ECONOMICS, AN INTRODUCTION FROM A BIBLICAL PERSPECTIVE

STUDENT TEXTBOOK

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FOREWORD

This free on-line textbook is itself compiled from various free on-line resources:

Bible passages were found at the website http://www.blueletterbible.org .

Quotes from the Westminster Standards and the Belgic Confession were found at the website http://reformed.org/documents/index.html .

Quotes from Dr. John Calvin's *Commentaries* were found at the website http://www.ccel.org/ .

The argument for gold as a medium of exchange, by Doug Casey, was found at the website http://www.kitcocasey.com/displayArticle.php?id=401 .

The micro-economic and macro-economic material, including many graphs and charts, which forms much of the content from chapters 8 through 20, was found at http://www.howardcc.edu/social_science/microbk.htm and http://www.howardcc.edu/social_science/macrobk.htm .

Material of Dr. Gary North was found at http://www.freebooks.com/ .

Additional materials were gathered from the following websites, as well as others:

- http://www.safehaven.com/showarticle.cfm?id=4331&pv=1
- http://www.boisestate.edu/econ/lreynol/web/Micro.htm
- http://cepa.newschool.edu/het/profiles/malthus.htm
- http://cepa.newschool.edu/het/schools/austrian.htm
- http://www.econlib.org/library/Enc/bios/Marshall.html

I encourage you to check out these websites and other websites referenced in this textbook.

INTRODUCTION

This textbook is an introduction to economics. It is intended to be a primer in economics approached from a Biblical perspective. By a Biblical perspective, I mean that the Bible serves as the foundation, and the body of knowledge built on top is in accordance with that foundation. Since the chief doctrines of the Bible are accurately summarized in the Westminster Standards, it is my intent in this textbook to teach economics consistent with the Bible as interpreted by that reformed confession.

Needless to say, most courses in economics have taken a very different approach from this one. Most have pursued economics from a humanistic standpoint, disregarding the Bible as the foundation of all truth and knowledge. But in this they greatly err. God is the Creator of the universe, and His word is more wise and truthful than anything men can produce- especially men in rebellion against God.

Most Christian teachers of economics have not fully subscribed to the Biblical doctrines outlined in the Westminster Standards and have not sought to teach economics within that framework. The vast majority of professing Christian teachers of economics see no need for distinctively Christian economics. They are quite satisfied with the humanistic approach to economics, because they are either essentially secular humanists with a veneer of Christianity themselves, or they are genuine Christians who have been significantly deluded by secular humanism. The Romish Church actually has seen the need for distinctively Christian economics, but their approach is flawed by the denial of such Biblical doctrines as *sola scriptura* and the total depravity of man. Consequently, Romish-based economics is typically plagued by rationalist elements. Among professing Protestants, some, especially among liberal academia, have by and large followed the rationalistic Romish approach to economics, with a only a slight tip of the hat to the Bible. Dr. Ron Sider is representative of this school. But there have been more plausible efforts to construct a distinctively Christian economics by various scholars, like Dr. Gary North, generally associated with the Christian Reconstruction movement. Nevertheless, the typical Christian Reconstructionist approach has been flawed, due at least in part to the erroneous rejection in some notable respects of the Biblical doctrines outlined in the Westminster Standards.

So this textbook teaches economics from an admittedly unusual perspective in our modern era. My hope is that it will stimulate students to search the scriptures to see if these things be so.

CHAPTER 1 : THE FOUNDATION OF THE WORD

The American Heritage® Dictionary of the English Language, Fourth Edition defines 'economics' in this way: "the social science that deals with the production, distribution, and consumption of goods and services and with the theory and management of economies or economic systems". In more common parlance, economics is the study of business transactions (also known as commerce) in human society, both with respect to how such transactions occur and how they should occur. Commerce involves the exchange of services as well as goods. Economics is a *social* science, and not a natural science, because it focuses upon how humans behave, not in terms of matter and energy and their interrelations, but in terms of humans and human institutions.

All branches of human knowledge depend upon certain foundational presuppositions or starting assumptions. For instance, one foundational presupposition of the physical sciences is that the material universe exists, and is not simply an illusion. There have actually been some philosophers in history that have suggested that the material universe is just an illusion in the mind of humans, and has no actual existence. This presupposition on their part would seem to undercut the whole enterprise of the physical sciences. So we can see in this case how a foundational presupposition can significantly alter one's approach to a certain branch of knowledge. This is true not only in the realm of the physical sciences, but in every branch of knowledge, including the social sciences, and more specifically the study of economics.

So it is quite relevant to ask: where should we look for our foundational presuppositions for human knowledge in general, as well as economics in particular? Christians rightly recognize that the only sure foundation for human knowledge is God's word, the Bible. Finite and sinful man depends upon God's revelation for human knowledge. God's revelation to man is the pre-condition for human knowledge. It alone – among all the various philosophical systems and worldviews – is consistent and without contradiction. It accurately describes reality, because it is infallibly inspired by God. Biblical Christianity is the only reasonable faith.

Nevertheless, many men have sought to deny the veracity of God's word, and replace it with some other philosophical foundation. Indeed, the mainstream objective of 'modern man' has been to construct a system of knowledge upon essentially humanistic presuppositions, which are contrary to scripture. Adam Smith, the father of modern economics and a renowned Enlightenment philosopher, began just such an enterprise in the field of economics, and he has been joined in his effort by the vast majority of modern economists. But such an enterprise, so conceived, is doomed to failure. Over and again reality contradicts such a "dismal science", as we shall show over the course of our studies. By denying the true God of the Bible, modern economics fails in some notable respects to grasp how things work, and even more significantly how they should work. To the extent modern economists have accurately described how things work or how things should work, they have had to borrow certain tenets of Biblical Christianity which are inconsistent with the presuppositions of their own worldview.

For our purposes, since we have decided as Christians to rest our faith in God's word, we must next ask what God's word teaches concerning economics. To begin to answer that question we should surely start "in the beginning". In the beginning God created man to labor for six days and to rest from labor one day in each week, corresponding to the divine pattern in the Creation week. If man had not rebelled against God, man would have enjoyed a most prosperous and blessed economy, without admixture of curse. But man did rebel, and consequently toil and trouble has been connected with human labor since the Fall. Business enterprise in a post-Fall world is not what business enterprise would have been if there had not been a Fall. Nevertheless, God graciously has provided a means of redemption in Jesus Christ. Though we cannot know the perfectly blessed economy this side of Christ's Second Advent, we can pray for the greater manifestation of Christ's kingdom on earth, which is the pre-condition of a perfectly blessed economy.

The law of Christ's kingdom is summarized in the Ten Commandments. Here is how the Westminster Confession aptly describes the law of God:

* * *

Chapter XIX
Of the Law of God

I. God gave to Adam a law, as a covenant of works, by which He bound him and all his posterity, to personal, entire, exact, and perpetual obedience, promised life upon the fulfilling, and threatened death upon the breach of it, and endued him with power and ability to keep it.

II. This law, after his fall, continued to be a perfect rule of righteousness; and, as such, was delivered by God upon Mount Sinai, in ten commandments, and written in two tables: the first four commandments containing our duty towards God; and the other six, our duty to man.

III. Besides this law, commonly called moral, God was pleased to give to the people of Israel, as a church under age, ceremonial laws, containing several typical ordinances, partly of worship, prefiguring Christ, His graces, actions, sufferings, and benefits; and partly, holding forth divers instructions of moral duties. All which ceremonial laws are now abrogated, under the New Testament.

IV. To them also, as a body politic, He gave sundry judicial laws, which expired together with the State of that people; not obliging under any now, further than the general equity thereof may require.

V. The moral law does forever bind all, as well justified persons as others, to the obedience thereof; and that, not only in regard of the matter contained in it, but also in respect of the authority of God the Creator, who gave it. Neither does Christ, in the Gospel, any way dissolve, but much strengthen this obligation.

VI. Although true believers be not under the law, as a covenant of works, to be thereby justified, or condemned; yet is it of great use to them, as well as to others; in that, as a rule of life informing them of the will of God, and their duty, it directs and binds them to walk accordingly; discovering also the sinful pollutions of their nature, hearts and lives; so as, examining themselves thereby, they may come to further conviction of, humiliation for, and hatred against sin, together with a clearer sight of the need they have of Christ, and the perfection of His obedience. It is likewise of use to the regenerate, to restrain their corruptions, in that it forbids sin: and the threatenings of it serve to show what even their sins deserve; and what afflictions, in this life, they may expect for them, although freed from the curse thereof threatened in the law. The promises of it, in like manner, show them God's approbation of obedience,and what blessings they may expect upon the performance thereof: although not as due to them by the law as a covenant of works. So as, a man's doing good, and refraining from evil, because the law encourages to the one and deters from the other, is no evidence of his being under the law: and not under grace.

VII. Neither are the forementioned uses of the law contrary to the grace of the Gospel, but do sweetly comply with it; the Spirit of Christ subduing and enabling the will of man to do that freely, and cheerfully, which the will of God, revealed in the law, requires to be done.

* * *

So the moral law of God, as it is summarized in the Ten Commandments, informs us of God’s norm for humans and human society. The way economic enterprise should be conducted is in accordance with the principles of the Ten Commandments, and the fundamental reason economic enterprise is not blessed and ideal is because of sin, the transgression of divine law. Transgressions of that moral law are unwise, and history has shown the dire consequences of foolish transgressions. “Righteousness exalteth a nation, but sin is a reproach to any people.“

CHAPTER 2 : IMPLICATIONS OF THE WORD CONCERNING HOW ECONOMIC ENTERPRISE SHOULD OCCUR

In the first chapter we pointed how the only sure foundation of the study of economics is the word of God, just as it is the foundation of every branch of knowledge. That word has implications. Those implications can be stated in the form of principles or laws. Just as there are physical laws in the universe, there are also economic laws. There is a law of gravity which describes how bodies fall to the earth; and there is a law of demand which describes how people generally behave when the price of a commodity rises. There are laws which describe electrocution by lightning, which warn man of lightning's dangers; and there are laws which describe the ill effects of human succumbing to greed and covetousness, which warn man of such greed and covetousness. Some economic principles describe how economic enterprise occurs, and some economic laws describe how it should occur.

The very existence of laws of economics - laws which describe how economic behavior takes place and laws which describe how economic behavior should take place – logically necessitates the existence of God who has revealed Himself to man. The definition of 'law' itself implies a Sovereign Creator and Sustainer. As the Webster's Ninth New Collegiate Dictionary so eloquently expresses, "Law implies imposition by a sovereign authority and the obligation of obedience on the part of all subject to that authority." So the very notion of 'laws' governing how things behave presumes an intelligent Governor of the universe who ordinarily governs according to those laws and who will judge infractions of those laws. But the existence of an intelligent Governor and Sovereign Authority over the universe is quite contrary to the naturalistic worldview. The naturalistic worldview of Darwinian evolutionary theory reduces all ontological reality down to the level of the material, and asserts that all that really exists are physical objects behaving according to chance reactions. If consistently applied, there would be no room for 'general [natural] laws' in such a worldview. In addition, if there is no omniscient, revelatory God, how can there be 'knowledge' and 'truth', if all that exists is finite and fallible. 'Truth' is that which is known for certain, but without an omniscient, revelatory God, man can know *nothing* for certain. Even that which a finite, fallible being thinks he knows is subject to error, so without an omniscient God, 'truth' is an unattainable, irrelevant concept. And without a revelatory God, man can have no true knowledge, for there is no sure foundation for knowing truth for man. And if 'knowledge', 'truth', and 'general [natural] laws' are not possible for man, then neither can 'science' be – whether a natural or social science - according to the standard definition of 'science' found in the Webster's Dictionary. There can be no 'science' without laws and knowledge, but there can be no laws and knowledge without the sovereign God who has revealed Himself to man.

The Christian Biblical worldview can account for 'knowledge', 'truth', and 'general [natural] laws'. 'Knowledge' is that true understanding of the universe in the mind of the God described in the Bible, who imparts knowledge and the means to attain more knowledge to man. 'Truth' is that which the omniscient God of the Bible knows for certain. 'General [natural] laws' are the principles in the mind of God by which He ordinarily governs the universe- whether in the realm of the natural sciences or the social sciences. The omniscient, revelatory God of the Bible has indicated the scientific method of science is possible for attaining true knowledge- within limits.

We could also analyze other worldviews, and show how their internal contradictions are opposed to principles of 'knowledge' and 'truth', for knowledge' and 'truth' presuppose the absence of such internal contradictions. Contradiction is contrary to truth, and the existence of truth implies the absence of contradiction. Other worldviews are plagued by internal contradictions, but the Biblical Christian worldview alone among worldviews is absent such internal contradictions. (Worldviews which purport to be Christian, yet deny 6-day Creation, are examples of self-contradictory worldviews, for the Christian Bible teaches 6-day Creation, and Christ adhered to the truth of the Bible.) And so the Biblical Christian worldview alone among worldviews admits 'science' – both natural and social - while also recognizing the limits of the scientific method for the attaining of true knowledge.

All of the foundational principles of how economic enterprise should take place are found in the Bible. They are contained in the Ten Commandments, just as principles concerning other branches of ethics are contained in the Ten Commandments. Man has no right to add to these foundational principles, for they are a summary of *all* moral law. There are multitudinous applications of these summary principles, but all true applications are based upon and consistent with the more general foundational principles of the Ten Commandments. So there are Biblical laws which describe how economic behavior should take place. We observe how laws or principles characterize the way economic behavior takes place as well, and not only how it should take place. But we shall reserve our consideration of this topic for the next chapter, and focus in this chapter upon how economic behavior *should* occur. Many of the ways economic behavior occurs in this fallen, sin-cursed world are not the way economic behavior morally should occur.

We should bear in mind that some laws relating to economics can be deduced from scripture, though they are not explicitly stated in scripture. Scripture teaches that "the whole counsel of God, concerning all things necessary for his own glory, man's salvation, faith, and life, is either expressly set down in Scripture, or by good and necessary consequence may be deduced from Scripture", as the Westminster Confession rightly attests. We are focusing in the remainder of this chapter on economic principles, deducible as well as explicitly stated, concerning how business should be conducted.

While all of the Ten Commandments are relevant to economics, informing man how he *should* conduct himself to know blessedness in his enterprise, the Eighth Commandment is peculiarly pertinent to the topic of economics. The Eighth Commandment, found in Exodus 20:15 , reads thus: "Thou shalt not steal." So let's explore some of the economic lessons which can be learned from the Eighth Commandment. Given the introductory nature of this textbook, we are not seeking to be exhaustive, but illustrative.

Let's begin with the Westminster Larger Catechism's explication of the Eighth Commandment:

* * *

Q. 140. Which is the eighth commandment?

A. The eighth commandment is, *Thou shalt not steal*.

Q. 141. What are the duties required in the eighth commandment?

A. The duties required in the eighth commandment are, truth, faithfulness, and justice in contracts and commerce between man and man; rendering to everyone his due; restitution of goods unlawfully detained from the right owners thereof; giving and lending freely, according to our abilities, and the necessities of others; moderation of our judgments, wills, and affections concerning worldly goods; a provident care and study to get, keep, use, and dispose these things which are necessary and convenient for the sustentation of our nature, and suitable to our condition; a lawful calling, and diligence in it; frugality; avoiding unnecessary lawsuits, and suretiship, or other like engagements; and an endeavor, by all just and lawful means, to procure, preserve, and further the wealth and outward estate of others, as well as our own.

Q. 142. What are the sins forbidden in the eighth commandment?

A. The sins forbidden in the eighth commandment, besides the neglect of the duties required,are, theft, robbery, man-stealing, and receiving any thing that is stolen; fraudulent dealing, false weights and measures, removing landmarks, injustice and unfaithfulness in contracts between man and man, or in matters of trust; oppression, extortion, usury, bribery, vexatious lawsuits, unjust inclosures and depopulations; ingrossing commodities to enhance the price; unlawful callings, and all other unjust or sinful ways of taking or withholding from our neighbour what belongs to him, or of enriching ourselves; covetousness; inordinate prizing and affecting worldly goods; distrustful and distracting cares and studies in getting, keeping, and using them; envying at the prosperity of others; as likewise idleness, prodigality, wasteful gaming; and all other ways whereby we do unduly prejudice our own outward estate, and defrauding ourselves of the due use and comfort of that estate which God hath given us.

* * *

We should notice how this explication points out the host of ethical obligations subsumed under and implied by the Eighth Commandment. These obligations begin with the heart of the individual, for the motivations of the heart have their consequences in human actions. Greed and covetousness in the heart easily give way to theft. So we are obliged to “moderation of our judgments, wills, and affections concerning worldly goods”. The obligations work out from the heart to the outward actions of the individual and the society as a whole. Thus, for example, it is not proper for a person to gamble (called here in the Westminster Larger Catechism “wasteful gaming”) nor to set up a gambling business, and it is appropriate that the state enact laws to suppress gambling. It is the responsibility of the magistrate to uphold the moral principles summarized in the Ten Commandments in the state, and it is the responsibility of parents to uphold them in the home, even as it is the responsibility of the individual to uphold the principles in their own persons. The Westminster Confession rightly affirms: “God, the Supreme Lord and King of all the world, hath ordained civil magistrates to be under him over the people, for his own glory and the public good; and to this end, hath armed them with the power of the sword, for the defense and encouragement of them that are good, and for the punishment of evil-doers…The civil magistrate may not assume to himself the administration of the Word and sacraments, or the power of the keys of the kingdom of heaven: yet he hath authority, and it is his duty, to take order, that unity and peace be preserved in the Church, that the truth of God be kept pure and entire; that all blasphemies and heresies be suppressed; all corruptions and abuses in worship and discipline prevented or reformed; and all the ordinances of God duly settled, administered, and observed.” So these moral obligations are the responsibility of every man and every institution of man. Our commercial activity should be governed according to these host of obligations emanating from the Eighth Commandment (as well as the rest of the Ten Commandments). Man must uphold the moral obligations of the Ten Commandments, and in so doing divine and human rights are protected.

The theologian John Calvin in many respects paved the way in his reformed systematic theology for the writing of the Westminster Standards. It is therefore instructive to study Calvin’s *Commentaries* relating to the Eighth Commandment, to better understand the relation of the precepts as they are found in scripture and the duties as they are outlined in later reformed confessions such as the Westminster Standards. Below, as well as in Appendix A of this textbook, are excerpts from that commentary:

* * *

EXODUS 20

EXODUS 20:15	
15. Thou shalt not steal.	**15.** Non furaberis.

THE REPETITION OF THE SAME COMMANDMENT

DEUTERONOMY 5

DEUTERONOMY 5:19	
19. Neither shalt thou steal.	**19.** Non furaberis.

Since charity is the end of the Law, we must seek the definition of theft from thence. This, then, is the rule of charity, that every one's rights should be safely preserved, and that none should do to another what he would not have done to himself. It follows, therefore, that not only are those thieves who secretly steal the property of others, but those also who seek for gain from the loss of others, accumulate wealth by unlawful practices, and are more devoted to their private advantage than to equity. Thus, rapine is comprehended under the head of theft, since there is no difference between a man's robbing his neighbor by fraud or force. But, in order that God may the better withhold His people from all fraudulent injustice, He uses the word theft, which all naturally abhor as disgraceful. For we know under how many coverings men bury their misdeeds; and not only so, but also how they convert them into praise by false pretexts. Craft and low cunning is called prudence; and he is spoken of as provident and circumspect who cleverly overreaches others, who takes in the simple, and insidiously oppresses the poor. Since, therefore, the world boasts of vices as if they were virtues, and thus all freely excuse themselves in sin, God wipes away all this gloss, when tie pronounces all unjust means of gain to be so many thefts. Nor let us be surprised that this decision should be given by the divine tribunal, when the philosophers deliver nearly the same doctrine.

We must bear in mind also, that an affirmative precept, as it is called, is connected with the prohibition; because, even if we abstain from all wrong-doing, we do not therefore satisfy God, who has laid mankind under mutual obligation to each other, that they may seek to benefit, care for, and succor their neighbors. Wherefore He undoubtedly inculcates liberality and kindness, and the other duties, whereby human society is maintained; and hence, in order that we may not be condemned as thieves by God, we must endeavor, as far as possible, that every one should safely keep what he possesses, and that our neighbor's advantage should be promoted no less than our own.

LEVITICUS 19

LEVITICUS 19:11, 13	
11. Ye shall not steal, neither deal falsely, neither lie one to another.	**11.** Non furabimini et non negabiris, neque mentiemini quisque proximo suo.
13. Thou shalt not defraud thy neighbor, neither rob *him*: the of him that is hired shall not abide with thee all night until the morning.	**13.** Non opprimes proximum tuum, neque rapies: nec morabitur opus mercenarii apud to usque mane.

God here explains somewhat more clearly His mind and design, for He enumerates as thefts eases in which either deceit or violence is employed. The two words, which we have translated to *deny*, and to *lie*, signify also to *deceive*; as also to *lie*, or to *frustrate hope*.[1] There is no question, then, but that God would restrain His people from all craft, or deceit, that they may deal sincerely and honestly with each other; even as Paul wisely explains the meaning of the Holy Spirit, when he exhorts believers to

> "put away lying, and to speak every man truth with his neighbor; for we are members one of another." (Ephesians 4:25.)

In the second passage, God commands men to demean themselves meekly and temperately with their neighbors, so as to abstain from all unjust oppression. The meaning which Jerome[2] and others after him, have given to the word qse *gnashak*, to *calumniate*, is incorrect altogether; for it is everywhere used for to *oppress*, *despoil*, *rob*, or *lay hands on the goods of another*. It is clear, therefore, that as Moses had previously provided against frauds, he now prohibits the iniquity of extorting from our neighbor what we have no right to. Still, violence, or open rapine, is better expressed by the other word lzg *gezal*; and these[3] two words are, ill my opinion, as it were, *genus* and *species*. After he had forbidden, therefore, that they should in any way oppress their brethren and possess themselves of their goods, he at the same time adds, that they should not use violence in despoiling them unjustly. Finally, he points out one mode of unjust oppression, when a person, who has hired himself as a laborer, is defrauded of his wages, and not only if he be sent away without payment, his wages being denied him, but if payment be deferred to the morrow. For we know that hirelings generally live from hand to mouth, and therefore, if there be ever so little delay, they must go without food. Consequently, if a rich man keeps a poor and wretched individual, whose labor he has abused, in suspense, he deprives him as it were of life, in depriving him of his daily food. The sum is, that humanity is so to be cultivated that none should be oppressed, or suffer loss from default of payment.

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DEUTERONOMY 24

DEUTERONOMY 24:14, 15	
14. Thou shalt not oppress an hired servant *that is* poor and needy, *whether he be* of thy brethren, or of thy strangers that *are* in thy land within thy gates:	**14.** Non opprimes mercenarium pauperem et egenum e fratribus tuis, et ex peregrinis tuis qui sunt in terra tua, intra portas tuas.
15. At his day thou shalt give *him* his hire, neither shall the sun go down upon it; for he '*is* poor, and setteth his heart upon it: lest he cry against thee unto the Lord, and it be sin unto thee.	**15.** Die suo reddes mercedem ejus, neque occumbet super eam sol: quia pauper est, et ea sustentat animam suam: ne clamet contra te ad Jehovam, et sit in te peccatum.

14. *Thou shalt not oppress an hired servant*. This precept is akin to the foregoing. Moses pronounces that he who has hired a poor person for wages oppresses him unless he gives him immediate recompense for his labor; since the two admonitions, "thou shalt; not; oppress," and "*thou* shalt give him his hire," are to be read in connection with each other. Hence it follows, that if a hireling suffers from want because we do not pay him what he has earned, we are by our *very* delay alone convicted of unrighteousness. The reason is now more clearly expressed, viz., because he sustains his life by his daily labors.[1]Although, however, this provision only refers to the poor, lest they should suffer hunger from the negligence or pride of the rich, still humanity in general is enforced, lest, whilst the poor labor for our profit, we should arrogantly abuse them as if they were our slaves, or should be too illiberal and stingy towards them, since nothing can be more disgraceful than that, when they are in our service, they should not at least have enough to live upon frugally. Finally, Moses admonishes us that this tyranny on the part of the rich shall not be unpunished, if they do not supply their workmen with the means of subsistence, even although no account shall be rendered of it before the tribunals of men. Hence we infer that this law is not political, but altogether spiritual, and binding on our consciences before the judgment-seat of God; for although the poor man may not sue us at law, Moses teaches us that it is sufficient for him to appeal to the faithfulness of God. Wherefore, although the earthly judge may absolve us a hundred times over, let us not therefore think that we have escaped; since God will always require of us from heaven, whatever may have been unjustly excused us on earth. The question, however, here arises, whether, if he who has been oppressed should not cry out, the criminality will cease in consequence of his silence; for the words of Moses seem to imply this, when he says, that the rich will be guilty, *if* the poor cry unto God and make complaint of their wrongs. The reply' is easy, that Moses had no other intention than to over-. throw the vain confidence of the despisers, whereby they arc, stimulated to greater audacity in sin, and are hardened in iniquity. He says, therefore, that although, as far as men are concerned, they may allow us to pillage and rob, still a more awful judgment is to be dreaded; for God hears the complaints of the poor, who find no protector or avenger on earth. And surely, the more patiently he who is despoiled shall bear his wrong, the more ready will God be to undertake his cause; nor is there any louder cry to Him than patient endurance. If, however, any should object that the cry here spoken of is at variance with Christ's command, that we should pray for our enemies, we answer at once, that God does not always approve of the prayers which He nevertheless answers. The imprecation of Jotham, the son of Gideon, took effect upon the Shechemites, (Judges 9:20,) although it was plainly the offspring of immoderate anger. Besides, it sometimes happens that the miserable, although they endure their injuries with pious meekness, still cease not to lay their sorrows and their groans in the bosom of God. Nor is this a slight consolation for the poor, that if no one on earth relieves them because their condition is low and abject, still God will hereafter take cognizance of their cause.

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DEUTERONOMY 25

DEUTERONOMY 25:4	
4. Thou shalt not muzzle the ox when he treadeth out *the corn.*	**4.** Non obligabis os bovi trituranti.

4. *Thou shalt not muzzle the ox*. This passage, indeed, properly belongs to the Supplements of the Commandment, but, since it is a confirmation of the foregoing decree, it seemed fit to connect them; especially because its faithful expositor, Paul, declares, that God had no other design in delivering it than that the laborer should not be defrauded of his just hire, (1 Corinthians 9:10;) for, when he is speaking of the maintenance to be afforded to the ministers of the Gospel, he adduces it. in proof of his case. And, lest any should object that there is a difference between oxen and men, he adds, that God does not care for oxen, but that it was said for the sake of those that labor. Meanwhile, we must bear in mind, that men are so instructed in equity, that they are bound to exercise it even towards the brute animals; for well does Solomon magnify the injustice, whereby our neighbor is injured, by the comparison; "A righteous man regardeth the life of his beast." (Proverbs 12:10.) The sum is, that we should freely and voluntarily pay what is right, and that every one should be strict with himself as to the performance of his duty; for, if we are bound to supply subsistence to brute animals, much less must we wait for men to be importunate with us, in order that they may obtain their due.

EXODUS 22

EXODUS 22:21-24	
21. Thou shalt neither vex a stranger, nor oppress him: for ye were strangers in the land of Egypt.	**21.** Peregrinum non opprimes, neque spoliabis: quia peregrini fuistis in terra AEgypti.
22. Ye shalt not afflict any widow, or	**22.** Nullam viduam nec pupillum

fatherless child.	affligetis.
23. If thou afflict them in any wise, and the, and cry at all unto me, I will surely hear their cry:	**23.** Si affligendo afflixeritis eum, certe si clamando clamaverit ad me, audiendo audiam clamorem ejus:
24. And my wrath shall wax hot, and I will kill you with the sword; and your wives shall be widows, and your children fatherless.	**24.** Irasceturque furor meus, et occidam vos gladio, eruntque uxores vestrae viduae, et filii vestri pupilli.

LEVITICUS 19

LEVITICUS 19:33, 34	
33. And if a stranger sojourn with thee in your land, ye shall not vex him.	**33.** Si peregrinatus tecum fuerit peregrinus in terra vestra, non opprimetis illum.
34. *But* the stranger that dwelleth with you shall be unto you as one horn among you, and thou shalt love him as thyself; for ye were strangers in the land of Egypt: I *am* the Lord your God.	**34.** Tanquam indigena ex vobis, erit vobis peregrinus qui peregrinatur apud vos, et diliges eum sicut teipsum: quia peregrini fuistis in terra: ego Jehova Deus vester.

Leviticus 19:33. *And if a stranger sojourn with thee in your land*. Before I pass on to the other iniquities, I have thought fit to introduce this precept, wherein the people are commanded to cultivate equity towards all without exception. Fob if no mention had been made of strangers, the Israelites would have thought that, provided they had not injured any one of their own nation, they had fully discharged their duty; but, when God recommends guests and sojourners to them, just as if they had been their own kindred, they thence understand that equity is to be cultivated constantly and towards all men. Nor is it without cause that God interposes Himself and His protection, lest injury should be done to strangers; for since they have no one who would submit to ill-will in their defense, they are more exposed to the violence and various oppressions of the ungodly, than as if they were under the shelter of domestic securities. The same rule is to be observed towards widows and orphans; a woman, on account of the weakness of her sex, is exposed to many evils, unless she dwells under the shadow of a husband; and many plot against orphans, as if they were

their prey, because they have none to advise them. Since, then, they are thus destitute of human aid, God interposes to assist them; and, if they are unjustly oppressed, He declares that He will be their avenger. In the first passage He includes widows and orphans together with strangers; in the latter He enumerates strangers only; yet the substance is the same, viz., that all those who are destitute and deprived of earthly succor, are under the guardianship and protection of God, and preserved by His hand; and thus the audacity of those is restrained, who trust that they may commit any wickedness with impunity, provided no earthly being resists them. No iniquity, indeed, will be left unavenged by God, but there is a special reason why He declares that strangers, widows, and orphans are taken under His care; inasmuch as the more flagrant the evil is, the greater need there is of an effectual remedy. He recommends strangers to them on this ground, that the people, who had themselves been sojourners in Egypt, being mindful of their ancient condition, ought to deal more kindly to strangers; for although they were at last oppressed by cruel tyranny, still they were bound to consider their entrance there, viz., that poverty and hunger had driven their forefathers thither, and that *they* had been received hospitably, when they were in need of aid from others. When He threatens, that if the afflicted widows and orphans *cry* unto Him, their cry shall be heard, He does not mean that He will not interfere, if they endure their wrongs in silence; but He speaks in *accordance* with the ordinary practice, that those who find no consolation elsewhere, are wont to appeal to Him. Meanwhile, let us be sure that although those who are injured abstain from complaining, yet God does not by any means forget His office, so as to overlook their wrongs. Nay, there is nothing which incites Him more to inflict punishment on the ungodly, than the endurance of His servants.

The nature of the punishment is also expressed; those who have afflicted widows and orphans shall perish by the sword, so that their own widows and orphans may be exposed to the audacity, violence, and knavery of the ungodly. Moreover, it must be observed that, in the second passage, they are commanded to love strangers and foreigners as themselves. Hence it appears that the name of neighbor is not confined to our kindred, or such other persons with whom we are nearly connected, but extends to the whole human race; as Christ shows in the person of the Samaritan, who had compassion on an unknown man, and performed towards him the duties of humanity neglected by a Jew, and even a Levite. (Luke 10:30.)

DEUTERONOMY 10

DEUTERONOMY 10:17-19	
17. ...God,...regardeth not persons, nor taketh reward.	**17.** Deus non accipit personam, neque recipit munus.
18. He doth execute the judgment of the fatherless and widow, and loveth the stranger, in giving him food and raiment.	**18.** Faciens judicium pupillo et viduae, diligens peregrinum, dando et panem et vestimentum.
19. Love ye therefore the stranger; for ye were strangers in the land of Egypt	**19.** Diligite igitur peregrinum, quia peregrini fuistis in terra, AEgypti.

He confirms the foregoing decree by a reference to the nature of God Himself; for the vile and abject condition of those with whom we have to do, causes us to injure them the more wantonly, because they seem to be altogether deserted. But God declares that their unhappy lot is no[1]obstacle to His administering succor to them; inasmuch as He has no regard to persons. By the word person is meant either splendor, or obscurity, and outward appearance, as it is commonly called, as we gather from many passages. In short, God distinguishes Himself from men, who are carried away by outward appearance, to hold the rich in honor, and the poor in contempt; to favor the beautiful or the eloquent, and to despise the unseemly. Proswpolhyi>a is, therefore, an unjust judgment, which diverts us from the cause itself, when our minds are prejudiced by what ought not to be taken into account. Therefore Christ teaches us that a judgement is righteous, which is not founded upon the appearance, (John 7:23;) since truth and justice never prevail, except when we attend to the case itself. It follows that the contemptible are not afflicted with impunity, for although they may be destitute of human aid, God, who sitteth on high, "hath respect unto the lowly." (Psalm 138:6.) As regards strangers, God proves that he cares for them, because He is gracious in preserving them and clothing them; and then a special reason is again adduced, that the Israelites, when they were formerly sojourners in Egypt, had need of the compassion of others.

…

LEVITICUS 19

LEVITICUS 19:35, 36	
35. Ye shall do no unrighteousness in judgment, in mete-yard, in weight, or in measure.	**35.** Non facietis iniquitatem in judicio, in dimensione, in pondere et mensura.
36. Just balances, just weights, a just ephah, and a just bin, shall ye have: I *am* the Lord your God, which brought you out of the land of Egypt.	**36.** Statera justa, pondera justa, epha justum, et hin justum erit vobis.

DEUTERONOMY 25

DEUTERONOMY 25:13-16	
13. Thou shalt not have in thy bag divers weights, a great and a small.	**13.** Non erit tibi in sacculo tuo pondus et pondus, majus et minus:
14. Thou shalt not have in thine house divers measures, a great and a small.	**14.** Non erit tibi in domo tua modius et modius, major et minor.
15. *But* thou shalt have a perfect and just weight, a perfect and just measure shalt thou have: that thy days may be lengthened in the land which the Lord thy God giveth thee.	**15.** Pondus perfectum et justum erit tibi, modius perfectus et justus erit tibi, ut proroges dies tuos super terram quam Jehova Deus tuus dat tibi.
16. For all that do such things, *and* all that do unrighteously, *are* an abomination unto the Lord thy God.	**16.** Quia abominatio Jehovae Dei tui est quicunque facit haec, omnis faciens iniquitatem.

