

Teaching Introductory Microeconomics— The Full Treatment

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INTRODUCTION

Choices and decisions in business and in economics as well as in life are *not* made in an ethical vacuum. *There are few economic choices that are ethically neutral.* By their very nature, choices/decisions involve the worldview of the chooser/decision-maker, and this can cause two individuals possessing an equal knowledge of the same educational tools to make widely different choices when faced with the same alternatives. Consequently, the teaching of microeconomics principles will always be lacking without the infusion of an ethical/philosophical system which gets at *how to properly use* these principles and tools. This paper will propose that microeconomic principles and tools are best applied using a biblical model and that decision-makers with non-Christian worldviews often make choices based on biblical principles because the latter work best even in a fallen world (II Timothy 3:16). The difference here is in motivation; the Christian's motivation is to serve Jesus Christ. On the other hand, Christians do not always follow biblical principles because ideal behavior is sometimes compromised due to expediency, greed, or other wrong motives.

In this short paper, I will deal with selected areas of an introductory microeconomics course from the standpoint of how and where a teacher might effectively integrate a Christian worldview into the basic body of economic theory. My purpose is not an in-depth study of each of these areas but rather an introduction to stimulate thought on how the Christian worldview might be more effectively integrated. Thus, the analysis on each area/issue can and should be further developed for the benefit of teacher and student and “to the glory of God.” I believe that the Christian worldview is revealed most completely and accurately in the Bible, and thus, biblical principles will serve as reference points¹. My comments are purposely prescriptive to generate further discussion, investigation, and study.

Ultimately, I hope to develop a text supplement for teachers of introductory microeconomics who wish to give students the full treatment.

THE ECONOMIC PROBLEM

Most introductory economics texts define economics as the discipline of study that deals with the problem of scarcity and how to efficiently use scarce resources to meet wants/needs. This scarcity forces man and society in a collective sense to make choices which involve many factors, the most important of which is the worldview of the decision-maker(s). Scarcity has both a “wants-side” (which are virtually unlimited according to economics texts) as well as a supply-side. (Economics texts teach that virtually everything has an opportunity cost—something that must be given up in order to produce or consume another unit.) This provides an excellent opportunity to briefly talk about the Christian concept of satisfaction and the difference between material possessions (temporary) and spiritual possessions (everlasting). Regarding the former (material possessions), the Christian is often satisfied with less of these material possessions because of their relative unimportance compared to the latter (spiritual possessions), which to a degree involve denying oneself materially (although they come as a gift from God). Paul says to the Philippians to be content in all circumstances (Philippians 4:11-13), while Matthew admonishes us to deny ourselves and follow Jesus (Matthew 16:24)². Thus, two societies with the same amount of resources would have widely differing degrees of scarcity depending on their respective worldviews. Also, in a micro-sense, there is a very real cost of following Jesus in terms of denying oneself and in terms of being identified with Jesus Christ; only the true Christian perceives the benefits as far outweighing the costs. The Bible teaches us

that it is impossible to have true enjoyment without God (Ecclesiastes 2:25; see also Romans 8:18). In a macro-sense, a society's standard of living is much more than its ability to produce material goods and services. Standard of living is also influenced by pollution, leisure time, and a host of other factors which are deemed particularly important to certain individuals.

Economics is also referred to as a study of choices that individuals and institutions make in market settings. The choices are assumed to be more optimal in terms of consumer satisfaction and resource allocation if made in a free-market setting. Assuming a marketplace of perfect knowledge (a rather naive assumption), the question arises, "Given man's sin nature (a Christian worldview), what constraints are needed to properly restrain man's natural selfishness?" This provides an opportunity to point out the proper role of government in a fallen world and the importance of a Christian worldview in providing a natural constraint (Romans 13:1). Of course, politicians and bureaucrats are sinful, too, and need to be constantly monitored.

