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ESSAYS & INSIGHTS

# Anthony Cesario - Loyola<sup>1</sup> (D) 0000-0002-4920-4288

University New Orleans, USA

# Teaching austrian economics through fiction: a summary and analysis of *Time Will Run Back* by Henry Hazlitt

**Abstract:** While many may be familiar with Henry Hazlitt through his non-fiction writing on austrian economics, he also published a lesser-known and extremely underappreciated fictional story, *Time Will Run Back*. Although it was the only work of fiction he ever wrote, it is an absolute Austrian masterpiece that incorporates an extensive amount of Socratic dialogue to guide the reader through Mises' economic calculation and teaches many of the economic principles associated with it. The book's main theme is that "if capitalism did not exist, it would be necessary to invent it — and its discovery would be rightly regarded as one of the great triumphs of the human mind" (HAZLITT, 1993, p. 82). This paper reviews the story from an austrian perspective and discusses some of the creative ways through which it manages to teach various economic principles referenced throughout the work.

Keywords: economics, education, fiction, capitalism, free markets



<sup>&</sup>lt;sup>1</sup>Graduated with an undergraduate degree in 2022 from Loyola University, New Orleans studying economics with Dr. Walter Block along with other brilliant professors and will be pursuing a PhD in economics at Texas Tech University starting in 2023. As a student and scholar, he has attended numerous Mises Institute events, including the 2021 and 2022 Austrian Economics Research Conferences, Mises University in 2021 and 2021, the 2022 Rothbard Graduate Seminar, as well as a couple of Supporters' Summits. He currently works as a research assistant for Dr. Block and recently spent the summer as a 2022 Summer Research Fellow at the Mises Institute, where he focused on the economic consequences of interfering with a firm's structure. In addition to organizational economics, he is also interested in labor economics, developmental economics, political theory, and philosophy. ajcesari@my.loyno.ed

# Enseñanza de la economía austriaca a través de la ficción: un resumen y análisis de El Tiempo Volverá Atrás por Henry Hazlitt

**Resumen:** Aunque varios estén familiarizados con Henry Hazlitt por su trabajo no ficticio en economía austriaca, también publicó un cuento ficticio no tan conocido y extremadamente subestimado, *El Tiempo Volverá Atrás*. A pesar de ser el único trabajo ficticio que llegó a escribir, es una absoluta obra maestra austriaca que incorpora una cantidad extensa de diálogo Socrático para no sólo guiar al lector adecuadamente a través del problema del cálculo económico de Mises, sino también para enseñar a varios sobre los principios económicos asociados con ello. El tema principal del libro es que "si el capitalismo no existiese, sería necesario inventarlo - y su descubrimiento sería debidamente reconocido como uno de los grandes triunfos de la mente humana" (HAZLITT, 1993, p. 82). Este ensayo revisa el cuento desde una perspectiva austriaca y discute algunas de las formas creativas en las que se las ingenia para enseñar varios principios económicos a través del libro.

Palabras clave: economía, educación, ficción, capitalismo, libre mercado.

# Ensinando economia austríaca através da ficção: resumo e análise de *Time Will Run Back*, de Henry Hazlitt

**Resumo:** Embora muitos possam estar familiarizados com Henry Hazlitt por seus escritos de não-ficção sobre economia austríaca, ele também publicou uma história de ficção menos conhecida e extremamente subvalorizada, Time Will Run Back. Embora tenha sido a sua única obra de ficção, é uma obra-prima da economia austríaca que incorpora uma extensa quantidade de diálogo socrático para guiar o leitor através do cálculo econômico de Mises e ensina muitos dos princípios econômicos associados a ele. O tema principal do livro é que "se o capitalismo não existisse, seria necessário inventá-lo – e sua descoberta seria corretamente considerada como um dos grandes triunfos da mente humana" (HAZLITT, 1993, p. 82). Este artigo revisa a história a partir de uma perspectiva austríaca e discute algumas das formas criativas pelas quais ele consegue ensinar vários princípios econômicos referenciados ao longo do trabalho.

Palavras chave: economia, educação, ficção, capitalismo, livre mercado.

## INTRODUCTION

While many may be familiar with Henry Hazlitt's non-fiction writing on Austrian economics, he also published a lesser-known and extremely underappreciated fictional story, *Time Will Run Back* (1951).<sup>2</sup> Although it was the only work of fiction he ever wrote, it is an absolute Austrian masterpiece that incorporates an extensive amount of Socratic dialogue that adeptly guides the reader through Mises' economic calculation problem and teaches many

<sup>&</sup>lt;sup>2</sup> Some of Hazlitt's non-fiction writing include *Economics In One Lesson* (1946), *The Failure of The New Economics* (1959), and *The Conquest of Poverty* (1973).

of the economic principles associated with it.<sup>3</sup> The plot is about a protagonist who inherits the control of a worldwide centrally-planned government and, in trying to address the many problems that plague this global regime, unwittingly reverse-engineers a free market system. Hazlitt's focus on this story allows the reader not only to understand a variety of fundamental economic concepts, but also to experience the sense of the chaos, frustration, and misery that results from abandoning the market for the organization of social cooperation. The book's main theme is that "if capitalism did not exist, it would be necessary to invent it — and its discovery would be rightly regarded as one of the great triumphs of the human mind" (HA-ZLITT, 1993, p. 82). This paper reviews the story from an Austrian perspective and discusses some of the creative ways through which it manages to teach the various economic principles referenced throughout the work.

The book is divided into three main parts. The first part of the book introduces the main characters and explores the issues that this fictional society – called "Won-World" – is struggling with (HAZLITT, 1951, p. 16). The second part deals with Peter Uldanov, the protagonist trying to solve some of Won-World's problems by implementing reforms that gradually lead to a free market. The third and final part analyzes the reforms Uldanov implemented and the consequences of intervening in the newly established free market.

#### PART ONE: LOST

In the first part, the reader is introduced to Uldanov on his first day back in Moscow, the capital of Won-World, since his childhood. His mother had raised him on a secluded island in the Bahamas, where he was taught music, science, and mathematics. However, he was not taught history, politics, sociology, or economics, nor was he familiar with widespread Marxist propaganda.<sup>4</sup> This is important because he is the only one in the world who has not been indoctrinated by the current ideology, allowing him to have a unique perspective on any of society's issues.

Upon returning to Moscow, Uldanov was told by his father, Stalenin, the current dictator of Won-World, that he had summoned him there to give him a proper education on Mar-

<sup>&</sup>lt;sup>3</sup> The economic calculation problem was primarily developed by economist Ludwig von Mises in his 1920 essay *Economic Calculation in the Socialist Commonwealth*.

<sup>&</sup>lt;sup>4</sup> While growing up, he was also kept largely uninformed about the world beyond the island, which had changed significantly since the 20th century. Specifically, in addition to there being a revolution that overthrew capitalism and replaced it with a worldwide dictatorship, virtually every trace of the old capitalist world had been stamped out. The new rulers made sure to first exterminate everyone who was even "remotely suspected of believing in capitalism" (HAZLITT, 1951, p. 36). They then tore down all the churches, destroyed all the religious monuments, and got rid of all the paintings and music. They also burned all books on economics, literature, philosophy, history, and natural sciences that they considered "bourgeois" or "non-Marxist" (HAZLITT, 1951, p. 37). On top of this, they also established a new language known as "Marxanto" (HAZLITT, 1951 p. 40); created their own music, which consisted of songs such as "Marx Save the Dictator" (HAZLITT, 1951 p. 71), had their own names for the days of the week, like Marxday, Stalinday, Leninsday, Engelsday, and Prolesday (HAZLITT, 1951 p. 108), developed their own verbiage which included phrases such as "for Marx's sake" (HAZLITT, 1951 p. 92), and even had unique beverages, like Marxi Cola (HAZLITT, 1951 p. 102), and alcohol, like Marxattans and Stalinis (HAZLITT, 1951 p. 79). A new calendar was also created and labeled "Before Marx" (B.M.) and "After Marx" (A.M.) to signify the day that Marx was born (HAZLITT, 1951 p. 34). Although the year at the start of the novel is technically 2100, the overall state of technological progress is said to be roughly the same as it was between 1918 and 1938.

xism. During their first meeting, his father gave him some ration coupons, highlighting the society's lack of monetary exchange, and a proletarian uniform, underscoring the emphasis on class distinction. He also warned him not to tell anyone that he was the dictator's son. Following the meeting, Uldanov decided to grab a bite to eat and began to experience some of the problems plaguing this society, such as allocating services without using a monetary exchange. Specifically, the first restaurant he tried to enter, which looked cleaner and better lit than the others he had passed by, denied him service because he was wearing a proletarian uniform. He ended up eating at the next proletarian eating place he found, which was dirty, smelly, crowded, and noisy. In other words, instead of prices, the quality of the food services was allocated based on class status.

Uldanov also attended a parade featuring his father boasting the progress made by Won-World. During his speech, he begrudgingly acknowledged that a couple of lines of production did not meet their production quotas, but blamed it on sabotage, traitors, and "uneradicated traces of capitalist mentality" (HAZLITT, 1951, p. 24). Hazlitt highlights that, although society is experiencing production issues, rather than considering they are due to the way it is organized, there is a tendency to focus instead on pointing fingers at others.