Leviticus 19:35. *Ye shall do no unrighteousness in judgment*. If you take the word judgment in its strict sense, this will be a special precept, that judges should faithfully do justice to all, and not subvert just causes from favor or ill-will. But since the word jpsm, *mishpat*, often means rectitude, it will not be unsuitable to suppose that all iniquities contrary to integrity are generally condemned; and that he afterwards proceeds to particular cases, which he adverts to elsewhere, where he enumerates the most injurious thefts of all, and such as involve the grossest violation of public justice. For the

> corruption which tends to the subversion of judgments, or, by undermining rectitude, vitiates all contracts, leaves nothing in security; whilst deception in weights and measures destroys and sweeps away all legitimate modes of dealing. Now, if the laws of buying and selling are corrupted, human society is in a manner dissolved; so that he who cheats by false weights and measures, differs little from him who utters false coin: and consequently one, who, whether as a buyer or seller, has falsified the standard measures of wine or corn, or anything else, is accounted criminal.[1] By the laws of Rome,[2] he is condemned to a fine of double the amount; and by a decree of Adrian, he is to be banished to an island. It is not, therefore, without reason that Solomon reiterates this decree, that he may fix it the deeper in the hearts of all. (Proverbs 20:10, 23.) But although this pestilent sin is by no means to be endured, but to be severely punished, still God, even if legal punishments be not inflicted, summons men's consciences before His tribunal, and this he does both by promises and threats. A just weight (He says) and a just measure shall prolong a man's life; but he who has been guilty of deception in them, is an abomination before me. Length of life, indeed, has only a figurative connection with just weights and measures: but, because the avaricious, in their pursuit of dishonest gain, are too devoted to this transitory life, God, in order to withhold His people from this blind and impetuous covetousness, promises them long life, if they keep themselves from fraud and all knavish dealings. We perceive from the conclusion, that, not in this respect only, but in all our affairs, those trickeries are condemned, by which our neighbors are defrauded. For, after God has said that He abominates "all that do such things," He adds immediately by way of explanation, "all that do unrighteously." We see, then, that He sets Himself against all evil and illicit arts of gain....

* * *

As we have pointed out before, more than just the Eighth Commandment is pertinent to understanding the way commerce should be conducted. Really every one of the Ten Commandments is pertinent, because every one of the Ten Commandments has application to commerce. For example, commerce in idols is prohibited by Biblical law, since idolatry is prohibited in the Second Commandment, which is why we find in the book of Acts that many businessmen in Ephesus were quite concerned at how Christianity would affect their trade. As another example, the Fourth Commandment is pertinent, for it prohibits commerce, that is not of the nature of mercy or necessity, on the Lord's Day. As the Westminster Confession so aptly expresses:

* * *

"As it is of the law of nature, that, in general, a due proportion of time be set apart for the worship of God; so, in his Word, by a positive, moral, and perpetual commandment, binding all men in all ages, he hath particularly appointed one day in seven for a Sabbath, to be kept holy unto him: which, from the beginning of the world to the resurrection of Christ, was the last day of the week; and, from the resurrection of Christ, was changed into the first day of the week, which in Scripture is called the Lord's Day, and is to be continued to the end of the world as the Christian Sabbath. This Sabbath is to be kept holy unto the Lord when men, after a due preparing of their hearts, and ordering of their common affairs beforehand, do not only observe an holy rest all the day from their own works, words, and thoughts about their wordly employments and recreations; but also are taken up the whole time in the public and private exercises of his worship, and in the duties of necessity and mercy."

* * *

And as yet another example, the Sixth Commandment is pertinent, for it prohibits commerce in abortion, since it is a form of murder. And commerce in prostitution and pornography is prohibited, for they are violations of the principle against adultery. And, as a final example, the Tenth Commandment informs us of our duty relating to what motivates us in commerce. We are not to be covetous, but content with God's provision to us.

All of these commandments reveal how we ought to engage in commerce. They also reveal how far short fallen man has come from engaging in commerce (as well as many other enterprises) as he ought. They point us therefore to our need of the Savior Jesus Christ who perfectly kept the commandments, and bore the guilty and penalty of sin on His people's behalf. And they show us how we now should serve Him in gratitude. Truly we must understand scripture if we are to understand how commerce should be conducted, and it is foolish to think those who are in rebellion against the God of the Bible can understand even the basics of economics as it should be.

CHAPTER 3 : IMPLICATIONS OF THE WORD CONCERNING HOW ECONOMIC ENTERPRISE DOES OCCUR

We reside in a fallen, sin-cursed world. Much occurs that morally should not occur. Various laws characterize the way economic behavior takes place in a fallen world, just as laws declare how it should take place. Some of these laws are explicitly stated in the Bible, while others are not. We have already quoted a verse which is an example of an explicitly stated law that describes the cause-and-effect relationship between righteousness and blessing and between sin and ruin: "Righteousness exalteth a nation, but sin is a reproach to any people." (Proverbs 14:34) This law of how things work teaches that righteousness (i.e., conformity to the Ten Commandments) tends to blessed long term prosperity, including economic prosperity, while transgression of the Ten Commandments tends toward ruin. Another example of an explicitly stated principle describing economic behavior is found in these verses:

"He becometh poor that dealeth [with] a slack hand: but the hand of the diligent maketh rich." (Proverbs 10:4)

and

"The hand of the diligent shall bear rule: but the slothful shall be under tribute." (Proverbs 12:24)

These verses teach the economic principle that there is a cause-and-effect relationship between the diligence of a person or people and the economic prosperity of that person or people. This principle describes the nature of economic activity, but it has implications on how economic activity should take place as well. Since economic prosperity is desirable, we can deduce from Proverbs 10:4 and 12:24 that we *should* strive for diligence in our work ethic. We thus learn from it both an economic principle as to the nature of economic behavior, as well as an economic principle of how economic enterprise should be conducted.

The book of Proverbs is replete with principles concerning commerce. Let's consider just a sample of verses from the book and the principles they teach concerning commerce and wealth:

1. Economic prosperity in the hands of fools ends up leading to their ruin.

"…the turning away of the simple shall slay them, and the prosperity of fools shall destroy them." (Proverbs 1:32) As Matthew Henry comments on this verse: "Now they value themselves upon their worldly prosperity; but then that shall help to aggravate their ruin, v. 32. *First,* They are now proud that they can turn away from God and get clear of the restraints of religion; but that very thing shall slay them, the remembrance of it shall cut them to the heart. *Secondly,* They are now proud of their own security and sensuality; but *the ease of the simple* (so the margin reads it) *shall slay them;* the more secure they are the more certain and the more dreadful will their destruction be, *and the prosperity of* *fools shall* help to *destroy them,* by puffing them up with pride, gluing their hearts to the world, furnishing them with fuel for their lusts, and hardening their hearts in their evil ways."

2. Those who are surety for strangers are eventually economically harmed by it.

"He that is surety for a stranger shall smart [for it]: and he that hateth suretiship is sure." (Proverbs 11:15)

3. Diligence in one's vocational labors leads to economic satisfaction, unlike those who waste their time in bad company.

"He that tilleth his land shall be satisfied with bread: but he that followeth vain [persons is] void of understanding." (Proverbs 12:11)

4. Righteousness leads long term to a blessed economic condition.

"The righteous eateth to the satisfying of his soul: but the belly of the wicked shall want." (Proverbs 13:25)

5. Economic output requires economic input.

"Where no oxen [are], the crib [is] clean: but much increase [is] by the strength of the ox." (Proverbs 14:4)

6. Pride eventually leads to economic ruin.

"The LORD will destroy the house of the proud: but he will establish the border of the widow." (Proverbs 15:25)

7. Thievery eventually leads to ruin.

"The robbery of the wicked shall destroy them; because they refuse to do judgment." (Proverbs 21:7)

8. Those who are lenders long term will rule over those who are borrowers.

"The rich ruleth over the poor, and the borrower [is] servant to the lender." (Proverbs 22:7)

9. Those who oppress the poor (and engage in other forms of wickedness) in order to try to get rich, will ultimately be ruined.

"He that oppresseth the poor to increase his [riches, and] he that giveth to the rich, [shall] surely [come] to want." (Proverbs 22:16)

10. Those who are diligent in lawful callings will be elevated in rank by God.

“Seest thou a man diligent in his business? he shall stand before kings; he shall not stand before mean [men].” (Proverbs 22:29)

11. Those who are wise and knowledgeable will be richly blessed long term.

“Through wisdom is an house builded; and by understanding it is established: And by knowledge shall the chambers be filled with all precious and pleasant riches.” (Proverbs 24:3-4)

Many other examples could be cited besides those suggested above. They are simply illustrative of the plethora of principles taught in the Bible describing the nature of commerce and wealth. If these Biblical principles of economics are ignored or denied, then all of the economic principles we shall be discussing in most of the remaining chapters of this textbook will be for naught. Any systematic of economics which fails to give central place to this proposition - that God will bless that person or people that follow Him as He has revealed in the Bible and will curse that person or people that rebel against Him as He has revealed in the Bible - is fatally and utterly flawed. At best such a flawed approach to economics can teach man how “to enjoy the pleasures of sin for a season”. (Hebrews 11:25) But long term, it is mere vanity and deception, and it will be little solace in the eternity of hell. The principles of economics taught in scripture are fundamental to the whole enterprise of the study of economics.

CHAPTER 4 : BUILDING UPON THE WORD THROUGH *PROPER* USE OF INDUCTION AND CLASSIFICATION

The last two chapters have been spent describing how principles of economics can be deduced from the word of God. We showed how principles can be deduced from the Bible which show how economic enterprise should occur (Chapter 2) as well as how it does occur (Chapter 3). Now we are ready further to build our edifice of knowledge of economics, on the foundation of the word of God. Scripture not only teaches economic principles, it also legitimizes a study of economics which derives conclusions beyond what can simply be deduced from the Bible.

Let us preface this new step in our studies by repeating what has been said before: apart from Biblical Christian presuppositionalism (i.e., the Christian faith as it is revealed in the Bible), there can be no branch of human knowledge called economics. Without a God who makes and enforces laws, it would make no sense to engage in an enterprise of studying laws, be they laws of economics, physics, etc. And without a God who has revealed Himself to man, man would lack the tools successfully to construct a system of knowledge relating to economics, as well as other branches of knowledge. Pagans may imagine they are also constructing a system of knowledge of economics, but in reality it is a system replete with errors. "The fear of the Lord is the *beginning* of wisdom", so since they lack a true fear of the true God, they lack even the ability to take baby steps in the scholarly enterprise to which they aspire.

What we are trying to do in this and most remaining chapters of the textbook is to show the principles of economics which can *properly* be derived by induction and classification from historical experience and observation. Let's first consider induction, and then consider classification.

By induction we mean inferring a generalized conclusion from particular instances. This contrasts with deduction, where conclusions about particulars can necessarily be inferred from general or universal premises. The Bible legitimizes induction (when rightly used) as a method of drawing conclusions, even as it legitimizes deduction as a method of drawing conclusions. Let's consider some illustrative evidence in the Bible.

In Jesus' conversations with the Jews, He noted their use of induction in forecasting the weather. He said: "When it is evening, ye say, [It will be] fair weather: for the sky is red. And in the morning, [It will be] foul weather to day: for the sky is red and lowring. O [ye] hypocrites, ye can discern the face of the sky; but can ye not [discern] the signs of the times?" (Matthew 16:2-3) Apparently the Jews had noticed, based upon observation, a pattern of sky appearance which allowed them to forecast the weather remarkably well. Christ did not admonish their use of inductive reasoning in this way. Rather, He acknowledged their ability to rightly reason in this way. He faulted them for not using similar reasoning skills to discern that their Messiah was come and that they should follow Him.

Another instance in Jesus' ministry where He implicitly acknowledged the legitimacy of induction occurred when Satan tempted Jesus to jump off a cliff. Satan said to Jesus: "…If thou be the Son of God, cast thyself down: for it is written, He shall give his angels charge concerning thee: and in [their] hands they shall bear thee up, lest at any time thou dash thy foot against a stone." But Jesus replied to Satan: "It is written again, Thou shalt not tempt the Lord thy God." (Matthew 4) We know from observation that when objects are dropped from high elevations, they are broken apart upon impact with the ground. Implicitly using this conclusion from induction, Jesus pointed out to Satan it would be wrongly tempting God to jump off a cliff, because it would be tantamount to committing suicide.

Psalm 95:10 provides yet another example. It reads: "Forty years long was I grieved with this generation, and said, It is a people that do err in their heart." We see in this verse a conclusion drawn about a people from a pattern of behavior that lasted forty years long.

Finally, we find a similar case with the Apostle Paul, who had much experience with Cretans, and noted a general pattern of their behavior, apparently using the inductive method. "One of themselves, [even] a prophet of their own, said, The Cretians [are] alway liars, evil beasts, slow bellies. This witness is true. Wherefore rebuke them sharply, that they may be sound in the faith." (Titus 1:12-13) The pattern of lying behavior by the Cretans rightly led to the conclusion that they are liars, generally speaking.

So induction as a method of reasoning is well attested for in scripture, and is therefore a legitimate tool that can be used in the study of economics. We can and ought to make inductions concerning economic principles, based upon observation of human behavior historically. To reject the use of induction would simply be foolish.

But as with any tool, we must be sure to use the tool of induction properly, lest it be unsafe. Propriety in this context is defined as those conclusions which can be gathered by induction from sufficient and valid historical human experience, are consistent with the word of God, and reflect cause-and-effect and not merely coincidental correlation. Some examples will illustrate this point.

One ready example in scripture itself is found in Psalm 73. This psalm records the lament of Asaph at "the prosperity of the wicked". In the first part of this psalm Asaph did not properly use the tool of induction. He witnessed the pleasures of sin for a season in the wicked, and he extrapolated it to an unwarranted extent, saying, "They are not in trouble as other men; neither are they plagued like other men." But by the end of the psalm Asaph realized his earlier error, and acknowledges that God "didst set them in slippery places: thou castedst them down into destruction". His earlier conclusion was based upon too short term data, and it was contrary to the word of God. But his final conclusion was based on long term data, and it was consistent with the word of God.

Let's consider another example. Suppose an economist did a study of the US economy from 1970-2005, trying to gage how debt levels affect economic prosperity. And suppose he concluded from the data that increased national debt levels corresponded with enhanced economic prosperity and political standing in the world. And suppose he thus concluded that debt actually contributes to prosperity and power. Such a conclusion would be ill-founded because it contradicted scriptural precept concerning debt and because it based its findings on too short term data.

And let's consider a third example. We mentioned that care is needed to ensure that a principle reflects cause-and-effect and not merely coincidental correlation. Suppose all the people in a wealthy town had a last name that began with the letter 'V'. And suppose some economist, studying the economic wealth of these townspeople, made the following conclusion: "people whose name begins with the letter 'V' are wealthy". Now the problem with such reasoning is that the economist had happened upon a mere coincidental correlation and not a cause-and-effect relationship. The reason for the wealth of the townspeople had nothing to do with the first letter of their last name, but rather was owing to their diligence, godliness, frugality, inventiveness, etc. So care must be taken to only draw a general conclusion if we can locate causal factors. Without locating such causal factors, the inductive conclusion would be misguided.

To repeat then, propriety with respect to induction is defined as those conclusions which can be gathered by induction from sufficient and valid historical human experience, are consistent with the word of God, and reflect cause-and-effect and not merely coincidental correlation. We should always keep in mind that principles ascertained through induction lack the certitude of universal applicability that characterizes principles ascertained through deduction from the word of God. Therefore, whenever conclusions based upon induction of observed experience come into conflict with what is implied in scripture, we must believe those conclusions based upon induction are not true *to the extent* they come into conflict with what is implied in scripture.

It should also be pointed out that the tool of induction can be of use in applying economic principles deducible from scripture. For instance, suppose that through the tool of induction it is found that a certain economic policy leads to the loss of life. Now since we can deduce from the Sixth Commandment that we should seek to preserve human life, therefore the findings by induction will be relevant for shaping economic policy. Let me illustrate. Suppose historical studies conclude that a laissez faire policy regarding pollution leads companies to pollute, which in turn has detrimental health consequences. Since the government has the responsibility to preserve life within the sphere of its God-given authority, therefore it would be appropriate for the government to enact anti-pollution legislation.

Another tool we mentioned is classification. Classification is the systematic arrangement into classes or groups of that which is observed. Man had early, divinely ordained experience in classification:

"And out of the ground the LORD God formed every beast of the field, and every fowl of the air; and brought [them] unto Adam to see what he would call them: and whatsoever Adam called every living creature, that [was] the name thereof. And Adam gave names to all cattle, and to the fowl of the air, and to every beast of the field…" (Genesis 2:19-20)

And mankind since the time of Adam have rightly continued to name and classify that which they have observed. With respect to the study of economics, classification is necessary to organize the different types of economic systems, the different classes of economic theory, etc. As with induction, we must make sure to use the tool of classification in a way consistent with scripture.

We now have in place the framework for constructing a systematic knowledge of economics, from a Biblical perspective. While it will not discard all of the conclusions of economic studies based on other worldviews, it is unique, as has already been demonstrated. No other worldview will rightly uphold the Ten Commandments, so the economic systems of all other worldviews will ultimately lead to ruin.

This framework for constructing a true systematic knowledge of economics is applicable at the level of the nation as well as the level of the economic units of the nation. Economics is generally divided into these two sub-fields of study: microeconomics and macroeconomics. Macroeconomics considers aggregate behavior, i.e. the study of the sum of individual economic decisions, such as at the national and international level. This is in contrast to microeconomics, which considers the economic behavior of individual consumers, firms, and industries. Macroeconomics tries to look at the big picture, while microeconomics focuses upon its components. Again, at both levels the framework we have laid out applies.

We shall spend most of our time in the remaining chapters of this textbook then considering laws of economics which can be ascertained through induction and classification. Our methodology is sound, being based upon the foundation of the word of God. Man commonly fancies that he is not depraved, and that he does not need the word of God to draw proper conclusions. But history and the word of God testify against him. Time and again man has shown himself inept without the word of God. Exhibit A in the case for man's ineptitude will be covered in the next chapter, on honest money.

CHAPTER 5 : THE PRINCIPLE OF HONEST MONEY

The use of money in commerce is almost as old as man himself. That is why we read about it in the Bible as early as the book of Genesis. There are a number of practical reasons why money is used in commerce. First, it is used as a medium of exchange. Instead of exchanging a hair cut for gasoline directly (called barter), a barber can get money from a customer for giving the haircut and use the money to buy gasoline at a fill-in station down the street. It saves the barber from having to find someone who needs a haircut and sells gasoline. Money, in this sense, encourages and speeds up trade. Second, it is a standard of value. How many gallons of gas is one haircut worth? Without money it is difficult to reach an agreement every time you enter into a trade like that. Money allows us to put values on the goods and services we sell. Finally, it is a store of value. By exchanging goods and services for money, one can accumulate money and increase wealth. Without money, a surplus of gasoline at the barber's residence could create a fire hazard. It would be of diminishing worth as it accumulated there. But storing money is far more practical. So it is for very practical reasons that money has been with us for so long.

Over the course of history, many different things have been tried as money. The list includes cigarettes, beads, tobacco, and salt. In more recent times fiat currency has been tried. But all money is not created equal. Some money has proved reliable; while some money has proved unreliable. Some money more readily allows the upholding of scriptural principles; while some money does not so readily allow it. To take a very obvious example, anything that could be readily counterfeited would not be a prudent medium of exchange. Rather, a money should be selected which tends to promote honesty and discourages theft. In the long term honest money prevails and sub-standard mediums of exchange fail.

So what does historical human experience indicate is a reliable form of honest money? The case for gold and silver seems strong. They have a history of reliability like none other. Consider these verses from Biblical history:

"And Abram [was] very rich in cattle, in silver, and in gold." (Genesis 13:2)

"Behold, the money, which we found in our sacks' mouths, we brought again unto thee out of the land of Canaan: how then should we steal out of thy lord's house silver or gold?" (Genesis 44:8)

"The merchandise of gold, and silver, and precious stones, and of pearls, and fine linen, and purple, and silk, and scarlet, and all thyine wood, and all manner vessels of ivory, and all manner vessels of most precious wood, and of brass, and iron, and marble…" (Revelation 18:12)

But the case for gold and silver extends beyond the Bible. Consider the case below made without even any reference to scriptural precedent:

* * *

What Most People Don't Know About Gold
By Doug Casey

Historically, gold has never been viewed as a speculation. It was simply money: cash in the most basic form. It was a medium of exchange and a store of value. People did not accumulate gold because it could make them wealthy, but because it was a convenient, liquid way to keep the wealth they had.

It's only very recently, since 1971—when the U.S. government proved unable to keep the price at $35—that gold has been viewed as a speculation. In those days gold was an ideal speculation, with minimal risk but a huge upside.

Gold has been in a free market for three decades now; the frenzy of the '70s that took the metal from $35 to more than $800 disappeared, and was followed by a 21-year bear market. As a result, an entire generation of investors has grown up thinking that gold is not only not money but an investment dog. Their thinking is about to change. I believe that not only will gold again be used as money, but that it has entered a new long-term bull market.

Before looking at where the metal's price is likely to go over the next few years, however, it's worthwhile to consider some of the fundamentals… fundamentals that not 1 in a 1,000 people understands.

The Questions. Any discussion of gold always comes back to certain basic questions: Why is gold money? Why is gold valuable? Why can't money be whatever we say it is? (The last question is usually asked by government officials because they don't know the answers to the first two.) Why does gold give rise to all kinds of controversy not associated with, say, platinum or lead? Why is the stuff an emotional, political statement for those who love it and for those who hate it?

The Answers. Over thousands of years, in billions of transactions by millions of humans, many commodities have been used as money: stones, salt, cattle, and seashells among them. But wherever gold was available, it tended to displace other media of exchange. Like any successful money, gold never needed to be decreed "legal tender" by a government; it was recognized as the most desirable money by common consent because of its unique properties.

Certain materials have proven especially well suited for certain uses. Aluminum is good for airplanes, bricks for construction, paper for books, and gold for money. If bricks were used for airplanes and aluminum for books, the results would be as suboptimal as when paper is used for money.

In fact, the properties required of money were first described by Aristotle in the fourth century BCE.

1. **It is durable.** It won't evaporate, mildew, rust, crumble, break, or rot. Gold, more than any other solid element, is chemically inert. This is why foodstuffs, oil or artwork can't be used as money.

2. **It is divisible.** One ounce of gold—whether bullion, coin, or dust—is worth exactly 1/100th of one hundred ounces. When a diamond is split, its value may be destroyed. You can't make change for a piece of land.

3. **It is convenient.** Gold allows its owner physically to carry the wealth of a lifetime with him …

4. **It is consistent.** Only one grade exists for 24-carat gold, so there is no danger of owning 24-carat gold varying in quality. Twenty-four-carat gold (pure gold) is the same in every time and place since gold is a natural element, unlike gems, artwork, land, grain, or other commodities.

5. **It has intrinsic value.** Gold finds new industrial uses each year. Of all the metals, it is the most malleable (able to be hammered into sheets less than 5-millionths of an inch thick), most ductile (a single ounce can be drawn into a wire 35 miles long), and the least reactive (it can stand indefinite immersion in seawater, does not tarnish in air, and can withstand almost any acid). Next to silver, it's the most conductive of heat and electricity and the most reflective of light.

   These superlatives make gold uniquely well suited as a medium of exchange and a store of value. Arguments that gold's value is "mystical" are silly; it is simply one of the 92 natural elements.

   One important last point was not listed by Aristotle, probably only because he lived before the creation of paper and banking.

6. **Gold cannot be created by government.** Gold can, of course, be debased with impurities or falsified in weight, and governments strapped for revenue have tried those tricks. But a trader can protect himself with a pair of scales or a vial of acid, although a familiar and trustworthy hallmark of a coin saves him that trouble. Unlike currency, gold cannot lose value because of government mismanagement. On the contrary, it tends to gain value because of government mismanagement.

But isn't that latter point largely academic, since gold isn't presently used as money anywhere in the world? I think not. Even though the concept still receives little discussion, and none in "official" circles, gold is likely in the foreseeable future to reassume its traditional role as money worldwide. …And not just in bullion form, but in modern, safe and reliable bullion proxies and electronic transaction services … " (from http://www.kitcocasey.com/displayArticle.php?id=401)

* * *

The article excerpted above made the case for gold, and a similarly compelling argument can be made for silver. Whereas gold is practical for purposes of storing and carrying larger sums of wealth, silver is practical for purposes of smaller portions of wealth, using coins. If a proper use of induction shows anything in economics, it surely shows the wisdom of the use of gold and silver as money. They serve as an honest money, and do not so readily allow men to steal the wealth of other men.

In what can only be explained as resulting from a dangerous mix of hubris, greed, and ignorance, the modern world has largely abandoned the use of gold and silver as money, and has replaced it with government-created fiat currency. Without the restraints they would have if their money supply were tied to silver and gold, governments can increase the money supply at will. Given the sinful nature of man, it is a recipe for government-sponsored theft through inflation. This brings us to the topic of our next chapter.

CHAPTER 6 : THEFT THROUGH INFLATION

The US government, like virtually every other modern country, mandates by fiat that people in the US accept government-created US dollars in payment of debts. It has to do this by fiat, because without such government order the US dollars would be worthless. They have nothing in themselves of intrinsic value. The body vested with the authority to determine the supply of US dollars in the economy is the Federal Reserve System. The Federal Reserve System consists of the Federal Reserve Board, the Federal Open Market Committee (FOMC), the Federal Advisory Council, and 12 regional federal reserve banks.

The Federal Reserve Board ("the Fed") consists of a group of seven monetary "experts", called Board governors. Each governor is appointed by the President of the United States, with approval from Congress. One new member gets appointed at least every two years, to serve a fourteen-year term. The Federal Reserve Board governors, once appointed, act completely independently from Congress and the White House. Any decision they make does not have to be approved by politicians.

The seven Fed governors are assisted by a committee called the Federal Open Market Committee (FOMC). The FOMC consists of the seven board governors as well as five of the twelve central bank presidents.

An advisory body is the Federal Advisory Council. The council includes government economists and bankers.

At the head of our banking system are 12 central banks (and 25 of their branches) whose policies are determined by the Fed. In each of the 12 financial districts, commercial banks serve customers, including both businesses and individuals. These banks in turn have their own accounts with a Federal Reserve Bank or branch bank in their district. The central bank holds the member banks' required reserves, loans money to the commercial banks, supervises them, and clears their checks.

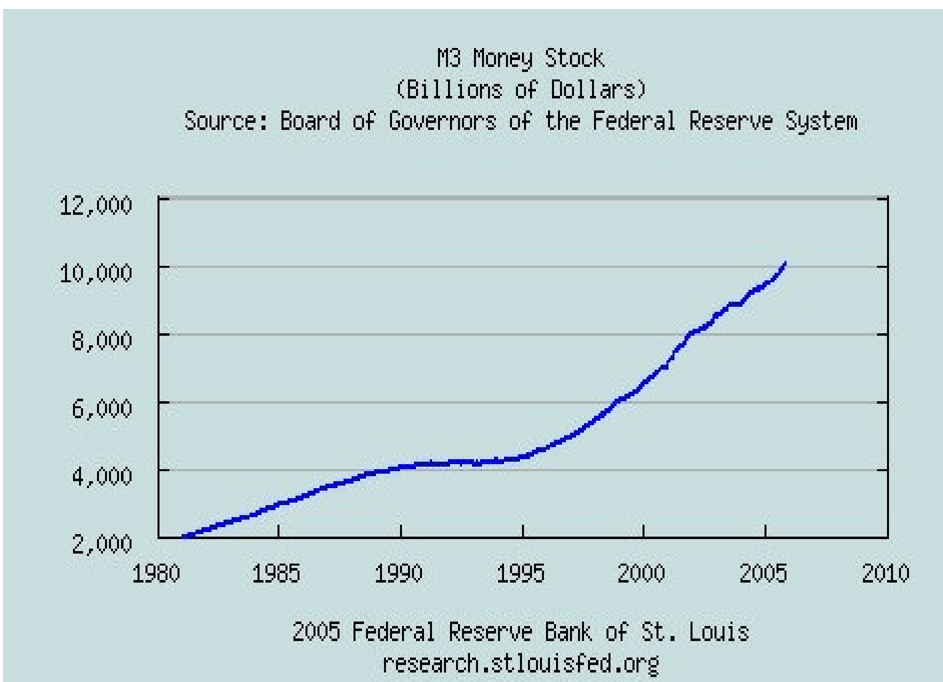
The Fed uses three tools to set the level of money supply. Of the three methods the Fed applies to change reserves in the economy, open market operations is the most important and most frequently used. The term refers to the Fed's activity of buying and selling government securities (bonds). Bonds are pieces of paper (certificates) which are proof that you have lent money to someone. Government bonds are first issued by Congress and the White House to help finance expenses for federal government services and goods (like defense and social security). The Fed does not issue these bonds, but only trades them to affect the money supply. To put more money into circulation, the Fed buys bonds from people, businesses or banks who hold them. These groups would receive cash in exchange for the bond, which puts funds in circulation and increases the money supply. The reverse occurs when the Fed sells bonds. This takes funds out of circulation and decreases the money supply.

A second tool it employs is the reserve requirement. When the Fed increases the reserve requirement (the amount a bank is required to keep on hand as a percentage of its deposits) it forces banks to make fewer loans. This causes a drop in the money supply. But when it decreases the reserve requirement, it causes an increase in the money supply.

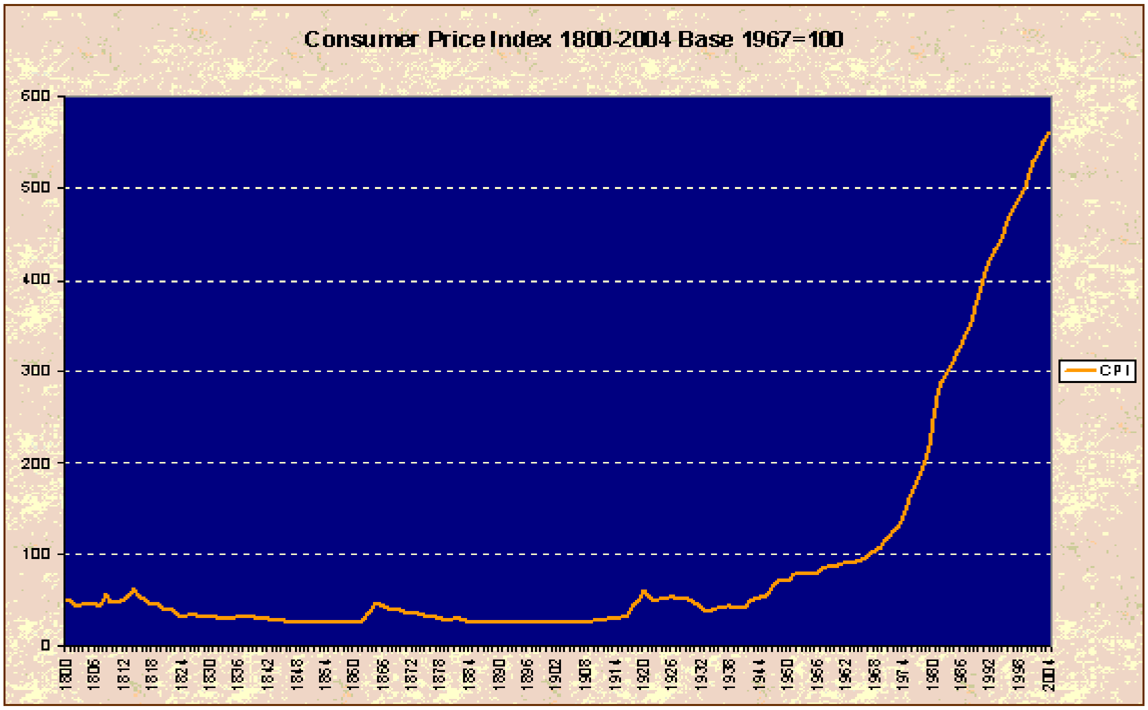
A third tool it employs is the discount rate. The discount rate is the interest rate which a bank must pay the Fed when the bank borrows money from the Fed. The more money a bank borrows, the more it can loan out and the more it increases the money supply. If the Fed decreases the discount rate, more banks will want to borrow money, thus increasing the money supply. The reverse is true when the Fed decides to increase the discount rate.

The Federal Reserve System uses a number of different measures to quantify the amount of money which exists in the economy. The narrowest definition, M-1, contains the most liquid forms of money. M-1 includes all coins and currency in circulation with the public, plus money in checking or transactions accounts (demand deposits, NOW accounts, etc.), plus traveler's checks. These forms of money are used to directly purchase goods and services. A little more broad than the M-1 definition of money is the M-2 definition. It includes everything in M-1, plus savings deposits (amounts less than $100,000), plus money market mutual funds, plus money market deposit accounts, plus other short-term money market investments. Broader yet are M-3 and L.

