

Transcript of “A new unified economic theory”

Hello, my name is Michael Glinsky, CEO of BNZ Energy Inc., speaking to you from beautiful Santa Fe, New Mexico. You can see behind me some of the trails where I ride my mountain bike. I would like to speak to you about a new economic theory that is the cornerstone of BNZ Energy. With no further ado, let me bring up the presentation and start the presentation.

This is a new unified economic theory. What I mean by “new unified economic theory” is that there is going to be a unification of the monetary, that is how the money supply is determined and controlled, with the fiscal investment policy, that is how investments are made in the economy. Traditionally, the monetary policy has been governed by Monetarism that has been uncoordinated with the fiscal policy and that with Monetarism that you have a central bank that is controlling the money supply via a discount or prime rate at which the central bank loans out money. This is Autocratic Capitalism with a central profit or resistivity or interest based monetary policy and control. Traditionally things have been handled from the fiscal investment side with the concepts of Keynesianism. That is where you borrow and spend in order to be able to make the investment by the central government. Since you are borrowing, there is an interest rate associated with the borrowing by the issuing of something like T-bills by the US Government or GILTs by the British Government. This is an autocratic. There is a central capitalistic government. This means the government is profit based with this interest based fiscal policy and control. Especially from the firm's perspective, the optimization is made in terms of profit. But these two things, the monetary and fiscal policy, end up being uncoordinated. Then there is the separate macroeconomics, the way that the overall economy is controlled based off of the Fundamental Equation of Monetary Policy which is that the Gross Domestic Product, GDP, is equal to the money supply, M, times the velocity of money, V. Then from the microeconomic or the firm perspective, you have a maximization of Discounted Cash flow, DCF, under the constraint that the Net Present Value, NPV, of the opportunity needs to be greater than zero. What we are going to be doing is bringing the two together. In fact, examining the firm like an economic commune comprised of that firm and its suppliers, its supplier's suppliers and so on. You have a microeconomic commune. Therefore we are going to approach the overall economic system as a multiscale web, mathematically a graph, of economic collectives. So that we will have a distributed constrained optimization at each one of the nodes of this multiscale web, each one of the the corner points, where you will maximize mSR , where m is the economic multiplier, S is a savings multiplier or temporal multiplier, m again is a network multiplier, and R is the primary revenue of that firm or the economic commune. You can see on the right of this equation, the time integrated revenue multiplied by this network multiplier multiplied by the savings or temporal multiplier and then divided by the payback time for the investment. You can now identify that the GDP is equal to the network multiplier times the revenue, which is also equal to the money supply divided by the savings rate. Since the savings rate is one over the velocity of the money supply, this is equal to MV . So you can see now that we have the Fundamental Equation of Monetary Policy, $GDP=MV$, represented here. So, we are going to have each one of the economies or these firms maximizing its mSR , this is equivalent to a revenue maximization or a GDP maximization of that sub economy or a maximization of the money supply. There will be a different currency associated with each one of the nodes in this graph, the economic web. So there is not just one central currency, but there will be individual currencies, that is transactional equities, associated with each one of the nodes in the graph of this web of economic communes, with coordinated Ubuntu (print/invest) Financing.

One thing to note is that this theory, since everything is going to be revenue maximizing and since the interest or the friction is going to be removed from these economies, is going to release this web of economic collectives from the economic tyranny of this viscosity. So what

we are going to have is what you see on the left, which are overall entities and distributed entities that are maximizing their mSR or are revenue maximizing entities under a constraint that an investment needs to be less than the amount of sustainable economic activity that is going to be created by this investment. This is also equivalent to saying that you will only do things that will increase the value of the currency, that is having no inflation of the currency. In fact, you will always see that the currency will be increasing in buying power as time goes on. This will be in contrast to what is done when you use resistive control of the economy. You will now see that these entities will be DCF maximizing firms under the constraint that the investment needs to be less than the Discounted Cash Flow, that is that the Net Present Value needs to be greater than zero for the entity. What we are doing, since we are removing this resistive control, is replacing resistive forecasting and control with Generative Artificial Intelligence (genAI) forecasting and control for the economic entities. This is for both macroeconomic and microeconomic entities because you have to remember that we are going to treat everything like a macroeconomic entity. This has really large implications, as you see here in this bottom box in terms of both the performance of the economy and the scale of the investments that can be made in the economy, because Discounted Cash Flow is equal to mSR times three different factors. The first factor is the profit margin. The second factor is a factor that favors quick projects. Projects with very quick payback coming from an exponential factor in the numerator and short lifetime projects coming from an algebraic factor in the denominator. Also see that the DCF is further reduced with respect to the mSR by one over the economic or network multiplier times the temporal or savings multiplier because the DCF does not give you credit for the network knock-on and temporal knock-on effects associated with the revenue. So, DCF is much less than this money supply or this GDP factor or revenue factor. It is not just a little bit less, I mean this in a big way. It is at least a factor of ten, if not a factor of a thousand less. We do see this. I have examples of where, if you operate the business according to a revenue maximization, you will see that the business will perform 10 times better than if the business is operated according to profit maximization. Also, with respect to the energy transition, we are only investing tens of billions of dollars per year which is a nominal amount compared to the 20 trillion dollars per year estimated needed investment in the energy transition. This is obviously a factor of a thousand, as I have indicated here.