A short while later, Uldanov was summoned again. His father informed him that he had a stroke and wanted him to take over eventually. He added that Uldanov's mother, who had passed away the year before, had always criticized him for not creating true communism. Then, he concluded that, since she was responsible for Uldanov's education, he should be the one to try creating true communism. Although protesting the idea at first, he eventually agreed. During the same conversation, Uldanov also learned that his father could not trust anyone and constantly feared for his life, leading him to conclude that "everybody in Won-World lived in fear" and that "the Dictator himself lived in as great fear as anyone else. He had to rule by fear because he was himself ruled by fear" (Hazlitt, 1951, p. 31). Hazlitt's emphasis on this shows that, under such a regime, everyone, including those in charge, lived in fear.

The next day, Uldanov was introduced to the rest of the politburo, including his would-be mentors, Bolshekov and Adams, who were Stalenin's two highest-ranking associates.<sup>5</sup> After spending some time learning about history with Bolshekov, Adams took Uldanov on a tour of the local shops. He noticed that there were not many of them and that people often traveled long distances to get there. He observed that there were usually fewer and lower-quality goods in the shops than advertised in the shop windows. Moreover, Uldanov also learned that "no item could be bought... except with a specific ration coupon for that particular kind of item" (HAZLITT, 1951, p. 51). In other words, this helps to show that without a market economy, there would also be a lack of high-quality goods and services.

Later, Uldanov was sent to Kansas to see the conditions of a massive food shortage that had killed one million people and was expected to kill at least one million more by the end of the year. When Uldanov asked his father about sending in food from other areas to mitigate the food shortage, he responded that food from other areas was needed to feed those parti-

<sup>&</sup>lt;sup>5</sup> Uldanov later learns that Adams' full name is Thomas Jefferson Adams.

cular areas. There was no food to go around, which shows that a centrally planned system would have trouble when things are not strictly produced according to plan.

Upon arriving in Kansas, he visited a collectivized farm with Bolshekov and saw a bunch of broken-down tractors rusting in the rain. Bolshekov asked the farm director why none of the tractors were in working order, promptly arresting him when he replied that his last mechanic had recently died from starvation. Besides, he was having trouble tracking down the proper form to send to the government to request replacement parts.<sup>6</sup> Hazlitt's emphasis on this shows how interconnected mechanics, tractor operators, farmers, and consumers are and how a food shortage can result in a lack of mechanics, leading to more broken tractors and ultimately even less food.

A few hours later, Bolshekov provided Uldanov with a little more detail about how the quotas worked on the collectivized farms. Specifically, he explained that they started by only taking anything more than what the workers needed to survive, which led to workers only producing enough to survive and nothing more. As a result, they changed the quota system so that workers had first to meet a minimum quota for the State, and only after could they retain anything for subsistence. Bolshekov added that if a collective produced over its subsistence quota, the surplus would go to the government. If it produced only 75% of its quota, it would only receive 75% for its subsistence. This highlights the incentive problem many workers would face under such a system.

In a separate conversation, Uldanov asked about production and how they implemented equal distribution. Bolshekov explained that he "determines how many calories people need to live on, how many yards of clothing they need, how many square feet of shelter, and how much and what kind of amusement" (HAZLITT, 1951, p. 58). He then orders these things to be produced, and each branch of production – including its industries, factories, managers, and workers – is given specific quotas. Bolshekov mentioned that production quotas were determined by the averages of the previous production cycles. However, Uldanov pointed out that this could be a problem if one factory were way more productive than another, since the average would be higher than what the less productive factory could produce through no fault of the less productive factory's manager. Bolshekov dismissed this as a mere "detail," suggesting that there were mathematical formulas to deal with these kinds of issues. This highlights the belief shared by many that these are simply computational issues.

Uldanov decided to set the production problem aside and asked how distribution worked. Bolshekov responded that individual ration coupons were issued to people and clarified that certain items like cigarettes must be applied separately. He also pointed out that if someone does not smoke, they do not apply, saving resources. When asked what was stopping someone from applying for cigarettes and then trading them for other coupons, Bolshekov retorted, "only the concentration camp" (HAZLITT, 1951, p. 59). This highlights

<sup>&</sup>lt;sup>6</sup> "You see…how hopeless the whole problem is," complained Bolshekov afterward (HAZLITT, 1951, p. 53). "The same story everywhere," he continued, adding, "the collectivized farm directors blame the tractor parts makers for delays in deliveries. The parts makers blame their suppliers in turn, or tell us that the state farms are careless in handling the machinery...." (HAZLITT, 1951, p. 53).

one alternative way goods and services would have to be distributed without money as a medium of exchange.

Curious, Uldanov asked what harm would be done by allowing people to exchange their ration coupons with others. Bolshekov explained that it would double the consumption of cigarettes and whatever other item the person traded the cigarettes for. Consequently, it would completely disrupt all of their production plans, showing the rigidity of the actual system. Uldanov then shifted focus away from distributing goods according to needs and toward figuring out how to ensure each person produces his/her ability. Bolshekov mentioned that exhortation alone was not enough, so they used the threat of violence, underscoring the inherently coercive nature of this society. He also noted that he did not understand why this was needed since everyone is now free from capitalism.<sup>7</sup>

In response, Uldanov suggested that this may be due to thinking collectively rather than individually.<sup>8</sup> To clarify, he brought up the example of a worker doubling their production but hardly getting any additional compensation. He contrasted it with a situation where a worker does no work at all and merely gets one-billionth less to eat. To underscore his point, Uldanov also brought up a smaller-scale example involving a collectivized farm with 100 people producing 100 potatoes each, pointing out that someone doubling his/her output from 100 to 200 would ultimately receive only one additional potato as a reward for doubling their productivity. He then inverted the situation: if everyone increased their output from 100 to 200 except for one person who gets away with not doing anything, then this person would end up receiving 198 potatoes, which is almost twice as many as he/she was working, and only two less than he/she would have received if he/she put in the same effort as everyone else. After making this point, Uldanov concluded,

"Under these conditions a man's output, or the intensity of his effort, will be determined not by some abstract, overall, collectivist consideration but mainly by his assumption regarding what everybody else is doing or is going to do. He will be willing 'to do his share'; but he'll be hanged before he'll break his back to produce while others are loafing, because he knows it will get him nowhere. And he is prone to be a little generous in measuring how hard he himself is working and a little cynical in estimating how hard everybody else is working.

<sup>&</sup>lt;sup>7</sup> Baffled, he added, "And yet I can't understand it," Bolshekov went on. "I don't know which baffles me most—the masses' lack of mass consciousness or their lack of intelligence. With all the conditioning our people get from their earliest years, with all the exhortation, all the propaganda, you would think everybody without exception would want to produce to the peak of his ability. They no longer have any capitalist masters! The fruits of their labor are no longer expropriated by somebody else! They now collectively own everything! Won-world and everything in it is their collective property! You would think they would want to increase this property. Everybody is now working for everybody else! And yet everybody complains about the bad quality of goods and about how little he gets! Why can't he understand that it's his shoddy work that makes goods bad, that it's his lack of production that leaves so few goods to go around? Why can't everybody understand that whether or not there is a great aggregate production to be distributed depends upon his contribution to that aggregate?" (HAZLITT, 1951, p. 60)

<sup>&</sup>lt;sup>8</sup> Specifically, he said, "The individual is told that if he increases his output he will, other things being equal, increase total output. Mathematically, of course, he must recognize that this is so. But mathematically he senses, also, that his own contribution can have only an infinitesimal relationship to his own welfare. He knows that even if he personally worked like a galley slave, and nobody else worked, he would still starve. And he knows also, on the other hand, that if everybody else worked like a galley slave, and he did nothing, or only made the motions of working when somebody was watching him, he would live like a commissar—I mean, like a king..." (HAZLITT, 1951, p. 61)

He is apt to cite the very worst among his co-workers as typical of what 'others' do while he slaves. All this may be why your exhortations based on collectivist considerations are so ineffective." (HAZLITT, 1951, p. 62)<sup>9</sup>

Toward the end of Part I, Uldanov learns his father had another, more severe stroke and reluctantly realizes that it is time for him to take control of Won-World officially.<sup>10</sup>

Part I mainly focused on Uldanov's background and the many problems plaguing the Won-World empire. Upon arriving in Won-World, for instance, one of the first observations made by Uldanov was that the quality of goods and services was distributed based on class affiliation. He also saw that shops were sparse and had fewer, lower-quality goods than advertised, highlighting problems with the supply and demand of goods and services under the current system. Besides, he also learned that a massive food shortage had already claimed the lives of one million people and was expected to claim at least one million more. This meant their system had problems with production and a hard time adjusting when production did not go according to plan. Another recurring issue that Uldanov observed was that any time a problem arose, the blame would be shifted to different people. Part I ended with Uldanov attempting to understand these problems by asking about production and how the regime implemented equal distribution. Upon doing so, he learned that an agency determined how much of everything everyone needed. Then it sent out quotas to have things produced based on various averages, which made him wonder whether there might be an incentive problem.