Over time the Fed has tended to inflate the supply of money. Below is a graph showing the growth of the money supply since 1980, measured by M3:



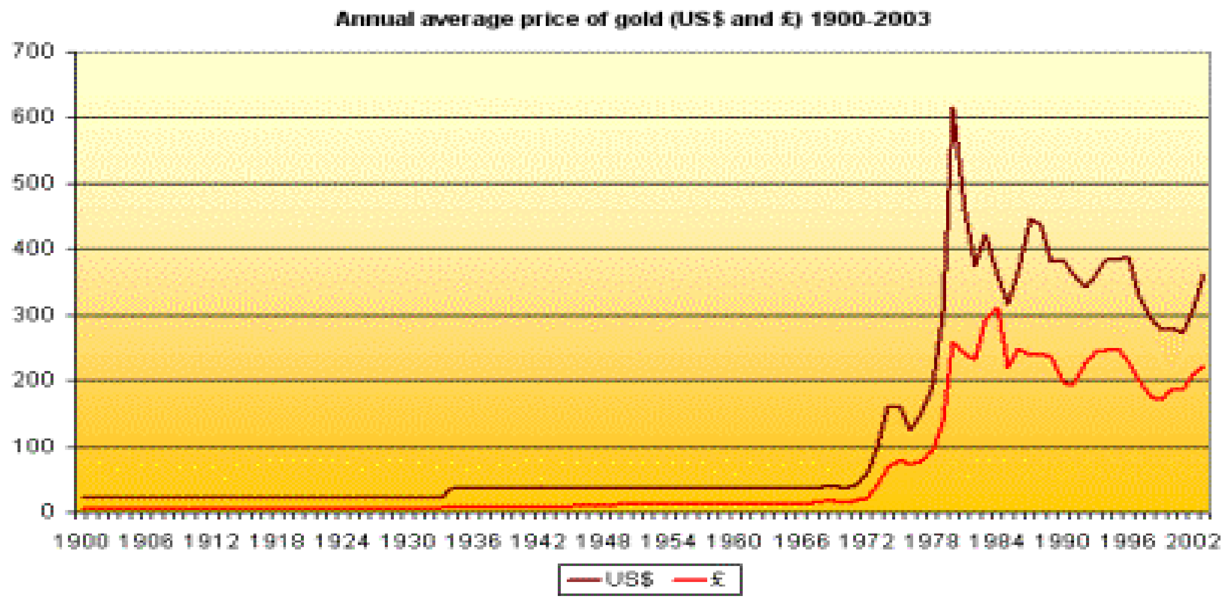
As a consequence of inflating the supply of money over time, each dollar becomes worth less and less. The official government measure of the worth of a US dollar is the Consumer Price Index (CPI). This figure is a weighted average price of a typical "basket" of consumer goods and services. The term "weighted" means that price increases of goods that are bought in large quantities increase the CPI more than goods which are not consumed as commonly. A rising CPI over time means the typical "basket" of consumer goods and services is rising in price, which means the value of the dollar is decreasing over time. The graph below, found at http://www.gold-eagle.com/editorials_04/norcini080604.html , shows the change in the CPI since 1800:



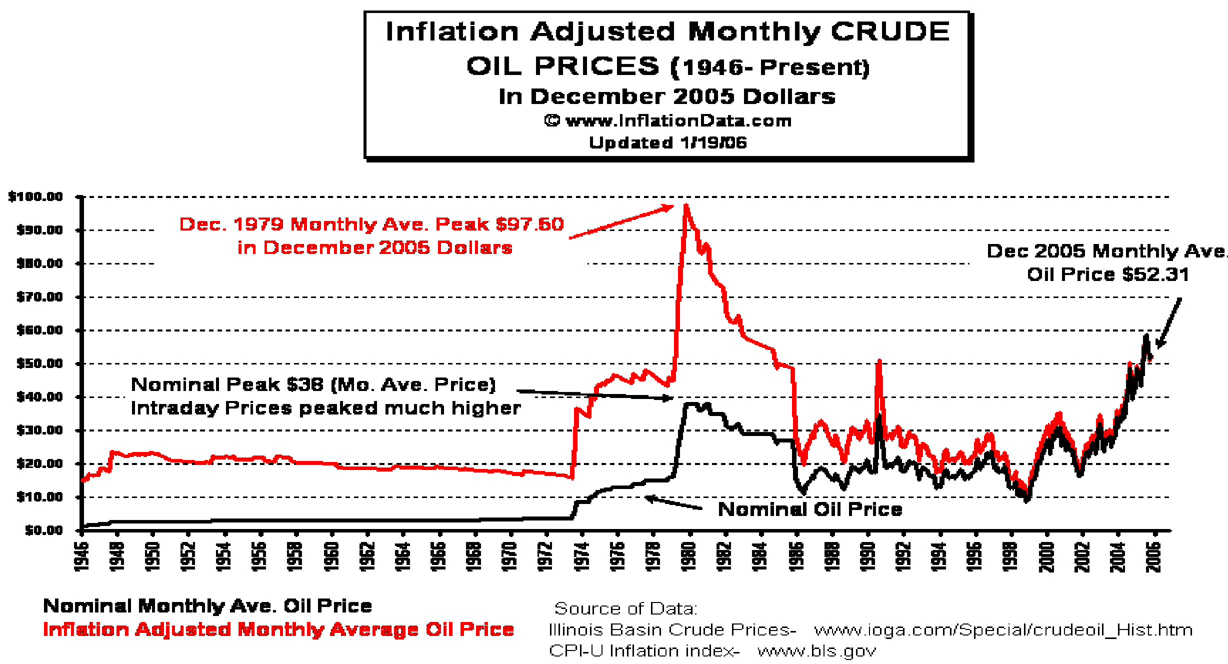
The CPI has been rising ever since the value of the dollar was no longer tied to gold and silver.

The government has other ways of measuring inflation as well. Two common ones in the US are the GDP deflator and the Producer Price Index (PPI). The PPI is similar to the CPI, but changes in (wholesale) prices which businesses, not consumers, must pay are measured. The GDP deflator is defined as nominal Gross Domestic Product (GDP) divided by real GDP times 100. We shall be explaining Gross Domestic Product in a later chapter. These other measures have manifested trends similar to that of the CPI.

As the money supply has inflated and the value of the dollar has declined, the price in dollars of various commodities has, not surprisingly, risen over time. The rise in commodity prices is in fact another measure of the declining value of the dollar. Below is a graph showing the historical trend in gold price from http://www.finfacts.com/Private/curency/goldmarketprice.htm :

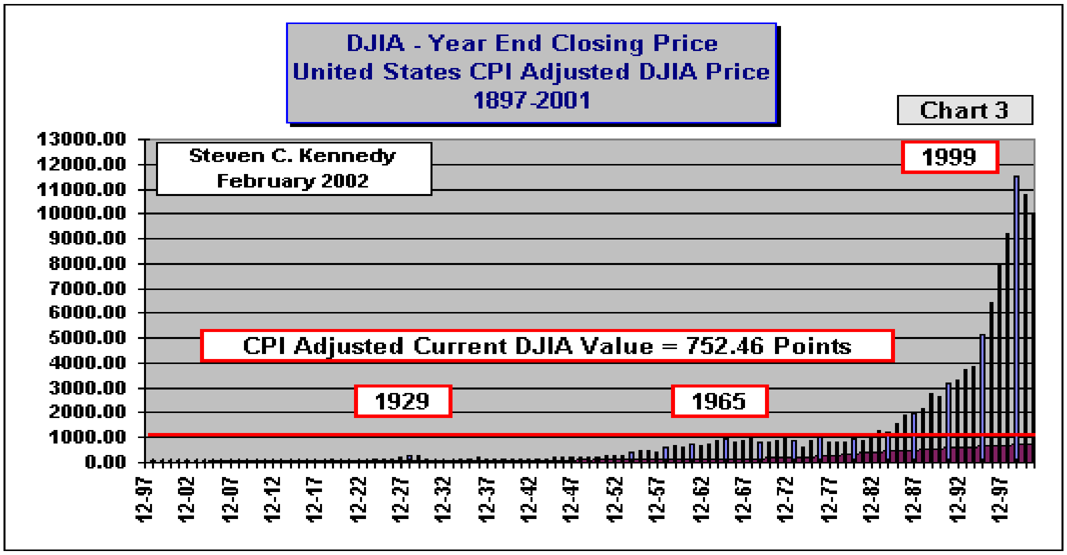


Another example is the trend in oil prices, shown in the graph below from http://inflationdata.com/inflation/images/charts/Oil/Historical_Oil_Prices_Chart.htm :

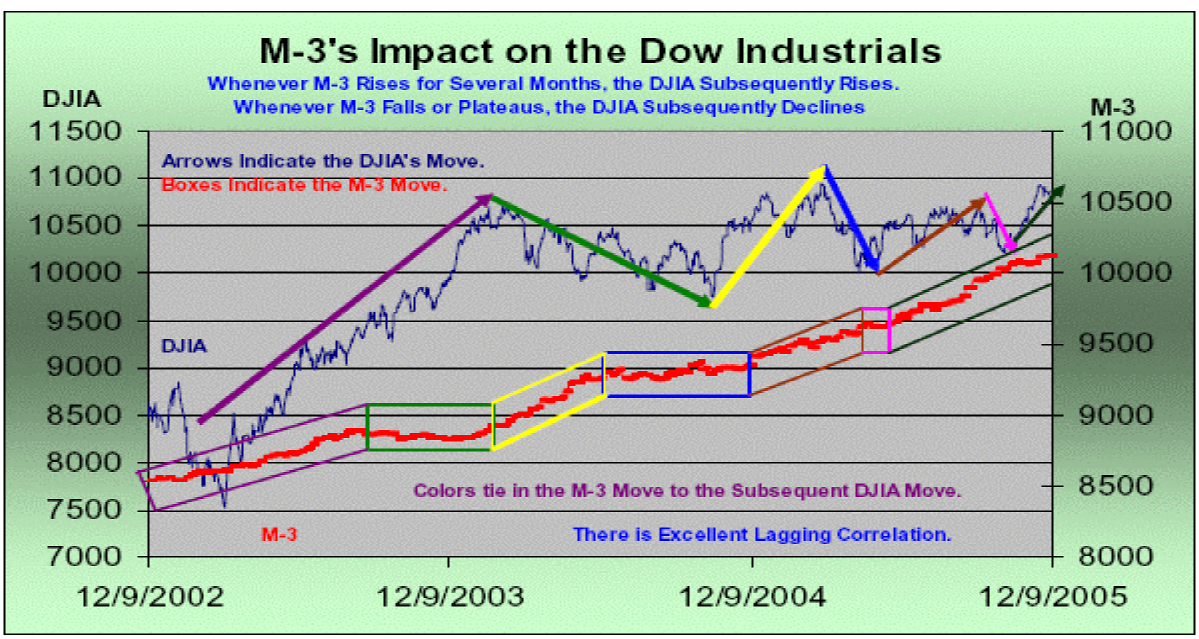


The nominal price of oil (shown above in the black line) is the actual price of oil in US dollars. The inflation-adjusted price of oil (shown above in the red line) adjusts the actual price down by the amount the CPI increased in a given year. For instance, suppose that in a certain year the CPI increased by 3% but the actual price of oil increased by 4%, then the inflation-adjusted price increase is only 1% (4% - 3%).

Not only has inflation affected the prices of commodities, it has also affected investment prices. One measure of the price of publicly traded stocks is the Dow Jones Industrial Average (DJIA). Its trend over time is shown below, from the webpage http://www.gold-eagle.com/editorials_02/kennedy021102pv.html :



As can be seen above, much of the gain in stock price (measured here by the DJIA) has simply been US dollar inflation. Many people imagine they are enjoying significant investment appreciation, whereas in fact the price increase is largely the result of money supply inflation, which in turn results in currency devaluation. Indeed, there seems to be a very close correlation between money supply growth and investment appreciation, as exhibited in the following graph from http://www.financialsense.com/resources/fed/moneysupply.htm :



So in real (i.e., inflation-adjusted) terms, the rising price of publicly traded stocks has not been nearly as impressive as in nominal terms. The gains are even further eroded after tax effects are considered. For instance, suppose that over a decade the price of a stock increases by 20%, while price inflation also runs at 20%. In real terms, there was no gain in stock value. Nevertheless, if one sold the stock at the end of the decade, the US federal government (along perhaps with one's state government) would tax the nominal gain. So in real terms, considered after taxes, the value of one's investment actually decreased. This is but one form of government-sponsored theft made possible by fiat currency inflation.

What is true of investments is essentially true of wages as well. Nominal wages have risen significantly; but real (i.e., inflation-adjusted) wages have not risen as significantly. For instance, if the general price level rises by 5 percent, then a 5 percent increase in nominal wages amounts to no real increase. It is even possible for nominal wages (the dollar amount) to rise while at the same time real wages (purchasing power) fall.

Many economists mistakenly believe that a greater quantity of money available to purchasers stimulates the economy. But increasing the quantity of money by the government does not stimulate businesses to produce more. It only raises the prices at which goods are sold; *i.e.* it lowers the value of the existing money. Here is how one economist has described the harmful effects of inflation:

* * *

A. Inflation leads to malinvestments. When prices rise, certain investments go up faster as compared to when prices are stable. For instance, prices of real estate and antiques rise faster if there is inflation. More money is invested in these goods therefore as compared to when there is no inflation. However, putting our borrowed money or savings into these non-producing types of commodities is not the most efficient way to increase the country's wealth. Higher inflation which causes prices of housing to rise may help real estate owners increase their wealth, but it encourages money to flow into ventures which otherwise would not have been as attractive. Instead of funds flowing into ventures which produce additional wealth, it is being invested in consumption items which do not add to the country's productive capacity. In addition, current buyers of property suffer. Current buyers pay for inflated houses and other inflated commodities. Some workers who could afford to purchase a house ten or fifteen years ago, can no longer do so.

B. Inflation encourages consumption instead of saving. Higher prices induce people to purchase more products now (before they become more expensive) and discourage people from saving, because money saved for future use will have less value. Too much consumption discourages savings needed for investments in capital goods and technology, the real causes of wealth in our economy.

C. Inflation leads to higher interest rates in the long run. Initially when the government increases the money supply, the increased availability of money may lower interest rates. However, the higher prices and lower value of the money leads banks and other financial institutions to raise rates in order to compensate for the loss of the purchasing power of their funds. Higher long term rates discourages business borrowing, which leads to less investment in capital goods and technology.

D. Higher prices of goods means that other countries will find it less attractive to purchase our goods. This will lead to a decline in exports and lower production and higher unemployment in our country.

E. Higher prices lead to increases in taxes. Nominal (not real) incomes rise along with inflation and push income earners into higher percentage tax brackets. So even though purchasing power does not increase, a person pays a bigger chunk to the government.

F. When the government finances its expenditures at least in part by printing more money, it acquires these funds "for free" (of course, it is not free to citizens who will be faced with significantly higher prices on goods and services later on). However, to the public it initially appears that these funds have been acquired without too much sacrifice. This encourages the public to accept the government programs more than if it had to pay taxes to finance them. This malinvestment is a very serious form of inefficiency in our society.

* * *

But even more fundamental than the above reasons, government-created inflation is immoral, because it is a form of theft. By increasing the money supply, the government is taking wealth away from those who are forced to have and hold its mandated currency, yet not by means of a Congressionally approved tax increase.

CHAPTER 7 : EXCHANGE RATES IN A FIAT CURRENCY WORLD

Countries buy and sell thousands of different kinds of goods to and from each other. Because countries in the modern world have different fiat currencies (the US dollar, the Canadian dollar, the Japanese Yen, the Chinese Renminbi, the EU Euro, etc.) these need to be exchanged before the goods can be purchased. For example, if a United States importing business purchases Japanese cars, it must first buy Japanese Yen in exchange for its own dollars before it can pay for the Japanese cars.

Most currency exchange rates currently fluctuate. Fluctuating exchange rates affect what an importing business ends up paying for the foreign good. For instance, if the value of the Japanese Yen relative to the US dollar rises, then the Japanese products purchased by American businesses become more expensive. Since fiat currencies are generally not tied to gold or silver, there is not only a fluctuating exchange rate among fiat currencies, there is also a fluctuating exchange rate with gold and silver.

Countries can decide to allow their foreign exchange rates to increase or decrease, *i.e.* adopt flexible exchange rates. Exchange rates are nothing more than prices buyers face for purchasing foreign currency, similar to a price a buyer faces for purchasing a commodity like a car. Prices (rates) of currencies relative to other foreign currencies fluctuate according to their demand and supply relative to the demand and supply of other foreign currencies. For instance, if the United States government supplies many more dollars than the Japanese government supplies Yen to the world economy, then there would be an increase in the relative supply of dollars and a decrease in the relative supply of Yen. Consequently, ceteris paribus (*i.e.* no other changes in say, demand), the price (value) of the dollar relative to the yen would fall (called depreciation) and the price of the yen relative to the dollar would rise (appreciation).

An increase in relative demand can also cause the currency to fluctuate. Assuming other variables do not change, a relative (to the Yen) increase in demand for U.S. dollars (for example, because of an increase in demand for American goods) would increase the price (value) of the American dollar and would decrease the price of Japanese Yen.

Some countries prefer to keep their currency value fixed relative to other foreign currencies. For instances, some Asian countries have chosen to have their currency fixed relative to the US dollar.

Countries trading with each other experience inflows and outflows of goods and services and accompanying flows of money used to pay for these goods and services. An accounting system, called the balance of payments, is kept to keep track of all of these flows. The balance consists of two major accounts, the current account and the capital account.

The current account is subdivided into four smaller accounts, the merchandise trade account, the services account, the investment income account, and the transfer payments account. The merchandise trade account includes imports and exports of tangible goods such as cars, computers, clothes, televisions, etc. If a country imports more than it exports in this category, then it is said to have a trade deficit.

The services account includes flows of payment in exchange for services countries provide to each other: transportation, insurance, banking, tourism, etc.

The investment income account reflects Americans' investment earnings from foreign stocks, bonds, real estate, etc., minus foreigners' investment earnings from American stocks, bonds, real estate, etc.

The fourth sub-account of the current account is the transfer payments account. This account includes gifts from American citizens to people living abroad or vice versa or payments (for example, a social security check) from the United States government to a person abroad (or from a foreign country's government to an American citizen).

A negative balance on the current account means that the country is considered a "debtor nation."

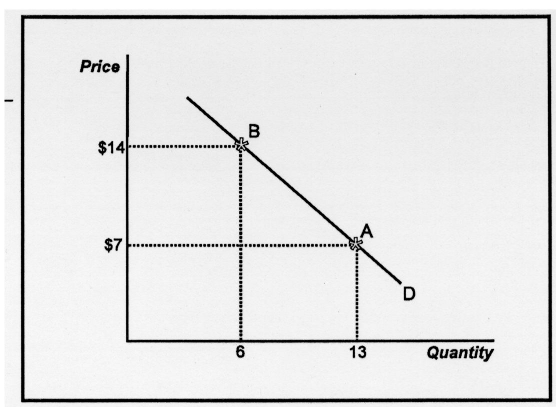
The capital account includes a variety of sub-accounts all dealing with purchases and sales of financial assets or real estate (stocks, bonds, land, buildings, businesses, etc.). Additionally, a central bank's trade in foreign exchange (Japanese yen, Brazilian reals, etc.) is also a flow of money which is reflected in the capital account. The balance on the capital account is the sum of the changes in the above mentioned capital sub-accounts. This amount should equal the balance on the current account. However, if it does not, there is a statistical discrepancy, which given the size of the money flows and the difficulty in measuring the literally millions of international trade transactions, is sometimes a substantial number.

Like so many other economic transactions, the exchange rates among currencies are governed by the law of supply and demand. The value of a particular currency is dependent upon the level of supply of that currency and the level of demand for that currency. In the next chapter we explore the law of supply and demand in a general way.

CHAPTER 8 : THE LAW OF SUPPLY AND DEMAND

The law of demand states that buyers of a good will purchase more of the good if its price is lower (and vice versa). If the price of strawberries decreases from $2.00 per pound to $1.00 per pound, consumers will buy more strawberries. The law of demand holds, as economists say, “ceterus paribus”, or “assuming other relevant variables remain constant.” It would be possible, for example, that as the price of strawberries decreases from $2.00 per pound to $1.00 per pound, fewer pounds of strawberries are purchased. One reason may be that buyers’ real incomes decline, so that, even though the price of strawberries is lower, they just cannot afford to buy as many. Does this then violate the law of demand? The answer is “no”, because the latter example is an instance where another relevant variable was not held constant. If all relevant variables had remained constant, then we would have seen an increase in the purchase of strawberries as a result of a price decrease.

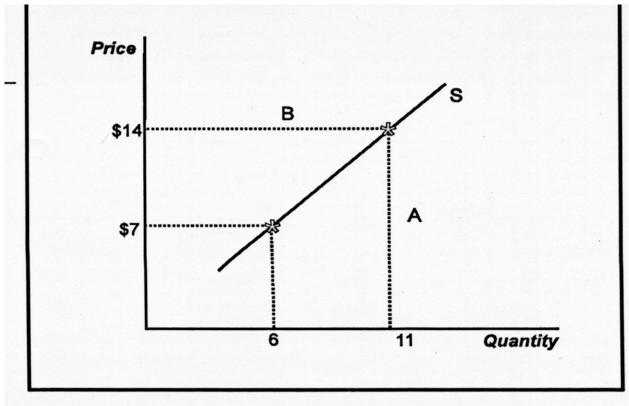
Demand data can be graphed in a diagram. The two variables to consider are the price of the product and the amount of the product purchased during a certain period of time. Economists usually measure the price of the good on the vertical axis and the quantity on the horizontal one. In the diagram below, two points are plotted for a particular product (for example, watching an ice hockey game at the US Air Arena). At ticket prices of $7.00, 13 (thousand) tickets are sold. And at $14.00 per ticket, only 6 (thousand) seats are sold. Other points can be plotted and a line or curve can be connected through these points to come up with this good’s demand curve. Individual product demand curves always extend from the upper left to the lower right, *i.e.*, they are downward sloping.



The above diagram shows that on demand curve D consumers buy 13 units at a price of $7 (point A) and 6 units at a price of $14 (point B).

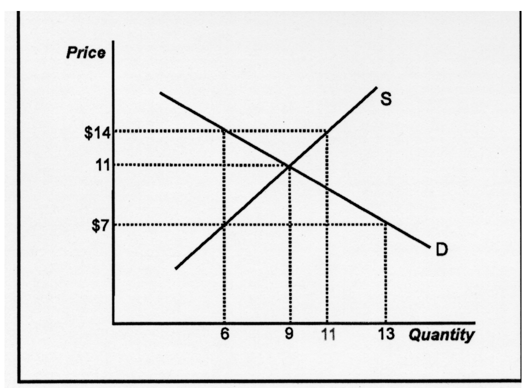
The law of supply states that product suppliers (firms) offer more of a product at higher than at lower prices (just the opposite of the law of demand). If the product price is high, the firm can make greater profits by selling more (assuming the cost of production is constant and the demand for the product is there). A product, for which the demand is high and therefore the price as well, will be supplied at greater quantities because the higher price makes firms want to supply more.

A supply curve is upward sloping from the bottom left of the graph to the upper right of the graph. This indicates that at higher prices firms supply more than at lower prices and there is a direct relationship between price and quantity supplied.



The above diagram shows that on supply curve S firms supply 6 units of this product when the price is $7 (point A) and 11 units when the price is $14 (point B).

In a free market (competitive and with no government involvement) the equilibrium price and quantity occur where the supply and demand curves intersect. At this price consumers are willing to buy the same amount which businesses are willing to offer. If the price were below this intersection point, a shortage would exist. If the price were above equilibrium, we would experience a surplus.



In the graph above, this market is at equilibrium at a price of $11 and a quantity of 9. When the price is set at $7, a shortage of 7 products (13 minus 6) will result. If the price were $14, there would be a surplus of 5 units (11 minus 6).

The demand schedule (curve) does not always stay in the same position. The following are reasons why it may change, *i.e.*, why demand increases or decreases:

1. A change in buyers' incomes and wealth.

The demand for most products will go up if buyers' real incomes or real wealth, *i.e.*, their purchasing power, rise. For example, if I manage to earn $50,000 next year instead of $40,000 this year (and assuming that there is no increase in the price level so that my **real** income increases), I will find myself purchasing more clothes, restaurant meals, etc. Consequently, the demand for these products increases. Notice that some products or categories of products may experience a decline in demand as a result of my higher income, because my higher income allows me to purchase more expensive ("**normal**") substitute products. Typical examples of these so-called "**inferior**" goods are potatoes, public transportation, spaghetti meals, generic products, etc.

2. Buyers' religion, and personal tastes and preferences.

The religion of buyers, as well as their personal tastes and preferences, will affect the demand of goods and services. For instance, if people were all to convert to Judaism, the market for pork would diminish significantly. As an another example, the more that people adopt Biblical Christianity in truth, the less demand there will be of such wicked services as gambling and harlotry. But the demand for Bibles and reformed Christian books would be enhanced.

3. The prices of related products or services.

Consider the market for potato chips. The demand for it will go down (assuming no other changes) if the price of a related good, for example, pretzels, decreases. So, if the price of a ***substitute*** falls, then the demand for the product in question drops (and vice verse). A ***related*** good can also be a ***complement***. This is a product consumed not in place of, but along with another good. A drop in the price of potato chips dip is expected to increase the demand for potato chips. So if the price of a complement falls, the demand for the other product rises (and vice versa).

4. Buyers' expectation of the product's future price.

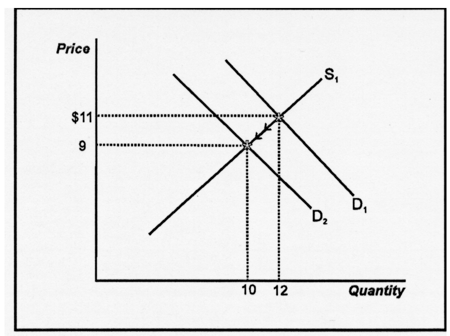
When a supermarket announces that potato chips will become more expensive in the near future, more people will tend to buy the product now (and vice versa). This would increase current demand and shift our demand curve to the right. Notice that this will have the eventual effect of raising the real price and thus fulfilling the expectation.

5. The number of buyers (population).

If the population of buyers of a certain product increases, we will experience an increase in the demand for that product. With the aging of the baby boomers we can anticipate a rise in the demand for products which senior citizens typically purchase (insurance, health care, travel, nursing care).

Economists distinguish between a change in demand and a change in quantity demanded. ***Demand*** increases (or decreases) when the demand curve shifts. This occurs because of the demand determinants (as described in the previous paragraph) changed. ***Quantity demanded*** increases (or decreases) because the price of the product changed. This can be illustrated by a movement along (not a shift in) the demand curve.

- When the demand curve shifts to the right, i.e., ***demand*** increases, then the market price will go up, as will the equilibrium quantity (in the short run).



- When the demand curve shifts to the left, both price and quantity will decline (in the short run).

Just as demand may shift, so may supply. Supply shifts as a result of supply determinants. Five reasons why firms may supply more of a product are:

1. Advance in technology.

An advance in the technology of making the product will lower the cost of producing it. This means that firms will want to supply more of the product.

2. Prices of inputs necessary to make the product.

When input prices (of labor, raw materials, etc.) go down, the firm can make more profit per product and will want to increase the supply of the product (and vice versa).

3. Taxes and subsidies.

Taxing the manufacturing of a product will lower the supply (it costs more to make it), and a subsidy does just the opposite.

4. The number of firms selling the product.

When more firms decide to enter the market the supply of the product increases, and vice versa.

5. The moral righteousness of workers

As moral righteousness increases, there is an increase in the supply of a product that can be produced, due to less waste of time on the job and more diligence, less theft of materials by workers, less unproductive argumentation, etc.

Note that any of the above changes will bring about a shift in the supply curve. The distinction between supply and quantity supplied is analogous to the difference between demand and quantity demanded.

In summary, supply and demand are influenced by various factors. Factors affecting supply are called supply determinants, and factors affecting demand are called demand determinants. Supply and demand determinants are non-price factors which cause changes in the supply and demand curves, respectively. We have distinguished between supply and demand versus quantity supplied and quantity demanded. Quantity supplied and quantity demanded are said to be affected by price changes alone. Typically, price rises of a product lead to increased quantity supplied and decreased quantity demanded. This affect of price on quantity supplied and quantity demanded is called the law of supply and demand.

CHAPTER 9 : THE EFFECT ON DEMAND OF PRICE AND INCOME CHANGES

In the last chapter we discussed how the quantity demanded is influenced by price changes, and how demand is influenced by income changes. More specifically, quantity demanded decreases as the price of a good or service increases, and overall demand of a good or service typically increases as income in a population increases. This is the general rule of thumb.

Nevertheless, different goods and services are affected in different ways by price and income changes. Some goods and services respond much more sharply to price changes than other goods and services. Those whose quantity demanded is sharply affected by price changes are said to be highly price elastic, where those whose quantity demanded is generally unaffected by price changes are said to be price inelastic. Hence, elasticity measures exactly ***how much*** less people buy of a good or service when the price rises, or vice versa. Price elasticity of demand is defined as:

> the percentage change in quantity demanded divided by the percentage change in the price of the product.

Let's consider an example. Suppose that when the price of a product is \$15.00 that people are willing to buy 25,000 of them . And suppose that when its price is \$17.00 that people are willing to buy 24,000 of them. What is the price elasticity of demand for tickets in this instance?

We can compute it as follows:

> the percentage change in quantity demanded = 1,000 / 25,000
>
> the percentage change in the price = 2 / 15
>
> so its price elasticity of demand = (1,000 / 25,000) / (2 / 15) =

So the elasticity of this product is about .33 or 33%.

Yet there are some products which have a higher price elasticity than the one in this example and some that have a lower price elasticity. Three determinants of price elasticity of demand are:

1. **The availability of close substitutes**. If a product has many close substitutes, for example a certain brand of cereal, then people tend to react strongly to a price increase, i.e. the price elasticity of this product is high.
2. **The importance of the product's cost in one's budget**. If a product is very inexpensive, such as salt, consumers could care less whether the price of salt goes up by 10, 20, or even 50%. Salt therefore has a very low price elasticity of demand.

3. **The period of time under consideration**. If you're looking at the demand for gasoline over only one day, people will react less strongly to a price increase than if you studied the effect of a price increase in gasoline over a period of two years. This is because people have much more time to adjust their consumption in two years than in one day. Over the course of two years you have the ability to move closer to work or school; arrange to carpool; buy a more fuel efficient car, etc.

A product is said to be price elastic when the elasticity is greater than 1. A product is said to be price inelastic when the elasticity is less than 1. A product is unitary elastic when the elasticity is equal to 1. Note that if elasticity is greater than 1 (elastic), the % change in quantity is greater than the % change in price (numerator bigger than denominator). For example, if a product's price rises by 13% and the quantity demanded goes down by more than 13%, then this product is elastic (and vice versa).

Now that we have considered price elasticity of demand, let's consider income elasticity of demand. Income elasticity of demand measures the change in people's purchase of a product or service as a result of a change in their income. For example, if your income rises by 10% and you decide to buy 20% more bananas, we can conclude that the income elasticity of demand is 2. (% change in demand / % change in income). Or in the case of an inferior good, if your income rises by 50% and you buy 25% fewer hamburgers, the income elasticity demand is –1/2. Be sure not to leave off the minus sign in the above example. Because income elasticity of demand can be either positive (in the case of a normal good), or negative (with an inferior product), the sign must be indicated, unlike when price elasticity is being considered.

In summary, demand for different goods and services responds differently to price and income changes, and this effect is measured by its elasticity of demand.

CHAPTER 10 : THE LAWS OF DIMINISHING MARGINAL PRODUCT AND DIMINISHING MARGINAL UTILITY

A production function is a relationship between inputs and outputs. It illustrates how many workers and machines it might take to produce, for example, one car, two cars, etc. The table below contains a hypothetical firm's total production data for cars during a certain period of time:

# of Workers	*Production of Cars*
0	0
1	3
2	7
3	15
4	19
5	22
6	23

As you can see, total production rises with additional workers. The rise in production is not proportionate though. The first few workers contribute more per worker than the last few. The drop in additional production after a certain number of workers (in this example the third worker) is known as the Law of Diminishing Marginal Product.

There are different types of input that affect output. Fixed inputs are resources which the firm keeps constant in the short run. Variable inputs may increase or decrease as production increases or decreases. Examples of resources that are typically fixed in the short run are: land, heavy machinery, buildings. Resources that are usually variable in the short run are: labor, energy, raw materials, supplies. The short run is a time period in which a business has at least one fixed input (for example, the production space [building] is fixed). The long run is a time period in which the firm has the flexibility to change all inputs (buy more or bigger machines, hire more workers, expand the building, etc.). How long this is depends on the nature of the business. For a small business, long run might be three months; for a larger, more inflexible business, it might be three years.

So the Law of Diminishing Marginal Product relates not only to workers, but also to other inputs. The law states that when a firm uses a variable input, such as labor, the productivity of workers who are hired at a later stage is less than the additional productivity of workers who were hired first. In the example in the table above, the firm can hire form 0 to 6 workers. The additional production of the second and third workers increases. This occurs because two and three workers are in a position to specialize and work more efficiently. The specialization opportunities diminish for workers 4, 5 and 6 though. Because of the fixed inputs, there are not enough machines and offices to comfortably accommodate these employees. Subsequently, these workers are not as productive as the third worker. Additional output of the fourth worker is 4 products, the fifth brings in 3 and the sixth employee only contributes an extra one product. Diminishing marginal product takes affect after the third worker.

Keep in mind that this law applies to production behavior of a firm in the short run, i.e. one or more factors of production are fixed (in most cases land or machinery are fixed inputs). In the long run it is possible to add machines and increase the size of an office, etc., so the reasons for diminishing returns are non-existent. It is possible, in the long run, that marginal production declines, but it is for different reasons.

Quite analogous to the Law of Diminishing Marginal Product is the Law of Diminishing Marginal Utility. To understand this law of economic behavior, it is first necessary to understand what is meant by 'marginal utility'. Marginal utility is the additional satisfaction one gets from consuming one more item of a good or service.

It can be observed by induction that for most things humans tend to get less additional satisfaction the more of them they have. Someone with no shoes very much appreciates getting a pair of shoes. Someone is happy to receive a second pair, though perhaps not quite as appreciative as with the first pair. And so on the satisfaction diminishes as the pairs of shoe accumulate. This is typical of consumption of most material things: the more you have of something the less the additional unit is worth to you. This is the Law of Diminishing Marginal Utility.

Proverbs 25:16 actually points out the Law of Diminishing Marginal Utility, using the example of honey. It reads: "Hast thou found honey? Eat so much as is sufficient for thee, lest thou be filled therewith, and vomit it." This phenomenon of the Law of Diminishing Marginal Utility explains why if you are shopping in a supermarket you only buy a limited quantity of goods. As the marginal utility of, for example, the third jar of honey declines, you may decide that the third jar is not worth your additional expense.

While the Law of Diminishing Marginal Utility is true of material things, scripture evinces that it is not true of spiritual things. The more we know God, the more we want to know and enjoy Him yet more.

This difference between material and spiritual things naturally brings us to the topic of our next chapter: the temporality of riches.