SUPPLY, DEMAND, AND MARKET EQUILIBRIUM

Because the supply curve represents the behavior of the supplier in the market and the demand curve the behavior of the buyer in the market, the shape and location of each of these two curves will reflect the respective worldviews of the supplier and buyer.

Worldview considerations along with market factors will impact the prices that suppliers will charge for the outputs they supply to the market. This can be especially important in cases of natural disasters or "supply shock" where the supply of the good (or service) has become unusually limited. Because of unnatural circumstances, the prevailing market price may be double, triple, or higher above its normal level. Traditional economic theory advocates letting the market price rise to efficiently allocate the existing shortage. A market composed of suppliers with Christian worldviews should react differently, even if "windfall profits" were legal, than a market where suppliers were guided by unbridled profit maximization that would take advantage of the situation by charging the highest price the market will bear. I recognize that a Christian worldview (CWV) can accommodate letting prices rise during natural disasters because of scarcity so that those who value the product more should be able to consume it by paying a higher price. Some states have price gouging laws to prevent suppliers from taking advantage of "acts of nature." It is important to stress the continued importance of price as an efficient resource allocation

mechanism in the sense that scarcity is dealt with through a rising price which allocates according to those buyers who both value the good or service the most and who have the means to purchase it at the higher price. This question of efficient resource allocation should spur a lively discussion on how a supplier might price his/her product given that it has been made scarcer by a natural disaster.

It is usually easier to see the effects of worldview on demand decisions because of the household's consumption patterns, in terms of what goods and services it consumes, how much it consumes, and what it is willing to pay can more easily be seen to affect preferences and thus demand. An additional area worldview will have a significant impact on is price elasticity of demand. Because price elasticity is particularly sensitive to the proportion of income spent on the output under consideration and the latter is dependent on worldview, the price elasticity for outputs which are consumed in moderation or even avoided by those with a CWV (i.e., alcoholic beverages) would be different than those without a CWV, assuming the latter preferred the output (I Corinthians 4:2; Matthew 25:14-22). The difference would be related to the natural constraints on consumption (Proverbs 30:7-9; I Timothy 6:6-10) that a CWV individual would place on his/her consumption in order to honor God that would not hold for a non-CWV consumer (II Corinthians 5:9,10; Romans 12:2).

Another area under basic supply and demand which lends itself to introducing the effects of a CWV is artificially set prices (usually government-mandated) which cause shortages or surpluses. A discussion of the merits of the government-imposed price ceilings (as in the case of rent control) or price floors (as in the case of minimum wage) or farm subsidies can be a starting point, but I believe it is the unforeseen consequences of such market intervention that provides the best opportunity to examine the effects of a CWV on behavior and market outcome.

For example, rent ceilings will lead to attempts by the seller to circumvent the below equilibrium price in the form of reducing provided services or even requiring the buyer to provide services that normally would not be required. While some might rationalize this behavior as "fair" given government intrusion and market demand and even necessary to properly allocate the scarce rental space, the Bible prohibits taking advantage of others as well as using deception to avoid obeying the law. It was brought to my attention by a reviewer of the paper that consumers of rent-controlled apartments can also exploit apartment owners through "subletting and charging a high fee to the lock." This is also an excellent opportunity to compare ethics of the effects of rent controls (leading to shortages) with a market outcome,

which as one reviewer suggested can be amoral and depends ultimately on the morals of buyers and sellers.

Minimum wage laws provide a test for employers regarding how they treat those employees whose jobs have low enough productivity that their equilibrium wages fall under the minimum wage. The Bible tells us that oppression by cheating is wrong (Hosea 12:7). In these cases, a buyer's market is artificially created, and this provides an opportunity for the employer (buyer) to take advantage of the worker (who sells his labor services) by requiring extra work or by improper treatment which is easier to get away with due to the surplus of workers (Matthew 16:26). Of course, it is not always easy to identify when an employer is taking advantage of his employees in this buyers' market and when the employer is simply reorganizing responsibilities of his workers to keep costs down after an increase in the minimum wage; however, the worldview of the employer would affect his tendency to take unfair advantage (Philippians 3:17-20).