#### PART TWO: GROPING

In the second part, Uldanov and Adams focused on developing a system better than the one currently in place. They first tried to figure out how to give the public "freedom from fear" (HAZLITT, 1951, p. 74). For this, they decided they needed to establish a "rule of law" (HAZLITT, 1951, p. 75).<sup>11</sup> They also discussed ways to incentivize workers to do the unpleasant work that needed to be done using other means besides the threat of violence. During

<sup>&</sup>lt;sup>9</sup> To underscore his point, he added, "Let's say I'm an unusual person, a sort of worker genius, and that if I strained all my faculties I could actually turn out ten times as much production as the average worker. But I turn out only 50 per cent more than the average, and yet get praised for doing it—because I am above average. Why should I be so foolish as to show the authorities what I could really do? I wouldn't live any better. I wouldn't get any more ration tickets than the next man. But once I had shown my capacity, my superiors would hold me up to its continuation—on the principle of 'from each according to his ability'. Therefore I find it wiser never to reveal my ability. Therefore nobody ever discovers that I am not producing according to my ability. Never having put it to a strain, in fact, I never even find out myself what my real ability is." (HAZLITT, 1951, p. 62)

<sup>&</sup>lt;sup>10</sup> As this realization sank in, "the sense of his immense responsibility fell on him like a ten ton weight," leading him to conclude, "Blessed are they without responsibilities. Blessed are they who do not have to make decisions, who have all their decisions made for them. No wonder so many were content to have no liberties. Liberty meant responsibility. It compelled decisions. Liberty was compulsion. To be free to decide meant that you had to decide. And you had no one to blame for the result of bad decisions but yourself." (HAZLITT, 1951, p. 69)

<sup>&</sup>lt;sup>11</sup> Specifically, they discussed changing the laws so that people can only be arrested if they're charged with a definite crime and they're told what that crime is. They also discussed letting them confront their accuser and answer to them, having the accusers provide evidence, assuming the person accused is innocent until proven guilty, and eliminating ex post facto laws. In addition to this, they also spoke about possibly providing the accused someone who knows the law better than they do and who has a better idea of what their rights are to defend them. On top of this, they also discussed making the court system independent of the executive branch of the government.

their conversation, Uldanov realized that under their current centrally-planned system, there could not be freedom of choice of occupation due to the disruption that would ensue and because people would only want to do pleasant work. He also realized that plant managers could not be allowed to decide on their own what to produce and how to produce it because that would likewise result in chaos.**12** In addition to not having "freedom in choice of work or occupation" and "freedom of initiative," Adams explained that there also could not be freedom in consumption.<sup>13</sup>

Toward the end of the discussion, Uldanov concluded that the freedom to criticize the government is one kind of freedom that people need under their system. He then issued a proclamation making it clear that people were welcome to offer constructive criticism of the government and that they would not be punished for doing so. Following the proclamation, however, nothing changed. According to Adams, this was probably because "control over a man's livelihood, over his means of support, over his economic career, means in effect control over all his actions and all his speech. To deprive him of economic liberty is to deprive him of all liberty" (HAZLITT, 1951, p. 80). This essentially means that controlling one's economic life includes controlling all of their actions and speech. To clarify, he added, "where the State is the sole employer, each man must not only refrain from doing or saying anything that will offend his superiors who constitute the State; he must go further, and exert himself to do or say anything and everything calculated to please his superiors who constitute the State" (HAZLITT, 1951, p. 80).

Eventually, Uldanov concluded that even democracy was impossible under the current system due to fear of repercussions.<sup>14</sup> As this conclusion started to sink in, Uldanov came to

<sup>&</sup>lt;sup>12</sup> He also realized that one of the main reasons they lacked initiative is because they could be shot if their initiative went wrong and ultimately concluded that there wasn't much room for "initiative, improvement and progress." (HAZLITT, 1951, 78).

<sup>&</sup>lt;sup>13</sup> Specifically, he stated, "The trouble is that very few things are consumed evenly throughout the year even if we should get the relative production of each thing exactly right. People don't burn coal evenly throughout the year, but only in winter. And if they have the storage room, they ask for the entire supply they are entitled to as soon as the ration ticket permits it. Yet the fact that three-quarters of the whole supply of coal is asked for in the first week of the consuming year doesn't necessarily mean that the coal supply is short or is going to run short. Again, ice is consumed mainly during the summer, and all sorts of other things are wanted only seasonally. The only reason people turn in their coupons for new clothes evenly each month throughout the year is that we stagger the validity dates on the clothes coupons in the first place so only one-twelfth become due each month.... And still again, some things, like vegetables and fruits, are consumed entirely within a few months of the year for the simple reason that that's when they come on the market, and they won't keep. In short, trying to figure relative shortages and surpluses by relative rates of consumption throughout the year is a tough problem. In most cases we who direct the economy have to solve it by pure guesswork." (HAZLITT, 1951, p. 78)

<sup>&</sup>lt;sup>14</sup> Adams summarized Uldanov's reasoning in the following way: "You say your experiment in democracy failed in the French Soviet Republic because the people have been terrorized for generations by communism and must be educated out of their terror. But you have also pointed out that they will never be educated out of their fear because their fear is inherent in the socialist system. And you have finally convinced me that this is true. Under socialism the State controls all the jobs. Under socialism everybody's career, everybody's means of livelihood, depends upon the minority, the hierarchy, already in power. That hierarchy holds economic life-and-death powers over everyone. Therefore nobody's opinion is free. Nobody has the impartial information to form an intelligent opinion, even if he had the courage to form or express one. Because the State, the ruling hierarchy, prints and controls all the newspapers, all the books and magazines, all the sources of information. It owns all the meeting halls. And nobody has the courage or even the means to express his opinion in public. Under such conditions, not only is public opinion not free, which is the only way in which it could be meaningful, but it cannot be said even to exist." (HAZLITT, 1951, p. 86)

another, even more startling, realization about their centrally-planned system. Specifically, he told Adams,

"You confront me with a bleak outlook...The other day you convinced me that socialism is incompatible with democracy, incompatible with the expression of any free, uncoerced majority will. You are [now] forcing me to admit that the reign of slavery and terror imposed by my father and Bolshekov is not an accident, not some monstrous perversion of the socialist ideal, but merely *the logical and inevitable outcome of the socialist ideal!* You are forcing me to admit that complete socialism means complete deprivation of individual liberty and an absolute government dictatorship." (HAZLITT, 1951, p. 87)

Essentially, this means that the authoritarian nature of this system was not an accident but a necessary feature.<sup>15</sup> In other words, when it comes to having a central plan, everyone must follow the central plan and do what they are told. There can be no room for choice for anyone, from the workers to the producers to the consumers. Otherwise, the whole central plan would be disrupted. After this alarming conclusion, Uldanov and Adams, who often referred to him as "chief," shifted their attention toward dealing with some of the famines around the planet (HAZLITT, 1951, p. 89). To address this problem, they decided to focus on their incentive systems. One of the first things they considered was allowing farms to keep any surplus they produced above the quota. This point led them into a Socratic dialogue about how it would even be possible to reward workers in proportion to what they produced. By the end of the conversation, Adams and Uldanov understood that multiple factors contribute to production: besides labor, there is also weather, land, animals, and machinery.

Adams also brought up another problem with rewarding workers in proportion to what they produce. He pointed out that this does not really work for a wide variety of people, including those who work on the roads, those who work on the sewers, those who work as barbers, and those who work as surgeons.<sup>16</sup> He then claimed that even if this problem were ignored, there would still be another problem related to some workers having more than they need of whatever commodity they produce while others have none. At that moment, Uldanov thought of an ingenious idea: to let the producers keep what they produce and then exchange it with others.<sup>17</sup> However, Adams argued that such an idea would result in chaos as everyone would start producing for themselves or only produce things they could

<sup>&</sup>lt;sup>15</sup> This is also one of the main points behind Hayek's The Road to Serfdom (1944).

<sup>&</sup>lt;sup>16</sup> Specifically, Adams asked, "but what would you give the road maker? Part of the road? What would you give the sewer worker? Part of the sewer? What would you give the telephone girl? Part of the wire? What would you give the barber? Part of the hair he cut off? What would you give the surgeon? Part of the patient?" (HAZLITT, 1951, p. 90)

<sup>&</sup>lt;sup>17</sup> To clarify, he stated, "Let everybody have what he makes and let him exchange the surplus above his own needs for whatever he wants of what somebody else makes! Then everybody will have to produce something in order to get something else for it. Everybody will be rewarded in proportion to his own production. That will give him an enormous incentive. And to be able to do this he will have to produce what somebody else wants. Then we won't have to coax or exhort people to work any more. We won't have to denounce them for shoddy work. Not only will everybody wish to produce all he can, but he will try to make it of as high quality as possible, so that somebody else will want it enough to give him what he wants in exchange for it. And then he won't have to take the shoddy goods that the State hands out to him. He can pick and choose, and take only the goods he wants from the people who make them well" (HAZLITT, 1951, p. 91).

exchange for the most amount of stuff. Uldanov then replied that "in order to do that...[they] would have to produce precisely the things that other people most wanted," reasoned Peter (HAZLITT, 1951, p. 91).<sup>18</sup> Still unconvinced, Adams asked,

"Who would build the roads, chief? Who would repair the sewers? Would each worker be assigned part of a road or part of a sewer as his own presumptive production to exchange with someone else? And who would take over part of a road or part of a sewer in exchange for his own product? And whom would the iron miners exchange with? They could only exchange their crude material with the steel makers, who are the only ones who would want