CHAPTER 11 : THE TEMPORALITY OF MATERIAL RICHES

Wealth is not static, nor is poverty. Over and again in history we see that those nations which were once wealthy are later in history brought low. An illustrious example is ancient Babylon. Consider these words of the prophet Isaiah:

"Come down, and sit in the dust, O virgin daughter of Babylon, sit on the ground: [there is] no throne, O daughter of the Chaldeans: for thou shalt no more be called tender and delicate…Sit thou silent, and get thee into darkness, O daughter of the Chaldeans: for thou shalt no more be called, The lady of kingdoms…thou saidst, I shall be a lady for ever: [so] that thou didst not lay these [things] to thy heart, neither didst remember the latter end of it. Therefore hear now this, [thou that art] given to pleasures, that dwellest carelessly, that sayest in thine heart, I [am], and none else beside me; I shall not sit [as] a widow, neither shall I know the loss of children: But these two [things] shall come to thee in a moment in one day, the loss of children, and widowhood: they shall come upon thee in their perfection for the multitude of thy sorceries, [and] for the great abundance of thine enchantments…Behold, they shall be as stubble; the fire shall burn them; they shall not deliver themselves from the power of the flame: [there shall] not [be] a coal to warm at, [nor] fire to sit before it. Thus shall they be unto thee with whom thou hast laboured, [even] thy merchants, from thy youth: they shall wander every one to his quarter; none shall save thee." (Isaiah 47:1-15)

This ancient Babylon foreshadowed a similar type 'Babylon' in its future, which was great yet brought low:

"The merchants of these things, which were made rich by her, shall stand afar off for the fear of her torment, weeping and wailing, And saying, Alas, alas, that great city, that was clothed in fine linen, and purple, and scarlet, and decked with gold, and precious stones, and pearls! For in one hour so great riches is come to nought. And every shipmaster, and all the company in ships, and sailors, and as many as trade by sea, stood afar off, And cried when they saw the smoke of her burning, saying, What [city is] like unto this great city! And they cast dust on their heads, and cried, weeping and wailing, saying, Alas, alas, that great city, wherein were made rich all that had ships in the sea by reason of her costliness! for in one hour is she made desolate."(Revelation 18:15-19)

So we see in these examples nations that were wealthy brought to poverty. Yet there are also examples of poor nations that have become wealthy. The barbaric Germanic nation which was impoverished during the mighty Roman Empire one day became great, even as the Roman state declined. It is clear in these and many other examples that nations rise and fall.

What's more, individuals and families as well experience the rise and fall in wealth. The industrialist Andrew Carnegie rose from rags to riches. Yet there are many cases of children that have squandered the wealth inherited from their parents.

The temporality of riches and its moral lesson is captured in these words of Jesus Christ in His Sermon on the Mount:

“Lay not up for yourselves treasures upon earth, where moth and rust doth corrupt, and where thieves break through and steal: But lay up for yourselves treasures in heaven, where neither moth nor rust doth corrupt, and where thieves do not break through nor steal: For where your treasure is, there will your heart be also.“ (Matthew 6:19-21)

CHAPTER 12 : THE EFFECT OF MARKET DOMINANCE ON ECONOMIC BEHAVIOR

A firm can be classified in one of four market types: perfect competition; monopolistic competition; oligopoly; and monopoly. These range from most competitive to least competitive, respectively. Perfect competition is a market structure in which there are many competing firms selling identical products or services. Monopolistic competition is a market structure in which there are many firms selling slightly differentiated products or services. Yet this market is quite different from the monopoly market, in which there is virtually no real competition. An oligopoly market contains a few firms who dominate the industry and one firm's actions is known to very much affect another's. A monopoly is an industry with only one seller. The product which the monopolistic firm sells typically has no close substitutes. Most monopolies in the United States are regulated by our governments (state and local).

Perfect competition and monopoly are the two extremes, and very few firms can be said to be either purely competitive or purely monopolistic. However, to better understand the more realistic industry types, it is important to learn about the two extremes first.

Characteristics of a purely competitive industry are:

1. There are many sellers and many buyers
2. It is relatively east to start a business in this industry
3. One firm's product is identical to a competitor's product (homogeneity)
4. Buyers of the product have complete knowledge of the price and the quality of the product

We find purely competitive industry in various sectors of agriculture, where many farmers produce the same crop, which then must compete in the open market.

A monopoly industry is defined as an industry with only one seller. Typically a monopoly firm is a large company which sells a product for which there are no close substitutes. Utility companies that sell electricity to customers within a certain region are examples of monopolies. There are alternative ways to generate electricity, but for all practical purposes, only one company provides electricity for a certain population. Such monopolies are called natural monopolies because a monopoly seems the most feasible way to deliver the good or service. Another example of a monopoly is the U.S. Postal Service, which has a monopoly in first class letters. Microsoft has held a near monopoly position in certain software, but this could quickly change with changing market conditions. The DeBeers company has for a long time nearly monopolized the diamond industry. Yet unlike government-protected monopolies, monopolies rooted in market conditions often over time can see their monopoly diminish.

Reasons why monopolies exist range from government restrictions to prevent competitors (Postal Service, utilities, etc.) from entering the market, to economies of scale allowing a firm to maintain a competitive position and economically discouraging competitors from entering. In the former case, the governmental controls the entry to and exit from the market through licenses, restrictions, and other government laws.

When possible, history has shown that it is best for the government not to encourage and protect monopolies. Competition tends to promote efficiency and effectiveness, whereas monopoly can tend to hamper them. This monopoly situation provides a disincentive to the monopolist to be efficient, keep prices low and provide high quality service.

Monopolies arising out of economies of scale are somewhat different from the ones just described. Whereas the government protected monopolies do not have to work hard to maintain their monopoly positions, the companies which have earned their monopoly status through efficient, low cost operations and by implementing constant innovations (like Microsoft), have to constantly remain on their toes to fend off competitors and to protect their share of the market. Ironically, these firms get most criticized by economists and politicians (and the small business competitors, of course) and are often subject to anti-trust investigations by the government. Frequently, these anti-trust cases are unwarranted and a waste of taxpayer and corporate money. The mere size of the near monopoly's operations makes people suspicious that the company obtained its position in an illegal and unethical way, whereas this is often not the case. Often large, successful companies have become that way because of hard work, outstanding service to their customers, and a perpetual emphasis on innovation and higher quality products.

Four characteristics of monopolistic competition are:

1. There are many sellers in this industry (lots of competition)
2. It's easy for firms to enter this industry and for existing firms to exit
3. Firms in this industry sell differentiated products
4. Firms in this industry frequently advertise (usually on a local level).

Characteristics 1 and 2 are the same as in perfect competition. Characteristic 3 means that firms in this industry sell products that are similar but slightly different. The difference may lie in the packaging of the product, the ingredients, the service associated with the product, the name of the product, or the difference may even be only perceived by consumers.

The advertising (characteristic 4) helps to emphasize these differences to consumers. These last two characteristics also mean that firms in this industry do not all have to charge the same price for the product. Since the products are slightly different they can change different prices. The demand curve is therefore downward sloping.

These are good examples of monopolistically competitive industries:

a. Retail clothing stores
b. Retail shoe stores
c. Gas stations
d. Fast food restaurants
e. Car dealers
f. Pizza restaurants

g. Financial consulting services
h. Legal services
i. Video rental stores

As you can judge from the characteristics, the model of monopolistic competition is more realistic than the purely competitive one. All firms, small or large, differentiate, if not through different ingredients, certainly in the way that they package, name, distribute, or service their products. Advertising is also very common; it benefits the firm because of the greater exposure to a larger market and often benefits the consumer by informing him of the choices available.

Monopolistically competitive firms earn "normal" accounting or so-called "zero" economic profits. Firms look at their cost of production and then mark up their prices to obtain a reasonable percentage profit. If any firm marks up its prices too much, another firm will take advantage of it by changing to a slightly lower price. This will cause the first firm to lose market share and the mark-up will be adjusted accordingly. This competitive process occurs in any industry, monopolistic competition, oligopoly or monopoly, as long as there is free, unrestricted (from government legislation) competition. It is rare therefore to see a firm in any unrestricted industry experience exorbitant, above normal economic profits for an extended, long term period of time.

Oligopoly industries are characterized by:

1. Few (two, three, four, …) sellers who control all or most sales
2. Barriers to entry (it is difficult to start a new company in an oligopoly industry)
3. Firms in this industry are interdependent (one firm's actions very much affect a rival firm's well being)
4. Advertising is prevalent (firms frequently advertise on a national scale).

Oligopoly firms are usually large relative to the market in which they operate. Consequently, if one oligopoly firm changes its product price or alters another part of its marketing strategy, it will significantly impact the rival firm(s).

For instance, if Pepsi lowers its prices to 50¢ per can, Coke will be affected. Coke most likely will lower its price, too. If this happens neither company will gain a competitive advantage.

These markets are good examples of oligopoly industries:

a. The automobile industry
b. The steel industry
c. The photographic equipment industry
d. The aircraft manufacturing industry
e. The beer (wholesale) industry
f. The cereal (breakfast) industry
g. Infant formula makers
h. The oil industry (OPEC)

i. The airline industry

When firms collude and behave in a monopoly like fashion they will be able to restrict output and charge a higher price. Each firm will see its profits increase in the short run as companies engage in price setting (fixing) and cooperate to keep out competitors.

Collusion and cartels are not legal in the United States. In contrast, legal cartels abroad are fairly common. The most famous example of an international cartel is OPEC (Oil Producing and Exporting Countries).

Collusion among producers and retailers may occur legally (outside the U.S.) or covertly. However, cartels frequently run into problems for the following reasons:

1. Cartel members' interests and goals may differ. This makes it very hard to reach an agreement between members. For instance, in the case of OPEC, Saudi Arabia, Iran, Iraq, Kuwait and other nearby countries have long fought (recently very literally) about how much to produce and what price to charge. The fierce disagreement between Iraq and Kuwait in July of 1990 triggered the war which broke out the following month. Another OPEC country, Venezuela, is interested in maintaining a high price and restricting output to preserve its smaller holdings of oil for a longer time.

2. Even if an agreement has been reached it is tempting for members to secretly cheat and supply more at the very high monopoly price in order to increase revenue. Of course if all countries cheat and increase supply the effect of a cartel is completely lost.

3. At the very high cartel price it becomes increasingly attractive for new producers to enter the market. In the oil market this has indeed occurred. After the price of a barrel of oil reached $34 in the late '70s, other countries found it profitable to drill and export oil. England, Mexico, Norway, the United States, and Russia entered the market and through their competition drove down the price of oil. During the 1980's and early '90s the average price of a barrel of oil has indeed come down and it has made OPEC's life a lot more difficult.

The above examples illustrate that, in the long run, given free and unrestricted competition, no firm, whether oligopolistic or monopolistic, can be expected to earn above normal profits. Competitive market forces prevail and ensure a fair price to consumers.

One characteristic of the modern era has been the rise of the large, publicly traded multinational corporation. We shall discuss this entity in our next chapter.

CHAPTER 13 : UNACCOUNTABILITY BEGETS IRRESPONSIBILITY

Businesses in America can take one of a variety of legal forms, with the following being among the more common:

- Sole proprietorship
- Partnership
- Corporation

A sole proprietorship is the simplest form of business organization to start and maintain. It is a business which legally has no separate existence from its owner. The owner receives the benefit of all the profits of the business. All debts of the business are debts of the owner. If the business were to get a judgment filed against it, it would be a problem for the owner. This form of business will have unlimited liability; therefore, if the business is sued, it is the proprietor's problem. And it is a "sole" proprietorship in the sense that the owner has no partners.

A partnership is a type of business entity in which partners share with each other the profits or losses of the business undertaking in which they have all invested. In a partnership, the partners are held financially liable for the business transactions of the partnership.

A corporation is a legal entity (distinct from a natural person) that often has similar rights in law to those of a *natural person.* As the term is generally used, a corporation is a commercial entity set up in accordance with a governmental framework, but various forms of non-commercial entities can also be corporations. The most salient features of incorporation include:

1. *Limited Liability*. Unlike in a partnership or sole proprietorship, owners of a corporation (generally called shareholders) hold no liability for the corporation's debts and obligations. As a result, their "limited" potential losses cannot exceed the amount which they contributed to the corporation as dues or paid for shares.
2. *Perpetual Lifetime*. The assets and structure of the corporation exist beyond the lifetime of any of its owners or agents. This allows for stability and accumulation of capital, which thus becomes available for investment in projects of a larger size and over a longer term than if the corporate assets remained subject to dissolution and distribution.

In order to better understand the corporation, it is helpful to understand its historical background:

* * *

"Forms of partnership that had unlimited and limited liability, called *societas* and *commenda* respectively, were rooted in Roman law. (Limited liability has an advantage over unlimited liability in that capital suppliers can only lose the amount of capital advanced.) However, the advent of the corporation generally is associated with the granting of a royal [English] charter to the Russia Company in 1557, giving to it exclusive trading privileges with Russia. This charter allowed it to constitute on a joint-stock basis with a functional management. But the novel feature of the Russia Company was its joint-stock with legal personality, which through the company seal enabled it to sue and to be sued. Exclusive trading charters had been granted previously to "regulated companies" as early as the thirteenth century. The first of these was called the Merchants of the Staple, organized to govern the wool-export industry, and the last, organized in 1505, was the Merchant Adventurers. Significantly, the regulated companies governed the actions of individual merchants and had no real legal personality.

The Russia Company innovation was copied in Holland with the establishment of the Dutch East India Company. In addition, Genoa chartered a slave-trading corporation (1580) and France chartered its Africa (1561), Coral (1600) and Canadian (1602) companies. The idea of the juristic person, or personality under the law, is attributable to Roman jurists, coming into common law, for example, by way of canon law. But through the vehicle of royal charters, the idea of legal personality enabled both ecclesiastic and lay institutions to hold and administer property in perpetuity.

Royal charters conferring legal personality continued to be granted to English companies, the most significant being English East India Company (1599). When receiving a new charter in 1654, this company won the right to perpetual existence, following the precedent set by the Dutch East India Company in 1623. Free transferability of East India Company shares soon followed, setting a precedent for future corporations.

The Mercantilist Corporation

Despite the success of the early corporation, public opinion regarding exclusive trading privileges soured under James I (1566–1625). The king was a spendthrift and had accumulated unprecedented debts. To raise additional income he regularly sold exclusive charters and renegotiated existing ones, creating a climate of investment uncertainty that undermined the long-term interests of the state. That investment uncertainty was the root cause of an economic crisis in the 1620s, intensifying political resentment against exclusive privileges. Although the attorney general, Sir Edward Coke (1552–1634), had earlier failed to restrict exclusive charters to those deemed in the public interest, Parliament was prompted to restrict royal prerogative. In 1624 it passed the Statute of Monopolies, which forbade the issuing of any further charters without its consent. Opposition to the business corporation persisted through both the Commonwealth and Restoration eras, resulting in a decline in trading companies involved in European and the Levant trade.

However, because of imperial rivalries, promotion of long-distance-trading corporations such as the East India and Hudson Bay Companies continued. Such companies were deemed essential to thwart foreign political and commercial ambitions. For example, France in 1664 chartered its own East India Company. In addition, monopoly corporations such as the East India Company were an important source of government income. For example, the need to raise additional income was an important reason behind the incorporation of the Bank of England in 1694. A notable feature of this period was the inclusion of the privilege of limited liability in company charters.

The reputation of the corporation received a further blow during the first quarter of the eighteenth century. War expenditure had led to unsustainable national debt levels, and schemes were developed to convert public debt into shares of companies, having as their primary asset the same government liabilities. The most infamous instances of these were the Mississippi Company in France (1718), and the South Sea Company in England (1720). The success of the debt conversions depended simultaneously on creditors receiving favorable terms and on government debt levels being greatly reduced. In both instances, company stock was overpromoted and stock prices soared, drawing in many thousands of investors. Eventually, rationality prevailed and investors began to doubt the promises of outlandish dividends. Consequently, stock prices fell precipitously. The Mississippi and South Sea episodes, both classic financial bubbles, further deepened suspicions regarding corporations, particularly in regard to the propensity to overpromote stocks.

Given this historical context, one can understand why the physiocrats in France and Adam Smith (1723–1790) in Britain expressed disapproval toward corporations.

Freedom of Incorporation

Negative opinion regarding corporations persisted through to the turn of the eighteenth century, although in England chartered companies made significant inroads in the insurance and transportation industries due to the need to raise large amounts of capital and to diversify risk. Moreover, quasi-corporations existed in shipping and tin mining. These sectors were under the special jurisdiction of admiralty and stannary courts. Both court systems operated under the principle of customary law, where legal principles adapted to suit business practice instead of conforming to a set of abstract legal principles, as was characteristic of both civil and natural law.

In contrast, under the common law, many corporations had to constitute more circuitously, given the difficulty of obtaining a charter. Through the trust device, promoters hoped to establish joint-stock firms having transferable shares and the ability to sue and be sued. However, this device could not be used to attain limited liability.

Beginning in the last quarter of the eighteenth century, such unincorporated companies appeared in the silk, wool, food, and beer industries, but were notably absent in the cotton and metal industries. In this period the number of companies increased five-fold, and many of them were unincorporated.

The growth in unincorporated businesses occurred despite their illegality under the Bubble Act (1720). This act had been dormant but was resurrected in a number of court rulings in the period 1808 to 1812. The legal threat to the unincorporated companies dissipated only when the act was repealed in 1825. Under a strict interpretation of the common law they were still illegal, but a business-friendly regime at both the chancery- and common-law courts had ruled that such companies were in the public interest. However, continued uncertainty prompted Parliament to enact company legislation that had as its main tenet freedom of incorporation. A chief concern focused on whether freedom to incorporate should be constrained to guard against overpromotion and stock speculation. However, lessons from incorporation experiences in the United States and France ultimately resulted in the English Companies Act of 1844 granting freedom of incorporation, and leaving investors to protect themselves. However, corporations were required to accurately report half-yearly earnings to stockholders.

In the nascent United States, despite the legacy of the common law and the Bubble Act, some state legislatures had begun to freely issue charters to companies operating in many commercial sectors including banking, insurance, and manufacturing. Also, as early as 1817, Connecticut and Massachusetts had moved towards chartering corporations with limited liability. Competition among the states soon encouraged their neighbors to follow suit. Significantly, the region experienced increased economic growth.

In France hostility toward the corporation had peaked during the Revolution, when it had been outlawed for a time, but under Napoleon, corporations were accepted as a necessary evil. Although opposition to corporations eased in successive regimes, there remained reluctance to grant charters. Paradoxically, a form of limited partnership known as a *commandite par actions* was allowed to mutate into an unofficial corporation. Firms could easily register as *commandites*, and in contrast to the chartered corporation they were free from stringent capitalization requirements. Formally, only owners not engaged in management could enjoy limited liability and the right to transfer shares. In practice, however, managers were able to circumvent such constraints. Significantly, *commandite* firms were associated with the most dynamic part of the French economy.

Freedom to incorporate with limited liability in Britain did not come until 1856. Free incorporation with limited liability soon followed in France, and by 1860 most U.S. states had adopted it. Finally, by the last quarter of the nineteenth century many continental European nations had followed suit, ushering in the modern corporate era." (from http://www.qub.ac.uk/mgt/efirg/Corporation.pdf)

* * *

As is evident from its history outlined above, corporate entities with limited liability are largely a modern phenomenon in the Christianized West. But once made widely available, the corporate entity has come to dominate commercial life. Almost all of the more prominent and influential commercial entities in the West and even in the world enjoy limited liability. Any commercial entity which does not seek such limited liability is at a competitive disadvantage, which explains the growth of the corporate form in Western commerce. Adding additional potency is the "perpetual lifetime" feature, giving it unbounded potential duration to accumulate wealth and power. (In theory, a corporation can have its charter revoked at any time, putting an end to its existence as a legal entity. However, in practice, dissolution only occurs for corporations that request it or fail to meet annual filing requirements.)

There are two types of corporation: privately held and publicly traded. The shares (representing ownership) in publicly traded corporations are bought and sold over exchanges (like the New York Stock Exchange), making it easy for corporate shareholders quickly to buy or sell their shares. Such ease of buying and selling of ownership interest is called liquidity. In contrast, shares of privately held corporations are not traded on such exchanges, making them for less liquid (i.e., readily converted into cash). Although there are large privately held corporations, the biggest corporations have tended to be publicly traded corporations with many shareholders.

Various arguments have been advanced in defense of corporations, and specifically their controversial limited liability feature. One argument is that it allows the raising of funds for riskier enterprises by removing risks and costs from the owners and shifting them onto creditors and to other members of society, thereby creating an externality. Another rationale sometimes offered for limited liability is that reducing the amount that an investor can lose reduces the time and effort required to determine whether a stock is risky, thus adding liquidity to the stock market - in contrast to the very illiquid market for partnership interests.

But the level of unaccountability afforded to corporate owners has tended to remove very important brakes against immorality. Unaccountability breeds irresponsibility and a culture where the quest for profits is the over-riding concern. There is nothing wrong with earning profits as a major goal of a business, for no business can long survive without profits. But financial profit should never be the over-riding goal of any person or institution. Rather, the over-riding goal of every man and every institution of man should be the glorification of God, as He has revealed in scripture. But in the corporate structure, especially of large publicly traded corporations, with so many varied owners and managers, the one common factor tends to be the making of profits, with little room left for the glorification of God as the preeminent mission of the business. There is less incentive for carefulness with respect to observance of moral principles, because owners are shielded from many of the risks associated with immorality. Edward, First Baron Thurow and Lord Chancellor of England (1731-1806) said of the corporate structure, “Did you ever expect a corporation to have a conscience, when it has no soul to be damned and no body to be kicked?”

Scripture teaches the principle that owners should be held fully accountable for what they own, as implied in such passages as Exodus 21:28-36:

“If an ox gore a man or a woman, that they die: then the ox shall be surely stoned, and his flesh shall not be eaten; but the owner of the ox [shall be] quit. But if the ox were wont to push with his horn in time past, and it hath been testified to his owner, and he hath not kept him in, but that he hath killed a man or a woman; the ox shall be stoned, and his owner also shall be put to death. If there be laid on him a sum of money, then he shall give for the ransom of his life whatsoever is laid upon him. Whether he have gored a son, or have gored a daughter, according to this judgment shall it be done unto him. If the ox shall push a manservant or a maidservant; he shall give unto their master thirty shekels of silver, and the ox shall be stoned. And if a man shall open a pit, or if a man shall dig a pit, and not cover it, and an ox or an ass fall therein; The owner of the pit shall make [it] good, [and] give money unto the owner of them; and the dead [beast] shall be his. And if one man's ox hurt another's, that he die; then they shall sell the live ox, and divide the money of it; and the dead [ox] also they shall divide. Or if it be known that the ox hath used to push in time past, and his owner hath not kept him in; he shall surely pay ox for ox; and the dead shall be his own."

According to these verses, moral propriety demands that the owner (in this case of an ox, but applicable to a whole host of cases besides [see I Corinthians for how broadly case law should be applied]) be held fully accountable for that which he owns. Hence, for example, if someone owns an ox that has a known history of being deadly, then the owner is responsible for making sure that animal is kept penned in. But if the owner fails to do his duty, then that owner should be held personally accountable, even to the point of death. Principles of equity thus, according to the Bible, demand that owners be so accountable for what they own. By releasing owners from this type of accountability via incorporation laws, the state is thwarting and circumventing Biblical principles of equity. This is surely scripturally unwarranted. Owners should not allowed a loophole out of the responsibility that Biblical justice demands.

More recently new legal structures for businesses have been introduced which expand yet further upon the concept of limited liability. One example is the limited liability company (LLC). An LLC is a hybrid between a partnership and a Corporation in that it combines certain tax advantages of a partnership with the limited liability accorded to corporate shareholders. There has quite predictably been a rush for partnerships to take on this or a similar form, that the owners might enjoy many of the same liability protections previously enjoyed by the corporation alone.

Scripture warns about partnership with the wicked, because God holds partner-owners fully accountable. Scripture warns: "be not unequally yoked" with the ungodly. One major ill effect of entering into partnership with the wicked is that one thereby takes on the liability incurred by an irresponsible partner. This consequence serves as a retardant to entering into such partnership with the wicked. Hence the wicked have a harder time creating larger businesses with multiple owners, and the godly are warned from entering into common ownership with them. But the corporate structure circumvents what would be the natural ill effects of partnership with the wicked. By conferring limited liability on the corporation, the corporate owner is not held fully responsible for the hiring of wicked managers or entering into partnership with wicked co-owners. This should not be allowed to occur.

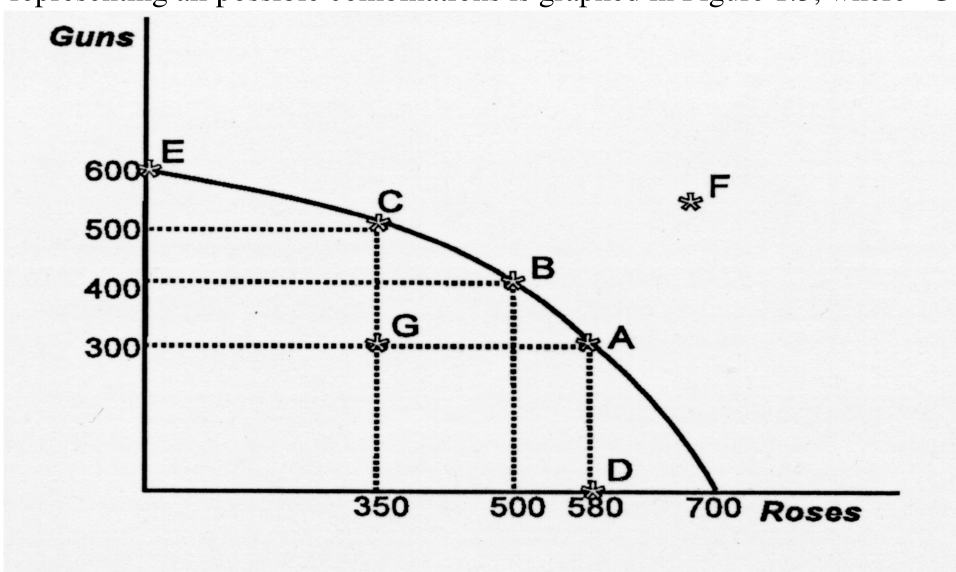
So such human creations by legal fiat protect owners from some of the responsibilities of ownership which the Bible says owners must have. This is contrary to scriptural principle. It is an invention of modern secular humanism, not rooted in divine ethic.

This economic principle of unaccountability breeding irresponsibility has ramifications beyond the issue of limited liability. Commercial entities should be held accountable for their activities. For instance, they should be held accountable if they break contracts, falsely advertise, promote immorality, pollute the environment, etc. If they are not held accountable for these sorts of activity, then given native human depravity, their unaccountability will necessarily breed irresponsibility in a host of respects. And a society so governed will reap the fruits of such irresponsibility. It is a recipe for long term societal disaster.

CHAPTER 14 : THE 'YOU CANNOT HAVE YOUR CAKE AND EAT IT TOO' PRINCIPLE

Jesus Christ had come to visit the home of Martha and Mary. During His stay there, Martha was absorbed with various chores, like serving the meal, while Mary spent a significant amount of time listening to Jesus teach. Mary and Martha chose to use the resources at their disposal in a different way. This account illustrates the decisions we must make given our limited resources, including the limited resource of time.

Limitation of resources and the outputs they can produce can be graphically represented in what is called a production possibilities curve. A production possibilities curve represents outcome or production combinations that can be produced with a given amount of resources. For instance, let's say that a very small country currently availing itself of 100 acres of land, 20 machines, and 50 workers, is able to produce maximally 500 machines and 350 units of consumer goods with these resources. However, it could also, with the same resources, produce 400 machines and 500 units of consumer goods. Or it could produce 300 machines and 580 unit of consumer goods. Numerous other combinations, producing fractions of capital goods or consumer goods, are possible. A curve representing all possible combinations is graphed in Figure 1.3, where "Guns"



represents capital goods, and "Roses" represents consumer goods. Any point on the curve (for example, 500 guns and 350 roses) illustrates an output combination that is produced with all available resources and as efficiently as possible. A point inside the curve, for example 300 guns and 350 roses, represents an output combination that is produced with less than the available resources (unemployment), or with all the resources, but with the resources used inefficiently (underemployment).

If an economy is operating at a point on the production possibilities curve, it means, by definition, that all resources are used and they are utilized as efficiently as possible. It is, in other words, the maximum that can be produced with the existing resources and technology. It follows then that output cannot increase if resources and technology remain constant. When economists discuss the concept of “scarcity,” they refer to the economic reality that resources are limited and that at any given point in time, output is limited. The production of one particular good or a category of goods (consumer goods) can increase, but only at the expense (opportunity cost) of decreasing production of another good or category of goods. (Opportunity cost is the cost of something in terms of an opportunity forgone (and the benefits that could be received from that opportunity), or the most valuable forgone alternative.)

Over time, economic growth occurs when the economy realizes greater production capabilities to produce capital and consumer goods. For this to happen, resources (land, labor or capital) must increase, technology must improve, morality must improve, or in other ways God must materially bless the country. In a graph, economic growth can be illustrated by an outward shift of the production possibilities curve.

Uneven economic growth among the nations has been seen throughout human history. For example, in the aftermath of the Protestant Reformation, Protestant nations such as Great Britain and the Netherlands experienced significant economic growth, whereas the Roman Catholic nations like Spain and Italy languished. During the “Cold War” era, the United States and other industrialized countries such as Hong Kong, Japan and Germany, experienced significant economic growth. The production possibilities curve shifted out considerably. On the other hand, during the same period, communist (or command economy) countries, such as the former Soviet Union, and Cuba, experienced significantly less economic growth, if any, than industrialized, more capitalist countries.

But such economic growth is typically a long run phenomenon, while a production possibilities curve shows the currently available output options, assuming that God does not supernaturally intervene. In the short run nations, like individuals, cannot have their cake and eat it too.

CHAPTER 15 : THE INEVITABILITY OF ECONOMIC INEQUALITY

There have been various ill-fated efforts over the course of human history to eradicate poverty and create a thoroughly equal society. Perhaps the most extreme and tragic of such efforts have been experiments in Marxism, whether in Cuba, the former Soviet Union, or China. But even the US has been deluded at times that it could achieve the eradication of poverty. One example was President Lyndon Johnson's War on Poverty, initiated with these words of President Johnson: "Because it is right, because it is wise, and because, for the first time in our history, it is possible to conquer poverty, I submit, for the consideration of the Congress and the country, the Economic Opportunity Act of 1964."

Those who have joined such ill-fated movements would have been wise instead to have heeded these words of the Lord Jesus Christ:

"For ye have the poor with you always, and whensoever ye will ye may do them good…" (Mark 14:7)

"For [the kingdom of heaven is] as a man traveling into a far country, [who] called his own servants, and delivered unto them his goods. And unto one he gave five talents, to another two, and to another one; to every man according to his several ability; and straightway took his journey." (Matthew 25:14-15)

The man traveling into a far country in the Matthew 25 parable represents God. God Himself has thus ordained inequality among humanity, giving some greater riches and gifts than others. Those societies which have tried to force feed economic equality have been dismal failures precisely because they are trying to overthrow the order established by God. It is as futile as trying to overthrow the law of gravity.

Scripture teaches lessons on how economic inequality should be addressed, and it is not by purporting to eradicate all poverty or creating a society where there is economic equality. But before we consider some of the relevant scriptural principles for addressing poverty, let's consider various modern American efforts to address it, and then compare these with scriptural principles.

The current degree of inequality in the US is depicted in the table below:

Percentage Distribution of Households, by Income

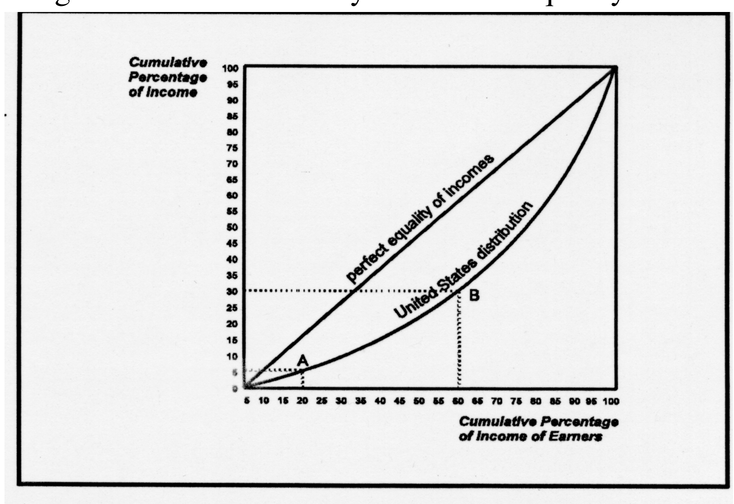
INCOME AMOUNT	**PERCENT OF ALL FAMILIES**	**PERCENT OF ALL INCOME RECEIVED (rounded to whole #'s)**
Under $17,000	20	4

$17,000 - $30,000	20	10
$30,000 - $45,000	20	15
$45,000 - $65,000	20	23
$65,000 - $110,000	15	28
$110,000 and over	5	20

➢ *Source: Department of Commerce*

Inequality has widened to its current day level, with the top quintile earning 48 percent of the total earnings and the bottom 20 percent receiving 4 percent. The long term trend has seen an increasing gap: in 1971 the top twenty percent earned 43.5 percent and in 1981 it was 44.4 percent. During the American colonial era, when the English-speaking colonies enjoyed established Protestantism, there was a significant degree of economic equality, though even then there were economic differences, as well as poverty.

A diagram illustrating the extent of a country's income inequality is drawn below:



➢ *The Lorenz Curve illustrates the extent of a country's income inequality. The United States distribution shows the Lorenz curve traveling through Point A at which 20% earn only about 4% of all income; and point B where 60% of income earners receive approximately 30%. The straight line indicates total equality.*

This so-called "Lorenz Curve" indicates that the further the curve bows outward, the greater the country's inequality.

The poverty cut off amount for a family of four, as determined by the US Social Security Administration, currently stands at around $16,000 (for a single person it is around $9,000). The US Social Security Administration uses as a guide the amount an average family spends on necessary food expenses and multiplies this by three to allow for expenditures on housing, clothing, insurance, entertainment, etc.

