

Adding a New Category of “Individual vs System” to the Economics

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Abstract

After the industrial revolution, the long-term effort of resolving the threat of resource scarcity was accomplished globally in the 1950s. However, the threat of environmental destruction was, and still is, accumulating along the way. As mainstream economics is the main culprit of environmental destruction, it cannot be expected also to be the correct solution. Accordingly, it is suggested that a new category of “individual vs system” should be added to the economics. As the inability of the mainstream microeconomics to endogenise the environmental variable and to construct the right foundation for microeconomic analyses can be remedied based on the microeconomic natural laws within the new category, so too, can the incapability to resolve the threat of environmental destruction from the mainstream macroeconomics be reversed based on the macroeconomic natural laws also within the new category.

Keywords

Resource Scarcity, Environmental Destruction, Environmental Variable, Microeconomic Natural Laws, Macroeconomic Natural Laws

1. Introduction

After the industrial revolution, the long-term effort of resolving the threat of resource scarcity was accomplished globally in the 1950s. However, the threat of environmental destruction was, and still is, accumulating along the way. Our eternal life goal cannot be the resolution of resource scarcity or the threat of environmental destruction. Although this eternal goal has never been decisively defined, we still need to find the right path to achieving the necessity of avoiding resource waste.

As mainstream economics is the main culprit of environmental destruction, it cannot be expected also to be the correct solution. Accordingly, it is suggested

that a new category of “individual vs system” should be added to the economics. As the inability of the mainstream microeconomics to endogenise the environmental variable and to construct the right foundation for microeconomic analyses can be remedied based on the microeconomic natural laws within the new category, so too, can the incapability to resolve the threat of environmental destruction from the mainstream macroeconomics be reversed based on the macroeconomic natural laws also within the new category.

2. Wealth and Goals

Human needs can be divided into two subsets of “immediate” and “future”. In the former, the most important ones must be the resolution of life threats. In the latter, the needs must relate to the eternal goal of life. The combined view of these two subsets can be considered similar to Maslow’s hierarchy of needs [1] which, in turn, can reveal a path of progress.

If there were no conflict between immediate and future needs, then there would probably not be much that could be explained in economics. However, over—but not sufficient—satisfaction of immediate needs has already excessively exploited the environment, raised the cost of fulfilling our future needs and destroyed the sustainability of the environment.

2.1. Individual Vs Social Wealth

The sense of not over—but just sufficiently—using our environment can be easily perceived but hard to be complied with, because it involves the desire to accumulate individual wealth. This sense arises out of our current economic system which treats both individual and social wealth as the same thing which is not only futile in terms of sustainability of the environment.

Regarding to the breakthrough of maximising individual wealth, globalization is still the current limit on the space dimension. In terms of the time dimension, scheduling death could be its current limit, which has already been partially realised. Clearly, the amount of wealth that can be generated through space and time expansion can be ten or even a hundred times more than spot transactions. The problem is, the excessive monetisation of future needs through the financial market does not only drive future prices to become more volatile, but can also accelerate the severity of wealth inequality.

Historic monuments and antiques have been left to the world from ancient times. Therefore, individual wealth cannot be permanently usable unless it can be integrated into the stream of production or reproduction. In other words, after the effective resolution of the threat of resource scarcity, there is an undeniable responsibility of individual wealth to become a part of the social wealth that can lead to the sustainability of the society. For example, to speculate and push up future prices of essential staples through financial derivatives would threaten the lives of certain people around the world. Such behaviour is unjust conduct by selfish interests that infringes on the collective right to subsistence, and it is

not the correct path to approach the eternal goal of our life.

Other than historic monuments and antiques, there is also the cultural heritage that can be inherited from the past and treated as social wealth. For example, if a good solution to the threat of environmental destruction can only be found in certain cultural heritages, then these heritages ought to be deemed as wealth of the world and essential for managing global sustainability.

2.2. Basic Economic Rights (BERs)

We all believe that a nation is owned by its all citizens. However, rarely can any nation openly state how many BERs its citizens have? Enormous budgets on economic development have been spent each year without seeking consent from economically disadvantaged people.