<sup>&</sup>lt;sup>18</sup> Mises referred to this as "consumer sovereignty" and described it in immense detail. Specifically, he stated, "The direction of all economic affairs is in the market society a task of the entrepreneurs. Theirs is the control of production. They are at the helm and steer the ship. A superficial observer would believe that they are supreme. But they are not. They are bound to obey unconditionally the captain's orders. The captain is the consumer. Neither the entrepreneurs nor the farmers nor the capitalists determine what has to be produced. The consumers do that. If a businessman does not strictly obey the orders of the public as they are conveyed to him by the structure of market prices, he suffers losses, he goes bankrupt, and is thus removed from his eminent position at the helm. Other men who did better in satisfying the demand of the consumers replace him. The consumers patronize those shops in which they can buy what they want at the cheapest price. Their buying and their abstention from buying decides who should own and run the plants and the land. They make poor people rich and rich people poor. They determine precisely what should be produced, in what quality, and in what quantities. They are merciless egoistic bosses, full of whims and fancies, changeable and unpredictable. For them nothing counts other than their own satisfaction. They do not care a whit for past merit and vested interests. If something is offered to them that they like better or that is cheaper, they desert their old purveyors. In their capacity as buyers and consumers they are hard-hearted and callous, without consideration for other people. Only the sellers of goods and services of the first order are in direct contact with the consumers and directly depend on their orders. But they transmit the orders received from the public to all those producing goods and services of the higher orders. For the manufacturers of consumers' goods, the retailers, the service trades, and the professions are forced to acquire what they need for the conduct of their own business from those purveyors who offer them at the cheapest price. If they were not intent upon buying in the cheapest market and arranging their processing of the factors of production so as to fill the demands of the consumers in the best and cheapest way, they would be forced to go out of business. More efficient men who succeeded better in buying and processing the factors of production would supplant them. The consumer is in a position to give free rein to his caprices and fancies. The entrepreneurs, capitalists, and farmers have their hands tied; they are bound to comply in their operations with the orders of the buying public. Every deviation from the lines prescribed by the demand of the consumers debits their account. The slightest deviation, whether willfully brought about or caused by error, bad judgment, or inefficiency, restricts their profits or makes them disappear. A more serious deviation results in losses and thus impairs or entirely absorbs their wealth. Capitalists, entrepreneurs, and landowners can only preserve and increase their wealth by filling best the orders of the consumers. They are not free to spend money which the consumers are not prepared to refund to them in paying more for the products. In the conduct of their business affairs they must be unfeeling arid stony-hearted because the consumers, their bosses, are themselves unfeeling and stony-hearted. The consumers determine ultimately not only the prices of the consumers' goods, but no less the prices of all factors of production. They determine the income of every member of the market economy. The consumers, not the entrepreneurs, pay ultimately the wages earned by every worker, the glamorous movie star as well as the charwoman. With every penny spent the consumers determine the direction of all production processes and the minutest details of the organization of all business activities. This state of affairs has been described by calling the market a democracy in which every penny gives a right to cast a ballot.10 It would be more correct to say that a democratic constitution is a scheme to assign to the citizens in the conduct of government the same supremacy the market economy gives them in their capacity as consumers. However, the comparison is imperfect. In the political democracy only the votes cast for the majority candidate or the majority plan are effective in shaping the course of affairs. The votes polled by the minority do not directly influence policies. But on the market no vote is cast in vain. Every penny spent has the power to work upon the production processes. The publishers cater not only to the majority by publishing detective stories, but also to the minority reading lyrical poetry and philosophical tracts. The bakeries bake bread not only for healthy people, but also for the sick on special diets. The decision of a consumer is carried into effect with the full momentum he gives it through his readiness to spend a definite amount of money. It is true, in the market the various consumers have not the same voting right. The rich cast more votes than the poorer citizens. But this inequality is itself the outcome of a previous voting process. To be rich, in a pure market economy, is the outcome of success in filling best the demands of the consumers. A wealthy man can preserve his wealth only by continuing to serve the consumers in the most efficient way. Thus the owners of the material factors of production and the entrepreneurs are virtually mandataries or trustees of the consumers, revocably appointed by an election daily repeated." (MISES, 1949, p. 270-272)

the iron. And the only things the steel makers would have to offer in exchange would be steel. Would you personally like to take home a couple of steel rails or an I-beam?... It's just impossible." (HAZLITT, 1951, p. 91)

After making this point, Adams then highlighted the even greater difficulty involved not only in figuring out what to produce, but in what materials to use to produce those items and the machines needed to produce them. This shows that the issue is not just what consumption goods to produce, but also what production goods to produce, and what resources to use to produce everything.<sup>19</sup> By saying this, Hazlitt is having Adams unwittingly describe the fundamental problem of economic calculation that any society must solve.<sup>20</sup>

In one of his next meetings with Adams, Uldanov asked him how much Won-World was producing. When he responded that he would get the statistics regarding how much of each item was produced, Uldanov told him that he just wanted to know the total. Completely bewildered, Adams mentioned that they could not come up with such a figure because they would be comparing apples and oranges.<sup>21</sup> Essentially, Adams suggested that, without some common denominator that all the various commodities can be reduced to, figuring out how much is being produced would not really provide any useful information.

Upon hearing this, Uldanov asked if this meant that they did not know whether production went up or down, to which Adams responded in the affirmative. Concerned, Uldanov mentioned that this question needed to be answered because if not, they "are planning completely in the dark" and "flying blind." (HAZLITT, 1951, p. 94).<sup>22</sup> By emphasizing this point, Hazlitt is alluding to similar terminology Mises used when describing planning attempts under a centrally-planned system. Specifically, he stated, "the paradox of 'planning' is that it cannot plan, because of the absence of economic calculation. What is called a planned economy is no economy at all. It is just a system of groping about in the dark" (MISES, 1949, p. 696).

<sup>&</sup>lt;sup>19</sup> Specifically, he stated, "I haven't even mentioned yet the real trouble with your idea. At present the Central Planning Board decides what things the population needs, and in what proportions. When you think of the hundreds of different consumption goods and services, that's a tremendously difficult problem to solve. That's a major headache all by itself. But when we've done this, we've only started. For then we have to decide how many factories to build, how many machines to build, how much of each raw material to produce, and how many workers to allot, to produce each of these consumption goods in the right proportions. And then we have to decide how much of each raw material to produce to build the factories and machines themselves." (HAZLITT, 1951, p. 91)

<sup>&</sup>lt;sup>20</sup> Elaborating further, Mises wrote, "The practical man, eager to improve human conditions by removing uneasiness as far as possible, must know whether, under given conditions, what he is planning is the best method, or even a method, to make people less uneasy. He must know whether what he wants to achieve will be an improvement when compared with the present state of affairs and with the advantages to be expected from the execution of other technically realizable projects which cannot be put into execution if the project he has in mind absorbs the available means. (MISES, 1949, p. 209)

<sup>&</sup>lt;sup>21</sup> To clarify, he said, "but, chief, how can you possibly have such a figure? What is 200,000,000 pairs of shoes added to 1,000,000,000 bushels of wheat added to 1,000,000 quarts of gin? It's 1,201,000,000—of what? You can only add things of precisely the same kind—otherwise the total is meaningless" (HAZLITT, 1951, p. 93).

<sup>&</sup>lt;sup>22</sup> To clarify, he added, "Our resources of labor and land and the tools of production are strictly limited; we simply must know how to apportion the production of thousands of different commodities and services in order to provide most satisfactorily for everybody's need. And we can't even begin to solve that problem unless we have...some common... some common unit of measurement. If we find that we want to produce more overcoats, and that we can do so only by producing fewer trousers, or shoes—or even cigarettes—we have to find which commodity we can afford to produce less of. And therefore we have to find out how many overcoats are equivalent to how many cigarettes, or how many cigarettes to how many—clarinets, or what not. And we can only do that by finding some quantity or quality common to all of them." (HAZLITT, 1951, p. 94)

During their next conversation, Adams excitedly told Uldanov that he believes Marx had actually figured out the solution to their problem long ago. Specifically, he explained that Marx suggested reducing everything to labor. Uldanov pointed out that there are situations where one commodity that takes one day to produce exchanges for ten times more than other commodities also produced in one day. In response, Adams mentioned that this had to do with the difference between skilled versus unskilled labor and that skill was ultimately reduced to working time. Also, he mentioned that the length of time it took for a person to acquire his skills also needed to be considered. However, Uldanov explained that this was also problematic because it would mean that skilled workers who earn five times as much as others should have devoted four-fifths of their life to acquiring the skill.

Undeterred, Adams explained that rather than paying workers with ration tickets, they could try to pay them in labor certificates. At first, Uldanov rejected this idea because it would result in the chaotic disruption of the central plan they described earlier. During their next conversation, however, Uldanov thought of an adjustment that could make the system of labor certificates work, namely, letting people exchange their ration tickets with others. However, Adams pointed out that such a system would likewise result in chaos.<sup>23</sup>

Uldanov disagreed with this assertion, arguing that "each person knows his own needs best" (HAZLITT, 1951, p. 101). Besides, he stated, "under a system of free exchange of ration tickets, each person will be freer to take goods in whatever relative proportions he wanted them—and not merely in the proportions that someone else, like you or me, thinks is good for him." And then concluded, "this freedom of exchange will mean that more wants will be satisfied than now. And ultimately we have no other way of measuring 'production' than by its capacity to satisfy wants" (HAZLITT, 1951, p. 101). Essentially, Uldanov was highlighting the fact that exchanges are ways by which people can trade things they value less for things they value more.