The US has undertaken various measures to promote economic equality and to reduce poverty. Some of these measures include:

1. Passage of a progressive personal income tax. A progressive tax is one in which you pay a higher tax rate (percentage) as your income goes up. A person with $80,000 in income might pay 33% in taxes. A person with only $8,000 might pay 15%

A proportional tax is one where both high and low income earners pay the same rate.

In a regressive tax the low income earner pays a higher rate than the higher income earner.

The following are examples of the various categories of taxes:

> **Progressive:** the federal and state individual income tax (not counting loopholes); the corporate income tax (ditto).
> **Proportional:** the social security tax, up to a certain level of income, but after that level it becomes regressive, since no tax is imposed
> **Regressive:** the state sales tax; keep in mind that regressiveness is based on income. 5% of a poor person's income may go to state taxes (assuming that a poor person consumes all of his/her income), while only 2 or 3% of a wealthy person's income is spent on taxes (because the rich person doesn't spend his/her entire income).

To illustrate how a progressive income tax works, let's take a look at this example. Suppose a person earns taxable income of $40,000 and faces a marginal tax of 28%. What is this person's average tax rate?

If, for example, the brackets are:

$0 – 5000	=0%
$5000 – 25,000	=15%
over $25,000	=28%

> Then he will pay $0 + $3000 (.15 x $20,000) + $4200 (.28 x $15,000) = $7200 in tax. As a percentage of his/her total income this is 18.0% (=average tax).

But someone with earnings less than $25,000 would have an average tax rate of less than 15%. So a person earning $40,000 would pay a higher % of income tax than a person earning less than $25,000. This is what makes the tax progressive.

2. Medicaid is medical assistance for families and individuals who are poor.

3. Unemployment compensation includes benefits to people who have lost their job. Employers bear the brunt of the tax for this fund. Benefits vary per state and individual (depending upon previous salary) but average around $225 per week and are taxable.

Average length of the duration of benefits is 26 weeks, but Congress sometimes passes bills allowing an extension of benefits for the unemployed.

4. The food stamp program provides coupons to needy families, which allows them to purchase grocery store items. The program costs the federal government roughly $17 billion per year.

5. AFDC (Aid to Families with Dependent Children) is what people most often refer to when they discuss welfare. It provides cash payments to families with children whose supporting parent (usually the father) has left the house. A certain poverty cut off amount is used by the government to determine who receives financial handouts and in-kind assistance. Many poor qualify for programs such as AFDC (Aid to Families with Dependent Children), as well as other programs such as housing subsidies, food stamps, Medicare or Medicaid, social security and disability benefits, school lunch vouchers, and child care assistance.

6. The earned income tax credit for low wage earners seeks to mitigate the disincentive to work built into some of the afore-mentioned welfare programs (like AFDC, housing subsidies, food stamps, medicaid, etc.). The idea of the earned income tax credit is as follows: above a certain income level one pays income taxes, but below a certain income level one "pays" negative taxes, i.e. receives a subsidy from the government. The greater the difference between someone's income and this level, the more the subsidy.

So that is the current manner by which the US government addresses poverty. Biblically speaking, is it right? To answer that question, it is helpful first of all to consider the causes of poverty.

The causes of poverty can be classified under two main categories: those which relate to personal sin and those which do not relate to personal sin. We have a good example of the latter in the person of Job. God providentially ordained that Job fall into poverty and affliction for a time, but not because of some special sin on Job's part. Of course, if Adam had never sinned, then there would never have been the sort of poverty and affliction that Job experienced. But Adam's original sin and its ill consequences should not be confused with personal sin. Some fall into poverty and affliction, like Job, not due to some egregious personal sin, but due to conditions that often arise in a fallen world, such as natural disasters (earthquakes, hurricanes, etc.), general economic downturns (like recessions or even depressions), and disease and death. When a wife loses her husband, this can often throw a family into poverty. We ought not to assume, like some of Job's "friends", that all poverty and affliction arises from personal sin. Nevertheless, some poverty does result from personal sin. When a person engages in sodomy that results in the disability of AIDS, which in turn leads to poverty, there is a very close relation between the personal sin and poverty. Similarly, when someone engages in idleness and drunkenness that leads to poverty, then there is a very close relation between the personal sin and poverty. And similarly, when a woman engages in adultery and has children out of wedlock, without a husband to help support the family, leading to an impoverished family, then there is a very close relation between the personal sin and poverty. And finally, when a man loses all his wealth to gambling, there is a very close relation between the personal sin and poverty.

Scripture teaches that the manner in which poverty is addressed should depend upon whether the cause of poverty relates to personal sin or does not relate to personal sin. Scripture teaches that personal sin leading to poverty should be punished and not rewarded, as exemplified in the following passages:

“For even when we were with you, this we commanded you, that if any would not work, neither should he eat.” (II Thessalonians 3:10)

“Judgments are prepared for scorners, and stripes for the back of fools.” (Proverbs 19:29)

“For the drunkard and the glutton shall come to poverty: and drowsiness shall clothe [a man] with rags.” (Proverbs 23:21)

“Slothfulness casteth into a deep sleep; and an idle soul shall suffer hunger.” (Proverbs 19:15)

“And the man that committeth adultery with [another] man's wife, [even he] that committeth adultery with his neighbour's wife, the adulterer and the adulteress shall surely be put to death.” (Leviticus 20:10)

“There shall be no whore of the daughters of Israel, nor a sodomite of the sons of Israel.” (Deuteronomy 23:17)

On the other hand, scripture teaches that government, church and civil laws should come to the aid of those whose poverty does not relate to personal sin, as exemplified in the following passages:

“And when ye reap the harvest of your land, thou shalt not wholly reap the corners of thy field, neither shalt thou gather the gleanings of thy harvest. And thou shalt not glean thy vineyard, neither shalt thou gather [every] grape of thy vineyard; thou shalt leave them for the poor and stranger: I [am] the LORD your God.” (Leviticus 19:9-10)

“At the end of three years thou shalt bring forth all the tithe of thine increase the same year, and shalt lay [it] up within thy gates: And the Levite, (because he hath no part nor inheritance with thee,) and the stranger, and the fatherless, and the widow, which [are] within thy gates, shall come, and shall eat and be satisfied; that the LORD thy God may bless thee in all the work of thine hand which thou doest.” (Deuteronomy 14:28-29)

“Let not a widow be taken into the number under threescore years old, having been the wife of one man, Well reported of for good works; if she have brought up children, if she have lodged strangers, if she have washed the saints' feet, if she have relieved the afflicted, if she have diligently followed every good work. But the younger widows refuse: for when they have begun to wax wanton against Christ, they will marry; Having damnation, because they have cast off their first faith. And withal they learn [to be] idle, wandering about from house to house; and not only idle, but tattlers also and busybodies, speaking things which they ought not. I will therefore that the younger women marry, bear children, guide the house, give none occasion to the adversary to speak reproachfully." (I Timothy 5:9-14)

Scripture also teaches that family members should help fellow family members in an impoverished state:

"If any man or woman that believeth have widows, let them relieve them, and let not the church be charged; that it may relieve them that are widows indeed." (I Timothy 5:16)

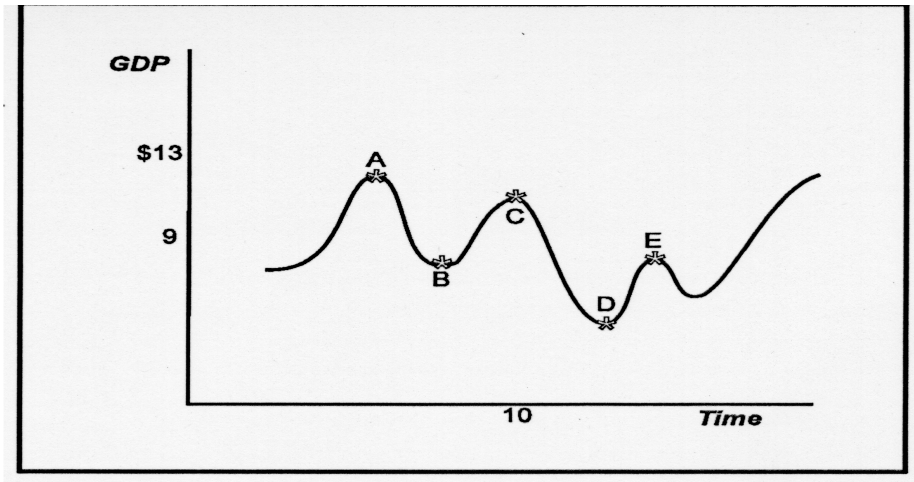
"And it came to pass at midnight, that the man was afraid, and turned himself: and, behold, a woman lay at his feet. And he said, Who [art] thou? And she answered, I [am] Ruth thine handmaid: spread therefore thy skirt over thine handmaid; for thou [art] a near kinsman. And he said, Blessed [be] thou of the LORD, my daughter: [for] thou hast shewed more kindness in the latter end than at the beginning, inasmuch as thou followedst not young men, whether poor or rich. And now, my daughter, fear not; I will do to thee all that thou requirest: for all the city of my people doth know that thou [art] a virtuous woman." (Ruth 3:8-11)

"But if any provide not for his own, and specially for those of his own house, he hath denied the faith, and is worse than an infidel." (I Timothy 5:8)

Current US and Western poverty programs are often inconsistent with scriptural principles. They generally do not distinguish between poverty which relates to personal sin and poverty which does not relate to personal sin. Quite often, sins which lead to poverty go unpunished, and sometimes sins which lead to poverty are even financially rewarded. The results of this unwise policy are predictable: poverty stemming from personal sin grows in occurrence. During America's colonial era, when personal sins like drunkenness, gambling, and adultery were more consistently suppressed by the government, the occurrence of these personal sins was less. Hence, the poverty arising from these sins was less, and there was generally more equality in the population. But as modern society has gotten ever more wicked, and government less willing to punish wickedness, we have seen increasing levels of inequality. It is inevitable that there will be poverty in this world, but the extent of poverty can be reduced by prudent policy which rewards good behavior and punishes bad behavior.

CHAPTER 16 : BUSINESS ACTIVITY AND BUSINESS FLUCTUATIONS

Business fluctuations are the ups and downs in economic activity (as measured by changes in Gross Domestic Product [GDP]). One full fluctuation, or business cycle, consists of one recession and one expansion. The chart below graphically represents these business fluctuations:



The economy experiences continuous increases and decreases in economic activity (as measured by Gross Domestic Product). From point A to B, GDP is falling, so we are experiencing a recession. From B to C, activity picks up and there is an expansion. From C to D, the recession appears more severe and we may speak of a depression. In order to understand business fluctuations and how the government measures them then, it is necessary to more thoroughly understand Gross Domestic Product.

Gross Domestic Product is defined as the value of the final goods and services produced in a country. To illustrate how GDP is computed, let's suppose that a country only produces two products: apples and oranges. Suppose apples are priced at $1 each and 5000 are produced each year; and suppose oranges sell at $2 each and 4000 are produced per year. What is this country's GDP? The value of the apples amounts to $5000 (5000 times $1) and the oranges are worth $8000 (4000 times $2) for a nominal GDP of $13,000. Note that if the prices of these products double, so that apples cost $2 and oranges cost $4, nominal GDP would rise to $26,000. It might appear that our economy improved one hundred percent: GDP is twice as high! However, you may have observed that this increase resulted from a rise in prices and not from an increase in production. For that reason we say that nominal GDP has doubled, but REAL GDP stayed the same. Real GDP, therefore, measures the actual amount of goods and services a country produces. So Real GDP (GDP in constant dollars) adjusts for price increases and only measures the changes in the volume of goods and services produced (a better indicator of economic activity).

Another kind of GDP you may come across is "per capita GDP." This is the average value of gross domestic product per individual of a country.

Government accountants include only final goods and services produced for purchase by consumers, businesses, and the government, as well as changes in business inventories, in the calculation of GDP. No intermediate goods are included. A Goodyear tire bought by Chrysler used in the production of its cars and trucks is an intermediate good, because the ultimate purchase of the tire is not as a tire, but as part of a final good, a car. The car can be purchased by consumers, in which case it is called consumption. It if is purchased by a business it is included as investment. And when the government buys it, it is called a government expenditure. The argument for not including intermediate goods is that if they were included, they would be counted more than one time in the calculation of GDP-once as part of the final good and once (or more than once depending upon how may stages of production there are) as the intermediate good. If intermediate goods were included, the Goodyear tire would be counted as it was produced by Goodyear for purchase by Chrysler, and also as it was produced as part of a car or truck by Chrysler for purchase by consumers, businesses or the government. In addition to excluding intermediate goods, the following goods are excluded as well in the government's calculation of GDP:

> any good produced in another year, even though it is sold in the current one. For instance, a used car produced and sold in 1990, but resold in 1996, is not included in 1996 GDP, because the actual production did not take place in 1996. The commission of the used car dealer, however, is included, because it is a productive service provided in 1996. Another example of a good which can be sold in one year but produced in a previous year is an inventory item. If Chrysler produces a car in 1995, but does not sell it until 1996, it is included in 1995 GDP and not 1996 GDP. Again, the Chrysler car dealer's commission is included in 1996 GDP.
>
> any good not directly representing production. Examples: financial transactions, such as the purchase of stocks and bonds; government expenditures on welfare and other non-productive transfer programs.
>
> goods which are difficult to measure or which government accountants choose not to measure: illegal transactions, household goods and services produced and provided by household members themselves (do-it-yourself activities, cleaning the home, painting the walls, etc.), and barter trade.

Gross Domestic Product then is the total value of all final goods and services produced in our country. These final goods and services are bought by four different groups: consumers, businesses, our state and local governments, and foreign countries. Therefore, GDP can be calculated by summing these four components: Consumption (C) + Investment (I) + Government Expenditures (G) + Net Exports.

Consumption includes expenses by individuals on food, clothing, dishwashers, education, banking services, etc. Investment means purchases by businesses of machines and equipment. It also includes inventory changes (some goods may have been produced, but not sold; remember that GDP measures production, not sales). (Investment in economics then does ***not*** mean the purchases of financial products, such as stocks and bonds, for purchases of financial products are merely transfers of ownership and do not necessarily represent production.) Government Expenditures are expenses by the government on items like roads, supplies, tanks, weapons, education, etc. It does not include welfare payments as this does not represent production. Net Exports stands for exports (products foreign countries buy from us) minus imports (goods we buy from other countries).

Gross Domestic Product can also be computed by adding everyone's measurable income. After all, if I spend $50 on a video game, part of that money goes to wages, some to paying the store owner's rent, a portion to the seller's profit, etc. Allowing for some indirect taxes (for example, sales tax) and depreciation, we will find that computing GDP from the income approach will give the same value as using the expenditure approach.

The income approach adds these six categories to arrive at GDP:

> wages and salaries (w) + interest (i) + rent (r) +
> corporate profits (p) + indirect business taxes (IBT) +
> capital consumption allowance (CCA = depreciation).

Gross Domestic Product, and most notably real Gross Domestic Product, is a measure of how economically active a country is. The higher real GDP, the more products we produce during that year. It measures, therefore, the total or aggregate supply of goods and services, consumer and capital goods, produced in a country during one year. The more we produce, the more goods we have for consumption and production.

Sometimes economists speak of Net Domestic Product as a truer measure of the health of an economy. Each year machinery, equipment and other capital goods wear out (depreciation) because of the constant use in production or sometimes because they become obsolete. Businesses who produce new capital goods supply businesses with new machinery to replace the worn out or obsolete machinery. If no new machinery or capital goods are produced, you can imagine that soon the country's capital stock would be depleted. If on the other hand, more capital goods are produced than became obsolete or worn out, then we would experience additions to our country's capital stock. Finally, if businesses produce exactly enough machinery to just replace the worn out or obsolete capital goods, then our capital stock would stay the same. Subsequently, only if we produce more than the depreciated or worn out machinery will we add to the capital stock. In order to measure these additions (or declines) to the capital stock, economists use Net Domestic Product. Net Domestic Product includes everything in Gross Domestic Product, but subtracts the value of depreciated capital goods.

So far we have discussed business fluctuations as measured by changes in Gross Domestic Product, but another important economic indicator is unemployment level. An extended period of rising unemployment is an indicator of recession. The unemployment rate is published based on a government survey of about 66,000 representative American households. This sample might not seem very large, but government statisticians have found the survey a reliable indicator of unemployment in the United States. According to the official definition, a person is considered unemployed if he is without a job and also actively looking for one. This means that a person who lost his job, but is not looking for another one, is not counted in the unemployment statistics. So called "discouraged persons" (people who don't believe there is a job for them) often fall in this category.

Some economists have questioned the accuracy of the unemployment rate which the government publicizes. They argue that hidden unemployment exists when someone is out of work, wants a job, but has given up looking because he has become discouraged. This person is not counted as unemployed. Furthermore, underemployment exists when a person accepts a job he does not really want or is overqualified for. These workers are counted as fully employed. On the other hand, many people report to be unemployed, but work in the "underground" economy.

Four commonly distinguished forms of unemployment are:

1. **Frictional unemployment**: People who are in between jobs or students who just got out of school and are looking for a job.
2. **Structural unemployment**: People who are laid off because of technology advances or other structural changes in production. Many typists are laid off because of greater computer capabilities. American steel, auto and electronics workers have become structurally unemployed due to foreign competition and American companies locating abroad.
3. **Cyclical unemployment**: People who are laid off temporarily due to a decline in the demand for their product. During recessions fewer cars are bought causing automobile workers to be laid off until demand picks back up.
4. **Seasonal unemployment**: People who are out of work during the off season: ice cream vendors during the winter; school teachers during the summer (if they are looking for a job during this time; see the definitions in the next objective).

Economists define full employment as zero cyclical and seasonal unemployment. In that case only frictional and structural unemployment exist. The latter are considered unavoidable by many economists, because people are always expected (and encouraged in some cases) to change and be in between jobs (frictional unemployment) and changing technology (structural unemployment) forces additional lay-offs. Full unemployment is estimated by many economists to be around 5%. In any case, cyclical unemployment is the primary type of unemployment that rises and falls as a consequence of business fluctuations.

Many explanations have been given as to why these business fluctuations occur and whether they are a natural phenomenon or whether they can be prevented. John Maynard Keynes, an influential twentieth century economist, argued that during good economic times, businesses have a tendency to overproduce. This overproduction stimulates the economy because it creates jobs and higher earnings. However, consumers soon realize that they have over purchased or may be saturated with some products. Consequently, they lower their consumption and cause businesses to be stuck with unsold products. Faced with increasing inventories, businesses then cut back on production, lay off workers or lower salaries of employed workers. As the government observes this downturn in the economy, it attempts to counter this by "stimulating" the economy. Since it interprets the cause of the downturn to be a cut back in consumption, it increases consumption by raising government expenditures on social programs, social security, and by creating jobs, even inefficient ones, to ensure people of higher earnings. On the flip side, the common Keynesian belief is that an economy with 5% or less unemployment turns inflationary and should be slowed down. This systematic perspective on economics is called Keynesian economics.

So called classical and neo-classical economists disagree with this Keynesian interpretation and approach. They don't believe that recessions are caused by overproduction and a lack of consumer demand. They believe that a healthy rate of production translates into higher real earnings and more purchasing power for workers and entrepreneurs. If ever there is a surplus, the market system corrects this by allowing wages, prices and interest rates to fall. Government intervention is unnecessary. More strongly yet, government "stimulation," according to the classical economists, is harmful to the economy in the long run. Since the government took control of the banking system in 1913 (establishment of the Federal Reserve System), it has had a history of increasing the country's money supply considerably almost each year to date. An increase in the money supply equates to rising prices (inflation) and is harmful to the economy. The real cause of recessions and depressions is inflation, according to classical and neo-classical economics, created by the Fed in the first place, threatening to heat up beyond control, followed by the Federal Reserve contracting the money supply (in an attempt to lower inflation). This raises interest rates and lowers the demand for goods and services. Businesses are also harmed by inflation, because they are faced with economic uncertainty regarding the price level, and furthermore, find themselves paying higher taxes. Classical and neo-classical economists argue that government regulations, such as safety requirements, product restrictions, pollution control measures, are often unnecessary and too costly, contributing to increased business expenses and causing lay-offs. Minimum wage laws and other labor laws are also blamed, because they raise costs and lead to inefficiencies. And anti-trust laws also come under fire of classical and neo-classical economists. So, not surprisingly, the solution which classical and neo-classical economists give to solving or preventing recessions is to minimize government interference and encourage a healthy business climate by way of eliminating unnecessary regulations and taxes. Classical and neo-classical economists also are typically less concerned about unemployment going below the theoretical full employment level. They dismiss the common Keynesian belief that an economy with 5% or less unemployment turns inflationary and should be slowed down. They argue that the only cause of inflation (a long term phenomenon) is a steady increase in the nation's money supply. So they stress the importance of holding the money supply constant (or at least to a slow rate of growth) and letting natural market forces address employment issues.

Where does scripture come down in this debate between Keynesian versus classical and neo-classical conceptions concerning business fluctuations? Keynesians blame unfettered private enterprise and classical/neo-classical economists blame government for business fluctuations- who would God's word blame? It would seem business fluctuations are at least to a large extent (though perhaps not entirely) rooted in human weakness and sin. Humans tend to get covetous and borrow and spend more than they can afford, leading to temporary over-production to meet the demand. Humans also tend to want government to do more than it reasonably can or should do (such as spend in government programs more than can be paid for in taxation), again because of covetousness and sinful discontent. As we saw in a previous chapter, it is sin and ignorance that have led man to create fiat currencies, whereby it is possible to inflate the money supply. Since human sin and weakness inevitably plague both private enterprise and government in a fallen world, it would seem reasonable to conclude from scripture that business fluctuations arise to a great extent by human sin manifested in government action and private enterprise. So to address the problem of business fluctuation requires addressing sin in both government and private enterprise. And the only way to address sin is through our Lord and Savior Jesus Christ, who came to save His people from their sins. A people must seek in Him the forgiveness of their sins and the grace of His Spirit to govern themselves and their society in accordance with the principles of His word. Though obedience will never be perfect til Christ returns, yet the sin which precipitates business fluctuations to a great degree can through Christ be reduced and business fluctuation lessened. It takes the grace of Christ to stifle human sin that engenders excessive business fluctuations.

CHAPTER 17 : FRACTIONAL RESERVE BANKING AND THE MONEY SUPPLY

In the previous chapter we considered how business fluctuations arise. In this chapter we consider one mechanism in modern market economies which tends to exacerbate business fluctuations: fractional reserve banking. The modern fractional reserve banking structure can lead to changes in the money supply, which in turn leads to business fluctuations, as we explained in the previous chapter. The following hypothetical example, excerpted from http://www.howardcc.edu/social_science/macrobk.htm , helpfully illustrates how money supply can change in this system:

* * *

"A bank's balance sheet includes entries for assets, liabilities and net worth. Assets are investments and properties which the bank owns and liabilities are funds which the bank owes. For our purposes, it is sufficient to consider a balance sheet, or T-account, which includes only these assets: total reserves (divided into required and excess reserves) and loans. On the liability side we will only look at demand and other checkable deposits (funds deposited by the bank's clients into their transaction accounts).

The following balance sheet shows a bank with $4000 of deposits, $1000 in total reserves and $3000 in loans.

Assets		***Liabilities***	
Total Reserves	$1000	Demand Deposits	$4000
Loans	$3000		

…In the example above, the bank received $4000 from one or more customers and loaned $3000 of it out. The other $1000 the bank keeps on hand in case the customer(s) want(s) a portion of his/her money back within a short period of time. By law, a bank is required to keep at least a fraction of customers' deposits on hand in the form of cash (total reserves). This concept is called "fractional reserve banking."

You might wonder what would happen if this bank's customers decided to not just withdraw a portion of their deposits the next day, but all of it!

This would indeed cause the bank to be in big trouble. After all, it has loaned out $3000 of the deposited money. Such a "run" on the bank would force the bank to go bankrupt, unless it receives help. Our system of fractional reserve banking is built on the assumption that on any given day at most ten or fifteen percent of all deposits is withdrawn by customers. Experience does back this up, except in cases where the customers lose trust in the bank and withdraw all their deposited money at once.

Required and Excess Reserves
A bank's total reserves (cash) can be broken down into two kinds: A. required reserves, and, B. excess reserves. Required reserves are the funds which the bank legally must (is

required) to keep. Excess reserves is cash which it has as extra and could choose to loan out. In the above example, the bank has $1000 in total reserves.

Let's say that the government (the federal reserve) requires banks to keep 20% of their deposited money. Demand deposits were $4000, so the bank is required to keep 20% of that, or $800. How much does it have in excess reserves in this case?

Answer: $200. ($1000 - $800). In other words the bank still has maximally $200 which it can loan out…

Money Creation
An initial deposit of $1000 enables a bank to loan out $800 (assuming a required reserve ratio of 20%). This $800 will be spent and deposited into bank B, which in turn can loan out 80%, or $640. Analogously, bank C can loan out 80% of $640, or $512, etc., etc. The initial $1000 has created demand deposits of an additional $800 plus $640 plus $512, etc. The total increase in the money supply amounts to $5000.- in the above example. Mathematically, the increase in the money supply can be calculated as follows:

Change in M = deposit multiplier x the initial deposit, where the deposit multiplier (dm) equals: dm = 1/required reserve ratio

In the above example: $5000 = 5 x $1000.

The above process can be illustrated through the following T-charts:

Bank A receives a (new) deposit of $1000:

BANK A

Assets		***Liabilities***	
Total Reserves	$1000	Demand Deposits	$1000
Loans	$0		

Note that of this $1000 in total reserves, the bank is required to keep 20% or $200 and it can loan out the other 80% or $800. Let's say the bank decides to do so the next day. It shows the following balance sheet:

BANK A

Assets		***Liabilities***	
Total Reserves	$200	Demand Deposits	$1000
Loans	$800		

The $800 loan is taken out by business Z, which spends the money … [The receiving party deposits the money in Bank B]:

BANK B			
Assets		***Liabilities***	
Total Reserves	$800	Demand Deposits	$800
Loans	$0		

And bank B's next day balance sheet will be as follows:

BANK B			
Assets		***Liabilities***	
Total Reserves	$160	Demand Deposits	$800
Loans	$640		

The $640 in loan money is accepted by business XYZ, which spends it on a trip to California through airline KLM. Airline KLM then deposits the $640 in its account with bank C, etc.

As you can see, the total accumulation of money in the form of demand deposits (checking accounts), an important component of M-1, equals $1000 + $800 + $640 + $512 + … = $5000.

The multiplier in the above example, 1/required reserves, equals 1/.20, or 5. This number, as we concluded above, leads to an expansion of the nation's money supply of five times the change in the initial change in reserves. The factor 5 assumes that banks' reserve requirements are 20%. In reality, banks' required reserves are not this high. For many banks the percentage equals 10 for most transaction accounts, but does vary depending on the nature of the account and the size of the bank. Some required reserves ratios are as low as 3%.

The lower (20%) reserve requirement means that the multiplier is larger. However, banks do not always loan out all that they can. This in turn lowers the value of the multiplier. Additionally, the public does not always deposit all the money it receives (it holds currency) and this lowers the real world multiplier further."

* * *

So the lower the reserve requirement, the more that the money supply can expand with a fractional reserve banking structure, causing greater money supply variability, and hence greater business fluctuation. Furthermore, with a fractional reserve banking structure, during periods when people get nervous whether the money they have deposited in the banks is safe (knowing that much of their money has been loaned out by the bank, sometimes to risky ventures), there can be runs on the bank. During such runs, most depositors seek to take their money out of the bank. Since the bank cannot pay all depositors, it – as well as many banks in a similar situation – go under. To prevent this, the US government has created a system whereby the government stands behind the banks, promising to pay depositors up to a certain level. By this means, such runs on the bank are averted. But this means that the US government has effectively become the surety for banks. As God's word says about being a surety, " " (Proverbs). This system can tend to assist banks that take inappropriate risks, as well as promoting more fluctuations in the money supply.

The question we should then be asking is this: should the government allow fractional reserve banking or should it instead require banks to maintain a 100% reserve? If it required a 100% reserve of money deposited, some likely consequences would be:

- The US government would no longer have to stand as a surety for the nation's banks, and so risk would be decreased.
- There would be less fluctuation in the money supply, because money creation through fractional reserve banking would be nonexistent.
- There would be less loaning (and borrowing) of money, because the supply of loan money would be less.
- Depositors would likely have to pay higher fees to store money at banks, because banks would have to charge higher fees, not receiving income from loans obtained through excess reserves.

Christians should seriously consider whether the system of fractional reserve banking is wise.

CHAPTER 18 : THE TRUE STANDARD OF LIVING

One fallacy of modern secularist economics is looking at the standard of living in merely material terms, with little consideration of spiritual aspects. There is often the tendency to judge the standard of living of people according to their real per capita GDP (i.e., their inflation-adjusted GDP per person). Some economists measure standard of living by real per capita GDP, plus other factors, but typically these other factors are merely additional material ones.

One example of an additional material factor is environmental quality. Higher real GDP does not necessarily mean higher environmental quality. If increased production is accompanied by considerably greater amounts of pollution, then environmental quality suffers at the expense of real GDP. Environmentalists today point at this relationship and claim that increased pollution and the dangers from the depletion of natural resources has lowered people's standard of living. Many environmentalists therefore argue in favor of halting economic growth to preserve the environment, natural resources, wildlife, etc. However, history does not necessarily validate environmentalist claims. Economic progress through technological advances has often found solutions to environmental problems. It has often been the case that economic growth has led to a more economically prosperous country and a cleaner environment. Nevertheless, there certainly are cases when economic growth has tended to come at the expense of environmental quality.

Another instance of an additional material factor is leisure time. If people decide to work an additional ten hours per week, production and the GDP may increase. However, the increased GDP comes at the expense of leisure time in this example. So there are at least some instances when there is inverse relation between real GDP and leisure time.

Modern secularist economics then has tended to measure standard of living by such material factors as real per capita GDP, environmental quality, etc., but scripture disabuses us of merely material conceptions of standard of living in these words:

"Better [is] a dry morsel, and quietness therewith, than an house full of sacrifices [with] strife." (Proverbs 17:1)

"But seek ye first the kingdom of God, and his righteousness; and all these things shall be added unto you." (Matthew 6:33)

In evaluating economies and economic systems with respect to the standard of living they produce, we ought to evaluate from a preeminently spiritual perspective, with material factors relegated to secondary status. A high standard of living is foundationally one where the people are in true Biblical peace with God and with men, having been pardoned through faith in Jesus Christ, and submitting to His moral law summarized in the Ten Commandments in grateful devotion.

CHAPTER 19 : THE GOVERNMENT'S ROLE IN THE ECONOMY

There is a spectrum of possibility with respect to the government's role in the economy, ranging from pure laissez faire capitalism (in which government plays only a minor role) to pure Marxism (in which almost everything is government owned and controlled). But most nations of the world have a mixed economy, in which both government and private enterprise play important roles.

In the Marxist model, government dictates production levels, prices, distribution of goods and services, etc., and all private property is abolished. Such economic systems are known as command economies because government controls (or commands) all aspects of economic activity.

Marxism is highly critical of capitalism, arguing that a capitalist society is divided into two powerful social classes:

- the working class or proletariat: "those individuals who sell their labor and do not own the means of production" whom he believed were responsible for creating the wealth of a society (buildings, bridges and furniture, for example, are physically built by members of this class
- the bourgeoisie : those who "own the means of production" and exploit the proletariat

Marxism (also known as communism) advocates a social form where the capitalist system would be ended, by popular revolution if necessary, and the working classes would be the sole beneficiary of the "fruits of their labor".

Most forms of socialism are not as radical as Marxism. Socialism is an ideology of a social and economic system where the means of production are collectively owned and administered by all of society via the government. Amongst other things, this is intended to produce a more evenly spread distribution of wealth. But less radical forms of socialism than Marxism allow some ownership of private property by individuals. Also, many advocates of socialism reject the Marxist use of revolution as a means to usher in the ideal socialist state. Many socialists instead advocate the use of democratic political processes as the means to usher in the ideal socialist state.

In mixed economies, such as found in most modern Western nations, there is a mixture of socialist and capitalist elements.

Pure capitalism is the socio-economic system in which the means of production are overwhelmingly privately owned and operated for profit, decisions regarding investment of capital are made privately, and where production, distribution, and the prices of goods, services, and labor are affected by the forces of supply and demand. Capitalist economies are also known as free market economies, because the allocation of resources is determined only by the supply and the demand for them, free of government interference.

The US has a mixed economy leaning towards the capitalist end of the spectrum. Market pricing generally is the mechanism by which national resources are allocated in

America, though government is not absent from allocation. At its founding as a nation, the US was closer to the pure capitalist model, but especially in the twentieth century the role of government in the economy grew. The US government utilizes both fiscal and monetary policy to exercise significant influence over the national economy.

Fiscal policy is the central government's attempt to change economic activity by increasing or decreasing government expenditures, for example on highways, defense, education, public works projects, and social programs, or by increasing or decreasing taxes on individuals or corporations. The following are approximate amounts of federal (not state and local) government expenditures towards the end of the twentieth century:

1.	Social Security	$340 b.
2.	Medicare	$150 b.
3.	National Defense	$270 b.
4.	Income Security (AFDC, etc.)	$220 b.
5.	Interest on the National Debt	$230 b.
6.	Health	$120 b.
7.	Education and Social Services	$50 b.
8.	Other	$230 b.

Social security and medicare expenses are listed separately above, but are combined in some tables, because the tax (FICA) paid by income earners for these two expenses is taken out as one "chunk" (approximately 7.5% paid by the employee and an additional 7.5% by the employer). Medicare is medical assistance for people over 65.
Social Security is a mandatory retirement program in which all United States workers participate. Of a salaried employee's gross pay, 7.65% goes to Uncle Sam and the employer contributes a matching amount as well. A cap of approximately $65,000, beyond which no social security, or "FICA" contributions are paid, makes the tax regressive. About one and one-half percent of this contribution goes to paying for Medicare expenditures. At around age 65 (and older in the near future) a person is eligible for social security income. Benefits depend on how many years one has worked and the amount of the total contribution. A person who chooses to work between the ages of 65 and 70 will still receive benefits, but receive less if (s)he earns more than approximately $12,000 per year. This provides a disincentive for the recipient to earn additional income. In addition to retirement payments, the program pays funds to other groups in our society, such as spouses of deceased workers, dependent parents, children whose parents have died and disabled wage earners and their dependents.