So far, governments still believe they should invest heavily to help economic development. However, once the threat of resource scarcity has been resolved, the economic growth no longer has the legitimacy to infringe on all citizens' right to subsistence. This right is clearly stated in the constitution of every nation. However, it seems that no government has ever declared the BERs to be a part of its citizen's right to subsistence. Currently, a few northern European nations have proposed the idea of basic incomes (BIs), which can be deemed as a breakthrough.¹

In a broad sense, every citizen's wealth should thus include BERs and the even more systematic rights that will be provided in the future by the government. For those northern European nations promoting BIs, they can move from the bottom tier of subsistence needs to the next step of the safety needs in Maslow's hierarchy of needs, and promote it to become the next systematic societal needs. The design of progressing national welfare and happiness and the primary responsibility of government will then become manifest.

3. Constraints

The way to conduct an economic analysis is usually to choose a target, set certain constraints, and then search for the optimal solution through appropriate analytical tools. However, the environment has long been treated as an opportunity instead of constraint of operation in mainstream economics. Therefore, no optimal solution that binds the capability of environmental sustainability can ever be found because it is believed that the environment cannot be quantitatively measured.

3.1. Systematic Variables

Common sense dictates that there are two different components of primary

¹BERs are distributed after actuarial determination of spendable budgets. Even if the number of non-workers should increase, shrinking BERs would force some of them to work again. The actuarial determination can avoid the possibility of leaving debts to future generations. It is a necessary constraint of determining BERs.

forces affecting us: controllable and uncontrollable.² Although, no such strict rule that can guarantee both coefficients in a bivariate model have an exact sum of 1. However, this seemingly impossible task can be easily managed by including a system variable in the model,³ which can then be deemed to be a part of microeconomic natural laws [2]; conformity between common sense and economic analysis.

In general, individual price factors are too stochastic to be measured, only systematic variables can be quantified by standards, and the key to do so is by using the “Fama threshold”. This threshold incorporates two requirements in quality and quantity. The primary focus in the former is heterogeneity. That is, there must be at least one non-mainstream participant to contribute to the effect of risk diversification significantly. In the latter, the number of participants should be from 15 to 20, and they should not be significantly concentrated in resource allocation.

The systematic price factor must be identical for all participants in the environment, if none of them has broken through the environment’s geographical constraint. Based on the portfolio theory and the principle of risk diversification, as long as the “Fama threshold” can be fulfilled, the environment’s systematic risk component can always be determined no matter which member would be chosen to start the process of risk diversification.

3.2. The Asset Pricing Model for Non-Financial Companies

A company or product usually has some substitutes or (and) complements that must be included in the model of asset pricing.⁴ According to Yu [3] [4] [5], after considering relevance and risk, the asset pricing model for a non-financial company i can be expressed as

$$\tilde{r}_i = \alpha_1 \tilde{R}_i + \alpha_2 \tilde{R}_c + \alpha_3 \tilde{R}_g + \varepsilon_i \quad (1)$$

This behavioural model links \tilde{r}_i , in order, to \tilde{R}_i , the supply-side content of \tilde{r}_i ; \tilde{R}_c , the supply-side return-on-investment (ROI) for product i ’s substitutes or (and) complements relevant to company i ; and \tilde{R}_g , the supply-side ROI for product i ’s system variable. By including \tilde{R}_g , all three coefficients in Equation (1) can be proved econometrically in the appendix of Yu [3] to have the following relationship:⁵

$$\hat{\alpha}_1 + \hat{\alpha}_2 + \hat{\alpha}_3 = 1 \quad (2)$$

Whilst \tilde{R}_g is the dominant factor, \tilde{R}_i can only be determined later. Unless

²Although the latter can be further reduced by breaking through space or (and) time constraints, certain uncontrollable components that cannot be surmounted must still remain. After all, we still have to live on the earth and our future is still filled with uncertainty.

³The econometric proof can be referred to the Appendix of this paper.

⁴For a localised company, it can take the smallest environment to define its system variable which, in turn, already includes all other systematic risk components that come from upper tiers [3].

