FAITH & REASON HONORS PROGRAM
CLASS OF 2019

Using Literature as a Vehicle for Teaching

and Discussing Economic Theory

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**Introduction**

Economics is an educational discipline that possesses a reputation of overwhelming negativity, given its often touted moniker of “the dismal science”. Despite how prevalent economics is and how much of an influence it maintains within society, many individuals dismiss it as a field defined by confusion, frustration, and over-technical jargon. It’s quite clear that this “dismal” nature, which was first termed by Scottish writer and philosopher, Thomas Carlyle, in his discussion of slavery in the West Indies, can now be more adequately applied to first-year undergraduate students sitting confused and uninspired in an introductory macroeconomics class. This unfortunate reality is what defines much of economics, not just in college classrooms, but in the world as a whole, with many people lacking understanding of the economic forces that shape society.

Economics has been around for centuries and it’s said to have been officially founded by Scotland’s Adam Smith in the late 1700’s, but has been written about in some form for much longer. Economics often is misattributed as dealing with money, and while that is one element of the field, there are many different levels that people must consider. “It’s the study of scarcity, the study of how people use resources and respond to incentives, or the study of decision-making. It often involves topics like wealth and finance, but it’s not all about money. Economics is a broad discipline that helps us understand historical trends, interpret today’s headlines, and make predictions about the coming years” (American Economic Association). This is why economics is such a vital field to study and understand. It not only works to understand the overall factors that shape global markets (macroeconomics), but it also works to understand what factors influence behavior on a household/business scale and how we react to such factors. (microeconomics).

 It’s worth noting that much like how economic concepts are inescapable throughout our lives, they are also inescapable within literature, given that when authors are writing realistic works based on society, every element of society can be seen in some form throughout each piece. This means that authors and poets must use their creative talents to discuss economics in a way that avoids technical verbiage and mirrors the emotion and linguistic beauty that the rest of their work possesses. In this, the power of literature becomes apparent, as storytelling can appeal to emotions and influence peoples’ decisions and behavior in a way that economic reporting could never imagine. “Literary treatments (including ‘good stories’ told by economists) are often more convincing to non-economists than are mathematical models and statistical evidence” (Watts, xxiii). This concept is fundamental in a relatively new idea known as “narrative economics”, which is an idea that was developed by Robert J. Shiller, Nobel Prize winner in economics and current Sterling Professor (highest rank of professor) of economics at Yale University. Narrative economics, according to Shiller, refers to “the study of the spread and dynamics of popular narratives, the stories, particularly those of human interest and emotion, and how these change through time, to understand economic fluctuations” (Shiller 4). Over time, experts in a variety of various disciplines have begun to possess the notion that narratives are valuable beyond their face entertainment value, and are instrumental tools in better understanding how people think.

 It is for this reason that narratives, especially in the context of literature, are invaluable in better understanding a number of disciplines, such as psychology, sociology, and economics. For the purposes of this paper, economics will be the focus, and it will show a variety of works from the past several hundred years of literature that discuss many of the principles that define economics, and offer unique, yet realistic contexts in which economic principles are present.

**Literature from the Late 1500’s – 1600’s**

**Shakespeare’s *The Merchant of Venice***

As the 16th century was nearing its end, England was blessed by the productions of arguably the greatest literary figure in history, William Shakespeare. Shakespeare wrote his vast collection of works between the early 1590’s until around the time of his death in 1616. One of his most unique and famous works, was *The Merchant of Venice*, which was written at some point towards the end of 1590’s. This play by Shakespeare tells the story of a Venetian merchant by the name of Antonio, who finds himself in a less than desirable situation after taking out a risky loan with a Jewish moneylender named Shylock. *The Merchant of Venice* is a piece that discusses a number of different principles within the field of economics, and the two most notable of these are entrepreneurship and government regulation.

Entrepreneurship developed significantly throughout the time period, as Europe was coming out of the Renaissance and was more developed and prospering, which brought on an increase of wealthy individuals. A lot of wealth was amassed in shipping, dictating that the push for wealth had a high risk/high reward element to it. Joint-stock companies were established in order to diversify people’s interests and risks, which is what we see throughout Shakespeare’s economic-centric piece. Antonio is written as a prudent individual when it comes to his wealth, as he attempted to diversify his risks, despite not being able to come close to the level of balance in portfolios that is seen today. In a conversation with a couple Venetian noblemen, Antonio states that, “My ventures are not in one bottom trusted, nor to one place, nor is my whole estate upon the fortune of the present year: Therefore, my merchandise makes me not sad” (Shakespeare Act I Scene I). This is the kind of practical behavior that is indicative of quality entrepreneurs, maximizing profit while also diversifying some of the risk associated.

Another issue that arises in *The Merchant of Venice* is the need for government regulation and where the line should be drawn in terms of dealing with property rights and contract disputes. At times, matters such as these have been handled privately, but often with excessive force or violence, outlining the value of government interference in most cases. Generally speaking, “government laws, regulations, and enforcement agencies are necessary to establish the broader social context for a market economy – for example, to limit markets in light of constitutional and social commitments to basic human and political rights...” (Watts 155). In the context of the story, the court rules in favor of Antonio, because the contract that was made between himself and Shylock effectively violated his human rights (Shylock was asking for a pound of flesh), and the ruling was turned on Shylock, forcing him to give half of his wealth to Antonio, and half to the state. This kind of decision emphasizes the value of government regulation, effectively establishing a code of law based on reason and precedent that protects both individuals and business owners.