Concerned, Adams asked Uldanov how we would figure out what the exchange ratios of the labor certificates should be. He replied that he would not set any, letting people exchange them in whatever ratios they saw fit. This, however, alarmed Adams even further, who argued that people would end up taking advantage of each other since one person's gain is another person's loss. Uldanov completely rejected this characterization and argued that *both* sides end up better because the benefit comes from each person getting something that satisfies a higher want than whatever it was that they had before. In other words, all voluntary exchanges are positive-sum. To clarify, he added,

"Marx's labor theory of value was wrong, Adams, among other reasons, because it rested on the assumption that values were measured by some *objective* unit, whereas values are only measured *subjectively*. The value of a commodity does not reside in the commodity; it resides in a *relationship* between somebody's needs or desires and the capacity of that commodity to satisfy those needs or desires... Marx looked for some objective standard of value

<sup>&</sup>lt;sup>23</sup> Specifically, he stated, "we simply can't depend on the people, chief, to exercise their own discretion regarding what is good for them" (HAZLITT, 1951, p. 101).

because he assumed that two commodities that exchanged for each other must do so because of some 'equality' between them. But if two commodities were exactly equal, in the opinion of two persons, each of whom held one of them, there would be no reason for any exchange to take place at all. It is only because Peter, who holds potatoes, thinks that a certain amount of prunes, held by Paul, would be more valuable to him, that Peter would want to make an exchange. And only if Paul placed the opposite relative value on a given amount of potatoes and prunes would he agree to make the exchange." (HAZLITT, 1951, p. 101)<sup>24</sup>

At the end of their discussion, they agreed to start off by letting people trade their ration tickets. At first, people were afraid to trade their ration coupons because they thought it was some sort of trap. When Uldanov tried to encourage more people to trade their coupons, they thought it was mandatory to exchange some and asked the politburo about the ratios they should use for exchanging their ration tickets. Eventually, people started to become more comfortable exchanging ration coupons. At first, they only traded them with close friends and family members. They slowly started to trade with others in the neighborhood and the factories where they worked.

To Uldanov's amazement, he noticed a few developments occurring. First, a pattern started to emerge where people would "shop around" until they found the best offer to exchange (HAZLITT, 1951, p. 103), highlighting how such exchanges lead to a uniform rate being naturally established. Second, he noticed that rather than going door to door to exchange their tickets, people started meeting in a particular area to exchange with others, which people referred to as "markets" (HAZLITT, 1951, p. 104). Third, several people who came to be known as "brokers" began offering to exchange other people's coupons for them, which was extremely helpful since "the process of trading was often wearisome and complicated" (HAZLITT, 1951, p. 104). Eventually, the market reduced in size to only consist of the brokers, who put all of their slates together to form one massive slate with all the various exchange ratios on it. Fourth, although there was basically an "infinite network of possible exchange ratios," the ratios tended to always be in accord with each other due to the fact people would engage in "triangular" transactions, which came to be known as "arbitrage," any time they noticed a discrepancy between various ratios.<sup>25</sup> Impressed by the new developments, people began to refer to the adjustments of the exchange ratios as "automatic" (HAZLITT, 1951, p. 105). Uldanov, however, was not fond of using this word to describe the process because it suggested that the adjustments were occurring without any initiative, effort, ingenuity, or planning, even though it was precisely the initiative, effort, ingenuity, and planning of each

<sup>&</sup>lt;sup>24</sup> One of the first people who developed the subjective theory of value was economist Carl Menger in his book *Principles* of *Economics* (1871).

<sup>&</sup>lt;sup>25</sup> Specifically, "Some brokers made it their business to specialize in what they called "triangular" transactions among ration tickets. They were constantly on the lookout for discrepancies in the mutual exchange relationships of any three commodities. As soon as they found any discrepancy from which they could profit, by a triangular exchange, they immediately tried to do so. Their competitive bids and offers continued until the relationships were ironed out, so that no further profit was possible for anybody as a result of a discrepancy." (HAZLITT, 1951, p. 104-105).

individual that resulted in the adjustments in the first place.<sup>26</sup> This helps to show how the market process adjusts to consumers' wants without one person in charge directing things.

In addition to the other, there was a fifth development. Specifically, people gradually began to quote everything in terms of their exchange ratio to cigarettes, which helped simplify the process. In other words, cigarettes became a common medium of exchange. This was because, rather than situations where someone "with a chair coupon who wanted instead an extra shirt, an extra cap, and more bread" had to seek out someone willing to trade those items for a chair coupon, they were able to just trade the chair for cigarette coupons and then easily trade those cigarette coupons for the shirt, cap, and bread they wanted.<sup>27</sup> As a result, people started to refer to these ratios as "prices." This fundamental development is critical since it shows how prices and money can start to form out of a barter economy.

Eventually, however, a problem arose with using cigarettes as a common medium of exchange. Uldanov noticed that the prices of cigarettes and eventually of all other goods started to increase quickly and learned that this was due to a rumor that there were not enough actual cigarettes as there were cigarette ration coupons. People started rushing to exchange their cigarette coupons for actual cigarettes and realized the rumor was indeed true. To prevent this situation in the future, Uldanov promised not to issue more cigarette ration coupons than existing cigarettes. He also decided to allow people to exchange not only their ration coupons, but also the commodities themselves. The result was one market for coupons and another for the actual commodities.

Regarding cigarettes specifically, the coupons were exchanged for only about half of the value of the actual cigarettes themselves, which Uldanov recognized was because the quantity of cigarette coupons was greater than the quantity of actual cigarettes. He then announced that they would be increasing the production of cigarettes and reducing the number of ration coupons next period, which gradually resulted in the parity between cigarette coupons and actual cigarettes in stock. Hazlitt's discussion of this helps to highlight some of the negative effects associated with inflation, namely, that if claims on commodities increase beyond the quantities in existence, people will have an incentive to rush and redeem their claim before it is too late.

In the following days, Uldanov marveled at the results of the reforms that had been implemented, stating, "practically everyone was now happier. A man could now get commodities, to the extent that they were available, at the times and in the proportions that he

<sup>&</sup>lt;sup>26</sup> When thinking about the word, Uldanov mused, "Of course each of these specialists was doing this, not in order to make a more perfect market, or with any conscious effort to confer any benefit on society, but solely in the hope of making a transaction profitable to himself—profitable in the sense that he would end up with more ration tickets. And as everybody was trying to maximize his own satisfactions by getting the maximum supply of the particular kinds of ration tickets he wanted, his drive to do this, and the devices to which he resorted to do it, might also be called "automatic." But the process was not automatic in the sense that it took place without anybody's initiative or effort or ingenuity or planning. It took place precisely because each individual—or at least each individual who was energetic and enterprising—was devoting his initiative, effort, ingenuity and planning toward maximizing his own satisfactions." (HAZLITT, 1951, p. 105).

<sup>&</sup>lt;sup>27</sup> The problem of someone who has a chair and wants, say, a shirt, cap, and bread needing to find someone who has a shirt, cap, and bread and would be willing to trade those items for a chair is also known as the "double coincidence of wants" problem (ROTHBARD, 1962, p. 188).

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himself wanted them, rather than in the procrustean ratios in which they were originally doled out by the planning commissars" (HAZLITT, 1951, p. 108).<sup>28</sup> This shows just how much society has improved since adopting some of the market reforms implemented by Uldanov.

Later, Uldanov and Adams discussed the emerging prices and their relationship to supply and demand. Uldanov reasoned that things were not valued only because of how scarce they were but also because of how much others wanted them. After making this observation, he started to understand the problem of economic calculation more clearly. According to him, the question that needs to be addressed is, "are we making things in such relation to the wants of the people as to satisfy those wants to the maximum extent possible with the land, labor, and machinery at our disposal? In other words, are we creating the maximum value in relation to our existing means of production?" (HAZLITT, 1951, p. 110). While thinking about these questions, Adams added, "are we wasting, are we misapplying, are we misdirecting, labor, land or machinery in making some things or in making certain quantities of those things, when we might be using the labor, land, and machinery better in making other things, or greater quantities of other things, that would meet more wants?" (HAZLITT, 1951, p. 110). Uldanov then engaged in a Socratic dialogue with Adams to try and work out a way to answer the issues that he had raised. Upon doing so, he concluded, "for every product the value of the output should be greater than the value of the input. Otherwise, we are wasting resources" (HAZLITT, 1951, p. 111).<sup>29</sup>

A short while later, Uldanov and Adams resumed discussing how to address this problem. The first solution they considered was trial and error. Uldanov pointed out that this would not work because there needed to be "some definite way of recognizing and measuring the extent of the error" (HAZLITT, 1951, p. 113). After thinking a bit longer, he then suggested combining the trial and error system with the price system by creating a market for production goods. He doubted that such a system would work because, unlike consumer goods, the producers did not actually own the production goods; the State did.