I want to take a step back. We are basing everything on this constrained optimization of the time integrated revenue which is a functional, an integral of that quantity. It is not simply a an optimization of a function. I want to talk a little bit about the mathematical methods of constrained functional optimization. This is the core mathematics of economics and physics. If you pick up the book by Chiang on the Fundamental Mathematics of Economics you will see that he lays out these three methods that I am about to discuss. This is also true of physics. If you would pick up the book on "Classical Mechanics" by Goldstein, you would see that he also develops the three approaches that I am going to talk about. The basic problem is optimizing one of these functionals which, for us, is the time integrated revenue of this economic commune. If you are resistively controlling it, you add this red factor. You can see this exponential factor, this discount factor, that is associated with the resistivity, this artificial viscosity, that you are adding to the control system — the central bank and government based borrow/spend funding or borrow/loan financing that have been artificially introduced into the systems. This is subject to a constraint which is the force equation on the right. This is the physics of the interaction or the way that economic entities interact. This can be approached from three different perspectives. The first is the **Lagrangian** approach which uses the method of constrained optimization which utilizes Lagrange multipliers. You define a Lagrangian function as is shown here, where L is a function of q and \dot{q} and R is obviously the revenue or reward function. Now, by the principle of least action, where the action is the integral of the Lagrangian along the path or the evolution, you end up with the extremal equation being Lagrange's equation. This is a second order differential equation in the two quantities. More of the mathematical structure can be exposed if you make a Legendre

transformation or a change in coordinates from q -dot to p , to get to the **Hamiltonian** perspective. I do want to point out that in the economics literature q is referred to as the state of the economic system and p is referred to as the co-state of the economic system. [The Hamiltonian perspective is also known as Pontryagin's Maximum Principle of Control Systems.] When you make this Legendre transformation, you get the definition of the Hamiltonian of the system — capital H which is equal to p times $f(p,q)$ plus $R(q)$ and where p can be identified as the partial of the Lagrangian with respect to q -dot. Lagrange's equation now has been transformed into Hamilton's equations which are two first order differential equations involving the Hamiltonian, which you solve for q and p . There are many other very interesting things that can be shown. For instance, it can be shown that the volume is conserved by the flow in (p,q) or conjugate variable or phase space. Also, things can be referred back to constants of the motion or symmetries of the motion. But, this leads to probably the most insightful way of looking at this motion. This is in terms of the **generator of the canonical transformation** or generator that generates the motion. [This perspective is also known as the Dynamical Programming approach to optimal systems control of Bellman and Kalman.] We look at this in terms of the total action or the integral of the Lagrangian along the path which is equal to the action, which I will talk about more in a bit, and the energy E_P of the motion. You can solve a differential equation for the total action that generates the motion, that is called the Hamilton-Jacobi equation. You can see in red the additional term that adds the viscosity to the system. This action, S_P , which is the integral of p -dq along the path of motion, is equal to the negative of the entropy, The path that minimizes the action maximizes the entropy. The action is also referred to in Deep Reinforcement Learning (DRL), a method of Generative Artificial Intelligence (genAI) as the approximate value function where, in this case, it is the value created along the path or the total economic value, the approximation parameter, θ , is capital P and q is the state of the system, s . For Generative Pretrained Transformers, you are probably more familiar with the acronym GPT with respect to chatGPT which uses these Generative Pretrained Transformers, it is the approximate distribution or score function or approximate log likelihood, where the approximation parameter θ takes the place of the capital P and the little x is the state or coordinate little q . This action also is called Hamilton's Characteristic Function in classical dynamics. Most fundamentally, it is the generating function of the canonical transformation. You can look at this as the action that generates the flow and that ends up being approximated by Generative Artificial Intelligence (genAI). In most circumstances, Lagrange's equation is the equation that is easiest to solve directly. The generator or action, even though it is very conceptually valuable to think of it as the generator of the canonical flow governed by Hamilton's equations and also directly determined by the Hamilton-Jacobi equation, the Hamilton-Jacobi equation is very difficult to solve directly and get a closed form solution, but it is extremely easy to approximate with genAI, Especially AI that are piecewise linear universal function approximators. This is because these motions are geodesic motion or maximally flat motion that is very easy for a piecewise linear, that is maximally flat, approximator to approximate. The motion does have discontinuities or singularities in it that can be fit via the cusp in the piecewise linear approximation.