**John Milton’s *Comus***

As mentioned in an above section, one of the definitions of economics is the study of scarcity; scarcity being the fundamental concern behind the decisions we make and why we make them. The idea behind scarcity is that “human wants that can be satisfied with material goods and services are unlimited, at least compared to the finite level of resources available to produce those goods and services” (Watts 3). This basic premise is what dictates all of economics, because it forces people to make sound decisions regarding their use of resources (whether it’s natural resources, capital, etc.) both now and in the future. English poet, John Milton, discussed this idea in one of his works, *Comus*, which he presented in front of the Earl of Bridgewater in 1634. In this work, Milton warns the reader as to not fall into the trap of greedily striving for more and more of the earth’s natural resources. Milton writes, “If all the world / Should, in a pet of temperance, feed on pulse, / Drink the clear stream, and nothing wear but frieze, / The All-giver would be unthanked, would be unpraised, / Not half his riches known, and yet despised; / And we should serve him as a grudging master...” (Milton Lines 15-20). When people get into the mindset that they need to have control of more and more resources, they can lose sight of the fact that what’s available is finite, and they can’t just take and take with no repercussions. People shouldn’t feel as though they’re being treated unfairly since they only have access to limited resources, but they should be grateful for having access to any at all, and learn to make sound economic decisions in using those resources.

**Literature of the 1700’s – 1800’s**

**Alexander Pope’s *Imitations of Horace and Epistles III and IV***

 The income effect, is a phenomenon in economics that assumes that when an individual’s income changes, their rate of consumption changes alongside that. As income increases, whether directly or indirectly (directly referring to actual wage increases, while indirectly could just refer to a decrease in food prices), the individual is expected to consume more. Conversely, if income decreases, then the individual can be expected to consume less. This principle is seen in a poem by English writer Alexander Pope, titled *Imitations of Horace*. The poem tells the story of a nameless soldier who lost what bit of wealth he did amass, and took an aggressive and reckless approach in the upcoming battle. When the battle is finished, the soldier is met with praise and rewards, and now that he has his wealth again, he takes the opposite approach in the next battle. When he’s told to advance and charge, the soldier responds with, “D’ye think me, noble Gen’ral, such a Sot? / Let him take Castles who has ne’re a Groat.” (Pope, Lines XVIII-XIX) One thing that is associated with the income effect, is that as income rises, the demand for safety typically increases as well, now that the individual can afford to be protected. While this is typically seen in other facets nowadays, the principle remains the same.

 Another idea that Pope integrates is the nature of money, and how it can be both positive and negative in its uses. The old saying goes that, “money is the root of all evil”, and in some ways it is, with its potential to corrupt those who gain wealth. This concept is present in Pope’s poem, *Epistle III: Of the Use of Riches*. Pope tells the story of an average citizen named Balaam who exhibited many honorable characteristics, as he was “religious, punctual, frugal, and so forth...” (Pope, Line III) Due to his saintly nature, the devil takes interest and works into tempting his towards evil, not by making him suffer like he did in the Book of Job, but by making him extremely wealthy. After acquiring obscene wealth, it was not long before Sir Balaam would become corrupted and start making dishonorable decisions. Towards the end of the poem, he decides to take a bribe from France, his treachery is discovered, he is impeached from his spot on the Senate, and he is ultimately hung. This poem does an effective job at discerning the potential ramifications of being too in love with money, and it shows that it may even cost an individual their life in the end.

 Conversely, Pope illustrates the opposite side of the argument in his poem, *Epistle IV: Of the Use of Riches*. In this poem, Pope talks about all the projected ventures that the British government can undergo in terms of bettering society. With government funds they plan to, “Erect new wonders, and the old repair... bid harbours open, public Ways extend, / Bid Temples, worthier of the God, ascend, / Bid the broad arch the dangerous flood contain, / The Mole projected break the roaring Main, / Back to his bounds their subject Sea command, / And roll obedient Rivers thro’ the land” (Pope Lines XIV, XIX-XXIV). While money does have the power to corrupt when used irresponsibly, it also has the ability to make society a better place as a whole. It must be regulated and monitored so that money is effectively channeled towards beneficial projects instead of satisfying individuals’ greedy self-interests.

**Jonathan Swift’s *A Modest Proposal***

“If there is a golden rule of economics, it is this: “When the additional benefits of doing a little more of something are greater than the additional costs, do it. When the additional costs are greater than the additional benefits, don’t do it” (Watts 301). This idea in its simplicity is what’s known as a cost-benefit analysis, in which a decision is considered and options are compared based on their benefits and costs. There is great difficulty when these cost-benefit analyses are directed at situations which involve people and their well-beings. In his satirical piece, *A Modest Proposal*, Swift stretches the boundaries as to what is right to sell on the market and for whatever purposes. The cost-benefit analysis was done in order to determine the logistics of selling infants and young children in the marketplace for the purposes of food. Even financial consideration is given as to what an assumed fair value would be for a child’s body (between two and ten shillings) (Watts 303). Despite the unsettling nature of the market, the commentary does feel reasonable, as it is vital that decisions are made based on a thorough analysis of the various costs and benefits.

**Johann Goethe’s *Faust***

 One of the lasting sentiments of economic antiquity is the preference of the gold standard over a paper currency. It’s a system that has lost its favor (U.S. has not had currency backed by gold or other precious metals for over half a century) (Watts 270), and yet still has its merit. One issue surrounding paper currency that gold purists point to, is that using a paper currency presents an obvious risk for higher levels of inflation, due to the ease and inexpensiveness of governments being able to print out more and more money. While paper currencies are established now as the normal and preferred systems of finance, a number of experts condemn the system. This sentiment is shared by German writer, Johann Goethe, who as a former finance minister, takes a passionate stand against paper currencies. Goethe suggest in this play that, “paper currency came from an evil parentage, and would be systematically manipulated by government officials to support greater spending and to pay off public debt with money worth less than the government had borrowed earlier” (As quoted in Watts 270). In a discussion with the treasurer regarding the empire’s currency, Faust states, “The hoards of wealth untold, that torpid sleep / Within the Empire’s borders buried deep, / Lie profitless. The thought’s most ample measure / Is the most niggard bound of such a treasure” (As quoted in Watts 272). This is Faust’s preference for currency based on precious metals, as they are less susceptible to effects of inflation as they “lie profitless...” and don’t lose their value like paper money can.