As a result, they began to consider letting the planning board try to set prices. To do so, however, they determined that they would need the help of a mathematician. During their meeting with the mathematician, they realized that the mathematical equations assumed homogeneity of capital. They also learned that there would be such a large amount of equa-

<sup>&</sup>lt;sup>28</sup> To clarify, "Many people seemed to value the new freedom to exchange as much as the exchanges themselves. With the same overall production more wants were satisfied. Peter began to sense that this was equivalent to a great increase in production itself. For 'production,' as he began to see more clearly than he had before, was not something to be measured by tonnages or volume, but only by the satisfaction of human wants. A thousand tons of something a man couldn't use was not worth an ounce of something on which his life might depend. A factory 'producing' the wrong things could hardly be said to be producing at all." (HAZLITT, 1951, p. 108)

<sup>&</sup>lt;sup>29</sup> Elaborating further, he added, "Not only must the total value of our output exceed the total value of our input, but the value of the output of each product must exceed the value of the resources devoted to producing it. And the solution would not be perfect unless for each product the value of the output exceeded the value of the input by the same percentage as for every other product—otherwise we would know that we were producing too much of products A, B, and C and too little of D, E, and F, etc., and that we were wasting productive resources...The ideal productive system would be one that produced the maximum overall satisfactions with the minimum overall sacrifices or cost. The hundreds of different consumption goods must be produced in the relative proportions and by the methods that secure this result. Otherwise we are wasting our sacrifices and our resources or failing to obtain the maximum welfare from them." (HAZLITT, 1951, p. 111).

tions that figuring out that information would not be practical. In addition, Uldanov pointed out that another problem with the mathematical equations is that supply and demand and people's preferences are constantly changing.

During their next conversation, Adams and Uldanov explored the possibility of having a market for production goods even though the State owned them. Uldanov rejected this idea because "the prices set would be arbitrary, fictional and meaningless" (HAZLITT, 1951, p. 120).<sup>30</sup> After rejecting the idea of having the planning board plan every industry, they considered letting the workers of each industry plan their own industry. To better understand whether or not such a system would work, Uldanov decided to use the Soviet Republic of Peru as a guinea pig. First, he established strict censorship laws in the country so that no information about what was going on in Peru would travel outside the country. He then broke up the economy into 50 different industries and named a head for each industry. They were allowed to organize themselves in any way they liked and could set not only their own production but also their own prices, hours, conditions of work, and entrance requirements. Two months later, he visited the country and found "a chaotic situation bordering on civil war" since each industry had "become an unrestrained monopoly" (HAZLITT, 1951, p. 121). As a result, he decided to dismantle the system, which had come to be referred to as "syndicalism" or "guild socialism," and reintegrated Peru with the rest of the central plan.

Following his failed experiment, Uldanov came to yet another startling realization. Specifically, he realized that "the tools of production did not have to be owned by the State" (HAZLITT, 1951, p. 122). Instead, there could be "private ownership of the means of production" (HAZLITT, 1951, p. 122). Before he could implement this new reform worldwide, a civil war broke out. He was forced to flee to America and limit his reforms to the Western Hemisphere, which he eventually named "Freeworld" (HAZLITT, 1951, p. 129).

In sum, Part II primarily focused on Uldanov attempting to run the economy in place of his father, whose health was deteriorating. One of the first things he tried to do was to make people less fearful of the government by making it permissible to criticize it. However, this failed since control over one's economic life ultimately meant control over their actions and speech. Determined to give people greater freedom and incentive to produce, Uldanov began to consider letting people keep what they produced and exchange the excess with others. At the same time, he also became more aware of the economic calculation problem and how much of a logistical nightmare it was to try to figure out what consumer goods to produce and what producer goods to create. In addition, he also learned that they did not have a way to figure out their total production level since they lacked a meaningful way to add up all the various goods they were producing and explored some of the issues with trying to use labor

<sup>&</sup>lt;sup>30</sup> To clarify, he added, "The Central Planning Board, Adams, just can't play 'market'; it can't play 'price system,' like children playing house. Markets and prices, in order to perform the function they do perform—that of showing us the relative values that users and consumers put on things—must be real. Our present system of arbitrary allocations of raw materials and labor, arbitrary decisions concerning how big each industry should be and exactly how much of each product should be turned out—this is at least a controllable plan. It may not give people what they want, but at least it is far better than fixing prices at random and then watching the bizarre and unpredictable things that would happen under them." (HAZLITT, 1951, p. 120)

as a common denominator. Eventually, Uldanov decided to allow people to exchange their ration coupons and, upon doing so, noticed the development of markets, brokers, and people engaging in arbitrage any time there was a discrepancy in the exchange ratios. He also noticed that cigarettes became a common medium of exchange and learned how an increase in the quantity of cigarette ration coupons beyond how many cigarettes existed had inflationary consequences on this newly developed price system. Toward the end of the chapter, Uldanov realized that, although there was beginning to be a market in consumer goods, they lacked a market in producer goods. He considered letting the state "play market" but realized this would not work. Desperate, he decided to try an experiment in the Soviet Republic of Peru where he let the workers of each industry plan their own production. However, he eventually shut that down after each industry became an unrestrained monopoly. After this, he realized that he could just let there be private ownership of the means of production, but was unable to implement this new idea due to the outbreak of a civil war that forced him to flee to the Western Hemisphere, which he renamed "Freeworld."

#### PART THREE: DISCOVERY

The third and final part begins with Uldanov establishing private ownership in the means of production across Freeworld. In addition, he decided to allow individuals to own "shares" in the means of production, which helped with situations involving things like machinery and factories. Soon after being allowed to own and exchange shares, a market for shares developed, becoming known as the "stock exchange" (HAZLITT, 1951, p. 130).

Uldanov kept a close eye on the new system, making several observations. First, he noticed that there was a massive turnover in management. This was because managers were chosen based on whether or not they could increase the income of the workers and shareholders instead of being selected based on their ideology. Second, he noticed that income equality decreased because workers were willing to pay managers significantly more so long as they "increased the value of their own shares, or the income from their own shares, by an even greater amount" (HAZLITT, 1951, p. 130). Third, he noticed that the yield per acre of all crops grew dramatically and that workers took more pride in the land they worked on.<sup>31</sup> Amazed by the results, Adams observed that "the magic of private property turns sand into

<sup>&</sup>lt;sup>31</sup> To clarify, when Uldanov asked a worker what had caused this change in attitude, they replied, "The more work my family and I put into the farm, the better off we are. Our work is no longer offset by the laziness and carelessness of others. On the other hand, we can no longer sit back and hope that others will make up for what we fail to do. Everything depends on ourselves (HAZLITT, 1951, p. 131)." Another worker added, "The greater the crop we raise this year, the better off my family will be. But we also have to think of next year and the year after that, so we can't take any risk of exhausting the soil. Every improvement I put into the farm, whether into the soil or into the buildings, is mine; I reap the fruits of it. But there is something that to me is more important still. I am building this for my family; I am increasing the security of my family; I will have something fine to turn over to my children after I am gone. I don't know how I can explain it to you, Your Highness, but since my family has owned this land for itself, and feels secure in its right and title to stay here undisturbed, we feel not only that the farm belongs to us but that we belong to the farm. It is a part of us, and we are a part of it. It works for us, and we love it and care for it as if it were a part of ourselves." (HAZLITT, 1951, p. 131)

gold." Related to this, another development was the transition to using gold as the common medium of exchange instead of cigarettes because it was more durable and salable.**32** 

As a result of these changes, Uldanov had another shocking realization. Specifically, it dawned on him that "his two inventions—first, freedom of exchange of consumers goods, and second, private ownership of the means of production and the free exchange of the means of production—had solved the problem of economic calculation!" To clarify, he noted, "they had given rise to a free market system, a free price system. And it was this that had solved the economic calculation problem" (HAZLITT, 1951, pp. 131-132).<sup>33</sup>

In other words, private ownership and the free exchange of the means of production, along with the ability to reduce every commodity to a common denominator, allowing for monetary calculation, made it possible for people to figure out "whether and when they were

<sup>&</sup>lt;sup>32</sup> When Adams asked Uldanov why he thought gold emerged as the medium of exchange, he replied, "Well, before anything can become a medium of exchange, it must have a high measure of acceptability for its own sake. Gold has this. It must have a high value with small bulk, so that it can be easily carried in pockets or easily shipped from place to place. Gold, again. It must not be perishable; it must not evaporate like alcohol, rot like eggs or rust like iron. It must, in short, keep permanently. Gold, again. It mustn't vary in quality, like wheat, eggs, meat or a thousand other things. One part must be as valuable, weight for weight, as any other part, provided it is the same material. Gold, again. It must be easily divisible, so that it can be cut into any desired size without losing value, or pass from hand to hand in any standardized size. Gold, again. It must have stability of value. Gold has this because the current year's production is always small compared with the accumulated stock. It must be easily recognized for what it is, so that it cannot be easily imitated. Most people can tell real gold instantly, because there is nothing quite like it. It is beautiful to look at; it has an unmistakable ring; it is malleable and impressible, and takes a sharp stamp. And, if you wish, you can always make a final acid test." (HAZLITT, 1951, pp. 131-132)