⁵It is estimated on the unique property characterising the system variable g , that is,

$$\text{cov}(\tilde{r}_i, \tilde{R}_g) = \text{cov}(\tilde{R}_i, \tilde{R}_g) = \text{cov}(\tilde{R}_c, \tilde{R}_g) = \text{var}(\tilde{R}_g) \quad (\text{Yu, 2012}).$$

\tilde{R}_g is not effectively defined, otherwise, it is very difficult to allow α_1 to be larger than 1 due to the strong balancing mechanism in Equation (1). Usually, α_2 will be smaller than 0 if a net substituting effect is generated from outside. In turn, this would imply that the company has no superior competitive advantage in the market and hence it is impossible to make α_1 greater than 1.

As long as the systematic variable can be endogenised, the stability of our economic world can be automatically improved through Equation (1). What then would be its main disadvantage? Based on the general rule of having α_1 being smaller than 1, it is most likely that the stock market would no longer attract investors as it is currently doing.

3.3. Industrial Structure

Although there is no effect of risk diversification on a monopolist industry, it still can set the prices or transfer excess risks to its customers. The reason for opposing a monopoly is the fear of not establishing a more stabilised environment for development. Although, a new competitor might not have a good performance due to its newness, it could still contribute significant risk diversification and hence raise the performance level of the whole industry.

If the industry's individual risk component cannot be significantly diversified, all its members will be forced to bear some of the ineffective and unnecessary risks. If a member might because of carrying this kind of excessive risks, it will be a waste of resources. Once the "Fama threshold" has been met, it will not be possible for any new member to contribute significantly to risk diversification. As a consequence, the industry can only accept new members that can outperform its original average performance.

If the sum of those three coefficients in Equation (1) were to be greater than 1, it would represent an oligopoly as the market's system variable would still be unavailable. If it is close to 1, then it means that the market is close to being a competitive market. However, the market does not need to directly copy the market portfolio which represents the optimal resource allocation in the industry. It should be allowed to conform to the "Fama threshold" and still allow a few non-mainstream companies to exist as possible future replacements.

Most likely, overdevelopment within an industry or a nation would be observed, and the final position would be in the vicinity of the industry's minimum-risk portfolio, far from the market portfolio.⁶ This implies that no single company or nation can dominate all different products or industries, respectively. There should be careful evaluation to determine if the contrary effect of risk diversification could be caused by accepting too many members.

⁶According to the Markowitz's portfolio theory [12], all possible combinations of distributing national resources of production can form a closed feasible set on a σ - E plane, and its left boundary is a smooth curve bending toward the horizontal axis, which is named the efficient frontier (EF). After adding the opportunity cost (r_f) or a minimum target of development, the market portfolio m can be obtained accordingly as the optimal allocation of all production resources. There is also a global minimum-risk portfolio g existing on the EF; it represents the most stabilised condition or the system variable of the environment.

It is only the economic environment variable that is endogenised in Equation (1), there are still ecological and social environment variables which need to be integrated into the model. In the future, it will be necessary to construct a higher-level analytical framework that can include all three different environment variables, especially when they are closely connected with each other.

3.4. Fairness of Competition

A local company's systematic risk includes all the various environmental factors ranging from the local to the global economy. Contrarily, a well-diversified global enterprise has only the global economy as its source of systematic risk. Since components of both systematic risks differ by nature, it cannot be justified to permit both parties to compete with each other without any constraint. Moreover, linking the social and ecological environments of a local company usually contributes systematic factors to local development; instead, it is most likely an individual choice for an enterprise to break through the national boundary and go global. It would thus be unwise to allow foreign individual factors to infringe on domestic systematic factors in development. Furthermore, the target of ROI would be usually high for a global enterprise. The local economy would thus be gradually exhausted if it cannot meet the speed of exploitation.

International trade can best be sustained in terms of mutual interests, and this has to be an integrated evaluation based on both industrial structure, supporting setups and even plans for environmental sustainability. This kind of systematic analyses is vastly different to traditional ones, but it is necessary to deal with conflicts between individual and systematic constraints.

4. Threat of Environmental Destruction

Earth is the space of coexistence for not only all of us who are currently living but also for all future generations. The threat of its destruction is systematic by nature, and it requires all governments to initiate a consensual and effective resolution. However, despite all the lessons learned from international conferences about recognising the importance of trust, there is still no clear answer about how to develop enough trust to obtain a global consensus.