An area which has come under increasing scrutiny in recent years has been the use of illegal drugs. The broader question is, "Should some activities be prohibited by law even if they appear to be difficult to prevent?" Outside of the legal question (the prohibition against breaking the law), where does the Bible enter into this issue? I believe a case can be made for man's image-bearing role in God's creation which would require man to be free of using illegal drugs (refer to Genesis 1:26-31; I Peter 1:15, 16; I Corinthians 6:16, 9-20). This is not to depreciate the negative external effect of drugs on families, productivity in the workplace, and on society in general. These latter costs need to be elaborated on and even quantified where possible. However, by allowing the body to come under and stay under the influence of illegal drugs is a perversion of man's role as image-bearing stewards in God's creation.

CONSUMER BEHAVIOR

Consumer preferences are usually shown in microeconomics in the form of utility functions and/or indifference curves. These utility functions have different quantitative values, and these indifference curves take different shapes depending on preferences of the consumer, which in turn are directly related and determined by worldview. Exercising too much, watching television, playing sports, and participating in other forms of entertainment in general can be damaging to the Christian's relationships to God, his family, and even his job. Of course "too much" will differ with each individual according to opportunity costs. An

interesting exercise would be to take several products and let each member of the class estimate a utility function using a CWV and non-CWV perspective. Guidelines would have to be given regarding numbers to use and the format to use so that results could be easily tabulated. Then the faculty member could compare the results, giving extremes (highest and lowest) and the class average. This little exercise would bring out not only differences in perceptions of CWV versus non-CWV about products but also biases toward certain products. Another method to address differences in utility functions between Christians and non-Christians would be to give the students predetermined utility functions on selected products and ask them to indicate how the numbers might change if the consumer changed from a non-CWV to a CWV.

While the behavioral objective of utility maximization for the consumer is consistent with a CWV philosophy, the difference in how utility is maximized should be stressed. For the Christian, there is the overriding constraint on consumption that asks whether it is pleasing to or honoring God (I Peter 1:14-16; I Corinthians 10:31), which is not present in the non-CWV consumer.

Indeed, one could say that this constraint gets built into how the Christian looks at the utility generated by each good consumed (Hebrews 1; John 3:16; 6:35; 14:6; Romans 6:11-23; Philippians 4:11-13; I Timothy 6:6-10). Humble Christians "delight in delighting God." The essence of sin is to turn away from delight in pleasing God and instead seek delight in delighting oneself ("self-absorption rather than Christ absorption") (I Peter 1:14-16; I Corinthians 10:31)³.

It is usual to bring into a discussion of marginal versus total utility the "diamond water paradox." While usefulness may be the primary determinant of total utility, scarcity is the primary determinant of marginal utility, and it is on the basis of marginal utility that value is based. This could lead into a discussion of the atoning work of Jesus, whose work on the cross was of infinite value because no other human being could have accomplished the atonement for the sins of an individual (Romans 6:11-23). Many do not realize the infinite value of Jesus' work on the cross because they fail to recognize its uniqueness or believe that it is not something they need to be concerned about now. Often the closer a person moves toward death, the more value he attaches to the atonement because he sees his time as "running out."