<sup>&</sup>lt;sup>33</sup> In his non-fiction writing, Hazlitt pointed out that "a centrally directed economy cannot solve the problem of economic calculation" (HAZLITT, 1993, p. 82). To clarify, he added, "Without private property, free markets, and freedom of consumer choice, no organizational solution of this problem is possible. If all economic life is directed from a single center, solution of the problem of the exact amounts that should be produced of thousands of different commodities, and of the exact amount of capital goods, raw materials, transport, etc., needed to produce the optimum volume of goods in the proper proportion, and the solution of the problem of the coordination and synchronization of all this diverse production, becomes impossible. No single person or board can possibly know what is going on everywhere at the same time. It cannot know what real costs are. It has no way of measuring the extent of waste. It has no real way of knowing how inefficient any particular plant is, or how inefficient the whole system is. It has no way of knowing just what goods consumers would want if they were produced and made available at their real costs." (HAZLITT, 1993, p. 82)

wasting resources in making things that other people did not want, or in making too much of one thing and too little of another" (HAZLITT, 1951, p. 131-133).<sup>34, 35, 36</sup>

Gradually, a group known as "enterprisers" would borrow funds and invest them in starting their factories. If their outputs ended up being more than their inputs, they would be allowed to keep that surplus as "profit." However, if the inputs exceeded the outputs, they would be through as enterprisers.<sup>37</sup> Hazlitt's mention of these individuals refers to the entrepreneurs in an economy who try to figure out what things to produce for consumers. These entrepreneurs, according to Mises, are the "driving force" of a market economy (MI-SES, 1949, p. 249).

Fascinated, Uldanov continued to make observations. Specifically, he noticed that when too much of something was produced, its prices tended to fall, which resulted in less of that item being produced. In addition, Uldanov noticed that when there wasn't enough of a particular good, its prices would rise, encouraging people to produce more of that specific good. Similarly, when the profits of a particular commodity were high, he saw that more of it would typically be produced. This then tended to result in a gradual decrease of profits back down to the average rate of profit in other industries. In other words, "the cure for a low price was a low price. The cure for a high price was a high price. The cure for an excessive profit

<sup>&</sup>lt;sup>34</sup> According to Mises, "Monetary calculation fulfills all the requirements of economic calculation. It affords us a guide through the oppressive plenitude of economic potentialities. It enables us to extend to all goods of a higher order the judgment of value, which is bound up with and clearly evident in, the case of goods ready for consumption, or at best of production goods of the lowest order. It renders their value capable of computation and thereby gives us the primary basis for all economic operations with goods of a higher order. Without it, all production involving processes stretching well back in time and all the longer roundabout processes of capitalistic production would be gropings in the dark." (MISES, 1920, p. 14)

<sup>&</sup>lt;sup>35</sup> Rothbard has made a similar point. Specifically, he stated, "the money-commodity serves as a common denominator for all prices. Only the establishment of money prices on the market allows the development of a civilized economy, for only they permit businessmen to calculate economically" (ROTHBARD, 1963, p. 11).

<sup>&</sup>lt;sup>36</sup> In his non-fiction writing, Hazlitt explained the importance of private ownership in the means of production in greater detail, stating, "It is only with private property in the means of production that the problem of production becomes solvable. It is only with private property in the means of production that free markets, with consumer freedom of choice and producer freedom of choice, become meaningful and workable. With a private price system and a private profit-seeking system, private actions and decisions determine prices, and prices determine new actions and decisions; and the problem of efficient, balanced, coordinated, and synchronized production of the goods and services that consumers really want is solved." (HAZLITT, 1993, p. 87)

<sup>&</sup>lt;sup>37</sup> This is because they wouldn't have the funds to start another enterprise and others would now be less willing to lend to them.

was an excessive profit."<sup>38</sup> This shows how prices adjust to changes in supply and demand to maximize the amount of satisfaction.

Another observation was that prices solved the economic calculation problem since it "pointed out and measured which were the more economical ways of producing each of these goods" (HAZLITT, 1951, p. 134). In addition, it "virtually forced the adoption of the most economical way of production upon everybody once it had been discovered by anybody" (HAZLITT, 1951, p. 134). Curious, Adams asked Uldanov whether he thought it was wasteful for the private enterprises to replace their old machinery whenever a more economical way was discovered. He insisted that it wasn't wasteful because "relative costs of production show that these machines are now worthless" (HAZLITT, 1951, p. 134). To clarify this, he stated, "they have been made obsolete. Far greater value — far greater worth — can be produced with the new machines" (HAZLITT, 1951, p. 134).

A few weeks later, Adams met with Uldanov and inquired about why the private industries didn't all have the newest, most technologically advanced machinery possible. In response, he explained that "the best technical method of producing any single commodity is not necessarily the most economical method of producing it" (HAZLITT, 1951, p. 135), which helps to highlight the difference between technological efficiency and economic efficiency. To clarify, he added,

"What we have to consider is overall productivity — not the productivity of a single branch of industry, not the mere production, say, of cotton cloth, but the combined productivity of all lines of industry. Therefore we have to compare all input with all output. In figuring what net economies the new textile machines really bring, we must figure the cost of making the new machines themselves. We must consider the amount of labor, machine tools and time that must be diverted to making these machines. For the productive resources used in making the new machines must be taken from making something else — something else that may possibly be even more urgent. And then we must further consider, not merely what happens in the cotton textile industry, but what happens in every other industry. If we were to turn the

<sup>&</sup>lt;sup>38</sup> To clarify, Uldanov observed, "If too many hogs were being raised, their price would fall to a point where it no longer paid to feed them corn; and so fewer hogs would be raised. If too many shirts were being turned out, their price would fall below what it cost to buy the cotton cloth, to rent the factory and machinery and pay the labor that made them. Therefore the least efficient shirtmakers would be forced out of business, and the number of shirts produced would fall. If, on the other hand, there was an exceptionally big profit in raising cotton, more cotton would be planted in the next harvest. This would cause the price of cotton and the profit in raising it to fall back again to a level equivalent to that realized in raising other things. If there was a big profit in making shoes, more shoe factories would be set up, until the relative scarcity of shoes was relieved and their price fell." (HAZLITT, 1951, p. 133). In addition, Uldanov noticed that "the result of the effort of each enterpriser to maximize his profits led to a constant tendency toward the equalization of profits" (HAZLITT, 1951, p. 134). Specifically, "This meant...that there was a constant tendency toward a proper balance, as measured by consumers' satisfactions, in the production of these thousands of different commodities. It also meant that productive resources could not be misdirected or wasted for a long time in making the wrong products. For when a needless product was made, nobody bought it. The particular enterpriser who turned it out quickly failed. And when too much was made even of a needed product, it did not repay its costs of production, so the volume made would quickly be reduced. This meant that there was a constant tendency for thousands of different goods to be produced just in those proportions in which they gave a uniform and, therefore the overall maximum satisfaction of consumer needs. And it meant that there was a constant tendency for productive resources-raw materials, tools, and labor-to be allocated among the production of thousands of different things just in those proportions in which they would produce the highest value." (HAZLITT, 1951, p. 134)

whole machine-tool industry over to making the new textile machines, then there would be no capacity left to make new machines for any other industry. Yet some other industry may need new machines even more urgently...What must be kept in mind, in choosing the best or most economical methods of production, is not merely the most efficient technical method of producing one particular commodity at one particular stage of one particular industry, but the most economical use of all available resources of labor and time and means of production to achieve the greatest general all-around production for a uniform satisfaction of consumer wants. And this doesn't necessarily mean the use of the most perfect technical equipment at one particular point when this can only be achieved at the cost of robbing other industries and making them technically more inefficient." (HAZLITT, 1951, 135)<sup>39, 40</sup>

After making this point, Uldanov praised one of the mathematicians he consulted for their "invention of double-entry bookkeeping and cost accounting," which he claimed would "go down as two of the great triumphs of the human mind" (HAZLITT, 1951, p. 136). In an attempt to explain why, he stated, "such discoveries were not possible under Wonworld's socialist system. They enabled the individual enterpriser to calculate with the greatest nicety, not only for his organization as a whole but for each department within it and for each product, whether resources are being wasted and misdirected or whether they are being used to produce the maximum return" (HAZLITT, 1951, p. 136).

During another one of their discussions, Adams raised the concern that people are now interested in maximizing their own profit instead of doing what's best for the community. "That is true, Adams, and that is precisely the great miracle," replied Uldanov (HAZLITT, 1951, p. 137). "Each of these men is 'selfishly' seeking merely his own private profit," he continued, adding, "and yet under this new system we have invented, under this private ownership of the means of production, each of these men acts as if he were being led by an invisible hand to produce the things that the whole community most wants, to produce them in the right proportions, and to produce them by the most economical methods" (HAZLITT, 1951, p. 137).<sup>41</sup>

<sup>&</sup>lt;sup>39</sup> In addition to this, Uldanov also pointed out that an "economic dictator would have to decide how up-to-date and perfect the machines and productive resources could afford to be at any one point" but they "would not know how to solve the problem" (HAZLITT, 1951, 135). To underscore this point, he added, "[the economic dictator] wouldn't even clearly recognize the problem. And if he did see it, he wouldn't be able to solve it, because he wouldn't have a free market system and a free price system to enable him to measure his costs of production against the value of his product—to measure his input against his output" (HAZLITT, 1951, pp 135-136).