**W.S. Gilbert’s *Song of a Savoyard***

 At the heart of economics lies the universal principle of supply and demand, which refers to the idea that the availability of a good or service and the willingness of consumers to purchase said good or service are the underlying factors that dictate price changes. The market price of a good or service means the price is positioned where the amount that consumers can and will purchase equals the amount that producers can and will sell. If the price goes above this equilibrium price, then the supply outweighs the demand, and some things will go unsold. If the price goes below the equilibrium price, then the demand outweighs the supply, and not enough will be produced to meet demand (Figure 1).

*Figure 1*. Supply and demand curve where p=price and q =quantity produced (From https://policonomics.com/supply-and-demand/)



As long as the market is operating efficiently, then the market will dictate proper prices based on the principle of supply and demand. English poet W.S. Gilbert writes about this principle in his book of songs, *Songs of a Savoyard*. In one song, Gilbert writes of a kind-hearted king who wishes that everyone would be wealthy like he is. However, what’s important to note about this song, is the ending in which Gilbert writes, “When you have nothing else to wear /But cloth of gold and satins rare, / For cloth of gold you cease to care – / Up goes the price of Shoddy” (As quote in Watts 106). This bit refers to the idea that as consumer’s tastes regarding certain goods change (in this case, clothing), then prices will dictate that change. In the context of the song, as people lose their taste in expensive and luxurious clothing, “For cloth of gold you cease to care...”, then the prices in cheaper clothing will increase as more people start to buy them, “Up goes the price of shoddy.” This basic idea is one of the most fundamental principles that dictates economics, specifically how markets operate, and can be seamlessly applied on a global or individual scale.

**Percy Bysshe Shelley’s *Song to the Men of England***

 Prior to the meteoric rise of industrialism in England, the nation dealt with a significantly higher unemployment rate, partially due to the discharge of a number of men from military service after the Napoleonic Wars. There was considerable unease in the nation as a result of this, and it wouldn’t be solved for a number of years. However, the great British poet, Percy Bysshe Shelley, wrote somewhat of an ode to these workers in an effort to establish somewhat of an inspiring tune for the British labor force and to hopefully start a social revolution. This ode is titled, *Song to the Men of England*, and it details the plights of the working class in the face of oppression. Shelley writes a number of powerful stanzas including, “Wherefore feed, and clothe, and save, / From the cradle to the grave, / Those ungrateful drones who would / Drain your sweat – nay, drink your blood?” (Shelley Lines 5-8) and “The seed ye sow, another reaps; / The wealth ye find, another keeps; / The robes ye weave, another wears; /The arms ye forge, another bears” (Shelley Lines 17-20). This work from Shelley is not just a message to those citizens who are out of work, but also to those who are working, as farmers, weavers, gunsmiths, etc. It is a call to action that no longer should their work see little reward while those above them amass all the wealth. It was one of the many calls for revolution seen across Europe throughout the first half of the 19th century, and while it did not amount to the social revolution that Shelley envisioned, it’s still a tremendous work outlining the exploitation of the British labor force.

**Frédéric Bastiat’s *Petition of the Manufacturers of Candles***

 For centuries, the majority of reputable economists have supported the notion that free trade among nations leads to an overall increase in productivity for all nations involved. By opening up boarders and trading specialized goods for other specialized goods internationally, the overall standard of living increases. This rivals the idea of protectionism, which is an anti-trade position that merits that all goods are produced domestically in order to save jobs from foreign workers and businesses. Despite the lack of reasoning behind protectionism (paying more for the things we buy and utilizing more resources to produce things that can be produced cheaper elsewhere), it is still a position that manages to seep into certain world governments. Regarding protectionism, a famous satirical fable was written in 1845 by French economist, Frédéric Bastiat, which attacks the mindset behind tariffs and anti-trade legislation. In this piece, everyone associated with the French lighting industry (manufacturers of lighting fixtures, producers, of oil, resin, and other essentials, etc.) call on the French government to pass restrictive legislation to inhibit any form of rivalry from the sun, which they feel increasingly threatened by. The petitioners arguing that by forcing the French citizenry to close any and all orifices that allow in natural light, people will be forced to buy more lighting fixtures, therefore their business will prosper. This piece hits on all of the major arguments against protectionism, as it would be unreasonable to allocate resources for goods that are not necessary when a cheaper (free) alternative is available, the citizens would be worse off because of the rise in costs that would associated with the legislation, and putting additionally money into an industry that isn’t efficient or competitive is questionable, when that money would be better allocated in an industry that actually possesses competitive advantage (conditions that allow for a country/company to produce a good at a lower cost).