Let me move on to the fact that we know that these collectives do not have just one entity, so that we end up having a collective of many interacting economic entities. For physics, it is going from one atom up to many different atoms that could interact or one elementary particle to many elementary particles that could interact. In the first case, it is called a plasma or fluid, in the second case it is called a field of elementary particles. We are presented with the ensemble or a group of all of the particles that are interacting here and what we are seeing is the reflection of the master individual, the Puppet Master. This Puppet Master or this individual is undergoing simple motion that we have just discussed that can be generated via the solution to the Hamilton-Jacobi equation and is following this geodesic motion that gets multiply reflected or multiply scattered on to this community or this economic collective. We end up having the master individual being viewed through a Hall of Mirrors of where he has been

reflected multiple times. In order to discover what is happening here, the motion of the collective needs to be multiply de-scattered or deeply deconvolved with the HST, what we call the Heisenberg Scattering Transformation — a generating functional. The HST uncovers the very simple motion in a very few dimensions behind the infinite dimensional image. We now have a few coordinates. If we study the few coordinates, we will want to decode them into these fundamental capital Q and capital P variables so that we can find the geodesics of the motion. You will see that the Puppet Master will move around these geodesics and external forces will push him in a perpendicular direction or external economic forces and actors will push him in a direction that is perpendicular to the Q direction or in this capital P direction. The last thing I'd like to point out is that if you know what the singularities are, which here is the branch cut beta-star through here, that you can solve Laplace's equation and know what all of these geodesics are. All of the information is determined in terms of these beta-stars or these singularities of the surface or the boundary of the surface. This tells you everything that you need to know about these surfaces.

Let's take a closer look at the mathematical form of each one of these transformations. First, let's examine the generating functional or this deep deconvolution which goes backward through this Hall of Mirrors to expose this Puppet Master or The Wizard of Oz who is controlling everyone. This is an iteration of taking the logarithm of the field then applying this pooling operator that gives you the zeroth order look at the average of the way that people are distributed or correlated in the image. We continue the iteration by convolving with this bank of filters, applying the logarithmic activation function, and applying this pooling operator. The result that we get is how the individuals will be distributed. Then you repeat, again and again and again. This shows the way that individuals are correlated into families, the way families are associated with their small communes, the way then that communes are correlated into villages, the way villages are correlated into cities, the way that cities are correlated into states, the way that states are correlated into countries, and finally the way that countries are correlated into the world economy.

Go to the next step which is this decoding into the capital P and Q or the generator of the motion of the individual or Puppet Master, which is $S_P(q)$. This is the function of q that is approximated by these piecewise linear universal function approximators, constrained to have the particular structure of a canonical transformation. They are called Multi Layer Perceptrons or MLPs. They find the way that the motion is correlated around phase space. They are effectively a geodesic finder. It is very interesting to note though that this decoder, this generating function, is equivalent to the generating functional defined as the HST in the previous slide. [The way that the motion of the Puppet Master is correlated in phase space is equivalent to the way that the collective economic system is correlated as a field.] Even though it appears as two different steps, it turns out that the generating functional is just the functional equivalent of the generating function.

Let me show an example of a physical system. This physical system is an electron that is moving about an orbit around an ion in a strong magnetic field, B . There are two different types of motion. One is the electron going around a little tight cyclotron orbit, then slowly drifting around the field, as it bounces back and forth along the field. Such a pair is called a Guiding Center Atom or GCA. There is another type of motion where both the ion and electron execute a cyclotron orbit, then drift perpendicular to the magnetic field. These are called Drifting Pairs, or DPs. The plot on the right hand side shows the motion of two different Guiding Center Atoms that come close to one of these sticking points or these beta-star points or these singularity points. You can see that, even though they are separated by just a little bit, they are traveling around at very different speeds. In fact, you will see the faster of these two, which is the blue one, end up lapping the orange one. Also, do note, that as you get close to the sticking point that the particles slow down. For an orbit that goes to this sticking point, you would see that it takes an infinite amount of time in order to reach the sticking point.