Income security includes AFDC (Aid to Families with Dependent Children), unemployment compensation, housing subsidies, food stamps, school lunches, etc.

These expenses are in addition to the considerable amount of money states and local governments incur on similar welfare programs.

The central government pays for its expenditures primarily through taxes. The table below shows some of the main sources of tax revenue for the federal government towards the end of the twentieth century:

1.	Individual (personal) income tax	43%
2.	Payroll (like Social Security, Medicare) taxes	39%
3.	Corporate income tax	10%
4.	Excise taxes (on alcohol, cigarettes, etc.)	5%
5.	Other (estate, import, etc.)	3%

Total state and local government expenses for all states and counties and local municipalities in the United States will approach $1200 billion towards the end of the twentieth century. The fifty states and their local subdivisions will divide their funds amongst:

1.	Education	35%
2.	Welfare Programs	20%
3.	Roads, Highways, Infrastructure	15%
4.	Other, (incl. police, fire protection, etc.)	30%

Education is the single largest expenditure by state and local governments. The expense is shared by both forms of governments, with the counties expending the majority of their funds on county public schools and the states sharing the burden of financing post-secondary state education.

Public welfare expenditures include unemployment compensation payments, food stamps, school lunch subsidies, and other income maintenance programs.

The “other” category includes many items of expenditures such as public safety, legal protection, human services and general government.

Most state governments in our country receive the bulk of their funds through (in order of importance):

1. Sales taxes
2. Individual Income taxes
3. Corporate Income taxes

The majority of the counties in the United States receive their revenue from (in order of importance):

1. Property taxes
2. Individual Income taxes

The budget deficit is the yearly amount which the government overspends relative to what it receives in taxes. The budget deficit is often confused with the national debt. The debt represents the accumulation of all past deficits which the country has incurred. Occasionally the country does run a budget surplus (more tax revenue than government spending), but deficits are much more prevalent.

When a government runs a deficit, *i.e.*, it spends more money than it receives in the form of taxes, it must come up with the difference somehow (unless it declares bankruptcy). From our discussion on inflation, we already learned that the government, through the Federal Reserve System, monetizes part of the debt by simply printing the money. This allows the government to have more funds available for spending on programs and also, as we have seen, leads to inflation.

Another way that the government can acquire funds to finance the deficit is by borrowing money from the public (issuing bonds). This is not inflationary, but decreases the availability of funds to the private sector and leads to a drop in private sector spending (crowding out).

Monetary policy is the central government's attempt to change economic activity by controlling how much money circulates in the economy and what that money is worth. Monetary policy is set and implemented by the Federal Reserve System in the US.

Having considered the role of government in economies in general, and in the US in particular, we should now ask what God's word says on the issue of the role of government in the economy. Scripture definitely teaches the propriety of private property. The Belgic Confession rightly avers: "And on this matter we denounce the Anabaptists, other anarchists, and in general all those who want to reject the authorities and civil officers and to subvert justice by introducing common ownership of goods and corrupting the moral order that God has established among human beings." We do not see the nation of Israel being told to appropriate all private property of its citizens. Yet scripture also teaches that government has an important role to play in the eonomies of nations. For instance, civil magistrates like Nehemiah are praised for suppressing commerce on the Sabbath. And the law concerning safe construction of roofs (Deuteronomy 22:8) is representative of laws that should be passed by civil governments to protect the safety and welfare of people. So scripture commends a role for government that avoids some of the extremes that have been tried by men in various situations, and that is informed by God's moral law.

CHAPTER 20 : AN HISTORICAL PERSPECTIVE

Before closing this course in economics, it is important that students have an overview of the history of economic thought. Prevailing economic views have changed over time, and it is helpful to understand how they have changed in relation to broader cultural trends.

Economic thought may be roughly divided into three phases:

- Pre-modern,
- Early modern (the French physiocrats of the 18th century), and
- Modern (since Adam Smith in the late 18th century).

The Enlightenment movement separates the pre-modern era from the modern era. Before the Enlightenment, especially in the West, humanity looked upon divine revelation as the foundation for knowledge. Of course, there were differences of view regarding what was the true divine revelation. For Protestants, it was the Bible alone; for Roman Catholics, it was the Bible plus church traditions plus Papal pronouncements; and for Muslims it was the Koran. But, generally speaking, people turned to religion to understand how commerce should be conducted. This was true of the Muslim world as well as of Christendom, plus many other societies. Ancient, pre-Christian Greece – with its philosophical schools – was more the exception than the rule. Greece's philosophical speculations regarding economics, politics, etc. anticipated the modern era. But in the pre-modern era, scholarship – including economic thought – tended to be religiously based and derived, and most scholars came from within clerical ranks.

In the pre-modern era, economic material wealth was generally measured by a nation's store of gold and silver, as well as other resources like land. For example, Spain had become the wealthiest nation in the world due to its acquisitions of gold and silver from its New World colonies, as well as its control of a vast new territory, following Columbus' voyages of discovery. But by the 1600s, Roman Catholic Spain had largely dissipated its wealth, while Protestant England and the Netherlands were the ascendant economic powers. The Protestant nations more consistently applied scriptural principles than the Roman Catholic, Muslim, and other nations, and God blessed them for it.

Since the economic goal pursued by most nations during the period, in simply material terms, was the accumulation of wealth as measured by precious metals (as well as land and other resources), and since international commerce had burgeoned, most nations adopted a mercantilist approach. Mercantilism is the economic system based on the premise that national wealth and power were best served by increasing exports and collecting precious metals in return. Mercantilism persisted as the dominant economic perspective of the European nations through the 18th century.

The Enlightenment of the 17th and 18th centuries revolutionized economic thought, along with thought in many other disciplines. This intellectual and cultural movement emphasized human reason over religion. Enlightenment philosophers argued that mankind could come to true systematic knowledge of the world apart from religion. It denied foundational Biblical truths like the total depravity of man in his fallen condition.

In terms of economics, the French Physiocrats were among the first to consider economics from an Enlightenment perspective, and the most influential physiocrat was Francois Quesnay. In 1758 Quesnay published the *Tableau économique* (Economic Table), which provided the foundations of the ideas of the Physiocrats. Their ideas and background, summarized at http://www.wsu.edu:8080/~dee/GLOSSARY/PHYSIOC.HTM, were as follows:

* * *

"European economics was invented by a group of French Enlightenment philosophers who called themselves the Physiocrats (which means "rule by Nature"). The Physiocrats took Issac Newton's idea that the universe was mechanistic and applied this mechanistic world view to the social production and distribution of goods and services. They examined the phenomenon of mercantile economics—mercantilism is the distribution of goods with the calculated goal of achieving profit—and argued that the distribution of goods operated under the same mechanistic and natural laws that the rest of the universe operated under. Enlightenment thinkers had been busy applying mechanistic thought to other areas of social organization, so it seemed quite natural to apply these principles to the economy.

The laws which the Physiocrats discovered operating in the economy were the following: a.) the natural tendency of mercantilism is to produce wealth, so that mercantilism left to its own devices would increase the wealth of a nation; b.) the natural tendency of merchants is to serve their self-interest, but in pursuing their self-interest everyone benefits from the excess wealth they create; c.) mercantilism naturally results in increasing the productivity of labor. Government interference in mercantilism—through taxes, regulations, price controls—hinders the activities of merchants and so prevents these natural laws of economics to take place; none of the benefits—increased wealth, increased productivity—will be realized by regulated mercantilism. The Physiocrats argued, then, that government leave the economy alone and allow individuals within the economy to do as they please in attempting to realize their own selfish interests; this doctrine they called *laissez faire* , or "let them do."

All of these ideas are firmly rooted in Enlightenment cultural ideas. The notion that the purpose of the economy is to grow, that is, to increase in wealth, is firmly rooted in the idea of progress, that human intervention in history is directed towards steady and unlimited improvement in the human condition. The idea of *laissez faire* derives from Enlightenment notions that society is composed of selfish and competing individuals who, in meeting their own self-interest, improve the world around them; it also depends heavily on the Enlightenment development of the idea of freedom and the individual, that is, that since individuals are separate and distinct, they should be allowed some level of autonomy in directing their lives."

* * *

Despite this pivotal role of the French Physiocrats as well as others (like the Spanish Scholastics), thoroughly modern economic thought is generally considered to have begun with Adam Smith's *The Wealth of Nations*, published in 1776. The central idea promoted by Smith in the book was that the competition between various suppliers and buyers would produce the best possible distribution of goods and services, because it would encourage individuals to specialize and improve their capital, so as to produce more value with the same labor. Smith's thesis rests on the belief that large systems can be self-regulating by the activity of their parts, without specific direction. Smith's formulation is called the "invisible hand" and is still the centerpiece of modern market economics, and capitalism in particular. One of the main points of *The Wealth of Nations* is that the free market, while appearing chaotic and unrestrained, is actually guided to produce the right amount and variety of goods by a so-called "invisible hand". If a product shortage occurs, for instance, its price rises, creating a profit margin that creates an incentive for others to enter production, eventually curing the shortage. If too many producers enter the market, the increased competition among manufacturers and increased supply would lower the price of the product to its production cost, the "natural price". Even as profits are zeroed out at the "natural price," there would be incentives to produce goods and services, as all costs of production, including compensation for the owner's labour, are also built into the price of the goods. If prices dipped below a zero profit, producers would drop out of the market; if they were above a zero profit, producers would enter the market. Smith believed that while human motives are often selfish and greedy, the competition in the free market would tend to benefit society as a whole by keeping prices low, while still building in an incentive for a wide variety of goods and services. Nevertheless, he was wary of businessmen and argued against the formation of monopolies. Smith vigorously attacked what he regarded as the antiquated government restrictions which he felt hindered industrial expansion. In fact, he attacked most forms of government interference in the economic process, including tariffs, arguing that this creates inefficiency and high prices in the long run. This theory, now referred to as "laissez-faire", which means "let them do", influenced government legislation in later years, especially during the 19th century.

Adam Smith was both a product of the Scottish Enlightenment as well as a leading figure of it. Smith attended the University of Glasgow, studying moral philosophy, under tutelage of Francis Hutcheson. Hutcheson had been a student at Glasgow under John Simson, Professor of Divinity. Simson has been described as the founder of the Scottish Enlightenment, and his teaching did much to introduce the "New Light" theology into Scotland. Simson was charged and found guilty of Arianism and Socinianism, eventually losing his professorship. But before Simson's removal, he had already passed on his rationalist Enlightenment philosophy to Hutcheson, who later passed it on to his students like Adam Smith and Thomas Reid. Smith developed a strong passion for Enlightenment "liberty, reason and free speech" and had little sympathy for government which enforced the Ten Commandments. His rationalist philosophy, which spurns the necessity of the government to follow the Bible in order for a nation to be blessed, was promulgated in such books as his *Inquiry into the Nature and Causes of the Wealth of Nations*, which he wrote while professor at the University of Glasgow.

The Wealth of Nations was influential since it did so much to create the field of economics and develop it into an autonomous systematic discipline. *The Wealth of Nations* was so successful that it led to the widespread abandonment of earlier economic schools, and later economists, such as Thomas Malthus and David Ricardo, focused on refining Smith's theory into what is now known as classical economics.

Robert Malthus expanded Smith's ruminations on overpopulation in his *Essay on Population* (1798). In this infamous work, Malthus posited his hypothesis that unchecked population growth always exceeds the growth of means of subsistence. Actual checked population growth is kept in line with food supply growth by "positive checks" (starvation, disease and the like, elevating the death rate) and "preventive checks" (i.e. postponement of marriage, etc. that keep down the birthrate), both of which are characterized by "misery and vice". Malthus's hypothesis implied that actual population always has a *tendency* to push above the food supply. Because of this tendency, any attempt to ameliorate the condition of the lower classes by increasing their incomes or improving agricultural productivity would be fruitless, as the extra means of subsistence would be completely absorbed by an induced boost in population. As long as this tendency remains, Malthus argued, the "perfectibility" of society will always be out of reach. Of course, the Malthusian conception of the perfectibility of society by humanistic means was quite un-Biblical, as were his concerns regarding population growth. Malthus failed to take into account the productive potential of the earth should mankind follow God's moral law. He also failed to take into account Christ's Second Coming, which would conclude population growth (given that in the new heaven and new earth there will be no more marriage and procreation). His wicked beliefs concerning population growth eventually gave rise to the birth control movement, and were contrary to the scriptural doctrine of the blessedness of having many children (Psalm 127:5). In fact, God was even in this Malthusian delusion giving the Western world up to judgment for tolerating false religion and worship. Once this false notion was accepted in the West, its birth rate significantly declined, while the birth rate outside the West (such as in the Arab Muslim world did not (or at least not as significantly).

David Ricardo, of Sephardic Jewish extraction, a contemporary of Malthus, is often credited with systematizing economics, and was one of the most influential of the classical economists. He was also a successful businessman, financier and speculator, and amassed a considerable fortune. Ricardo's most famous work is his *Principles of Political Economy and Taxation*. This book introduces the theory of comparative advantage. According to Ricardo's theory, even if a country could produce everything more efficiently than another country, it would reap gains from specializing in what it was best at producing and trading with other nations. Like Adam Smith, Ricardo was also an opponent of protectionism for national economies, especially for agriculture. He believed that the British "Corn Laws" — tariffs on agriculture products — ensured that less productive domestic land would be harvested and rents would be driven up. Thus, the surplus would be directed more toward feudal landlords and away from the emerging industrial capitalists. Since landlords tended to squander their wealth on luxuries, rather than investments, Ricardo believed that the Corn Laws were leading to the economic stagnation of the British economy. Parliament repealed the Corn Laws in 1846.

Ricardo also believed and popularized the "iron law of wages" — that overpopulation would prevent wages from topping the subsistence level. Smith had disagreed with Ricardo on this matter, and postulated an increase of wages with an increase in production, a view considered more accurate today in most of academia.

Ricardo also declared what would become the labor theory of value, which stated that a product's value results from the labor required to make it.

A final classical economist that needs to be mentioned is the Frenchman Jean-Baptiste Say. His most famous work was *Treatise on Political Economy*. In it Say outlined his "Law of Markets". Roughly stated, Say's Law claims that total demand in an economy cannot exceed or fall below total supply in that economy, or as James Mill was to restate it, "supply creates its own demand." Say was an ardent *laissez-faire* economist, which bothered French emperor Napoleon. Napoleon demanded that Say rewrite parts of the *Treatise* to conform with his attempt at creating a war economy, built on protectionism and regulation, but Say refused. Napoleon proscribed the *Treatise* and had Say ousted from the Tribunate in 1804. Say outlived Napoleon, and became fabulously rich, like economist Ricardo, through his investment strategies.

But Napoleon was not the only opponent of classical economics. Other 18th and 19th century critics of l*aissez-faire* economics charged that it was unduly harsh on the working class. Among its most radical critics was Karl Marx, a German Jew who became an ardent atheist. Marx held that capitalism is based on the exploitation of the working class: the wages received by workers are always less than the full value of their labor, and the difference is kept by the capitalist employer in the form of profit. Marx, often in collaboration with Friedrich Engels, drew on G.W.F. Hegel's philosophy, the political economy of Adam Smith and David Ricardo, and theorists of 19th century French socialism, to develop a critique of society which he claimed was both scientific and revolutionary. This critique achieved its most systematic (albeit unfinished) expression in his book *Capital: A Critique of Political Economy*, more commonly known as *Das Kapital*. As we saw in the previous chapter, Marxism called for the elimination of all private property and its common ownership by the government.

The late 19th century also saw the "marginal revolution" or neo-classical economics, which altered the basis of economic reasoning to include concepts such as marginalism and opportunity cost. The work of Carl Menger at the University of Vienna was influential in disseminating the framework of economics as the opportunity cost of decisions made at the margins of economic activity. The movement in neo-classical economic thought led by Menger came to be called the "Austrian School" (also known as the "Vienna School"), since most of its early professors were economic scholars in Austria. Later leaders in the Austrian School included Ludwig von Mises and Friedrich von Hayek. Neo-classical economics rejected Marxism and other forms of economic socialism, and it provided a general political, economic and philosophical defense of *laissez-faire* economic policy.

Alfred Marshall in Great Britain further enhanced and promulgated neoclassical economics with his textbook *Principles of Economics* (1890). His conclusions dominated economic thought for decades afterwards. Marshall thought classical economics attempted to explain prices by the cost of production. He asserted that the neoclassicals went too far in correcting this imbalance by overemphasizing utility and demand. Marshall thought the question of whether supply or demand was more important was analogous to the pointless question of which blade of a scissors did the cutting. Marshall explained prices by the intersection of supply and demand curves. The introduction of different market "periods" was an important innovation of Marshall's:

- Market period. The goods produced for sale on the market are taken as given data, e.g. in a fish market. Prices quickly adjust to clear markets.
- Short period. Industrial capacity is taken as given. The level of output, the level of employment, the inputs of raw materials, and prices fluctuate to equate marginal cost and marginal revenue, where profits are maximized. Economic rents exist in short period equilibrium for fixed factors, and the rate of profit is not equated across sectors.
- Long period. The stock of capital goods, such as factories and machines, is not taken as given. Profit-maximizing equilibria determine both industrial capacity and the level at which it is operated.
- Very long period. Technology, population trends, habits and customs are not taken as given, but allowed to vary in very long period models.

Marshall took supply and demand as stable functions and extended supply and demand explanations of prices to all runs. He argued supply was easier to vary in longer runs, and thus became a more important determinate of price in the very long run.

To Marshall also goes credit for the concept of price-elasticity of demand, which quantifies buyers' sensitivity to price. Marshall also originated the concept of consumer surplus. He noted that the price is typically the same for each unit of a commodity that a consumer buys, but the value to the consumer of each additional unit declines. A consumer will buy units up the point where the marginal value equals the price. Therefore, on all units previous to the last one, the consumer reaps a benefit by paying less than the value of the good to himself. The size of the benefit equals the difference between the consumer's value of all these units and the amount paid for the units. This difference is called the consumer surplus, for the surplus value or utility enjoyed by consumers. Marshall also introduced the concept of producer surplus, the amount the producer is actually paid minus the amount that he would willingly accept. Marshall used these concepts to measure the changes in well-being from government policies such as taxation.

In summary, neo-classical economics has been described this way:

* * *

“The framework of neoclassical economics is easily summarized. Buyers attempt to maximize their gains from getting goods, and they do this by increasing their purchases of a good until what they gain from an extra unit is just balanced by what they have to give up to obtain it. In this way they maximize "utility"—the satisfaction associated with the consumption of goods and services. Likewise, individuals provide labor to firms that wish to employ them, by balancing the gains from offering the marginal unit of their services (the wage they would receive) with the disutility of labor itself—the loss of leisure. Individuals make choices at the margin. This results in a theory of demand for goods, and supply of productive factors.

Similarly, producers attempt to produce units of a good so that the cost of producing the incremental or marginal unit is just balanced by the revenue it generates. In this way they maximize profits. Firms also hire employees up to the point that the cost of the additional hire is just balanced by the value of output that the additional employee would produce.

The neoclassical vision thus involves economic "agents," be they households or firms, optimizing (doing as well as they can), subject to all relevant constraints. Value is linked to unlimited desires and wants colliding with constraints, or scarcity. The tensions, the decision problems, are worked out in markets. Prices are the signals that tell households and firms whether their conflicting desires can be reconciled.

At some price of cars, for example, I want to buy a new car. At that same price others may also want to buy cars. But manufacturers may not want to produce as many cars as we all want. Our frustration may lead us to "bid up" the price of cars, eliminating some potential buyers and encouraging some marginal producers. As the price changes, the imbalance between buy orders and sell orders is reduced. This is how optimization under constraint and market interdependence lead to an economic equilibrium. This is the neoclassical vision." (from http://www.econlib.org/library/Enc/NeoclassicalEconomics.html)

* * *

In the first half of the twentieth century the economist John Maynard Keynes became an influential exponent of the importance of central banking and government involvement in economic affairs, as well as a critic of the political economy of the post-World War I period. Keynes most prominent work was his book *The General Theory of Employment, Interest and Money* (1936). He was very influential during the Great Depression of the 1930s, when many economists and politicians were looking for answers to solve the terrible output declines and accompanying high unemployment. His economic views led the US government to pass the Employment Act of 1946, which established the Council of Economic Advisors and committed the federal government to intervene in the economy. From its inception the US economy had been primarily a laissez-faire economy with very little government involvement, minimal regulations, and free banking. Prices, wages, interest rates and other economic variables were determined by economic conditions of private businesses and households. Then, due to influences from, among others, Karl Marx and Friedrich Engels in the late 19th century and John Maynard Keynes in the 1920s and 1930s, the country experienced a dramatic change in economic beliefs about the role of the private sector and a country's government. Subsequently, the role of the government in this country as well as many other industrialized countries increased considerably, particularly since the Great Depression of the 1930s. Central banks took control of the monetary system; labor unions, supported by government legislation gained in influence; regulations about worker safety, anti-discrimination and anti-trust (against big businesses) multiplied; social programs, such as social security, unemployment compensation, and subsidies to farmers were deemed necessary; new deal types of government spending (Tennessee Valley Authority) to artificially create jobs became commonplace; and to fund the direct government expenses and the exponentially growing number of government employees, taxes to individuals and businesses skyrocketed. The classical economists, whose thoughts were widely accepted in Western economies before the 1920s, believed that economic downturns can best be solved by leaving the economy alone and letting private market forces correct the problems. A self-correcting mechanism (Adam Smith's "invisible hand") is in place, which allows for only minimal government involvement in the economy. With the economic problems getting worse during the 1930s, Marxian economic theory gaining more acceptance, and big businesses (and specifically their "robber baron" owners) beginning to be seen as the cause of all economic evil, people started to look towards the government for answers. Keynes' theories provided precisely the fuel which socialist minded economists and philosophers of that time needed to propose government intervention as the solution to all economic problems.

According to Keynes, over-production and under-consumption are always the main causes of any economic downturn. If businesses overproduce during one period of time, they experience surpluses and will need to cut back on their production during the next period. Cutbacks in production are accompanied by layoffs and declining earnings. Declining earnings mean even less spending during the next production period, so that businesses find themselves with even greater surpluses. This leads to a snowball effect which puts the economy eventually into an economic depression. Keynes stated that the only way to stop the ball from rolling is for the government to intervene by artificially creating demand and raising people's earnings. This can be done by initiating public works or increasing welfare handouts or increasing general government spending. The money the government uses to finance these expenditures can be obtained by running budget deficits. The government finances these deficits by either borrowing from the public (issuing Treasury bonds) or by printing money through its Federal Reserve System.

The Keynesian model is based on the belief that consumption demand drives the economy and that a shortfall in this demand causes recessions and depressions. If we can find ways to stimulate consumption, we will solve the problem. Keynes invented a concept called the marginal propensity to consume (MPC). The MPC indicates how much of any additional earnings people consume. For example, if the government gives me $1000 which I previously did not own, and if I decide to spend $800 of this money to purchase goods (let's say a used car), then my marginal propensity to consume is 800/1000 or .8 or 80%.

This additional spending of $800 turns into additional income for the person from whom I bought the goods (the used car). If this person's MPC is also 80%, then we expect him to spend 80% of $800 or $640. He then spends this on goods (say a color television) and this creates income for the person from whom he bought the goods (the television store owner). This person then spends his MPC of the $640 on goods, and so forth. The total amount of additional spending adds up to $1000 (the initial government spending) + $800 (on the used car) + $640 (on the television) + ... This mathematical sum, assuming the

MPC is constant, is 5 times $1000 (the initial government spending). The 5 in this equation is called "the multiplier." Note that this number varies with the value of the MPC: the greater the MPC, the more spending at each level, and therefore the greater the multiplier (the multiplier is 1/(1-MPC)).

The significance of the multiplier, according to Keynes, is that an initial amount of government spending ($1000 in the above example) can create a total amount of spending in the economy equal to a multiple (5 in the above example) times the initial amount ($1000 in the above example). Keynes argued that this additional spending is needed to raise what he called "equilibrium national income" (can be thought of as GDP) to bring about additional spending and income necessary to reach full employment.

Keynes's complement of the marginal propensity to consume is his marginal propensity to save (MPS). Savings is defined as income not consumed. Consequently, if a person receives additional income of $100 and of that he consumes $80, his saving from this same $100 is $20. The MPC in this case is .8 or 80% and the MPS is .2 or 20%. It is true in all instances that the MPC and the MPS add up to 1. Note also that MPS=1-MPC, so that the multiplier can be rewritten as 1/MPS.

What is true for a government injection (say additional spending of $1000), must work in reverse for a government tax increase. When the government spends money, certain groups in our society receive additional money. When the government raises taxes on certain individuals, these people lose take home earnings. A multiplier effect works for taxes in reverse as well. However, Keynes argued that since people would have spent only a fraction of this money anyway (80% in the above example), the decrease in overall spending from a tax increase is not as large as the increase in overall spending from a government spending increase. The tax multiplier can mathematically be derived to equal the negative number of the regular spending multiplier minus 1. In the above example, the spending multiplier is 5 and therefore the tax multiplier is -4.

Based on the above, we can conclude then that when the government increases spending by $1000 and also increases taxes by $1000, equilibrium national income (GDP) will change by +$5,000 from the additional spending and -$4,000 from the additional taxes. On balance then equilibrium income will rise by +$1,000. Notice that in the above example, the government did not run a deficit (assuming it did not have a deficit before), but was still able to raise equilibrium income by $1,000. The balanced budget multiplier in this example and in all of Keynes's models is 1, i.e. when the government increases (or decreases) spending and taxes by the same amount, then equilibrium income rises (falls) by 1 times this amount.

The Keynesian model ran counter to the Austrian school and neo-classical and classical economists, such as George Reisman, Ludwig Von Mises, Ayn Rand, Adam Smith, David Ricardo, and Jean Baptiste Say. The classical and neo-classical perspective would question that wealth and production can be created and "multiplied" out of nothing, i.e. by artificially stimulating demand. Keynes held that as long as there is enough demand, supply will follow and unemployment will disappear. But we must ask: where do the funds for this demand really would come from? In the Keynesian model, if the government increases its spending, it can obtain the funds to do so from two primary sources: 1. printing money, or, 2. borrowing from the public. If it prints the money, the value of the money decreases by the same amount as the supply of the money increases. In terms of purchasing power, in the long run, therefore, there can be no additional real money and so there can be no additional real demand. It may be true that initially some people feel somewhat wealthier because they are the recipients of the additional government money. These people can indeed increase their spending relative to what it was before. However, as soon as inflation takes effect, there will be in all other parts of the economy groups of people harmed by the rising prices. In the long run (after the inflation takes effect), this group's drop in purchasing power and accompanying decrease in demand offsets the other groups' increase in demand. In reality, because of the harmful effects of inflation, inefficiencies and malinvestments become prevalent in the economy, and the decrease in demand is likely to more than offset the initial increase in demand. If the government borrows the funds from the public, a similar effect can be observed. Again, the beneficiaries of the government spending do experience an increase in their income. In this case it is an increase in their real income, because there is no inflation. Consequently, they increase their real demand. However, the people lending their funds to the government experience a decrease in their availability of funds and demand fewer goods or lend less money to businesses. As they demand fewer goods, it offsets the increase in demand on the part of the government. As they lend less to businesses, investment spending decreases. In either case, no real increase in demand occurs.

Say's Law asserts something very different from Keynes' view. Say's Law suggests that any creation of wealth, production and jobs must be initiated at the production side, not the demand side. Only when entrepreneurs and workers become more industrious and productive, is additional real purchasing power created. Additional real purchasing power equates to additional real demand.

So there have been various competing schools of modern economic thought since Adam Smith's time: the classical school, the Marxist school, the neo-classical school, the Keynesian school, etc. Other schools have joined these. For example, in the late 1940s and early 1950s the monetarist school arose, led by Milton Friedman and associated with the University of Chicago. And even more recently a supply-side economics school has arisen.

But one thing all of these modern economic schools of thought have in common are that they are ultimately humanistic. While there are unquestionably economic truths which can be learned from them (which is why this textbook has incorporated much material gleaned from their economic writings), fundamentally they are all in error, for none of them are grounded on the word of God. None of them accept that man in his fallen condition is totally depraved and reliant upon the word of God as the foundation for a true knowledge, including of economics. None of them acknowledge that to know true blessed prosperity a people must repent of their sins and turn to Jesus Christ as Lord and Savior. None of them acknowledge that we must serve the Lord in gratitude by upholding the Ten Commandments. None of them acknowledge that we should have reformed Christian nations with reformed Christian established churches. None of them acknowledge that heresy, idolatry, schism, Sabbath desecration, etc. must be suppressed and wickedness punished. Too few Christians have recognized the great antithesis between humanistic economics and Biblical Christian economics, which is why so many so called Christian economic textbooks are little more than humanistic textbooks with a Christian veneer.

Lord, may thy kingdom come, and may we know Thee and thy word as we ought.

APPENDIX A : ADDITIONAL EXCERPTS FROM JOHN CALVIN'S COMMENTARIES RELATING TO ECONOMICS

DEUTERONOMY 19

DEUTERONOMY 19:14	
14. Thou shalt not remove thy neighbor's land-mark, which they of old time have set in thine inheritance, which thou shalt inherit in the land that the Lord thy God giveth thee to possess it.	**14.** Non transferes terminum proximi tui quem finierint majores in haereditate tua, quam haereditate accipies in terra quam Jehova Deus tuus dat tibi ut possideas eam.

A kind of theft is here condemned which is severely punished by the laws of Rome;[1] for that every one's property may be secure, it is necessary that the land-marks set up for the division of fields should remain untouched, as if they were sacred. He who fraudulently removes a landmark is already convicted by this very act, because he disturbs the lawful owner in his quiet possession of the land;[2] whilst he who advances further the boundaries of his own land to his neighbor's loss, doubles the crime by the deceptive concealment of his theft. Whence also we gather that not only are those thieves, who actually carry away their neighbor's property, who take his money out of his chest, or who pillage his cellars and granaries, but also those who unjustly possess themselves of his land.

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LEVITICUS 25

LEVITICUS 25:35-38	
35. And if thy brother be waxen poor, and fallen in decay with thee, then thou shalt relieve him; *yea, though he be* a stranger, or a sojourner: that he may live with thee.	**35.** Si attenuatus fuerit frater tuus, et vacillaverit manus ejus apud te, fulcies illum (*vel*, apprehendes ut sustineas): peregrinum et advenam: et vivet tecum.
36. Take thou no usury of him, or increase: but fear thy God; that thy brother may live with thee.	**36.** Non accipies usuram ab eo et augmentum: sed timebis Deum tuum: vivetque frater apud te.
37. Thou shalt not give him thy money upon usury, nor lend him thy victuals for	**37.** Pecuniam tuam non dabis ei ad usuram, nec cum augmento dabis escam

increase.	tuam.
38. I *am* the Lord your God, which brought you forth out of the land of Egypt, to give you the land of Canaan, *and* to be your God.	**38.** Ego Jehova Deus vester qui eduxi vos de terra AEgypti, ut darem vobis terram Chanann, ac essem vobis in Deum.

DEUTERONOMY 23

DEUTERONOMY 23:19, 20	
19. Thou shalt not lend upon usury to thy brother; usury of money, usury of victuals, usury of any thing that is lent upon usury.	**19.** Non foenerabis fratri tuo foenus pecuniae, foenus cibi, foenus cujuscunque rei in qua foenus exercetur.
20. Unto a stranger thou mayest lend upon usury, but unto thy brother thou shalt not lend. upon usury; that the Lord thy God may bless thee in all that thou settest thine hand to in the land whither thou goest to possess it.	**20.** Extraneo foenerabis, ac fratri tuo non foenerabis: ut benedicat tibi Jehova Deus tuus in omni applicatione manus tuae super terram ad quam ingrederis, ut possideas eam.

From these passages we learn that it is not enough to refrain from taking the goods of another, unless we also constantly exercise humanity and mercy in the relief of the poor. Heathen authors also saw this, although not with sufficient clearness, (when they declared[1]) that, since all men are born for the sake of each other, human society is not properly maintained, except by an interchange of good offices. Wherefore, that we may not defraud our neighbors, and so be accounted thieves in God's sight, let us learn, according to our several means, to be kind to those who need our help; for liberality is a part of righteousness, so that he must be deservedly held to be unrighteous who does not relieve the necessities of his brethren when he can. This is the tendency of Solomon's exhortation, that

> "we should drink waters out of our own cistern,[2] and that our fountains should be dispersed abroad amongst our neighbors," (Proverbs 5:15, 16;)

for, after he has enjoined us each to be contented with what is our own, without seeking to enrich ourselves by the loss of others, he adds that those who have abundance do not enjoy their possessions as they ought, unless they communicate them to the poor for the relief of their poverty. For this is the reason, as Solomon tells us elsewhere, why "the rich and the poor meet together; and the Lord is the maker of them all." (Proverbs 22:2.)

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EXODUS 22

EXODUS 22:25	
25. If thou lend money to *any of* my people *that is* poor by thee, thou shalt not be to him as an usurer, neither shalt thou lay upon him usury.	**25.** Si pecuniam mutuam dederis populo, meo pauperi qui est tecum, non eris ei sicut usurarius: non imponetis ei usuram.

25. *If thou lend money to any of my people.* Humanity ought to be very greatly regarded in the matter of loans, especially when a person, being reduced to extremities, implores a rich man's compassion; for this is, in. point of fact, the genuine trial of our charity, when, in accordance with Christ's precept, we lend to those of whom we expect no return. (Luke 6:35.) The question here is not as to usury, as some have falsely thought,[1] as if he commanded us to lend gratuitously, and without any hope of gain; but, since in lending, private advantage is most generally sought, and therefore we neglect the poor; and only lend our money to the rich, from whom we expect some compensation, Christ reminds us that, if we seek to acquire the favor of the rich, we afford in this way no proof of our charity or mercy; and hence lie proposes another sort of liberality, which is plainly gratuitous, in giving assistance to the poor, not only because our loan is a perilous one, but because they cannot make a return in kind.