**Charles Dickens’s *Hard Times***

 The great English author, Charles Dickens, wrote many examples of social and economic factors into his works of literature, having lived in England during the time of the Industrial Revolution. He was a staunch critic of the poverty and social barometers that existed in Victorian England, often writing that into his works, giving readers a real, gritty look into poverty. In Dicken’s novel, *Hard Times*, he discusses two ideas present in economics that are known as public goods and externalities. Public goods, as opposed to private goods, are entities that can be utilized by many people at once and no one can be excluded from (whereas private goods can be limited to a single individual). The air itself must be considered a public good, and it is open for all to use. An externality is a consequence or side effect associated with the consumption or production of a product or service. The most notorious externality is pollution, which is a negative spill-over cost associated with all of the production that occurs (especially during the Industrial Revolution). He writes about this factor in the novel, describing the grunginess of it all with lines such as, “It was a town of red brick, or of brick that would have been red if the smoke and ashes had allowed it; but, as matters stood it was a town of unnatural red and black, like the painted face of a savage” (As quoted in Watts 151). The issue during Dicken’s time is that there was no way for the government to handle the spread of the pollution, as the industrial processes that caused them far outpaced any potential means of cleaning up. Nowadays, while pollution is still a concern, the infrastructure is at least in place to readily deal with it when needed.

**Emily Brontë’s *Wuthering Heights***

 One of the biggest factors that erodes the potential of productivity is deranged self-interest. While self-interest is a positive motivating factor, and it guides people towards hard work and frugalness, when it becomes corrupted, it leads people towards bad actions instead of altruistic and constructive ones. Adam Smith was one of biggest advocates of the competitive market in terms of it being effective in channeling individuals’ self-interest towards productive behavior. One of Smith’s famous examples of this is the actions of a butcher, and how a butcher must be kind and respectful to their customers while offering reasonable prices. This is not because a person steps into an inherently benevolent role when they become a butcher, but because it resides in their best interest as a butcher to give their customers a positive experience, so that they don’t lose business to competitors. While this certainly applies to financial systems, it is applicable for all walks of life. British author Emily Brontë writes this into her famous work *Wuthering Heights*, in which this principle is applied to a failed relationship for the main female protagonist Catherine. In this, Brontë writes, “It ended. Well, we *must* be for ourselves in the long run; the mild and generous are only more justly selfish than the domineering; and it ended when circumstances caused each other to feel that the one’s interest was not the chief consideration in the other’s thoughts” (As quoted by Watts 21). This shows that deranged self-interest can be detrimental and condemning for any endeavor that requires interdependence. Whether it be a romantic relationship, a business venture, or even a simple conversation, self-interest must be guided away from the harmful nature that it is prone to when left unchecked.

**Mark Twain’s *Adventures of Huckleberry Finn* and *A Connecticut Yankee in King Arthur’s Court***

 One of the unfortunate realities of life, is that nothing is completely free from discrimination, not even an efficient, competitive, free-market economy. Despite the obvious shortcomings, from a social, economic, and personal perspective, discrimination is still rooted in society and strips people of various ethnic, racial, sexual, and religious groups of various opportunities in the marketplace. This is true now, and it was especially true during the Antebellum Period in the United States, in which slavery was still legal and was all too common down south. This type of environment is written in American author, Mark Twain’s, Magnum Opus, *The Adventures of Huckleberry Finn*. This novel tells the story of Huck Finn who after his adventures with Tom Sawyer, still struggles to fit in with society. Especially growing up in a state like Missouri, Huck was exposed to the woes of slavery. He works to ignore the social constructs set in place that tell him that he shouldn’t interact in a positive way towards Jim, a large, yet mild-mannered slave who eventually joins Huck on his trip down the Mississippi River after escaping from his master. Slavery is the cruelest, most demeaning, and most violating form of discrimination, and while that would eventually be abolished, race relations were still especially volatile for the next hundred years in the United States, and issues still arise commonly in today’s landscape. However, slavery was the original example of this in this country, and it is well described throughout the novel.

 Another principle that Twain discusses in his work is the idea of nominal vs real value when it comes to currency. Nominal prices are the dollar value that is attached to a product at the time it was produced, while real prices are values that are adjusted over time for inflation, offering greater insight into the value of a product when comparing to previous and future years. An example of this being how $50 in the U.S. 100 years ago has a greater value than $50 today, and back then, it could buy much more. While the nominal values are equal, the real values of each $50 are significantly different from one another. In Twain’s novel *A Connecticut Yankee in King Arthur’s Court*, this principle is brought up in a discussion between two neighboring countries. In a rather humorous back and forth, one country’s king lauds his own nation for having wages that are doubled those of their neighbor, while the other lauds his own country for having goods that cost much less than the neighboring country’s goods. This exchange is spearheaded with the line, “Your wages are merely higher than ours in *name*, not in *fact*” (As quoted in Watts 279). Illustrating the issue at hand. In order to have a definitive answer as to which currency possesses a greater value, each currency would need to be weighed against a singular, objective point of reference to get each currency on the same scale. While that type of measurement was not sufficiently in place during the Medieval Period, it is now utilized today through measures such as producer-price-index (PPI) and consumer-price-index (CPI).

**Literature of the 1900’s**

**Robert Frost’s *Mending Wall* and *The Road Not Taken***

 The end of the 19th and dawn of 20th centuries saw the rise of great, American poetry. From Walt Whitman to Emily Dickson, American poetry started to rise in its proficiencies, and it is around this time that arguably the greatest American poet began his reign. Robert Frost wrote a number of tremendous pieces over the course of his long career, including one from 1914 in which he perfectly balances poetic language and social commentary. This piece titled, *Mending Wall*, is a poem that discusses the ideas behind property rights, which was discussed earlier in the paper, although Frost looks at this issue in a much different manner. In this poem, two neighbors who live next to one another have a stone wall that runs down the middle of their properties, and every spring they work to put the stones back that have fallen off. One spring, the speaker questions the neighbor’s motives as to having the wall, because while they both agree to it, the speaker always contemplates if it’s really necessary to have. He understands that property rights should certainly be enforced when the risk that what’s on one side of the wall could be harmful to the other side is present, however this is not the case with his old, harmless neighbor. When he asked the neighbor, he only responds with, “Good fences make good neighbors” (Frost Line 27). The neighbor’s mentality probably mirrors that which claims that property rights are inherent and natural rights, a sentiment that was shared by English philosopher John Locke, who claimed that the unalienable human rights were “life, liberty, and property”. Despite the lack of conflict in this poem, with the speaker opting to rebuild the wall every year with the neighbor (and actually taking initiative in doing so), it still provides an interesting commentary on the nature of property rights, and the differing opinions regarding the inherent nature in them.