Let's zoom out and take a look at the different orbits and how the phase space is laid out. On the previous slide, we were tracking one of the Guiding Center Atoms that was getting close to the sticking point x that is shown here. You can see that Drifting Pairs are shown in this area over here. These two areas are divided from a third area by what is called the separatrix, because the separatrix separates the three areas. This dark black line separates the areas of Drifting Pair motion from the Guiding Center Atom motion, from the third motion which is free motion. "Dobby is free." You can move around these trajectories in an unbound, free manner. External forces will act in a direction that is perpendicular to these orbits. The thermal force will always rob you of energy and take you to one of the orbits with less energy. Turn your attention to the plot on the right. There is an x -point that can be looked upon as a point of economic prosperity. They are topographical saddle points or mountain passes. Topologically, they are local maximums, unstable equilibriums, or metastable states since it takes an infinite amount of time to approach them. There are local minimums that are stable equilibriums indicated by the o -points. This o -point is a point of economic recession where there is some chronic unemployment. The economy is not operating optimally at full employment, with a much greater GDP, as it would be at the x -point. There is also an o -point that goes to negative infinity. These are points of economic depression or "economic black holes" where there is a total economic collapse. Let's say that we start from this point and are going around one of these orbits with a pretty good GDP. You will see that external entities will extract energy so that the orbit will spiral into the o -point until it reaches the o -point and bounces around the vicinity of the o -point of recession given by the size of the random step that the external entities perturb the orbit. What we want to do, instead of going down this well worn path into one of these valleys of economic recession, as shown in the middle illustration, is to take the path up to the mountain pass of economic prosperity or Nirvana. This is the objective of Keynesian borrow/spend economic stimulation — how to control or stimulate the economy to reach this point.

Let's discuss this stimulation in more detail. Say that we were initially here bouncing back and forth in this area of economic recession. Borrow and spend to get up to this orbit. It will take a long time to reach this point of the sticky texture, an x -point of economic prosperity. Eventually, you will move away from it, interact with external demons, and spiral back to the point of economic recession. The economy would need to be re-stimulated. This is a Sisyphean task, where the government will have to borrow more and more. Economic conservatism advises that the economy should not be stimulated. The government should not borrow to spend. Hopefully, the point of economic recession is not too bad, and not too much sacrifice is made. There a much larger danger if the economy would be overstimulated to here. It would move along the separatrix to the area of economic depression where a market crash, a "pump and dump", will move the economy into the basin of depression and it would subsequently spiral down to economic collapse. This happened in the United States with the market crash of October of 1929 and the subsequent economic collapse of the 1930s. So you would like to have a method of economic control that would keep you around the x -point. I propose the method of ponderomotive stabilization, where a little alpine valley is created at the mountain pass or Nirvana. Let's watch this video that shows how it is done. "This equilibrium point is stable because, if we perturb it, the pendulum will slowly return to the equilibrium point. The upper vertical position is another equilibrium point, but it is unstable, because any small perturbation will make it fall to the lower equilibrium point. Now let's power the jigsaw to see what happens." The x -point is the upper unstable equilibrium, and the o -point is the lower stable equilibrium. Wasn't that really cool? The way I like to think about this is like I am training or controlling my dogs. I have a buzzer, and when they do something that I like, they are behaving properly, I do nothing. When they do something that I do not like, I buzz them. When they do something that I really don't like, I buzz them longer. When they do something that I detest, I give them a small electrical shock. This creates a ponderomotive potential, so that they will circulate around the little alpine valley. This is what is done by sheepdogs that run

around the herd of sheep nipping at their heels. They effectively “buzz” the herd creating a force. The sheep do not like being buzzed, so the herd goes in the direction of least buzzing. This comes about because, at the point of equilibrium, the system has effectively infinite mass. It is an immovable object so the force has no effect. As the system moves away from the equilibrium, the mass of the system decreases so the system can be moved. The farther the system moves away from the equilibrium the more the mass decreases, the more it can be moved. This is what sets up the stabilizing potential.