Before descending to speak of loans, God here adverts to poverty and distress, (Leviticus 25:35,) whereby men's minds may be disposed to compassion. If any one be afflicted with poverty, he commands us to relieve his necessity. He makes use, however, of a metaphor,[2] that he who is tottering should be strengthened, as if by catching hold of his hand. What follows about the stranger and sojourner extends and amplifies, in my opinion, the previous sentence; as if it were said that, since humanity is not to be denied even to strangers, much more is assistance to be given to their brethren. For, when it pleased God that strangers should be permitted to inhabit the land, they were to be kindly treated[3] according to the rights of hospitality; for to allow them to *live* is to make their condition just and tolerable. And thus God indirectly implies, that such unhappy persons are expelled and driven away, so as not to *live*, if they are oppressed by unjust burdens. This, then, is the sum of the first sentence, that the rich, who has the ability, should uplift the poor man who is failing, by his assistance, or should strengthen the tottering.

A precept is added as to lending without interest, which, although it is a political law, still depends on the rule of charity; inasmuch as it can scarcely happen but that the poor should be entirely drained by the exaction of interest, and that their blood should be almost sucked away. Nor had God any other object in view, except that mutual and brotherly affection should prevail amongst the Israelites. It is plain that this was a part of the Jewish polity, because it was lawful to lend at interest to the Gentiles, which distinction the spiritual law does not admit. The judicial law, however, which God prescribed to His ancient people, is only so far abrogated as that what charity dictates should remain, *i.e.*, that our brethren, who need our assistance, are not to be treated harshly. Moreover, since the wall of partition, which formerly separated Jew and Gentile, is now broken down, our condition is now different; and consequently we must spare all without exception, both as regards taking interest, and any other mode of extortion; and equity is to be observed even towards strangers. "The household of faith." indeed, holds the first rank, since Paul commands us specially to do good to them, (Galatians 6:10;) still the common society of the human race demands that we should not seek to grow rich by the loss of others.

As touching the political law, no wonder that God should have permitted His people to receive interest, from the Gentiles, since otherwise a just reciprocity would not have been preserved, without which one party must needs be injured. God commands His people not to practice usury, and still lays the Jews alone, and not foreign nations, under the obligation of this law. In order, therefore, that equality (*ratio analogica*) might be preserved, He accords[4] the same liberty to His people which the Gentiles would assume for themselves; for this is the only intercourse that can be endured, when the condition of both parties is similar and equal. For when Plato[5] asserts that usurers are not to be tolerated[in a well-ordered republic, he does not go further than to enjoin, that its citizens should abstain from that base and. dishonest traffic between each other.

The question now is, whether usury is evil in itself; and surely that which heathens even have detested appears to be by no means lawful to the children of God. We know that the name of usurer has everywhere and always been infamous and detested. Thus Cato,[6] desiring to commend agriculture, says that thieves were formerly condemned to a fine of double, and usurers quadruple; from which he infers, that the latter were deemed the worst. And when asked what he thought of usury, he replied, "What do I think of killing a man?" whereby he wished to show, that it was as improper to make money by usury as to commit murder. This was the swing of one private individual, yet it is derived from the opinions of almost all nations and persons. And assuredly from this cause great tumults often arose at Rome, and fatal contentions were awakened between the common people and the rich; since it can hardly be but that usurers suck men's blood like leeches. But if we come to an accurate decision as to the thing itself, our determination must be derived from nowhere else than the universal rule of justice, and especially from the declaration of Christ, on which hang the law and the prophets, -- Do not unto others what ye would not have done to thyself. (Matthew 7:12.) For crafty men are for ever inventing some little subterfuge or other to deceive God. Thus, when all men detested the word *foenus*, another was substituted, which might avoid unpopularity under an honest pretext; for they called it *usury*, as being a compensation for the loss a man had incurred by losing the *use* of his money. But[7] there is no description of *foenus* to which this specious name may not be extended; for whosoever has any ready money, and is about to lend it, he will allege that it would be profitable to himself if he were to purchase[8] something with it, and that at every moment opportunities of gain are presenting themselves. Thus there will be always ground for his seeking compensation, since no creditor could ever lend money without loss to himself. Thus usury,[9] since the word is equivalent to *foenus*, is but a covering for an odious practice, as if such glosses would deliver us in God's judgment, where nothing but absolute integrity can avail for our *defense*. There was almost a similar mode of subterfuge among the Israelites. The name 5sn, *neschec*, which is derived from *biting*, sounded badly; since then no one chose to be likened to a hungry dog, who fed himself by biting others, some escape from the reproach was sought; and they called whatever gain they received beyond the capital, tybrt, *therbith*, as being an increase. But God, in order to prevent such deception, unites the two words, (Leviticus 25:36,) and condemns the increase as well as the biting. For, where He complains of their unjust modes of spoiling and thieving in Ezekiel,[10] and uses both words as He does here by Moses, there is no doubt but that He designedly cuts off their empty excuses. (Ezekiel 18:13.) Lest any, therefore, should reply, that although he derived advantage from his money, he was not on that account guilty of usury, God at once removes this pretense, and condemns in general any addition to the principal. Assuredly both passages clearly show that those who invent new words in excuse of evil, do nothing but vainly trifle. I have, then, admonished men that the fact itself is simply to be considered, that all unjust gains are ever displeasing to God, whatever color we endeavor to give to it. But if we would form an equitable judgment, reason does not suffer us to admit that all usury is to be condemned without exception. If the debtor have protracted the time by false pretences to the loss and inconvenience of his creditor, will it be consistent that he should reap advantage from his bad faith and broken promises? Certainly no one, I think, will deny that usury ought to be paid to the creditor in addition to the principal, to compensate his loss.[11] If any rich and monied man, wishing to buy a piece of land, should borrow some part of the sum required of another, may not he who lends the money receive some part of the revenues of the farm until the principal shall be repaid? Many such cases daily occur in which, as far as equity is concerned, usury is no worse than purchase. Nor will that subtle argument[12] of Aristotle avail, that usury is unnatural, *because* money is barren and does not beget money; for such a cheat as I have spoken of, might make much profit by trading with another man's money, and the purchaser of the farm might in the meantime reap and gather his vintage. But those who think differently, may object, that we must abide by God's judgment, when He generally prohibits all usury to His people. I reply, that the question is only as to the poor, and consequently, if we have to do with the rich, that usury is freely permitted; because the Lawgiver, in alluding to one thing, seems not to condemn another, concerning which He is silent. If again they object that usurers are absolutely condemned by David and Ezekiel, (Psalm 15:5; Ezekiel 18:13,) I think that their declarations ought to be judged of by the rule of charity; and therefore that only those unjust exactions are condemned whereby the creditor, losing' sight of equity, burdens and oppresses his debtor. I should, indeed, be unwilling to take usury under my patronage, and I wish the name itself were banished from the world; but I do not dare to pronounce upon so important a point more than God's words convey. It is abundantly clear that the ancient people were prohibited from usury, but we must needs confess that this was a part of their political constitution. Hence it follows, that usury is not now unlawful, except in so far as it contravenes equity and brotherly union. Let each one, then, place himself before God's judgment-seat, and not do to his neighbor what he would not have done to himself, from whence a sure and infallible decision may be come to. To exercise the trade of usury, since heathen writers accounted it amongst disgraceful and base modes of gain, is much less tolerable among the children of God; but in what cases, and how far it may be lawful to receive usury upon loans, the law of equity will better prescribe than any lengthened discussions.

Let us now examine the words. In the first place, where we have translated the words, "Thou shalt not be to him as a usurer,"[13] there is some ambiguity in the Hebrew word 5sn, *nashac*, for it is sometimes used generally for to *lend*, without any ill meaning; but here it is undoubtedly applied to a usurer, who bites the poor; as also in Psalm 109:11, "Let the usurer catch all that he hath."[14] The sum is, that the poor are to be liberally aided, and not to be oppressed by harsh exactions: and therefore immediately afterwards it is added, "neither shalt thou lay upon him usury." When again He repeats, "And if thy brother be waxen poor," etc., we see that reference is everywhere made to the poor; because, although sometimes those who possess large properties are ruined by usury, (as Cicero says that certain luxurious and prodigal persons ill his days contended against usury with the fruits of their farms, because their creditors swallowed up the whole produce;[15]) still the poor alone, who had been compelled to borrow by want, and not by luxury, were worthy of compassion.

The third passage, however, admirably explains the meaning of God, since it extends usury to corn and wine, and all other articles. For many contracts were invented by artful men, whereby they pillaged the needy without ignominy or disgrace: and now-a-days no rapacity is more cruel than that which imposes a payment upon debtors, without any mention of usury; for instance, if a poor man should ask the loan of six measures of wheat, the creditor will require seven to be repaid; or if the same thing should happen as regards wine. This profit will not be called usury, because no money will pass; but God, indirectly casting ridicule upon their craftiness, shows that this plague of usury[16] extends itself to various things, and to almost all sorts of traffic; whence it clearly appears that nothing else is prescribed to the Israelites, but that they should humanely assist each other. But, since cupidity blinds men, and carries them, aside to dishonest dealings, God sets His blessing in opposition to all such iniquitous arts, whereby they hawk, as it were, for gain; and commands them to look for riches rather to Him the author of all good things, than to hunt for them by rapine and fraud.

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NUMBERS 5

NUMBERS 5:5-7	
5. And the Lord spoke unto Moses, saying,	**5.** Loquutus est Jehova ad Mosen, dicendo:
6. Speak unto the children of Israel, when a man or woman shall commit any sin that men commit, to do a trespass against the Lord, and that person be guilty;	**6.** Alloquere filios Israel, Vir sive mulier quum fecerint ex omnibus peccatis hominum, transgrediendo transgressione in Jehovam, et deliquerit anima illa:
7. Then they shall confess their sin which they have done: and he shall recompense his trespass with the principal thereof, and add unto it the fifth *part* thereof, and give *it* unto *him* against whom he hath trespassed.	**7.** Fatebuntur peccatum suum quod fecerunt: et restituet delictum suum in solidum, et quintam ejus partem superaddet, dabitque ei in quem peccaverit.

5. *And the Lord spoke unto Moses*. Although at the outset He seems to include all trespasses, yet we gather from the context that the precept only refers to things stolen or fraudulently withheld, that he, who is conscious of his guilt, should make reparation. It must be observed, however, that the law relates to more secret thefts, which are not usually brought to justice: and on this account it is said, "If they have committed any sin after the manner of men, they must not seek for subterfuge from ordinary use and custom." Although, therefore, they may have many companions, God declares that this will not avail for their excuse; and consequently commands them voluntarily to restore what they have fraudulently or wrongfully appropriated. He will treat hereafter of the punishment of theft; He now only prescribes that, although no one shall bring the guilty parties to justice, and their crime may not be discovered, still they should diligently examine their consciences, and themselves ingenuously declare the secret transgression; and also make compensation for the loss conferred, since, without restitution, their confession would be but illusory. I now pass over what Moses adds, that, if no heir exists to whom the stolen goods may be restored, they should offer it to the priest, because I have already expounded it: except that we gather frost thence, that a contamination is contracted by fraud and rapine, which is never purged unless the house is well cleared of the ill-gotten gain. But this offering was treated of amongst the laws of the priests:[1] now, with respect to the restitution, we must consider that the fifth part was superadded, not so much in order that he, who had suffered the loss, should be enriched, as that all should diligently beware of every offense, which they hear not only to be useless to themselves, but also to be productive of loss. Besides, when a man has been robbed, it is often of more consequence than this additional fifth part, that he should have been deprived of the use of his property.

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EXODUS 23

Exodus 23:8	
8. And thou shalt take no gift: for the gift blindeth the wise, and perverteth the words of the righteous.	**8.** Ne accipias munus: quia munus excaecat videntes, et pervertit verba justorum.

LEVITICUS 19

Leviticus 19:15	
15. Ye shall do no unrighteousness in judgment; thou shalt not respect the person of the poor, nor honor the person of the mighty: but in righteousness shalt thou judge thy neighbor.	**15.** Non facies iniquitatem in judicio, non suscipies faciem pauperis, neque honorabis causam magni: in justitia judicabis proximum tuum.

Exodus 23:8. *And thou shalt take no gift*. This kind of theft is the worst of all, when judges are corrupted either by bribes, or by affection, and thus ruin the fortunes which they ought to protect: for, since their tribunal is as it were sacred asylum, to which those who are unjustly oppressed may fly, nothing can be more unseemly than that they should there fall amongst robbers.[1] Judges are appointed to repress all wrongs and offenses; if therefore they show favor to the wicked, they are harborers of thieves; than which there is no more deadly pest. And besides, since their authority excludes every other remedy, they are themselves like robhers with arms in their hands. The greater, therefore, their power of injury is, and the greater the damage committed by their unjust sentences, the more diligently are they to be warned to beware of iniquity; and thus it was necessary to keep them in the path of duty by special instructions, lest they should conceal and encourage thievery by their patronage. Now, as avarice is the root of all evils, when it thus lays hold of the minds of judges, no integrity can continue to exist. But, since all utterly condemn this vice, even though they may be entirely under its influence, God speaks of it the more plainly and popularly, enjoining that judges should withhold their hands from every gift: for there is no more fatal poison for the extinction of all uprightness, than when a judge suffers himself to be cajoled by gifts. Let those who accept gifts allege as much as they please that they still maintain their integrity, the fact itself clearly shows that they are venal, and seek their own pecuniary advantage when they are thus attracted by gain. Formerly it was enough to render judges infamous that they were called *nummarii*, (moneyers.)[2] But it is superfluous to treat any further of this matter, since God cuts off all handles for subterfuge in a single sentence: "for gifts (He says) blind the

eyes of him that seeth, and pervert the judgment of the righteous." If, then, we acquiesce in His decision, there is no light of intelligence so bright but that gifts extinguish it, nor any probity so great but that they undermine it; in fact, gifts infect a sound mind before they soil the hand; I mean those which a person receives in reference to the judgment of a cause; for there is no question here as to those gifts of mutual kindness which men reciprocate with each other. Thus, in the passage from Deuteronomy 16, before God speaks of gifts, He forbids that justice should be wrested., or men's persons respected: whence we gather, that only those snares are condemned which are set to curry favor. It must be observed on the passage from Leviticus, that to *judge in righteousness* is contrasted with *respecting the person*: and consequently, as soon as the judge turns away his eyes ever so little from the cause itself, he forgets equity. Moreover, to wrest judgment is equivalent to doing iniquity in judgment; but since injustice is not always openly manifested, but rather disguised by various artifices, after God in Leviticus has condemned corrupt and unjust judgments, He uses this word to wrest (*inclinandi*), in Deuteronomy, in order to dissipate all vain pretexts.

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POLITICAL SUPPLEMENTS TO THE EIGHTH COMMANDMENT

EXODUS 22

EXODUS 22:1-4	
1. If a man shall steal an ox, or a sheep, and kill it, or sell it; he shall restore five oxen for an ox, and four sheep for a sheep.	**1.** Quum furatus fuerit quis bovem aut pecudem, et jugulaverit, aut vendiderit, quinque boves reddet pro illo bove, et quatuor pecudes pro pecude illa:
2. If a thief be found breaking up, and be smitten that he die, *there shall* no blood *be shed* for him.	**2.** (Si in effossione inventus fuerit fur, et percussus fuerit, et inde mortuus, non erit ei in sanguinem.
3. If the sun be risen upon him, *there shall be* blood *shed* for him; *for* he should make full restitution: if he have nothing, then he shall be sold for his theft.	**3.** Si ortus fuerit sol super eum, erit ei in sanguinem:) reddendo reddet: si non sit ei, vendetar propter furtum suum.
4. If the theft be certainly found in his hand alive, whether it be ox, or *ass*, or	**4.** Si deprehendatur in manu ejus furtum a bove usque ad asinum, usque ad pecudem:

sheep, he shall restore double.	viva duo reddet.

Thus far God has proclaimed Himself the avenger of iniquities, and, citing thieves before His tribunal, has threatened them with eternal death. Now follow the civil laws, the principle of which is not so exact and perfect; since in their enactment God has relaxed His just severity in consideration of the people's hardness of heart.

What God formerly delivered to His people the heathen legislators afterwards borrowed. Draco, indeed, was more severe, but his extreme rigor became obsolete by the silent consent of the people of Athens; and the Decemvirs borrowed from Solon part of their law, which they published in the ten tables, although there were some variations in the distinction of the double or quadruple restitution, and in process of time other alterations were afterwards made. But if all things be duly considered, it will be found that both Solon and the Decemvirs have made a change for the worse, wherever they have varied from the law of God. First of all, no distinction[1] is here made, such as the Roman laws decree, between manifest thieves and those that are not manifest; for by them the thief not manifest is condemned to a double amend, and the manifest to quadruple; and he is called a manifest thief who is caught before he has carried what he has stolen to the place of its destination. I suppose that the awarders of the punishment had this point in view, that the wickedness of that person was the more egregious who was so greedily and anxiously set on his prey as not to be afraid of disgrace; and undoubtedly he who has no fear of shame is more audacious ill sin. But, on the contrary, God condemns to a double amend those upon whom the stolen goods were found; and to quadruple, those who had killed or sold it; and deservedly so, because greater obstinacy in crime betrays itself where the theft is turned to profit, nor is there any hope of repentance; and thus by this further process the crime of dishonesty is doubled. It might be that, immediately after the offense, the thief should be alarmed; but he who had dared to kill the stolen animal or to sell it, is altogether hardened in his sin. Besides, the more difficult its investigation is, the greater is the punishment which a misdemeanor deserves. Meanwhile, it is to be remembered, that the pecuniary fine imposed upon thieves did not free them from guilt; for, as Marcellus says,[2] not even the president of a province can bring it to pass, that infamy should not pursue a man condemned of theft; and there was no need of establishing by law that in which all by nature are agreed. Thus, when God punished thieves by a fine, He left them still marked by infamy. I know not whether they[3] assign the true cause why he who had stolen an ox is fined to a larger amount than he who had stolen a goat, or sheep, or other cattle, who say that the loss of the owner is taken into account to whom the labor of the ox is especially useful in agriculture; for what is said as to an ox I extend to cows and the whole herd. Those seem to come nearer to the truth who say the audacity of the thief is punished who, when he stole the larger animal, did not fear being observed by witnesses; yet it seems to me more likely that the different sentence depended on the price of the article; for assuredly it is more reasonable that he who has done the most harm should be exposed to the greater punishment.

2. *If a thief be found breaking up*. This clause is to be taken separately, and is inserted by way of parenthesis; for, after having decreed the punishment, God adds in connection, "he should make full restitution; if he have nothing, then he should be sold for his theft;" and this exception as to the thief in the night is introduced parenthetically. But although the details are not expressed with sufficient distinctness, still the intention of God is by no means ambiguous, viz., that if a thief should be killed in the dark, his slayer should be unpunished; for he can then hardly be distinguished from a robber, especially when he proceeds with violence; because he cannot enter another man's house by night without either digging through a wall or breaking down a door. The Twelve Tables[4] differ slightly from this; for they permit the killing of a thief by night, and also by day if he should defend himself with a weapon. But, since God had sufficiently repressed by other laws murders and violent assaults, He is silent here respecting robbers who use the sword in their attempts at plunder. He therefore justly condemns to death those who have avenged by murder a theft in open day.

3. *He should make full restitution*. These words, as I have said, are connected with the first verse, since here the execution of the punishment is only enjoined; as if God forbade thieves to be spared, but that they should pay either twofold or quadruple, or even quintuple, according to the measure of their crime. But, if they were unable to pay, He commands them to be sold as slaves, which also was the custom at Rome. Whence the saying of Cato,[5] "that private thieves lived in bonds and fetters, but public ones in gold and purple." And since this condition was a harsh one, a caution is expressly given, that they were not to be absolved on the score of their poverty. If any one should ask whether it was lawful for the owner of the thing stolen to recover double or quadruple its value, I answer, that what God awards, a man has the best of rights to; meanwhile, in equity men were bound to take care that they did not grow rich at the expense of others, but rather were they to apply whatever they gained to pious and holy uses.

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EXODUS 22

EXODUS 22:5-13	
5. If a man shall cause a field or vineyard to be eaten, and shall put in his beast, and shall feed in another man's field; of the best of his own field, and of the best of his own vineyard, shall he make restitution.	**5.** Si depasci fecerit quispiam agrum aut vitem, et immiserit jumentum suum ut depasceretur agrum alterius: bonum agri ejus et bonum vineae ejus restituet.
6. If fire break out, and catch in thorns, so that the stacks of corn, or the standing corn, or the field, be consumed *therewith*; he that kindled the fire shall surely make restitution.	**6.** Quum egressus fuerit ignis, et invenerit spinas: absumptusque fuerit acervus, vel seges, vel ager, reddendo redder qui ignem accendit, rem combustam.
7. If a man shall deliver unto his neighbor money or stuff to keep, and it be stolen out of the man's house; if the thief be found, let him pay double.	**7.** Quum dederit quispiam proximo suo argentum, vel vasa ad custodiendum, et furto ablatum fuerit e domo viri illius: si inventus fuerit fur, reddet duplum.
8. If the thief be not found, then the master of the house shall be brought unto the judges, *to see* whether he have put his hand unto his neighbor's goods.	**8.** Si non inventus fuerit fur, tunc applicabitur dominus domus ad judices, annon miserit manum suam in substantiam proximi sui.
9. For all manner of trespass, *whether it be* for ox, for ass, for sheep, for raiment, *or* for any manner of lost thing, which *another* challengeth to be his, the cause of	**9.** Super omni causa praevaricationis, super bove, super asino, super pecude, super vestimento, super omni re amissa: quum dixerit quispiam hoc esse, usque ad

both parties shall come before the judges; *and* whom the judges shall condemn, he shall pay double unto his neighbor.	judices veniet causa utriusque: et quem damnaverint judices, is reddat duplum proximo suo.
10. If a man deliver unto his neighbor an ass, or an ox, or a sheep, or any beast, to keep, and it die, or be hurt, or driven away, no man seeing *it*:	**10.** Si dederit quispiam proximo suo asinum, vel bovem, vel pecudem, aut quodcunque animal ad custodiendum, et mortuum fuerit, aut contractum, aut ab hostibus captum nemine vidente.
11. *Then* shall an oath of the Lord be between them both, that he hath not put his hand unto his neighbor's goods; and the owner of it shall accept *thereof*, and he shall not make *it* good.	**11.** Juramentum Jehovae erit inter utrumque, annon miserit manum suam in substantiam proximi sui, et juramentum suscipiet dominus ejus, et non reddet.
12. And if it be stolen from him, he shall make restitution unto the owner thereof.	**12.** Quod si furto ablatum fuerit ei, reddet domino ejus.
13. If it be torn in pieces, *then* let him bring *it for* witness, *and* he shall not make good that which was torn.	**13.** Si vero rapiendo raptum fuerit, adducet ei testem: raptum non reddet.
14. And if a man borrow *ought* of his neighbor, and it be hurt, or die, the owner thereof *being* not with it; he shall surely make *it* good.	**14.** Si commodato acceperit quispiam a proximo suo, et confractum fuerit aut mortuum domino ejus absente, reddendo reddet.
15. But if the owner thereof *be* with it, he shall not make *it* good: if it *be* an hired *thing*, it came for his hire.	**15.** Si dominus ejus fuerit cum eo, non reddet: si conductum fuerit, veniens pro mercede sua.

9. *For all manner of trespass*. An action for theft is here permitted, but with a fine attached if any should rashly accuse his neighbor; for else it might be doubted when or for what reasons the restitution of double or quadruple was to be required. He therefore permits that if any one suspects another of theft, he should summon that person to plead his cause; and if he should prove his case, that he should recover double the thing lost; but if the judges should pronounce that he had brought his action groundlessly, that he, on the contrary, should pay the penalty of his false accusation. For such an action as this is not altogether a civil one, but carries with it the stain of infamy, and thus it would be unjust that a man should be injured by false suspicions whom the judges acquit of crime. The word used here for judges is Myhla, *elohim*, which properly means gods, as being of the plural number; it is, however often used for God.[1] It is transferred to judges for the purpose of dignifying their office; because in it they represent the person of God, in whose hand alone is all dominion and power. Therefore Christ says they were called gods, because to them "the word of God came," (John 10:34,) i.e., that they should preside in His name, and be set over others, on which subject we treated under the Fifth Commandment.

5. *If a man shall cause a field or vineyard to be eaten*. This kind of fraud is justly ranked among thefts; viz., if any man shall have put in his beast to feed in another's field or vineyard. For if a person have made improper use of his servant to steal by him, he himself is deemed guilty of the offense, even although he may have touched nothing with his own hand; nor does he less do wrong who has given occasion of injury by means of a brute. Still, God restricts the punishment to a compensation of double the amount, because it cannot be certainly established that the master of the animal desired to effect the damage fraudulently and designedly; yet He requires the loss to be made up at the highest estimate of its value;[2] for thus I interpret "the goodness of his field and his vineyard," that the place having been examined, a liberal restitution shall be awarded to its owner, according to the utmost it would have probably produced in its greatest state of fertility.

6. *If fire break out and catch in thorns*. This injury is somewhat different from the foregoing, for he who kindles the fire is commanded to make good the damage done by him, although there may have been no willful intention to do harm. For the incendiary who had maliciously destroyed either a cornfield or a vineyard was to be far more severely punished; here, however, mere carelessness is punished. Although no mention is made either of house or barn, still the law includes all similar cases requiring compensation from him who had kindled a fire even in an open field. But it seems that such a person would be blameless, because he could not. foresee that the fire would ignite the thorns; yet, in order that every one should take as much care of the property of another as of his own, God commands him to suffer the penalty of his heedless or stupid negligence.

7. *If a man shall deliver unto his neighbor money*. It is here determined under what circumstances an action for theft would lie in case of a deposit, viz., if an inanimate thing, as a garment or furniture, be given ill charge, and the person with whom it is deposited should allege that it is stolen, God commands that, if the thief be discovered, he should pay double; but, if not, that an oath should be required of the man who declares that the thing has been stolen from him. But, if it be an animal that was given in charge, a somewhat different provision is made, viz., that if it have been violently carried away, or torn by beasts, the person with whom it was deposited should be free; but if it had *been* stolen, that he should make restitution. In order to understand the principle of this law, we must observe that depositaries are not to be compelled to do more than faith. fully preserve the thing entrusted to them; just as a prudent and careful father of a family is attentive to the preservation of his property. When they have acquitted themselves diligently in this respect, it would be unjust to require more, of them; otherwise, when they undertake the burden of this gratuitous office, their generosity would be an injury to themselves. But, since it is not so easy to steal an animal from the stall, or from the hands of the shepherd, the negligence of the shepherd betrays itself in the loss of the beast,[3] supposing no violence to have been used. Justice, then, is done in both cases, *i.e.*, that the depository shall not make good a vessel, or money, or a garment, because this would be in a manner to put him in the place of the thief; but that if the animal be stolen he shall pay its price, unless he can cleat' himself of carelessness. If any should think that too great indulgence is shown to the depositary, when God would have the dispute terminated by his oath; the reply is easy, that we do not entrust anything to be kept by another, unless we are persuaded of his honesty. Whoever, then, has chosen a guardian for his property, has borne witness to his own prejudice that he is a good and trustworthy man; and consequently, it would be absurd that he should soon afterwards be involved in all accusation of theft without proof. Wherefore it was reasonable that God would have the owner of the lost goods acquiesce in the oath of him. whom he has considered to be his faithful friend. Besides, a man is altogether acquitted who clears himself by calling God to witness his innocence, unless any sinister suspicion is alleged against him, and provided he excuses himself on probable evidence.

10. *If a man deliver unto his neighbor an ass*. Since in the passage from whence I have taken these four verses, mention is made of a deposit, and Moses is professedly providing against frauds, and robberies, and thefts, I have thought it well to place them under this head. It has indeed some relation to the Third Commandment, because it shows the lawful use of an oath, viz., that in matters of concealment men should have recourse to the witness of God, and that, by the interposition of His sacred name, an end should be put to their strife. But, while the authority attributed to oaths depends on the reverence due to God, at the same time faith and piety are enforced in them,[4] so that all things should correspond. I have, however, considered the main point, *i.e.*, how controversies as to things concealed should be brought to an end for the advancement of peace and equity. He would therefore have the depositary acquitted, if he swears that the animal entrusted to him is lost (either by death or violence,[5]) although lie should produce no witness of the matter, since it would be unjust that he should bear the blame, unless fraud, or some more palpable offense, have been committed by him. At the conclusion, then, it is said, "the owner of it shall accept" the oath, which is equivalent to saying, that lie shall be compelled to acquiesce, and shall give no more trouble about it. The expression, "an oath of the Lord shall be between them both," is a remarkable one, whereby the obligation and sanctity of an oath are enforced, whilst Moses reminds us that God is the author of this sacred mode of attestation, and presides over it as its judge and avenger.

Moses now lays down the law as to a borrowed animal, if it die, or be mutilated, or injured. There is, however, a wide distinction between a thing borrowed and a thing deposited, for he who lends confers a favor; and therefore, when a man borrows a thing, he binds himself to restore it in safety, as far as in him lies. A distinction, however, is made, if the owner himself of the animal be an eye-witness of the death or fracture, he shall bear the loss; but if the animal should die or be injured in his absence, its value is awarded to him. His presence is tantamount to this, as if it were said, if he shall have seen with his own eyes that the injury did not occur by the fault of him to whom he lent it, then he shall give him no trouble about it. For instance, if you have lent me a horse, and take the journey with me, although anything untoward should happen -- supposing you are assured that it did not occur by my temerity, or negligence, or bad management, I am free, and exempt from loss.

What is here laid down as to a borrowed animal must be applied also to all other things borrowed.

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LEVITICUS 24

Leviticus 24:18, 21	
18. And he that killeth a beast shall make it good; beast for beast.	**18.** Qui percusserit animam animalis, restituet illud: animam pro anima.
21. And he that killeth a beast, he shall restore it; and he that killeth a man, he shall be put to death.	**21.** Qui percusserit animal, reddet illud.

God here prescribes, that whosoever has inflicted a loss upon another shall make satisfaction for it, although he may not have turned it to his own profit; for in respect to a theft, its profit is not to be considered, but the intention to injure, or other cause of guilt; for it might happen that he who has killed another's ox should not deliberately desire to do him an injury, but in a fit of passion, or from unpremeditated impulse, should nevertheless have inflicted loss upon him. In whatever way, therefore, a man should have committed an offense, whereby another is made poorer, he is commanded to make good the loss. Whence it is clear, that whosoever do not so restrain themselves as to care for a neighbor's advantage as much as for their own, are accounted guilty of theft before God. The object, however, of the law is, that no one should suffer loss by us, which will be the case if we have regard to the good of our brethren.

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LEVITICUS 19

Leviticus 19:9, 10	
9. And when ye reap the harvest of your land, thou shalt not wholly reap the corners	**9.** Quum messueritis messem regionis vestrae, non finies metere angulum

of thy field, neither shalt thou gather the gleanings of thy harvest.	agri tui, et collectionem messis tuae non colliges.
10. And thou shalt not glean thy vineyard, neither shalt thou gather every grape of thy vineyard; thou shalt leave them for the poor and stranger: I am the Lord your God.	**10.** Et vineam tuam non racemabis, neque grana vineae tuae colliges: pauperi et peregrino relinques ea: ego Jehova Deus vester.

LEVITICUS 23

Leviticus 23:22	
22. And when ye reap the harvest of your land, thou shalt not make clean riddance of the corners of thy field when thou reapest, neither shalt thou gather any gleaning of thy harvest; thou shalt leave them unto the poor, and to the stranger: I am the Lord your God.	**22.** Quum metetis messem regionis vestrae, non absolves usque ad angulum agri tui: nec collectionem messis tuae colliges: pauperi et peregrino relinques eam: Ego Jehova Deus vester.

DEUTERONOMY 24

Deuteronomy 24:19-22	
19. When thou cuttest down thine harvest in thy field, and hast forgot a sheaf in the field, then shalt not go again to fetch it: it shall be for the stranger, for the fatherless, and for the widow; that the Lord thy God may bless thee in all the work of thine hands.	**19.** Quum messueris messem in agro tuo, et oblitus fueris manipulum in agro, non reverteris ad eum tollendum: peregrino, pupillo, et viduae erit: ut benedicat tibi Jehova Deus tuus in omni opere manuum tuarum.
20. When then beatest thine olive-tree, thou shalt not go over the boughs again: it shall be for the stranger, for the fatherless, and for the widow.	**20.** Quum excusseris olivam tuam, non scrutaberis ramos post te: peregrino, pupillo, et viduae erit.
21. When thou gatherest the grapes of thy vineyard, thou shalt not glean *it* afterward: it shall be for the stranger, for the fatherless, and for the widow.	**21.** Quum vindemiabis vineam tuam, non colliges racemos post te: peregrino, pupillo, et viduae erunt.
22. And thou shalt remember that thou wast a bond-man in the land of Egypt: therefore I command thee to do this thing.	**22.** Memento quod servus fueris in terra AEgypti: idcirco praecipio tibi ut hoc facias.

God here inculcates liberality upon the possessors of land, when their fruits are gathered: for, when His bounty is exercised before our eyes, it invites us to imitate Him; and it is a sign of ingratitude, unkindly and maliciously, to withhold what we derive from His blessing. God does not indeed require that those who have abundance should so profusely give away their produce, as to despoil themselves by enriching others; and, in fact, Paul prescribes this as the measure of our alms, that their relief of the poor should not bring into distress the rich themselves, who kindly distribute. (2 Corinthians 8:13.) God, therefore, permits every one to reap his corn, to gather his vintage, and to enjoy his abundance; provided the rich, content with their own vintage and harvest, do not grudge the poor the gleaning of the grapes and corn. Not that He absolutely assigns to the poor whatever remains, so that they may seize it as their own; but that some small portion may flow gratuitously to them from the munificence of the rich. He mentions indeed by name the orphans, and widows, and strangers, yet undoubtedly He designates all the poor and needy, who have no fields of their own to sow or reap; for it will sometimes occur that orphans are by no means in want, but rather that they have the means of being liberal themselves; nor are widows and strangers always hungry; but I have explained elsewhere why these three classes are mentioned.