THE PRODUCTION FUNCTION AND COST CURVES

The discussion of production functions and cost curves leads to a discussion of the productivity of inputs (labor,

physical capital, land, entrepreneurship) and the principal-agent problem where the managers/workers of a business firm are working for owners whose interests they are supposed to protect. This problem can be related to the situation between God and humans where the latter are stewards of God's creation according to a Christian worldview. Technology in a fallen world has both a positive and negative side. Often the negative side can be so subtle (such as becoming a slave to the technology to the detriment of relationships) because it is linked to a fallen world. The quest for more information via computers and other devices can lead to control and manipulation, and the development of mass production techniques can denigrate the importance of human resources, their family responsibilities, and their personal health and welfare. Also, this gives an opportunity to discuss the proper (biblical) use of authority and submission to authority (Matthew 20:20-28). In a CWV, the CEO or head honcho is an agent for God, just like any subordinate or worker. God does work through a system of hierarchies in His created order (man the head creature), in the family (husband, wife, children), in the business firm (president, VP, managers, workers), and even in the Trinity (Father, Son, Holy Spirit). This would be a good opportunity to talk about proper forms of submission and the fact that a subordinate (supervisor), although he does have different role than the supervisor (subordinate), is not necessarily inferior (superior). Unethical methods in terms of supervising employees may temporarily reduce costs and lower the firm's cost curves, but usually have long-term negative cost consequences (Romans 12:3-8).

When firms calculate the opportunity cost of production, they include a factor for "normal profits." In simplistic terms, "normal profits" represent what the firm could earn by using its resources in their next best alternative. Included in the calculation of next best alternative is a risk factor which is usually positively related to return in that market with higher risk. In other words, higher risk markets, *ceteris paribus*, demand higher normal profits. While the worldview of a firm's decision-makers would have little effect on the calculation of risk per se, it might affect the acceptability of risk in the calculation of "normal profits." In other words, it might produce a constraint which a person with a CWV would be unwilling to assume, whereas a person with a non-CWV would accept even though the risk calculation for the two was exactly equal. Also profit maximization using *unethical* means is wrong from a Christian worldview because the goal of the Christian is to honor God above profits. Profits obtained properly can serve as a means of evaluating good entrepreneurship but never an end in itself (Hebrews 12:1).

This is also an area to suggest that unethical practices might reduce costs in the short run but end up increasing costs in the long run. On the other hand, ethical practices such as honesty and diligence, which might sacrifice short run profits, would bring time and resource savings in the long run, especially if everyone worked as if "before the face of God."

The warning given in Scripture concerning becoming unequally yoked is also relevant to partnerships, especially in the light of the unlimited liability provision. Just as in marriage, a person contemplating linking himself to another in a business relationship needs to be extremely careful that the prospective partner has the same basic worldview. Otherwise ethical and relationship problems will plague the partnership and could destroy both parties (II Corinthians 6:14-17).

Business borrowing is also an area where worldview would have an impact. The Bible warns about, but does not prohibit, personal borrowing, but business borrowing is often necessary to bridge the gap between when expenditures are necessary to produce the product and when the corresponding revenues are received after the product is sold (Romans 13:8; Proverbs 22:7). In addition, opportunities to expand or make capital changes often require borrowing, but the question is how much borrowing is properly prudent? Financial ratios (debt-equity ratio, debt-to-total-assets ratio, etc.) can only give guidelines; ultimately the worldview of the decision-maker(s) will enter into how much borrowing the firm does. A decision-maker with a CWV will have a different attitude regarding his fiduciary responsibilities toward creditors and owners than a decision-maker with a non-CWV and, *ceteris paribus*, would be less likely to borrow if he were already highly leveraged (Proverbs 22:7).

Perhaps the most pervasive area affected by worldview which is discussed in my introductory microeconomics class (although this is normally handled more fully in upper-level strategic management or policy classes) is corporate culture. Corporate culture is difficult to define but is broadly the philosophy of the firm which guides general behavior as it copes with the problems stemming from external and internal environmental changes. The dimensions of corporate culture permeate all of the functional areas of the firm and impact the planning process, the manufacturing process, the distribution process, and especially the relationships between owners and managers, managers and workers, workers and customers, and all employees.

Corporate culture usually evolves as the firm grows and is heavily dependent on the values and worldview of upper-level management. For management with a Christian worldview, efficiency is not sought at any cost, and the

methods used to achieve economies of scale and scope are more important than the actual efficiency achieved (Matthew 20:20-28).