Let's discuss these methods of collective control. What happened in the United States in the 1960's, due to the civil rights movement, is that the resistivity embedded in our society was significantly decreased forming The Great Society. When Jimmy Carter became president in 1976 and tried to control it, he had no tools for doing that, so that the economy went out of control, resulting in large inflation. The reaction to this opening up of society started in 1971 with Lewis Powell's (who would eventually become a justice of the Supreme Court of the United States) manifesto that proposed a plan for re-exerting friction on society, “locking up” society both figuratively and literally. It is now coming to its conclusion with the rise of fascism or autocracy in the United States. What we are proposing with transactional equity and genAI control is to create a “sheepdog” for these economic communities. This puts us at the dawn of a new era of sustainable economic prosperity in this alpine valley shepherded by Generative Artificial Intelligence (genAI). These images were created by DALL-E, the artificial intelligence of OpenAI.

I want to talk a little bit about the interaction of two things. The first thing is the objective function that is optimized, whether that is DCF or GDP. This is equivalent to the method of control, whether that is genAI or resistivity. That is along this axis which is really whether it is a socialism (ubuntu or communism) that is controlling the economic collective, or it is capitalism. Whether it is controlled with profit maximizing capitalism, or it is controlled with revenue maximizing socialism. The second thing is the distribution of control. Whether it is a distributed web of economic communes or a single economic commune centrally controlled by a Central Bank and a centralized government or Central Committee. This is either autocracy or democracy. It is whether you end up with monopolies, both economic and political, or free-markets. Countries can now be put into quadrants of this matrix. First, there are the Socialist Autocracies like USSR, China, Cuba, and North Korea. Second, there are the Socialist Democracies like the Scandinavian countries, to a lesser extent, France, Portugal, Australia, Canada, Switzerland, and Germany. It is very interesting that most indigenous cultures of Africa, Americas and Australia are Socialist Democracies. Third, there are the Capitalist Democracies like United States of the 1960's, initially Israel, Hungary, Turkey, and Russia underneath Gorbachov and Yeltsin. Finally the Capitalist Autocracies like Hitler's Third Reich, Putin's Russia, Trump's USA, Erdoğan's Turkey, Orbán's Hungary, Netanyahu's vision for Israel, and essentially most of the history of Western Civilization. Note that Capitalist Autocracies are stable with poor economic performance. Socialist Autocracies are unstable, mostly because of their very poor performance. Capitalistic Democracies are also unstable with reasonable or modest performance. The best and stable economies are Socialistic Democracies.

We now go through these types of economic collective systems again. **Democratic Socialism** is stable with high performance. They are rated the happiest countries in the world. This was successfully deployed in the American West from 1830 to 1860. It was developed using multiple paper currencies, led by the Wells Fargo Bank, founded in 1852. Each bank covered one day's horse ride and had its own promissory note or currency that it could print and grant. During this time there was a two times decrease in prices due to increased productivity, that is deflation. There was a 100x increase in GDP of the American West over this time. A good example of an economic cooperative, that exists today, is the REI Co-op for recreational equipment. It is 90 years old and counting. It is the premier US retailer of camping gear. It

currently has \$4 billion per year in revenue and 15,000 extremely happy employees. This leads to a distribution of wealth, power, and control that customizes the guidance, that is sharing, leading to and reinforcing a free market and democracy. In contrast, there is **Autocratic Capitalism** that is stable with poor performance or **Autocratic Socialism** which is unstable with very poor performance. The much studied one is **Democratic Capitalism**, familiar to most economics departments and business schools. It is the capitalistic Monetarism ("Capitalism & Freedom") of Milton Friedman and the University of Chicago school of economics. Note that commercial firms, under this method of control, have very short lifetimes, an average of about 15 years and shrinking. This is because the diffusive model does not capture disruptions (does not model them), and the force of profit prevents the transition of firms through market disruptions. Old firms, like Sears, fail and are replaced by new firms, like Amazon, when there is a market disruption. The resistivity of 6.7%, embedded in the economy via a typical AAA bond rate, constrains and grinds businesses to a halt in about 15 years. The lifetime of the business is one over the interest rate, $t=1/nu$. The imposition of the interest rate is a forecast that businesses will go to zero revenue in 15 years, but imposition of the interest causes the business to have zero revenue in 15 years. It is a self-fulfilling prophesy. There is a strong natural force to concentrate wealth, power, control and guidance, so that there will be an evolution to autocracy and monopoly. Greed will be an irresistible force, despite regulations and democratic constitutional constraints, that will prevail resulting in monopolies and autocracies despite one's best efforts to prevent them.