 Frost also applies one of the fundamental principles of economics into arguably his most famous and oft-recited poem, *The Road Not Taken*. In this poem, the choice that the speaker is forced to make is a prime example of a principle known as opportunity cost, which refers to the idea that when somebody makes a choice, they lose out on all the benefits of all other possible alternatives. An example of this would be deciding to attended college in a four-year program, because not only is the cost of the education a factor, but the loss of potential income from if that person decided to forgo college and start working right away, along with a number of other alternatives, must also be considered as “costs”. Every economic decision, regardless of the scale, has an opportunity cost behind it. Frost implies that the roads were “about the same” despite the path he eventually takes being less traveled. This is because once risk is adjusted for, economists try to equalize differences among returns in order to make each option as appealing as the others. While the road that was more-heavily traveled may have more benefit to it, ultimately there are other factors involved with making decisions, such as which choice is best suited for the decision maker, how willing are they to accept risk, etc. That idea points to the idea that a certain decision, or “road”, may or may not be as good objectively, but the subjective factors may make a choice more beneficial in the long run for certain individuals. Ultimately, while one choice may be objectively better in a vacuum, making one choice leads people to paths that wouldn’t be available had they made the other choice, and the long branching network of potential paths that could have been taken becomes too convoluted to decipher.

**Upton Sinclair’s *The Jungle***

 Tying back into the idea behind government regulation, one of the most influential developments in government legislation was the introduction of regulation and inspection programs that were implemented to make sure the food that was being offered to consumers was of improved quality and safe to eat. This was due to the brave, investigative journalism done by a handful of muckrakers, who were a group of individuals who worked during the progressive era to expose corrupt or misguided institutions and organizations. Arguably, the most famous of these muckrakers was Upton Sinclair, who worked to expose the abuses that were happening in the meat packing industry. His most famous work, *The Jungle* was a horrifying account of the working conditions of factory workers, in which many people lost fingers and limbs, caught diseases, and worked in cold, cramped conditions for long periods of time. When the novel was published however, attention was not given to the workers’ plights, but to the atrocities surrounding the food itself. It’s said that “Spoiled meat was covered with chemicals to hide the smell. Skin, hair, stomach, ears, and nose were ground up and packaged as head cheese. Rats climbed over warehouse meat, leaving piles of excrement behind” (ushistory.org). It was after all of the horrifying details came out that President Roosevelt worked to passed the Pure Food and Drug Act of 1906 which prevents “the manufacture, sale, or transportation of adulterated or misbranded or poisonous or deleterious foods, drugs or medicines, and liquors” (history.house.gov). It was this act that would eventually lead to the formation of the Food and Drug Administration, accentuating a movement started by muckraker literature.

**Erich Maria Remarque’s *The Black Obelisk***

 Some of the most world-changing social, political, and economic factors that defined the first half of the 20th century all center around Germany, and the transition periods it took across two World Wars. Post WWI and prior to the rise of the Nazi Party in Germany, the Weimar Republic-led Germany endured one of the worst periods of hyperinflation in recorded history (Figure 2). Hyperinflation is an exaggerated and disastrous version of inflation, which refers to a constant and sustained increase in price level. The reason that the term “hyperinflation” is so

*Figure 2.* Graph showing the rising inflation of Weimar Germany over a six-year span and chart illustrating the devaluing of the German Mark. (From armstrongeconomics.com)



feared, is because, “Although the threshold is arbitrary, economists generally reserve the term “hyperinflation” to describe episodes when the monthly inflation rate is greater than 50 percent. At a monthly rate of 50 percent, an item that cost $1 on January 1 would cost $130 on January 1 of the following year” (econlib.org). Having lived in Germany throughout this time period, Erich Maria Remarque knows and has seen the many horrors of hyperinflation, and uses that as inspiration in his works. Remarque is most well-known for his novel *All Quiet on the Western Front*, which was a novel about German soldiers during WWI (he actually served for Germany during WWI on the Western Front). However, the economic hardships seen throughout Germany after the war can be seen in his other works, including his 1956 novel *The Black Obelisk*. This novel does the time period justice, as the effects of the rapidly diminishing mark (Weimar currency) are portrayed in an incredible, yet horrific manner. In a conversation with his employer Georg, the protagonist Ludwig asks for a raise after previously getting one that morning. When questioned about it, Ludwig states that it was, “A miserable ten thousand marks. However, it was still worth something at nine this morning. Now the new dollar exchange rate has been posted and instead of a new tie all I can buy is a bottle of cheap wine.” It was especially bad for the average individual, as Georg goes on to mention that, “The people with savings are ruined, of course. So are all the factory workers and office workers. Also most of the small-business people, only they don’t know it. The only ones who are making hay are the people with foreign exchange, stocks, or negotiable property.”