From a biblical perspective, profit maximization as a behavioral objective will lead to good stewardship because it promotes responsibility and accountability as long as it is done within the boundaries of God's laws. For basically the same reason, competition can be constructive (much like discipline) when done under God, but usually becomes destructive when done to promote self. Unethical methods of reducing competition include deceiving customers and crony capitalism (using government) which can increase profits in the short run, but usually have negative long-run consequences.

THE FOUR MARKET MODELS OF INDUSTRIAL ORGANIZATION

The traditional introductory microeconomics course addresses the four basic types of industrial structures in the form of four market models: perfect competition, monopolistic competition, oligopoly, and monopoly. The firms in each of these models have different degrees of market power depending on the assumptions of the market in which they are located. Where a firm has monopolistic power, the ethical checks from competition are not as strong as under perfect or monopolistic competition. Thus, unethical practices such as customer deception, failure to pay suppliers on time, and unkept promises to employees are more likely to occur (Proverbs 12:22). This lends itself to a discussion of how to properly use this market power, and this discussion presents another opportunity to distinguish between a Christian and non-Christian worldview. Of course, the decisions of the firm are rarely the decision of one individual, but this is where corporate culture is so influential. A corporate culture that is CWV-oriented will address even fundamental questions differently, such as whether to continue to operate or to shut down (short-run decision) or whether to remain or leave an industry (long-run decision)⁴. The fundamental calculus for these two decisions is the same regardless of worldview; if the firm cannot cover variable costs in the short run, it makes economic sense to shut down until either the revenue or the cost picture changes enough to cover variable costs. In the long run, the firm must cover all opportunity costs (because all are variable) or it should move into its next best alternative. Where the differences come in are in the factors that are included in costs. These factors would include but are not limited to covering relocation costs for employees, standing by contractual arrangements

with suppliers, and honoring agreements with creditors and distributors (Philippians 2:4).

When discussing price discrimination under the monopoly model, the ethics of price discrimination provides an excellent opportunity to discuss a CWV. The word "discrimination" is a "loaded" word with a negative connotation. Price discrimination in the economic sense (charging a different price to different customers when the price differential cannot be justified by cost differences) is justified on numerous grounds, some economic, some ethical. For instance, it can be shown that some price discrimination generates external benefits to society, and that it should be allowed because without the price discrimination, society as a group would lose (i.e. medical care, education, electricity, telephone service). In these cases, cross-subsidization via price discrimination can be justified on economic grounds alone. The problem is how to accurately measure these external benefits and how much price discrimination is necessary to achieve them. Needless to say, there is the danger of the price discriminator taking advantage of the "external benefits principle" to gain benefits for himself or herself; thus these types of situations often lead to government intervention in the form of regulation (public utilities, medicine, and telephone) or government operation (education). Improper forms of discrimination usually involve self-aggrandizement in some form and a focus on serving the self rather than God (Psalm 15:2-5).

In discussing the cartel model (usually under oligopoly), the oligopolist has the temptation to cheat on the cartel agreement. This cheating, while generating profits in the short run, would violate the Christian prohibition against lying and probably lower long-term profits when other firms discover the cheating and react accordingly (Psalms 15:5; Proverbs 12:22). Given the nature of man as revealed in the Scriptures, proper safeguards against cheating such as checks and penalties for violations should be built into all cartel agreements in order to minimize the probabilities of cheating (Leviticus 19:11; Deuteronomy 25:13-16). This could lead to a discussion of the necessity for accountability measures in a fallen world (Proverbs 3:32; 13:11; 21:6). In addition, a reviewer pointed out the oligopolistic cooperation among firms may also be considered collusion against the public and would be a good discussion point (Exodus 20:15, 16).

RESOURCE (INPUT) PRICING

In the resource market, the roles of household and firm are reversed from the product or output market.