"Altruism versus greed", "sharing versus greed", first of all it is **"better to share, than be greedy"**. We were taught this as young kids, to share your toys by putting them in a community toy chest, so that each individual child will have more toys to choose from, and therefore be happy. The Community Software Chest is GitHub. The Community Capital Chest was first implemented by Martin Luther as his Community Chest of the Protestant Reformation, in contrast to the Chest of Indulgences of the Medici's first implemented as they had their banks, then as they became Popes. The modern version of this, proposed by this theory, is the electronic transactional equity version of the Community Capital Chest, Ubuntu Financing (print/grant financing). This is a **sharing business model** which is sustainable revenue maximizing, has a business cycle, which is two to six years, of savings of inventory both input and output as well as cash in terms of transactional equity, is forecast using genAI models, is controlled via Ubuntu (print/grant) Financing, where the stakeholders (employees, suppliers, and customers) are the stockholders of the transactional equity, is socially responsible and respects the dignity of the employees, suppliers and customers. This is in contrast to the **greedy business model** which is short term profit maximizing, has a transaction cycle (15 days or Just-In-Time) of savings and inventory, is forecast using a dying diffusive model (that is, Discounted Cash Flow analysis and the Black-Scholes Equation which is the diffusion equation for options and derivative securities pricing), is controlled using debt (borrow/loan) financing, where the stockholders of the firm are not the stakeholders of the firm's economy, is exploitive of society (that is, the employees, the suppliers, the customers of the firm, and subtly intellectual property that is monopolized and exploited so that it is not shared so that it cannot have the maximum effect on the goodness of society).

Let's talk about the consequences of greed. I'm going to become a bit philosophical here. As you see here by Mr. Greed himself, **a pile of money that Mr. Greed has is not entitled to homage or periodic indulgence, that is additional money being added to his pile by the adoring people who just come up and want to add money to his pile**. Equivalently, a vendor is also not entitled to multiples of what they have invested or will invest in a good or service in compensation for that good or service. Generative Artificial Intelligence is about better forecasting and control of the collective systems, leading to better decisions and ultimately social (including economic) good. This is we are talking about, enlightenment not entitlement. Another way of looking at this is by considering this crazy motorcycle rider over

here on the right hand side, using resistive control. Indulgence or usury leads to resistive control like going full gas on this motorcycle, then braking to control the speed. It is effective control but wasteful of energy and leads to much less performance. For an economic collective, this effectively stabilizes and controls the economic collective, but constrains the economic collective from reaching the maximum level of sustainable economic activity and robs it of revenue needed for sustenance and growth. You always have to be giving this extra energy away. Operating in that way robs you of what is needed for sustenance and growth. You will see that these economies will be operated at one tenth or less of the level that they should operate at. Their growth ends up being, if they need to be in a growth mode like a developing economy or the whole world now with respect to the energy transition, a thousand times less than it should be. These are the consequences of controlling a system like this rider is controlling his motorcycle on this rather hair raising ride.

Finally, here are the conclusions. We are talking about **a new unified economic theory that is stable Democratic Socialism** which: (1) relaxes the capitalistic diffusive approximation made for control so that there is now a coordinated, yet distributed, monetary and fiscal policy made to maximize GDP, not DCF, (2) replaces the viscous forecasting and control with Generative Artificial Intelligence for the forecasting and control. It replaces Autocratic Capitalism which has uncoordinated viscosity-based centralized Monetarism (for monetary policy) and Keynesianism (for fiscal policy). We are moving from this Dystopia of Autocratic Capitalism, with this new unified economic theory, to the Utopia of Democratic Socialism. I would like to thank everyone for the time that they have taken to listen to this presentation. Thank you. Hopefully you have learned something new.

The YouTube video of this talk can be found at: <https://youtu.be/80IZBPRx8WA>

The accompanying slides of this talk can be found at: http://www.qitech.biz/tech_papers/new_economics_presentation.pdf

A paper describing collective system behavior can be found at: <https://arxiv.org/abs/2401.04846>

An academic paper with the details of this economic theory can be found at: <https://arxiv.org/abs/2310.04986>

A general interest talk that has a good description of how collective systems behave can be found at: <https://www.youtube.com/live/2TCGsht9-DM>