**Gertrude Stein’s *Money***

 The idea behind money, in theory, is a simple idea. It is a vehicle used to make purchases. However, the textbook definition of money creates very defined boundaries that dictate what is and isn’t money. Money must be able to act as a medium of exchange (trade money for goods and services), act as a medium of account (prices are expressed using monetary expressions), and it must be a store of value over time. This more convoluted ideal of money confuses a number of people regarding the nature of money, one of those people, was American writer, Gertrude Stein, who in her work *Money*, questions the nature of money and why money means very different things depending on the perspective. Stein argues that government and higher institutions spend money at an obscene rate, and when money is related to government uses, it feels drastically different than when individuals spend. There’s no difference between the money used, so Stein believes that the government should be forced to spend like individuals and households do.

**The Works of John Steinbeck**

 One of the most well-known and celebrated American authors of history is John Steinbeck, who wrote his most notable works between the 1930’s and the beginning of the 1960’s. Steinbeck is famous for not only for his tremendous creativity, but for also maintaining a strong social consciousness in his writing over time, and it is for this reason that he was awarded the Nobel Prize in Literature in 1962. His writing was rooted in social elements that were found throughout the world, which is most apparent in what many consider his finest work, *The Grapes of Wrath*, written in 1939. This work tells of the plights of a group of Oklahoma farmers displaced from their land and forced to migrate to California due to the effects of the Great Depression and the Dust Bowl. Obviously, this novel is based on the real social and economic forces that shaped life during the 1930’s, as the Great Depression was the most traumatic economic collapse the United States has ever seen and the Dust Bowl was a natural disaster that wreaked havoc among the Southern Plains region for a number of years.

 This type of writing is apparent in a number of Steinbeck’s works, as he worked to apply the factors that shaped his own world into his own created universes. This is seen multiple ways in one of Steinbeck’s later works, *East of Eden*, which tells of the stories of two separate families living in the Salinas Valley in California. In this novel, the characters discuss the principle of specialization, which in macroeconomics, refers to the idea that different nations should produce a smaller range of goods that they can make more efficiently and then trade with other countries to maximize production. In the story, this idea is discussed on a much smaller scale, but the reasoning remains the same. One of the fathers in the novel, Adam Trask, is talking to his son Aron in one scene about how proud he is that Aron’s going to college. Adam says that, “a boy must be a specialist or he will get nowhere” and, “Look at me. I know a little about a great many things and not enough about any one of them to make a living in these times” (As quoted in Watts 59). While Adam maintains a very pro-specialization mentality, his servant Lee takes the opposite side of the argument. Lee counters Adam’s point by saying, “Maybe the knowledge is too great and maybe men are growing too small... Maybe, kneeling down to atoms, they’re becoming atom-sized in their souls. Maybe a specialist is only a coward, afraid to look out of his little cage. And think what any specialist misses – the whole world over his fence” (As quoted in Watts 60). While the arguments in the novel apply to individuals instead of nations, they still directly parallel the sentiments seen on a global scale. By focusing on the production on a smaller range of goods, a nation becomes more susceptible to issues if something goes wrong with the production/trade of one or a few of their goods. This could come in the form of destructive weather, climate issues, war, embargos, tariffs, etc., and while they can be dealt with by wealthier nations with adequate infrastructure, they could bring more harmful results for more impoverished nations. So, by opting for specialization, nations are effectively “missing out” on the opportunity to produce goods that would offer greater choice and diversity.

 Also, in the novel the characters discuss one of the most important factors that drives and dictates how the economy runs: markets. Markets is a term in economics that refers to, “a means by which the exchange of goods and services takes place as a result of buyers and sellers being in contact with one another, either directly or through mediating agents or institutions” (Britannica.com). This umbrella definition can refer to anything from money markets, to bond markets, to auction markets, etc. However, in the context of *East of Eden*, the market that is being discussed is the futures market. A futures market is an, “auction market in which participants buy and sell commodity and futures contracts for delivery on a specified future date” (Investopedia.com). These types of contracts are typically purchased to offset market volatility, and they are purchased with an agreed upon delivery date and fixed price. In the novel, Adam’s other son Cal makes a successful investment in commodity (grain, oil, gold, livestock, etc.) futures, when he purchased a bean future, and the price of beans rose following WWI. Cal attempted to gift his father with the profit that he made from the investment, but his father refused the money, thinking that Cal somehow robbed farmers of that money (showing his lack of understanding of how the futures market operates). Despite Adam’s sentiment, the market operates so that everyone benefits, as with the initial purchase, the farmers were given $2 above market value for their beans and Cal ended with a return of 150% on his investment. While futures had already been being traded for a couple hundred years at that point, the exchanges were still in their infancy, with the first official western one being opened in Chicago in 1848 (Investopedia.com). These exchanges, while developed, were nothing compared to the level they’re at nowadays, as futures markets not only handle contracts dealing with commodities, but also contracts of financial instruments and interest rates.

**T.H. White’s *The Book of Merlyn***

 The important thing to note regarding the various economic factors that shape the world, is that many of them are related and can be looked at and studied relative to one another. This is applicable for a number of different pieces of economic theory, for example, how free trade, private property, and nationalism all relate to one another. This is looked at by English writer, T.H. White, in his Arthurian novel, *The Book of Merlyn*. In this novel, the great wizard Merlyn is educating King Arthur and in order to teach him a number of different lessons regarding politics, economics, and other social issues, he turns Arthur into a number of different animals. In this Merlyn explains that what causes many of the issues in the world is the striving of individuals, organizations, and countries for various resources. He says that, “It is nationalism, the claims of small communities to parts of the indifferent earth as communal property, which is the curse of man” (As quoted in Watts 26). By using the backdrop of animal societies to make his commentary, Merlyn shows Arthur that the best hope is for the world to open up borders and be free and let individuals dictate the course of things. He goes on to say, “You must abolish such things as tariff barriers, passports and immigration laws, converting mankind into a federation of individuals. In fact, you must abolish nations, and not only nations but states also; indeed, you must tolerate no unit larger than a family” (As quoted in Watts 26). His argument for this centers around the idea that by opening up the world and exposing each individual to one another, labor markets would be more competitive, the standard of living would be higher, and society would be much happier as a result. His insight moves Arthur and he ends with a philosophical comment that helps elevate his argument, “Actually there are never more than two choices open to a species: either to evolve along its own lines of evolutions, or else be liquidated... Man will have to choose between being liquidated or being manly. And a great part of being manly lies in the intelligent solution of these very problems of force...” (As quoted in Watts 27).