DEUTERONOMY 15

DEUTERONOMY 15:1-11	
1. At the end of *every* seven years thou shalt make a release.	**1.** Septimo quoque anno facies remissionem.
2. And this *is* the manner of the release: Every creditor that lendeth *ought* unto his neighbor shall release *it*; he shall not exact *it of* his neighbor, or of his brother; because it is called the Lord's release.	**2.** Haec autem est ratio remissionis, ut remittat omnis qui mutuum dederit manu sua, id quod mutuum dederit amico suo: non reposcet ab amico suo, aut a fratre suo, quia proclamata est remissio Jehovae.
3. Of a foreigner thou mayest exact *it again*: but *that* which is thine with thy brother thine hand shall release;	**3.** Ab alienigena reposces, aut quod fuerit tibi apud fratrem tuum, remittet manus tua:
4. Save when there shall be no poor among you; for the Lord shall greatly	**4.** Nisi quia non sit (*vel*, prorsus certe non erit) in te mendicus: quia benedicendo

bless thee in the land which the Lord thy God giveth *thee for* an inheritance to possess it:	benedicet tibi Jehova in terra quam ipse Deus tuus dat tibi in haereditatem ut possideas eam.
5. Only if thou carefully hearken unto the voice of the Lord thy God, to observe to do all these commandments which I command thee this day.	**5.** Sed ita duntaxat, si obediendo obedieris voci Jehovae Dei tui, ita ut custodias faciendo omne praeceptum istud quod ego praecipio tibi hodie.
6. For the Lord thy God blesseth thee, as he promised thee: and thou shalt lend unto many nations, but thou shalt not borrow; and thou shalt reign over many nations, but they shall not reign over thee.	**6.** Nam Jehova Deus tuus benedixit tibi, quemadmodum dixit tibi: tum mutuo accepto pignore dabis gentibus multis, tu autem non accipies mutuo: et dominaberis gentibus multis, at tibi non dominabuntur.
7. If there be among you a poor man of one of thy brethren within any of thy gates, in thy land which the Lord thy God giveth thee, thou shalt not harden thine heart, nor shut thine hand from thy poor brother;	**7.** Si fuerit apud te mendicus quispiam e fratribus tuis, in una e portis tuis, in terra tua quam Jehova Deus tuus dat tibi: non indurabis cor tuum, neque claudes manum tuam a fratre tuo mendico.
8. But thou shalt open thine hand wide unto him, and shalt surely lend him sufficient for his need, *in that* which he wanteth.	**8.** Sed aperiendo aperies illi manum tuam, et mutuando mutuabis ei ad sufficientiam usque, id quo indiguerit.
9. Beware that there be not a thought in thy wicked heart, saying, The seventh year, the year of release, is at hand; and thine eye be evil against thy poor brother, and thou givest him naught, and he cry unto the Lord against thee, and it be sin unto thee.	**9.** Cave tibi ne sit quidpiam in corde tuo impium, dicendo, Propinquus est annus septimus, annus remissionis: et malignus sit oculus tuus in fratrem tuum mendicum, ita ut non des ei: clamet autem contra te ad Jehovam, et erit in te peccatum.
10. Thou shalt surely give him, and thine heart shall not be grieved when thou givest unto him: because for this thing the Lord thy God shall bless thee in all thy works, and in all that thou puttest thine hand unto.	**10.** Dando dabis ei, neque malignum erit cor tuum quum dederis ei: quia hujus rei gratia benedicet tibi Jehova Deus tuus in omnibus operibus tuis, et in omni expensione manuum tuarum.
11. For the poor shall never cease out of the land: therefore I command thee, saying, Thou shalt open thine hand wide unto thy brother, to thy poor, and to thy needy, in thy land.	**11.** Non enim deerit mendicus de medio terrae: idcirco praecipio tibi dicendo, Aperiendo aperies manum tuam fratri tuo, id est pauperi tuo et mendico tuo in terra tua.

1. *At the end of every seven years*. A special act of humanity towards each other is here prescribed to the Jews, that every seven years, brother should remit to brother whatever was owed him. But, although we are not bound by this law at present, and it would not be even expedient that it should be in use, still the object to which it tended ought still to be maintained, *i.e.*, that we should not be too rigid in exacting our debts, especially if we have to do with the needy, who are bowed down by the burden of poverty. The condition of the ancient people, as I have said, was different. They derived their origin from a single race; the land of Canaan was their common inheritance; fraternal association was to be mutually sustained among them, just as if they were one family: and, inasmuch as God had once enfranchised them, the best plan for preserving' their liberty for ever was to maintain a condition of mediocrity, lest a few persons of immense wealth should oppress the general body. Since, therefore, the rich, if they had been permitted constantly to increase in wealth, would have tyrannized over the rest, God put by this law a restraint on immoderate power. Moreover, when rest was given to the land, and men reposed from its cultivation, it was just that the whole people, for whose sake the Sabbath was instituted, should enjoy some relaxation. Still the remission here spoken of was, in my opinion, merely temporary. Some, indeed, suppose that all debts were then entirely cancelled;[1] as if the Sabbatical year destroyed all debtor and creditor accounts; but this is refuted by the context, for when the Sabbatical year is at hand, God commands them to lend freely, whereas the contract would have been ridiculous, unless it had been lawful to seek repayment in due time. Surely, if no payment had ever followed, it would have been required simply to give: for what would the empty form of lending have availed if the money advanced was never to be returned to its owner? But God required all suits to cease for that year, so that no one should trouble his debtor: and, *because* in that year of freedom and immunity there was no hope of receiving back the money, God provides against the objection, and forbids them to be niggardly, although the delay might produce some *inconvenience*. First of all, therefore, He commands them to make a remission in the seventh year, *i.e.*, to abstain from exacting their debts, and to concede to the poor, as well as to the land, a truce, or vacation. On which ground Isaiah reproves the Jews for observing the Sabbath amiss, when they exact[2] their debts, and "fast for strife and debate." (Isaiah 58:3, 4.) The form of remission is added, That no one should vex his neighbor in the year in which the release of God is proclaimed.

3. *Of a foreigner thou mayest exact it*. An exception follows, that it should be lawful to sue foreigners, and to compel them to pay; and this for a very good reason, because it was by no means just that despisers of the Law should enjoy the Sabbatical benefit, especially when God had conferred the privilege on His elect people alone. What follows in the next verse, "Unless because there shall be no beggar," interpreters twist into various senses. Some translate it, Nevertheless (*veruntamen,*) let there be no beggar among thee; as if it were a prohibition, that they should not suffer their poor brethren to be overwhelmed with poverty, without assisting them; and, lest they should object that, if they should be so liberal in giving, they would soon exhaust themselves, God anticipates them, and bids them rely upon his blessing. Others, however, understand it as a promise, and connect it thus, That there should be no beggar among them, if only they keep the Law, since then God would bless them. Nor would this meaning be very unsuitable. What they mean who expound it, Insomuch that there should be no beggar with thee, I know not. Let my readers, however, consider whether[3] yk opa, *ephes ci*, is not better rendered "unless because," (*nisi quod*:) and then this clause would be read parenthetically, as if it were said, Whenever there shall be any poor among your brethren, an opportunity of doing them good is presented to you. Therefore the poverty of your brethren is to be relieved by you, in order that God may bless you. But, that the sentence may be clearer, I take the two words, yk opa, *ephes ci*, exclusively, as if it were, On no account let there be a beggar: or, howsoever it. may be, suffer not that by your fault there should be any beggar amongst you; for He would put an end to all vain excuses, and, as necessity arose, would have them disposed to give assistance, lest the poor should sink under the pressure of want and distress, tie does not, therefore, mean generally all poor persons, but only those in extreme indigence; such as the Prophet Amos complains are "sold for a pair of shoes." (Amos 2:6.) In order, then, that they may more cheerfully assist their distresses, He promises that His blessing shall be productive of greater abundance. And from hence Paul seems to have derived his exhortation to the Corinthians:

"He which soweth bountifully, shall reap also bountifully. God is able to make all grace abound toward you; that ye, always having all sufficiency in all things, may abound to every good work.: Now he that ministereth seed to the sower, *shall* both minister bread for your food, and multiply your seed sown, and increase the fruits of your righteousness, *that*, being enriched in every thing, *you may abound* unto all bountifulness." (2 Corinthians 9:6-11.)

In short, God would have them without carefulness, since He will abundantly recompense them with His blessing, if they have diminished their own stores by liberality to the poor.

6. *For the Lord thy God blesseth thee*. He confirms the foregoing declaration, but ascends from the particular to the general; for, after having taught that they might expect from God's blessing much more than they have bestowed on the poor, he now recalls their attention to the Covenant itself, as much as to say, that whatever they have is derived from that original fountain of God's grace, when He made them inheritors of the land of Canaan. God reminds them also that He then promised them abundant produce; and thus indicates that, if they were mean and niggardly, they would cause the land to be barren. When He says that they should lend to all nations, he speaks by way of amplification; and also in the next clause, that they should reign over the Gentiles; whence it follows, that if there were any in want among them, it would arise from the wickedness and depravity, of the people themselves.

7. *If there be among you a poor man.* The same word Nwyba, *ebyon*, is used, which we have seen just above, verse 4; nor is there any contradiction when He commands them to relieve beggars, whom He had before forbidden to exist among His people; for the object of the prohibition was, that if any were reduced to beggary, they should not be cast out and forsaken. Now, however, He explains the mode of preventing this, viz., that the hands of the rich should be open to assist them. In order to incline them to compassion, he again reminds them of their common brotherhood, and sets before them, as its token and pledge, the land in which by God's goodness they dwell together. Again, that they may be willing and prompt in their humanity, He forbids them to harden their heart, thereby signifying that avarice is always cruel. Finally, He applies this instruction to the year of release, viz., that they should straightway relieve their poor brethren towards the beginning of that year, just as if they would receive back in a few days the money which the poor man would retain to its end.

11. *For the poor shall never cease out of the land*. The notion[4] of those is far fetched who suppose that there would be always poor men among them, because they would not keep the law, and consequently the land would be barren on account of their unrighteousness. I admit that this is true; but God does not here ascribe it to their sins that there would always be some beggars among them, but only reminds them that there would never be wanting matter for their generosity, because He would prove what was in their hearts by setting the poor before them. For, (as I have observed above,) this is why the rich and poor meet together, and the Lord is maker of them all; because otherwise the duties of charity would not be observed unless they put them into exercise by assisting each other. Wherefore God, to stir up the inactivity of the rich, declares that lie prescribes nothing but what continual necessity will require.

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EXODUS 21

Exodus 21:1-6	
1. Now these *are* the judgments which thou shalt set before them.	**1.** Haec sunt judicia quae propones eis.
2. If thou buy an Hebrew servant, six years he shall serve; and in the seventh he shall go out free for nothing.	**2.** Si emeris servum Hebraeum, sex annis serviet: septimo egredietur gratis.
3. If he came in by himself, he shall go out by himself; if he were married, then his wife shall go out with him.	**3.** Si cum corpore suo ingressus fuerit, cum corpore suo egredietur: si maritus mulieris erat, egredietur et uxor ejus cum ipso.
4. If his master have given him a wife, and she have born him sons or daughters; the wife and her children shall be her master's, and he shall go out by himself.	**4.** Si herus ejus dederit ei uxorem, et pepererit ei filios, vel filias, uxor et filii ejus erunt heri sui: ipse vero egredietur cum corpore suo.
5. And if the servant shall plainly say, I love my master, my wife, and my children; I will	**5.** Quod si dicendo dixerit servus, Diligo herum meum, et uxorem meam,

not go out free:	et filios meos, non egredietur liber:
6. Then his master shall bring him unto the judges; he shall also bring him to the door, or unto the doorpost: and his master shall bore his ear through with an awl; and he shall serve him for ever.	**6.** Tunc adducet eum herus ejus ad judices, et applicabit eum ad ostium, vel ad postem, perforabitque herus ejus aurem ejus subula, et serviet ei in saeculum.

1. *Now these are the judgments*. Both passages contain the same appointment, viz., that as to the Hebrews slavery must end at the seventh year; for God would have the children of Abraham, although obliged to sell themselves, to differ from heathen and ordinary slaves. Their enfranchisement is, therefore, enjoined, but with an exception, which Moses expresses in the first passage but omits in the latter, *i.e*., that if the slave had married a bond-woman, and had begotten children, they should remain with the master, and that he should alone be free. Whence it appears how hard was the condition of slaves, since it could not be mitigated without an unnatural exception (*sine prodigio*;) for nothing could be more opposed to nature than that a husband, forsaking his wife and children, should remove himself elsewhere. But the tie of slavery could only be loosed by divorce, that is to say, by this impious violation of marriage. There was then gross barbarity in this severance, whereby a man was disunited from half of himself and his own bowels. Yet there was no remedy for it; for if the wife and children had been set free, it would have been a spoliation of their lawful master to take them with him, not only because the woman was his slave, but because he had incurred expense in the bringing up of the young children. The sanctity of marriage therefore gave way in this case to private right; and this defect is to be reckoned amongst the others which God tolerated on account of the people's hardness of heart, because it could hardly be remedied; yet, if any one were withheld by chaste affection, and unwilling to abandon his wife and offspring, an alternative is presented, viz., that he should give himself up also to perpetual slavery. The form of this is more clearly pointed out in Exodus than in Deuteronomy; for, in the latter, it is only said that the master, in order to assert his perpetual right to the slave, should bore his ear; whereas in Exodus the circumstance is added, that a public process should first take place; for, if each private individual had been his own judge in this matter, the rich men's houses would have been like slaughterhouses to put their wretched slaves to the torment in.[1] We read in Jeremiah, (34:11,) that this law fell into contempt, and that the Jews, contrary to all law and justice, retained perpetual dominion over their slaves; nay, that when they were severely reprimanded under King Zedekiah, and liberty was anew proclaimed, the wretched men were immediately dragged back to their yoke of tyranny, as if they had been set free in mockery. Care was therefore to be taken lest, by secret tortures, they should compel the unwilling to continue as their slaves; and the provision against this evil was an open confession of their desire before the judges; whilst the boring of the ear was a kind of stigma upon them. For the Orientals were accustomed to brand slaves, or fugitives, or criminals, or those who were in any wise suspected; and although God did not choose to have this mark of ignominy imprinted on the foreheads of his people, yet, if any one voluntarily consented to endure perpetual slavery, He willed that he should bear this token of his servitude upon his ear. Still we must remember that even this slavery, although it is said to endure for ever, was brought to a close at the jubilee, because then the condition of the land and people was altogether renewed….

APPENDIX B : EXCERPTS FROM SPEECH BY CONGRESSMAN RON PAUL CONCERNING US FIAT CURRENCY

Honorary Ron Paul of Texas, Before the U.S. House of Representatives
February 15, 2006

The End of Dollar Hegemony

A hundred years ago it was called "dollar diplomacy." After World War II, and especially after the fall of the Soviet Union in 1989, that policy evolved into "dollar hegemony." But after all these many years of great success, our dollar dominance is coming to an end.

It has been said, rightly, that he who holds the gold makes the rules. In earlier times it was readily accepted that fair and honest trade required an exchange for something of real value.

First it was simply barter of goods. Then it was discovered that gold held a universal attraction, and was a convenient substitute for more cumbersome barter transactions. Not only did gold facilitate exchange of goods and services, it served as a store of value for those who wanted to save for a rainy day.

Though money developed naturally in the marketplace, as governments grew in power they assumed monopoly control over money. Sometimes governments succeeded in guaranteeing the quality and purity of gold, but in time governments learned to outspend their revenues. New or higher taxes always incurred the disapproval of the people, so it wasn't long before Kings and Caesars learned how to inflate their currencies by reducing the amount of gold in each coin-- always hoping their subjects wouldn't discover the fraud. But the people always did, and they strenuously objected.

This helped pressure leaders to seek more gold by conquering other nations. The people became accustomed to living beyond their means, and enjoyed the circuses and bread. Financing extravagances by conquering foreign lands seemed a logical alternative to working harder and producing more. Besides, conquering nations not only brought home gold, they brought home slaves as well. Taxing the people in conquered territories also provided an incentive to build empires. This system of government worked well for a while, but the moral decline of the people led to an unwillingness to produce for themselves. There was a limit to the number of countries that could be sacked for their wealth, and this always brought empires to an end. When gold no longer could be obtained, their military might crumbled. In those days those who held the gold truly wrote the rules and lived well.

That general rule has held fast throughout the ages. When gold was used, and the rules protected honest commerce, productive nations thrived. Whenever wealthy nations-- those with powerful armies and gold-- strived only for empire and easy fortunes to support welfare at home, those nations failed.

Today the principles are the same, but the process is quite different. Gold no longer is the currency of the realm; paper is. The truth now is: "He who prints the money makes the rules"-- at least for the time being. Although gold is not used, the goals are the same: compel foreign countries to produce and subsidize the country with military superiority and control over the monetary printing presses.

Since printing paper money is nothing short of counterfeiting, the issuer of the international currency must always be the country with the military might to guarantee control over the system. This magnificent scheme seems the perfect system for obtaining perpetual wealth for the country that issues the de facto world currency. The one problem, however, is that such a system destroys the character of the counterfeiting nation's people-- just as was the case when gold was the currency and it was obtained by conquering other nations. And this destroys the incentive to save and produce, while encouraging debt and runaway welfare.

The pressure at home to inflate the currency comes from the corporate welfare recipients, as well as those who demand handouts as compensation for their needs and perceived injuries by others. In both cases personal responsibility for one's actions is rejected.

When paper money is rejected, or when gold runs out, wealth and political stability are lost. The country then must go from living beyond its means to living beneath its means, until the economic and political systems adjust to the new rules-- rules no longer written by those who ran the now defunct printing press.

"Dollar Diplomacy," a policy instituted by William Howard Taft and his Secretary of State Philander C. Knox, was designed to enhance U.S. commercial investments in Latin America and the Far East. McKinley concocted a war against Spain in 1898, and (Teddy) Roosevelt's corollary to the Monroe Doctrine preceded Taft's aggressive approach to using the U.S. dollar and diplomatic influence to secure U.S. investments abroad. This earned the popular title of "Dollar Diplomacy." The significance of Roosevelt's change was that our intervention now could be justified by the mere "appearance" that a country of interest to us was politically or fiscally vulnerable to European control. Not only did we claim a right, but even an official U.S. government "obligation", to protect our commercial interests from Europeans.

This new policy came on the heels of the "gunboat" diplomacy of the late 19th century, and it meant we could buy influence before resorting to the threat of force. By the time the "dollar diplomacy" of William Howard Taft was clearly articulated, the seeds of American empire were planted. And they were destined to grow in the fertile political soil of a country that lost its love and respect for the republic bequeathed to us by the authors of the Constitution. And indeed they did. It wasn't too long before dollar "diplomacy" became dollar "hegemony" in the second half of the 20th century.
This transition only could have occurred with a dramatic change in monetary policy and the nature of the dollar itself.

Congress created the Federal Reserve System in 1913. Between then and 1971 the principle of sound money was systematically undermined. Between 1913 and 1971, the Federal Reserve found it much easier to expand the money supply at will for financing war or manipulating the economy with little resistance from Congress-- while benefiting the special interests that influence government.

Dollar dominance got a huge boost after World War II. We were spared the destruction that so many other nations suffered, and our coffers were filled with the world's gold. But the world chose not to return to the discipline of the gold standard, and the politicians applauded. Printing money to pay the bills was a lot more popular than taxing or restraining unnecessary spending. In spite of the short-term benefits, imbalances were institutionalized for decades to come.

The 1944 Bretton Woods agreement solidified the dollar as the preeminent world reserve currency, replacing the British pound. Due to our political and military muscle, and because we had a huge amount of physical gold, the world readily accepted our dollar (defined as 1/35th of an ounce of gold) as the world's reserve currency. The dollar was said to be "as good as gold," and convertible to all foreign central banks at that rate. For American citizens, however, it remained illegal to own. This was a gold-exchange standard that from inception was doomed to fail.

The U.S. did exactly what many predicted she would do. She printed more dollars for which there was no gold backing. But the world was content to accept those dollars for more than 25 years with little question-- until the French and others in the late 1960s demanded we fulfill our promise to pay one ounce of gold for each $35 they delivered to the U.S. Treasury. This resulted in a huge gold drain that brought an end to a very poorly devised pseudo-gold standard.

It all ended on August 15, 1971, when Nixon closed the gold window and refused to pay out any of our remaining 280 million ounces of gold. In essence, we declared our insolvency and everyone recognized some other monetary system had to be devised in order to bring stability to the markets.

Amazingly, a new system was devised which allowed the U.S. to operate the printing presses for the world reserve currency with no restraints placed on it-- not even a pretense of gold convertibility, none whatsoever! Though the new policy was even more deeply flawed, it nevertheless opened the door for dollar hegemony to spread.

Realizing the world was embarking on something new and mind boggling, elite money managers, with especially strong support from U.S. authorities, struck an agreement with OPEC to price oil in U.S. dollars exclusively for all worldwide transactions. This gave the dollar a special place among world currencies and in essence "backed" the dollar with oil. In return, the U.S. promised to protect the various oil-rich kingdoms in the Persian Gulf against threat of invasion or domestic coup. This arrangement helped ignite the radical Islamic movement among those who resented our influence in the region. The arrangement gave the dollar artificial strength, with tremendous financial benefits for the United States. It allowed us to export our monetary inflation by buying oil and other goods at a great discount as dollar influence flourished.

This post-Bretton Woods system was much more fragile than the system that existed between 1945 and 1971. Though the dollar/oil arrangement was helpful, it was not nearly as stable as the pseudo gold standard under Bretton Woods. It certainly was less stable than the gold standard of the late 19th century.

During the 1970s the dollar nearly collapsed, as oil prices surged and gold skyrocketed to $800 an ounce. By 1979 interest rates of 21% were required to rescue the system. The pressure on the dollar in the 1970s, in spite of the benefits accrued to it, reflected reckless budget deficits and monetary inflation during the 1960s. The markets were not fooled by LBJ's claim that we could afford both "guns and butter."

Once again the dollar was rescued, and this ushered in the age of true dollar hegemony lasting from the early 1980s to the present. With tremendous cooperation coming from the central banks and international commercial banks, the dollar was accepted as if it were gold.

Fed Chair Alan Greenspan, on several occasions before the House Banking Committee, answered my challenges to him about his previously held favorable views on gold by claiming that he and other central bankers had gotten paper money-- i.e. the dollar system-- to respond as if it were gold. Each time I strongly disagreed, and pointed out that if they had achieved such a feat they would have defied centuries of economic history regarding the need for money to be something of real value. He smugly and confidently concurred with this.

In recent years central banks and various financial institutions, all with vested interests in maintaining a workable fiat dollar standard, were not secretive about selling and loaning large amounts of gold to the market even while decreasing gold prices raised serious questions about the wisdom of such a policy. They never admitted to gold price fixing, but the evidence is abundant that they believed if the gold price fell it would convey a sense of confidence to the market, confidence that they indeed had achieved amazing success in turning paper into gold.

Increasing gold prices historically are viewed as an indicator of distrust in paper currency. This recent effort was not a whole lot different than the U.S. Treasury selling gold at $35 an ounce in the 1960s, in an attempt to convince the world the dollar was sound and as good as gold. Even during the Depression, one of Roosevelt's first acts was to remove free market gold pricing as an indication of a flawed monetary system by making it illegal for American citizens to own gold. Economic law eventually limited that effort, as it did in the early 1970s when our Treasury and the IMF tried to fix the price of gold by dumping tons into the market to dampen the enthusiasm of those seeking a safe haven for a falling dollar after gold ownership was re-legalized.

Once again the effort between 1980 and 2000 to fool the market as to the true value of the dollar proved unsuccessful. In the past 5 years the dollar has been devalued in terms of gold by more than 50%. You just can't fool all the people all the time, even with the power of the mighty printing press and money creating system of the Federal Reserve.

Even with all the shortcomings of the fiat monetary system, dollar influence thrived. The results seemed beneficial, but gross distortions built into the system remained. And true to form, Washington politicians are only too anxious to solve the problems cropping up with window dressing, while failing to understand and deal with the underlying flawed policy. Protectionism, fixing exchange rates, punitive tariffs, politically motivated sanctions, corporate subsidies, international trade management, price controls, interest rate and wage controls, super-nationalist sentiments, threats of force, and even war are resorted to-all to solve the problems artificially created by deeply flawed monetary and economic systems.

In the short run, the issuer of a fiat reserve currency can accrue great economic benefits. In the long run, it poses a threat to the country issuing the world currency. In this case that's the United States. As long as foreign countries take our dollars in return for real goods, we come out ahead. This is a benefit many in Congress fail to recognize, as they bash China for maintaining a positive trade balance with us. But this leads to a loss of manufacturing jobs to overseas markets, as we become more dependent on others and less self-sufficient. Foreign countries accumulate our dollars due to their high savings rates, and graciously loan them back to us at low interest rates to finance our excessive consumption.

It sounds like a great deal for everyone, except the time will come when our dollars-- due to their depreciation-- will be received less enthusiastically or even be rejected by foreign countries. That could create a whole new ballgame and force us to pay a price for living beyond our means and our production. The shift in sentiment regarding the dollar has already started, but the worst is yet to come.

The agreement with OPEC in the 1970s to price oil in dollars has provided tremendous artificial strength to the dollar as the preeminent reserve currency. This has created a universal demand for the dollar, and soaks up the huge number of new dollars generated each year. Last year alone M3 increased over $700 billion.

The artificial demand for our dollar, along with our military might, places us in the unique position to "rule" the world without productive work or savings, and without limits on consumer spending or deficits. The problem is, it can't last.

Price inflation is raising its ugly head, and the NASDAQ bubble-- generated by easy money-- has burst. The housing bubble likewise created is deflating. Gold prices have doubled, and federal spending is out of sight with zero political will to rein it in. The trade deficit last year was over $728 billion. A $2 trillion war is raging, and plans are being laid to expand the war into Iran and possibly Syria. The only restraining force will be the world's rejection of the dollar. It's bound to come and create conditions worse than 1979-1980, which required 21% interest rates to correct. But everything possible will be done to protect the dollar in the meantime. We have a shared interest with those who hold our dollars to keep the whole charade going.

Greenspan, in his first speech after leaving the Fed, said that gold prices were up because of concern about terrorism, and not because of monetary concerns or because he created too many dollars during his tenure. Gold has to be discredited and the dollar propped up. Even when the dollar comes under serious attack by market forces, the central banks and the IMF surely will do everything conceivable to soak up the dollars in hope of restoring stability. Eventually they will fail.

Most importantly, the dollar/oil relationship has to be maintained to keep the dollar as a preeminent currency. Any attack on this relationship will be forcefully challenged-as it already has been.

In November 2000 Saddam Hussein demanded Euros for his oil. His arrogance was a threat to the dollar; his lack of any military might was never a threat. At the first cabinet meeting with the new administration in 2001, as reported by Treasury Secretary Paul O'Neill, the major topic was how we would get rid of Saddam Hussein-- though there was no evidence whatsoever he posed a threat to us. This deep concern for Saddam Hussein surprised and shocked O'Neill.

It now is common knowledge that the immediate reaction of the administration after 9/11 revolved around how they could connect Saddam Hussein to the attacks, to justify an invasion and overthrow of his government. Even with no evidence of any connection to 9/11, or evidence of weapons of mass destruction, public and congressional support was generated through distortions and flat out misrepresentation of the facts to justify overthrowing Saddam Hussein.

There was no public talk of removing Saddam Hussein because of his attack on the integrity of the dollar as a reserve currency by selling oil in Euros. Many believe this was the real reason for our obsession with Iraq. I doubt it was the only reason, but it may well have played a significant role in our motivation to wage war. Within a very short period after the military victory, all Iraqi oil sales were carried out in dollars. The Euro was abandoned.

In 2001, Venezuela's ambassador to Russia spoke of Venezuela switching to the Euro for all their oil sales. Within a year there was a coup attempt against Chavez, reportedly with assistance from our CIA.

After these attempts to nudge the Euro toward replacing the dollar as the world's reserve currency were met with resistance, the sharp fall of the dollar against the Euro was reversed. These events may well have played a significant role in maintaining dollar dominance.

It's become clear the U.S. administration was sympathetic to those who plotted the overthrow of Chavez, and was embarrassed by its failure. The fact that Chavez was democratically elected had little influence on which side we supported.

Now, a new attempt is being made against the petrodollar system. Iran, another member of the "axis of evil," has announced her plans to initiate an oil bourse in March of this year. Guess what, the oil sales will be priced Euros, not dollars.

Most Americans forget how our policies have systematically and needlessly antagonized the Iranians over the years. In 1953 the CIA helped overthrow a democratically elected president, Mohammed Mossadeqh, and install the authoritarian Shah, who was friendly to the U.S. The Iranians were still fuming over this when the hostages were seized in 1979. Our alliance with Saddam Hussein in his invasion of Iran in the early 1980s did not help matters, and obviously did not do much for our relationship with Saddam Hussein. The administration announcement in 2001 that Iran was part of the axis of evil didn't do much to improve the diplomatic relationship between our two countries.

Recent threats over nuclear power, while ignoring the fact that they are surrounded by countries with nuclear weapons, doesn't seem to register with those who continue to provoke Iran. With what most Muslims perceive as our war against Islam, and this recent history, there's little wonder why Iran might choose to harm America by undermining the dollar. Iran, like Iraq, has zero capability to attack us. But that didn't stop us from turning Saddam Hussein into a modern day Hitler ready to take over the world. Now Iran, especially since she's made plans for pricing oil in Euros, has been on the receiving end of a propaganda war not unlike that waged against Iraq before our invasion.

It's not likely that maintaining dollar supremacy was the only motivating factor for the war against Iraq, nor for agitating against Iran. Though the real reasons for going to war are complex, we now know the reasons given before the war started, like the presence of weapons of mass destruction and Saddam Hussein's connection to 9/11, were false. The dollar's importance is obvious, but this does not diminish the influence of the distinct plans laid out years ago by the neo-conservatives to remake the Middle East. Israel's influence, as well as that of the Christian Zionists, likewise played a role in prosecuting this war. Protecting "our" oil supplies has influenced our Middle East policy for decades.

But the truth is that paying the bills for this aggressive intervention is impossible the old fashioned way, with more taxes, more savings, and more production by the American people. Much of the expense of the Persian Gulf War in 1991 was shouldered by many of our willing allies. That's not so today. Now, more than ever, the dollar hegemony -- it's dominance as the world reserve currency -- is required to finance our huge war expenditures. This $2 trillion never-ending war must be paid for, one way or another. Dollar hegemony provides the vehicle to do just that.

For the most part the true victims aren't aware of how they pay the bills. The license to create money out of thin air allows the bills to be paid through price inflation. American citizens, as well as average citizens of Japan, China, and other countries suffer from price inflation, which represents the "tax" that pays the bills for our military adventures. That is until the fraud is discovered, and the foreign producers decide not to take dollars nor hold them very long in payment for their goods. Everything possible is done to prevent the fraud of the monetary system from being exposed to the masses who suffer from it. If oil markets replace dollars with Euros, it would in time curtail our ability to continue to print, without restraint, the world's reserve currency.

It is an unbelievable benefit to us to import valuable goods and export depreciating dollars. The exporting countries have become addicted to our purchases for their economic growth. This dependency makes them allies in continuing the fraud, and their participation keeps the dollar's value artificially high. If this system were workable long term, American citizens would never have to work again. We too could enjoy "bread and circuses" just as the Romans did, but their gold finally ran out and the inability of Rome to continue to plunder conquered nations brought an end to her empire.

The same thing will happen to us if we don't change our ways. Though we don't occupy foreign countries to directly plunder, we nevertheless have spread our troops across 130 nations of the world. Our intense effort to spread our power in the oil-rich Middle East is not a coincidence. But unlike the old days, we don't declare direct ownership of the natural resources -- we just insist that we can buy what we want and pay for it with our paper money. Any country that challenges our authority does so at great risk.

Once again Congress has bought into the war propaganda against Iran, just as it did against Iraq. Arguments are now made for attacking Iran economically, and militarily if necessary. These arguments are all based on the same false reasons given for the ill-fated and costly occupation of Iraq.

Our whole economic system depends on continuing the current monetary arrangement, which means recycling the dollar is crucial. Currently, we borrow over $700 billion every year from our gracious benefactors, who work hard and take our paper for their goods. Then we borrow all the money we need to secure the empire (DOD budget $450 billion) plus more. The military might we enjoy becomes the "backing" of our currency. There are no other countries that can challenge our military superiority, and therefore they have little choice but to accept the dollars we declare are today's "gold." This is why countries that challenge the system -- like Iraq, Iran and Venezuela -- become targets of our plans for regime change.

Ironically, dollar superiority depends on our strong military, and our strong military depends on the dollar. As long as foreign recipients take our dollars for real goods and are willing to finance our extravagant consumption and militarism, the status quo will continue regardless of how huge our foreign debt and current account deficit become.

But real threats come from our political adversaries who are incapable of confronting us militarily, yet are not bashful about confronting us economically. That's why we see the new challenge from Iran being taken so seriously. The urgent arguments about Iran posing a military threat to the security of the United States are no more plausible than the false charges levied against Iraq. Yet there is no effort to resist this march to confrontation by those who grandstand for political reasons against the Iraq war.__It seems that the people and Congress are easily persuaded by the jingoism of the preemptive war promoters. It's only after the cost in human life and dollars are tallied up that the people object to unwise militarism.

The strange thing is that the failure in Iraq is now apparent to a large majority of American people, yet they and Congress are acquiescing to the call for a needless and dangerous confrontation with Iran.

But then again, our failure to find Osama bin Laden and destroy his network did not dissuade us from taking on the Iraqis in a war totally unrelated to 9/11.

Concern for pricing oil only in dollars helps explain our willingness to drop everything and teach Saddam Hussein a lesson for his defiance in demanding Euros for oil.

And once again there's this urgent call for sanctions and threats of force against Iran at the precise time Iran is opening a new oil exchange with all transactions in Euros.

Using force to compel people to accept money without real value can only work in the short run. It ultimately leads to economic dislocation, both domestic and international, and always ends with a price to be paid.

The economic law that honest exchange demands only things of real value as currency cannot be repealed. The chaos that one day will ensue from our 35-year experiment with worldwide fiat money will require a return to money of real value. We will know that day is approaching when oil-producing countries demand gold, or its equivalent, for their oil rather than dollars or Euros. The sooner the better.

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Note: In the speech quoted above, Congressman Ron Paul excellently analyzes the fraud inherent in the US fiat currency, but he fails to recognize that this fraud was merely a symptom of the false religion of the American people, when they forsook established Protestantism and adopted secularism. Nevertheless, his speech serves as an excellent summary of much of American economic history, and its relation to politics.