Nature has its own laws of operation. When human beings rely on natural resources to live and follow instead of being against natural laws, they will be able to conform to the principle of cost-benefit efficiency. This is especially true when there are always some uncontrollable factors that are still unavoidable.

The threat of environmental destruction accumulated during the process of solving the threat of resource scarcity, which must have arisen due to the naivety of people who had no reason to commit suicide. However, if similar threats were to occur repeatedly, how could we comfort ourselves by claiming to be naive? Therefore, the whole process of resolving the threat of resource scarcity has some learning points for us to effectively manage all future threats. Moreover, we can best use our wisdom and potential whenever life threats are confronted.

Once the old threat has ended, the next new threat arises immediately. As the intention of that “invisible hand” must be to help human beings to progress, it should also be carefully studied.

4.1. The Macroeconomic Natural Law

The critical factor for resolving the threat of environmental destruction is not technology but people’s ethics and consensus. As long as there are nations that are still not cooperating, all the results of the efforts will be halved or even be in vain. A synthesis of finding by Yu [4] follows:

According to the *I Ching*, two eternal forces, Yin and Yan, cyclically affect the world. Regarding the economy, Yin means preparation, restoration and other digressive contents, whereas Yan means production, creation and other aggressive contents. Moreover, according to the *Five-Element Doctrine*, each cycle that Yin or Yan dominated can be further divided into five different stages that generate, naturally, in the following order, the elements of fire, earth, metal, water, and wood. This order is then repeated in the next cycle.

For the first *Five-Element* development cycle (FEDC) covering the entire human history, resource scarcity was the primary threat to human life. Human wisdom started to lead the world from the fire stage or the acquisition economy to the earth stage or the agrarian economy, to control the risk. Subsequently and occasionally, the abundance of subsistence goods caused an economic threat, and the general solution was to upgrade subsistence goods to make necessities. Hence, the world economy entered the metal stage or the manufacturing economy. When the surplus of necessities also caused a threat of abundance, the best solution was to search for new markets; hence, the cycle entered the water stage or the commercial economy that primarily includes the logistics and finance industries. Globalisation therefore became the ultimate strategy to obtain new markets. When this strategy was no longer feasible, increasing the value added to necessities was considered. Eventually, the solution was to transform necessities into luxuries, and the information and knowledge management of consumer preferences became the prevailing practice; moving the economic world into the current stage of wood or the knowledge economy.

4.2. Resolving the Threat of Environmental Destruction

Again according to the *I Ching*, the wood stage must give way to the second FEDC. The primary economic mission of this cycle has to start with the restoration of the ecological environment in the earth stage. It will be followed by the restoration of the lesser urgent economic environment in the metal and water stages; and finally, the social environment in the wood stage. To continuously destroy the environment is not merely an issue of behaving morally right and fair; it also concerns everyone’s fundamental right to survival, including all future generations, which cannot be infringed on by selfish interests.

If the wood stage is overdeveloped, the environment will be damaged further

and it would slow down the emergence of the next fire stage. Once individual rationality is associated with even more powerful knowledge, further destruction of the environment will be unavoidable. Therefore, the next era, after the era of knowledge, must be the era of ethics to reverse the trend of development and begin the restoration of the environment. It is a natural law that indicates the urgency and importance of resolving the threat of environmental destruction to reduce the difficulty of restoring the economic and social environments. It also indicates that ethical consensus, instead of technology, is the foundation of resolution. For example, the problem of ocean pollution caused by plastic bags or other plastics can be resolved by a ban on their use. However, the problem will never be fixed if there is a lack of consensus by all governments and people.

According to the *Five-Element Doctrine*, only after courtesy, which has the well-developed attributes of fire, can trust, which has the attributes of earth, be developed. Following the natural order, the next step is to develop justice, which has the attributes of metal, and wisdom, which has the attributes of water. The final step is to develop benevolence, which has the attributes of wood. However, trust has long since disappeared between developed and developing nations. Although love is highly valued in Western nations, it cannot be easily developed among strangers.