**Ayn Rand’s *Atlas Shrugged***

 One area where focusing on one’s economic self-interest becomes vital, is when an individual becomes manipulated and their work is being taking advantage of. For some reason, if the worker is working disproportionately to what they’re receiving, then the system dictating that institution has become overwhelmingly misguided. Whether it be due to wage stagnation or excessive redistribution policies, self-interest becomes increasingly important in the protection of the worker in question. Ayn Rand illustrates this in her most famous work, *Atlas Shrugged*, which is a dystopian tale about private businesses being oppressed by restrictive laws and regulations. In this sense, Rand takes a stand in defending individualism, especially against that notion that able-bodied individuals are supposed to provide for the needs of others. One of the restrictive measures in the novel is that at the one factory, workers will work based on their abilities and be paid based on their needs. Those who were able to work got forced into longer and harder work because they were able to, and yet their pay didn’t change because their needs were still lower than a number of other peoples’ needs. Obviously, they can’t speak out against this rule because then they would have the look of a heartless individual, so everyone remains quiet and maintains the status quo. However, the factory was severely hurt by the rule, as their productivity fell by 40% in just the first year alone. Yet, instead of making any reasonable changes, the people in charge opted to force the able bodies to work even more to make up for those “not pulling their weight”. While this novel is a dystopian commentary of the most extreme circumstances, it still provides an interesting insight into people’s motivation. As people begin to feel as if their work is unappreciated, this might harm worker productivity, and on a massive scale, can cause damage to the global economy.

**Ivan Doig’s *Bucking the Sun***

 There are two primary processes in which economic decisions are directed and altered, Monetary Policy and Fiscal Policy. Monetary Policy is directed by a country’s central bank or currency board and they have the authority to change the money supply and interest rates, in an attempt to reach one of two mandates that they set for themselves (price stability and maximum employment (U.S. Federal Reserve strives for both – Dual-mandate system)). Fiscal Policy is controlled by a nation’s federal government, as they have the authority to change taxes and government spending in order to maintain price stability, maximum employment, and steady growth (Figure 3).

*Figure 3.* The two types of fiscal policy, expansionary (which helps the economy grow) and contractionary (which helps limit the rise of inflation) (From http://www.upsesc.com/fiscal-policy--taxation.html)



The effectiveness of fiscal policy remains to be seen, because many economists maintain concerns that there is, “difficulty of enacting such policies on a timely basis, concerns that people and businesses may react to those policies in ways that will undermine their effectiveness, and the political unpopularity of fiscal policies that fight inflation – raising taxes and cutting government spending – versus the popularity of policies that lower unemployment” (Watts 281). While some might try to diminish the effectiveness of fiscal policy, its potential is clearly seen in times of depression and economic hardship, which is illustrated in American author Ivan Doig’s 1996 piece, *Bucking the Sun*. The mindset behind Franklin D. Roosevelt’s New Deal was that by the government pumping funds into various projects, society as a whole will benefit. This belief is showcased in the novel with the line, “How to make wages flow: pump them out of the government treasury. The idea on high was from some fruitcake Englishman professor named John Maynard Keynes, compensatory-spending-by-the-government-to-set-the-economy-in-motion, by way of Roosevelt’s alphabet-soup agencies. Make the American eagle lay dollars into hands that had forgotten the feel of a nickel” (Watts 283). With the lasting effects of the Great Depression still being felt widespread across the nation, FDR’s New Deal offered a new hope for many, by way of the government stimulating the economy.

**Charles Frazier’s *Cold Mountain***

 As established earlier, money is susceptible to the effects of inflation, and in the times of financial issues and high inflation, that spells severe trouble for people with excess liquidity. A certain type of behavior has been seen especially in times of hyperinflation, where people opted for bartering instead of using their money. Overall, during these rough economic times, “people rush – or are driven – to put their resources in real assets rather than money, which rapidly loses value and eventually may no longer be accepted as money at all” (Watts 264). This is apparent in the 1997 novel, *Cold Mountain,* written by American writer Charles Frazier, which tells the story of a deserter of the Confederate Army at the end of the Civil War. In this story, the mentality of the characters leans strongly toward pro-bartering, and they see money as unnecessary. Some of the sentiment is derived in the effectiveness of farming and being able to trade crops, however even then cash would still be a positive asset to have in most cases. Yet, the characters don’t feel this way, and some of the thoughts include, “What Ada came to understand was that though she might be concerned at their lack of cash, Ruby’s opinion was that they were well off without it” and, “...shopkeepers really didn’t want money since the value of it would likely drop before they could get shut of it. The general feeling was that paper money ought to be spent as soon as possible; otherwise it might easily become worth no more than an equal volume of chaff. Barter was surer” (As quoted in Watts 266). The ironic thing behind this is that bartering is one of the worst economic systems for a number of reasons. One, in order to trade a good, one must find someone who not only desires their good, but also possesses a good that they desire. Two, in a barter economy, there is no consistent measure of value (such as a dollar) that every good/service can be based on. Three, goods in a barter economy lack the divisibility that money has (you can’t split a single animal to make a trade equal). Four, many goods in a barter economy are unable to store value (food goes bad, animals die, etc.) Despite this, when an economic situation becomes dreadful, many find themselves opting for bartering when the value of money has completely deteriorated.

