usual, like the indifference curve U4 in figure 2. My grades may suffer at this schedule; however, performing well in tournaments also just as important so the schedule is still utility maximizing.

I will maximize utility at a completely different point on my production possibilities frontier during finals week. I will be more likely to substitute hours practising golf for time studying during finals week. As time spent studying becomes more valuable my indifference curve will become much flatter than on an ordinary day, like the indifference curve U2 in figure 2. As mentioned above, there are obvious flaws to this production possibilities
frontier. However, an economic model is a simplification of reality that represents " economic processes by a set of variables and a set of logical quantitative relationships between them. I have never spent an entire day where I dedicated all my waking hours to either studying or practising golf. So despite point F on figure 2 not statistically being utility maximizing it is where I normally operate. Normal daily activities like eating, talking with friends and other general errands are not considered in this model. The shaded area in figure 2 represents time 1 spend doing activities that are unaccounted for by golf practise and studying. I plan to graduate in May 2013 with a Bachelors ofSciencedegree in Economics.

My degree is a sign to potential employers that I have been trained in the field of economics. According to the " Investment model ofeducation" I will move from a male with " some college" experience to a male " college graduate. " The investment model of education suggests that college graduates are more likely to receive additional training in their early years of employment; resulting in higher wages. The potential for a higher wage could have a notable affect on my post-college labor-leisure model. The higher wage creates a steeper constraint, as seen below in Figure 3.

Figure 3: Post-College Labor-Leisure Model If offered a wage high enough, the new constraint could become steep enough to where my indifference curve would have a point of tangency with my reservation wage, as seen above. As a result of the additional training $I$ have received (a college education) my constraint has moved from the line $A D$ to line $A E$. The severe increase in wage has increased my cost of consuming leisure considerably.

My utility is now maximized by joining the labor force, as seen in the move from U1 to U2 on figure 3.

The radical change to my labor-leisure model has not taken place without a huge substitution and income effect. The new wage greatly increased my costs of consuming leisure, so much so I substituted some hours of leisure for hours of work. This is known as the substitution effect, and can be seen graphically between points $B$ and $C$. An income effect is also present. Aftergraduationmy parents will not continue to hand memoneyfor nothing in return, so the unearned income at point $F$ is no longer achievable.

This decrease in income reduces my purchasing power of leisure and will increase my demand for labor hours. This income effect is shown graphically between points $A$ and $B$. The total effect can be seen graphically between points $A$ and $C$. The substitution and income effect usually move an individual's preferences in opposite directions, but because I was choosing to work zero hours the presence of either effect could only increase my demand for work. In conclusion, I can portray how I make everyday decisions using the labor-leisure model and production possibilities frontier frameworks.

As with most economic models, it drastically simplifies reality. The simplification however is necessary, due to the complex nature of economic variables; simplicity aids clarity. For an economic model to be successful two appropriate variables must be chosen. In my personal instance the relationship between practising golf and studying for classes are directly related. By simplifying and selecting applicable variables complex economic information can be expressed logically, as shown above. Works Cited EconoMonitor : EconoMonitor The Current Downturn: Labor-leisure Tradeoff
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