<sup>&</sup>lt;sup>40</sup> Mises also described in detail the difference between engineering and economics. Specifically, he stated, "The art of engineering can establish how a bridge must be built in order to span a river at a given point and to carry definite loads. But it cannot answer whether or not the construction of such a bridge would withdraw material factors of production and labor from an employment in which they could satisfy needs more urgently felt. It cannot tell whether or not the bridge should be built at all, where it should be built, what capacity for bearing burdens it should have, and which of the many possibilities for its construction should be chosen." (MISES, 1949, p. 209)

<sup>&</sup>lt;sup>41</sup> The invisible hand was also a term used in Adam Smith's *Wealth of Nations* (1776). Specifically, he stated, "Every individual… neither intends to promote the public interest, nor knows how much he is promoting it…he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, led by an invisible hand to promote an end which was no part of his intention… By pursuing his own interest he frequently promotes that of the society more effectually than when he really intends to promote it." (SMITH, 1776, p. 593-594).

In the following days, Adams noticed an increase in the energy and passion of workers. He also saw that many even viewed their job as a hobby and constantly thought of ways to improve. When he asked Uldanov how to explain such a dramatic change, Uldanov replied that the first reason was economic liberty, which he claimed: "releases human energy" (HA-ZLITT, 1951, p. 139).<sup>42</sup>

The second reason, according to Uldanov, was that in their "new free private enterprise system—an integral part of which is the right to and the protection of private property—every man gets what he himself produces" (HAZLITT, 1951, p. 139). He then added, "and as his reward is proportioned to his product—as his reward is, in fact, merely another name for the exchange value of his product—he knows that it depends upon himself, upon the value of what he creates. Each man is constantly striving to increase the amount he himself creates because it increases his own reward" (HAZLITT, 1951, p. 139). After making this point, he mentioned that their new system had effectively replaced the Marxist idea regarding "from each according to his ability, to each according to his needs" with "to each what he creates" (HAZLITT, 1951, p. 140).

The conversation then shifted to the difference between the real world and a hypothetical world with perfect competition and a discussion about whether or not workers are actually compensated in proportion to what they produce. Specifically, Uldanov explained that a similar bidding process sets wages and they are ultimately determined by marginal productivity.<sup>43</sup>

Unconvinced, Adams asked how workers could get the value of what they produced if the owners of capital insisted on a share in it. In response, Uldanov pointed out that they did get the value of what they produced due to their time preference. This led to another Socratic dialogue where they discussed a situation involving two workers and a hatchet, one of whom created it. Uldanov asked if it would be inappropriate for the person who created the hatchet to ask for some money in return if they lent the hatchet to the other worker so that they can chop down trees and get paid per tree. Adams mentioned that since the person produced the hatchet and their work was necessary to produce the tool, he would buy it from the person if he were the second worker.

<sup>&</sup>lt;sup>42</sup> To clarify, he stated, "Before people had economic liberty, you and I and the Central Planning Board laid down the central economic plan. And from then on nobody else had any function or duty but that of slavishly carrying out, to the last detail, the plan that we bureaucrats had laid down. Now everybody can plan. Now everybody is a center of planning. The worker can plan to shift to another employer or another line of production where the rewards are higher. He can plan to train himself in a new skill that pays better. And anybody who can save or borrow capital, or who can get the co-operation of other workers or offer them more attractive terms of employment than before, can start a new enterprise, make a new product, fill a new need. And this puts a quality of adventure and excitement into most people's lives that was never there before. In Wonworld, in effect, only the Dictator himself could originate or initiate: everybody else simply carried out his orders. But in Freeworld anybody can originate or initiate. And because he can, he does." (HAZLITT, 1951, p. 139)

<sup>&</sup>lt;sup>43</sup> To clarify, the wages that workers earn tend to be based around the discounted marginal revenue product, otherwise known as a discounted marginal value product, that they will add to the company (ROTHBARD, 1962). For example, if a worker will only add an additional \$5,000 to the company each year for two years, then their marginal revenue product is \$10,000. However, if the interest rate is 10%, then that means that the present value of the \$10,000 gets discounted to \$9,000. Consequently, the employer would tend to not hire a worker above \$4,500, which is the workers' discounted marginal revenue product per year, because they would ultimately be losing money if they hired them. Instead, a prospective employer would be better off loaning that money out to someone at 10% and getting a greater return.

Pressing further, Uldanov brought up a situation where the second worker didn't have the money to do that and got Adams to admit that it would be fair to ask for part of what was earned with the hatchet, but mentioned that it would depend on how much the person who made the hatchet was asking for. To ease his concerns, Uldanov noted that the rental would rely on two main factors. The first factor is how many tree choppers were who wanted the hatchet and the maximum amount of one's share he would be willing to give up. The second factor is how many hatchet owners there were and the minimum amount they're asking for of what the other person earned, which would tend to be based on how much it adds to the production. To clarify, he pointed out that if an ax can only chop down ten trees per day, but a chainsaw could chop down twenty-five, their productivity per day would be ten and twenty-five, respectively. He then explained that people would not be willing to pay more for the hatchet or chainsaw than they could make the chopping trees. In other words, Hazlitt helps explain the supply and demand for labor and the fact that wages tend to be based on marginal productivity.

During another conversation, Adams asked Uldanov how the high profits of some of the capital owners could be justified. Uldanov responded by pointing out that in addition to time preference, profits are also a result of bearing the risk that they may lose their own capital due to the fundamental uncertainty associated with what to produce. Amazed by their new system's progress, Adams asked Uldanov what he thought the secret to their success was. He replied by pointing out that it had something to do with the fact that their system was based on voluntary economic relationships rather than coercive ones.<sup>44</sup>

Toward the end of the story, Uldanov became hospitalized for over ten weeks, which led to Adams taking over control of the economic decisions. When Uldanov was released from the hospital, he learned that the economic situation had taken a turn for the worse. Specifically, he observed that the prices of most goods had doubled and that there were shortages of a few goods whose prices had remained near their old levels. In addition, there had been multiple disruptions to their essential war production due to "unbalanced output or bottlenecks" (HAZLITT, 1951, p. 162). When he confronted Adams about the problems, Adams explained that it all started after he became worried that people would begin to hoard their gold, which was needed to help with the war, so he decided to have all the gold turned over to the State, issuing paper certificates in their place. He then realized that he needed more money to fund the war, so he decided to issue more paper certificates than actual gold.

Uldanov then pointed out that if a private individual did that, they would be jailed and then explained to Adams that issuing more paper certificates than existing gold caused the prices to rise. In response to the rising prices, Adams claimed he did everything he could to stop it from happening by putting maximum price ceilings on essential products. Uldanov

<sup>&</sup>lt;sup>44</sup> To clarify, he stated, "The secret of our new system...if it has any secret, is freedom! Simple freedom! You set men free, and each turns to doing what he most wishes to do, or what he thinks he can do best, or what he thinks will bring him the greatest means to happiness. The secret is the freedom of each man to make a living in his own way; the freedom to produce what he wishes; the freedom to keep what he creates, or to share it or dispose of it in accordance with the dictates of his own and not some bureaucrat's conscience; the freedom to associate with whom he wishes; the freedom to consume what he wishes; the freedom to make and to correct his own mistakes. (HAZLITT, 1951, p. 160)

replied that the price ceilings were the reason for the shortages, since they increased demand without increasing supply. After explaining these things to Adams, the story ends shortly after with Uldanov rolling back the various changes to the economy.

To sum it up, Part III mainly focuses on Uldanov fully grasping and appreciating the benefits of a free-market system and learning more about some potential consequences of interfering with it. It began with Uldanov establishing private ownership of the means of production across Freeworld. He also allowed people to own "shares" in factories and machines, which led to the development of a stock exchange. As a result, he noticed several developments, including a massive turnover in managers, a decrease in income equality, a dramatic increase in the yield per acre of all crops, a greater number of workers taking more pride in the land they worked on, gold becoming the new medium of exchange, and the emergence of enterprises. On top of this, he also realized that private ownership of the means of production helped solve the economic calculation problem plaguing his regime. He also came to appreciate the price system and how prices rose or fell depending on whether or not there was too little or too much of a particular good. Uldanov also came to understand the difference between technological efficiency and economic efficiency and praised the development of double-entry bookkeeping. In addition, he began to grasp ideas like equilibrium, marginal revenue product, time preference, entrepreneurship, and profit and loss. Toward the end of Part III, Uldanov experienced the devastating inflationary consequences of moving toward a fiat currency and having more paper certificates created than existing gold and had to deal with supply chain issues caused by various price controls. The story ends with Uldanov rolling back these various interventions and restoring the free market.

## CONCLUSION

In conclusion, *Time Will Run Back* is not only a powerful work of fiction but also an excellent learning resource that can be utilized to better understand the economic calculation problem and many of the economic principles associated with it. In addition to this, Hazlitt's mastery of Socratic dialogues makes it especially pleasing to read. What's more, even if the reader, like Uldanov, is completely ignorant about economics and the benefits of the free market at the start of the book, by the end of it, they'll come to have a much greater understanding and appreciation of both.

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