Households are sellers in the resource market (buyers in the product market), and firms are buyers in the resource market (sellers in the product market). With the “shoe on the other foot,” each decision-maker has the opportunity to behave responsibly in his respective role.

Discrimination in hiring and setting wage rates can be proper or improper from a biblical perspective. Proper discrimination would involve choosing the best applicant for the job based on qualifications/abilities; the needs of the firm; and wage payment commensurate with responsibilities, job conditions, and general market wages for similar types of employment. Worldview affects the way in which the firm treats its employees. The Christian employer is concerned about his or her employees beyond their productivity and immediate value to the firm. This concern extends to the workplace environment and involves total compensation plus a host of other factors, including the effect of business policies on the ability of the employee to meet family responsibilities (Deuteronomy 24:14, 15; Malachi 3:5). In short, the Christian employer sets relationships very high on the priority list of goals for the firm, and this in turn influences the amount of labor demanded and the price offered (wage) to employees. The payoff for “relationship building” to the employer is employee loyalty, which translates into higher productivity and generally greater flexibility in terms of work assignments. For the employee, a CWV should improve productivity on the job as the workplace becomes “an altar where work is presented to God as an acceptable offering” (Colossians 3:23, 24; I Peter 2:18).

Usually a discussion of input pricing deals with labor unions and the role that they play as monopolists in labor markets. The temptations to misuse market power by labor unions are similar to the temptations that monopolists face in the product or output markets. These are restricted only by government intervention or by adherence to a set of ethical principles such as those found in a Christian worldview. Negotiating collective bargaining and wage agreements present opportunities to deceive, misrepresent situations, and even exacerbate damaged relationships that need to be repaired before any agreement can be reached. The outcome of negotiations will be different depending on the worldview of the negotiators (Philippians 2:15).

Most introductory microeconomics courses also deal with the case of monopsony (single buyer), which presents a situation of economic power from the buyer’s side. The single employer (monopsonist) in a small rural community can, and many times will, take advantage of his market power through manipulation of the wage rate and working conditions. This provides a further example of where the behavior of an employer with a Christian worldview would

differ from one with a non-Christian worldview (Colossians 3:23, 24). An excellent discussion question for the class would be, “In what ways could the monopsonist use his market power to take advantage of his employees, and what Christian principles would prohibit him from doing so?”

CONCLUSION

This brief look at areas where an instructor teaching an introductory microeconomics course should integrate the influence and role of a Christian worldview is certainly not meant to be exhaustive. Each of the areas treated should be examined more thoroughly, and I would hope the reader and especially the teacher of introductory microeconomics would do so. Christians are called to be salt and light (Matthew 5:13-16) and have a responsibility to proclaim God’s word in areas and arenas where Divine Providence provides opportunities. Academicians are called to give the student not only the truth but the *whole truth* or *full treatment*.

ENDNOTES

- 1 An excellent discussion on worldview and its importance is found in Ronald H. Nash’s book, *Worldviews in Conflict – Choosing Christianity in a World of Ideas*.
- 2 For the Christian, the secret to happiness lies in being “right with God,” a condition of the heart, and does not rely in external factors (possessions, social standing, experiences, etc.).
- 3 An excellent resource for biblical integration is Richard Chewning’s book *Biblical Principles & Economics, the Foundations* Volume 2. In his editor’s reflections on Nash’s article, “The Subjective Theory of Economic Value,” Dr. Chewning makes the following statements on p. 98:

But God’s higher end is for us to be set free from our sinful natures, so we can enjoy the freedom of exercising moral choice in an environment of justice and righteousness. We can, therefore, conclude that God’s perfect creative acts and special revelation reveal His earnest interest in our ability and opportunity to exercise true moral choices, and this truth reinforces Nash’s observations about the marketplace. (p. 98)
- 4 Wilson, D. (1999, July). The inversion of humility. *Tabletalk*, 23(7), Ligonier Ministries, Lake Mary, Florida, p. 61.