**Jon Krakauer’s *Into Thin Air***

 Relating back to the principle of demand, one factor that dictates how willing people are going to be to purchase a certain good is the concept known as price elasticity of demand. Elasticity in economics refers how one variable reacts to a change in another variable, while the price elasticity of demand is a measurement that shows the elasticity of the quantity demanded of a good relative to a price change, when price is the only thing that changes. An elastic good is one where the demand for it changes greatly when the price changes, while an inelastic good is one where the demand for it does not change drastically when the price changes (Figures 4 and 5).

*Figures 4 and 5.* Elastic and inelastic demand curves illustrating the change in quantity demanded as price increases. (From https://www.economicshelp.org/ and https://medium.com/)

 

 Examples of each would include typical food items as elastic goods (if the price of a food item goes up, then a consumer would be inclined to either stop purchasing that good or find a substitute good) and gasoline for an inelastic good (people will continue to buy gasoline no matter how much the price goes up, because it is so vital for people who drive often). This principle of elasticity is discussed in Jon Krakauer’s novel *Into Thin Air*, and he details how in an attempt to dissuade climbers from trying to climb Mt. Everest, the government of Nepal raised the costs of acquiring a climbing permit for Everest from $2,300 to $10,000 (+ $1,200 for each additional person after nine), to $50,000 (+$10,000 for each person after five, up to a max of seven), finally to $70,000 (+$10,000 for each person after seven). Each time, the climbers continued to attempt to scale the mountain, never deterred by the price increases (although the four-expedition-limit sent climbers to the Tibetan side of the mountain). Even with the last and largest permit cost, there were still 16 of 30 Everest expeditions that happened on the Nepalese side of the mountain, showing the inelasticity of the good (at least for people who are passionate about climbing).

**Sebastian Junger’s *The Perfect Storm***

 American author Sebastian Junger published one of his most prominent works, *The Perfect Storm* in 1997. The creative nonfiction piece tells the story of a crew of swordfish fisherman and their experiences fighting through a severe storm back in 1991. Beyond their endeavors in surviving the storm, the book also outlines their life on the open sea, and it also provides a number of insights into the economics of the swordfish/fishing industries. This piece touches on a couple different economic ideas, such as property rights and supply and demand

 In regards to property rights, there is a concept known as Tragedy of the Commons which typically applies to pastures. This idea refers to when a group of individuals over-consume a shared resource until it is no longer viable to utilize (an overgrazed pasture). In this type of situation, no one has the incentive to nurture or take care of the resource, because everyone else would benefit without contributing. In the context of this book, the same principle applies to the oceans. Due to the rules surrounding international waters and the number of countries who utilize said waters, this issue is much more complex and difficult to solve than when dealing with a communal pasture. As regulations laxed in 1978 regarding fishing and as technology improved, there was an increased boom in commercial fishing. However, by 1991 the total number of North Atlantic swordfish caught dropped from 45 million pounds to 33 million pounds, and the average size for a swordfish went from 165 pounds to 110 pounds (Figured quoted in Watts 43). These decreases indicate a clear example of the tragedy of the commons problem, as overexertion of a resource led to a deteriorated quality of that resource.

 In terms of supply and demand, Junger discusses how changes in technology over time drastically benefit the available supply of fish. With the advent of railroads in the 1840s, transportation of goods became so much faster, and many product markets changed for the better. Junger writes that, “...food could be moved faster than it would spoil, and ice companies sprang up practically overnight to accommodate the new market. They cut ice from ponds in the winter, packed it in sawdust and then sold it to schooners in the summer months. Properly-packed ice lasted so long – and was so valuable – that traders could ship it to India and still make a profit” (As quoted in Watts 120).

**Conclusion**

 While the passages included throughout this paper are indicative of the potential that literature has in terms of teaching people many of the principles that make up the field of economics, these passages are not sufficient on their own. As Michael Watts states, “Literary passages on economic topics are not, however, a substitute for either formal economic theory or empirical analysis. They cannot prove what economic theorists prove nor quantify what empirical economists quantify...” (Watts xxiii). However, while they cannot replace traditional economic education, they can certainly function well as complementary material that offers unique perspectives from a completely different discipline, yet offers productive context for many of the principles and theories that govern the field of economics.

 A profound insight is presented by one of the great English economists, Alfred Marshall, in his famous work, *Principles of Economics,* in which he states that, “Economics is a study of mankind in the ordinary business of life. It examines that part of individual and social action which is most closely connected with the attainment and use of material requisites of well-being”. Michael Watts extends on this sentiment by saying, “While some literature and drama deals with extraordinary people in extraordinary situations, ordinary people engaged in the ordinary life...” along with what Marshall refers to as ‘...the material requisites of well-being’ are said to, “... make up a large part of what literary writers and critics often refer to as the human condition” (Watts xv).

 Going back to the idea that human beings are better suited for learning from narratives, literature offers itself as a unique answer to the issue of helping people understand the world of economics. When used in conjunction with economic analysis, objective evidence, and research studies, passages from literature can take the concepts from economics and insert them into realistic situations that have happened in the past, or fictional stories that mirror the real world. Regardless of the reputation surrounding either literature or economics, both fields, which possess such staunch differences, complement each other in a manner that shows the potential for productive education and discussions moving forward.

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