To continuously destroy the environment is more than unjust when it is linked to everyone's fundamental right of subsistence, which cannot be infringed on by selfish interests. This fundamental viewpoint can serve as the basis to establish the necessary trust required for obtaining a global consensus. Before that, it will be necessary for developed countries that have dominated positions in international negotiations to re-establish the necessary courtesy especially when their major products are primarily environment unfriendly. Consequently, a global index of ecological improvement could then be implemented to allow all nations and citizens to compete with courtesy and honour to accelerate the worldwide effort to resolve the threat of ecological destruction.

To resolve the threat of economic environmental destruction, based on the pre-established courtesy and trust, justice can then be developed to eradicate those products which are ecologically and environmentally unfriendly. The next step is to develop wisdom to remedy the already seriously biased financial market. Strategies can include the endogenisation of the economic systematic variable into the asset pricing model; to decode the myth of all monetary games in the financial market and promote the spill-over effect of study to quickly reduce their attraction; to add gambling taxes especially to those zero-sum games in the financial market and so on.

Finally, based on the established courtesy, trust, justice and wisdom, benevolence can then be developed to resolve the threat of the destruction of the social environment. Love without wisdom but with the ability to disburse would result in resource misallocation or waste, as seen in the many lessons from international aid in the past. In the capitalist system, it is considered far more important to

develop a better worker more than a better citizen. Clearly, this view is a biased development which prefers enhancing selfish interests at the expense of infringing on the basic right of subsistence of all. Similarly, for those rich people and nations, to resume social responsibility is to compensate for the long-time error of infringing on the basic right of subsistence of all through selfish interests.

4.3. Binding Eastern and Western Wisdom

Adam Smith believes that ethics can automatically emerge and their primary source comes from human beings' sympathy. However, after effectively resolving the threat of resource scarcity, selfish interests must be restricted; those basic subsistence rights of all, including environmental sustainability, must be protected. Sympathy thus must be transformed into courtesy to develop trust and so on.

He also believes that, based on trial-and error, it is possible to gradually establish a shared ethical system guided by an invisible hand [6]. However, fundamental rules are guiding the development and transformation of different general ethics, and to disregard these rules would violate the cost-benefit principle. Moreover, resolving the risk of environmental destruction is already an urgent undertaking; any method of trial-and-error would probably be too slow to be helpful. Smith also rejects the idea of having any transcendental cosmic order behind the generation of ethics, be it God or rationality or any natural form [6]. However, even if individual terms in the system of general ethics could be artificially named, the correlations among them must still conform to the systematic rules operating in nature. This fact has long been elucidated in the Eastern heritage of wisdom.

Interestingly, courtesy has never attracted much attention in the Western culture, but is highly respected in traditional oriental societies. Therefore, the heritage of both Eastern and Western wisdom must be combined into economics to truly understand how the world economy is operating; how to construct the analytical framework and approach that can effectively deal with the threat of environmental destruction.

5. The Invisible Hand

So far, Adam Smith's the invisible hand has yet to be decisively defined [7] [8] [9]. Among all different interpretations, probably the one of natural law arouses the least controversy. At that time, "The idea of a natural order governed by natural law dominated the new world view" [10]. Moreover, for economic and social scholars, "Isaac Newton's story of God creating the universe as a self-propelled machine gave a more lasting spin to the virtue of self-interested individualism" [10]. It might also be related to the law of large numbers well-known to the academia at that time.

This law explains that, although the outcome from each random test can differ, a certain value can be reached by acquiring the average outcome of a sufficiently

large number of repeated tests. For example, it is said that in the studies of the behavioural characteristics in the operational form of thermodynamics, the behaviour of a group of atoms can be predicted but not that of any single atom [11]. A similar viewpoint can also be found in the Markowitz [12] portfolio theory. That is, after individual factors can be significantly offset against each other, only the whole portfolio's characteristics can be revealed.

After the threat of resource scarcity has been effectively resolved, another threat to the destruction of the environment will inevitably accumulate, which implies that there is an invisible hand that guides this transition. The fact is that human beings make the best uses of their wisdom whenever confronted with life threats. Repeated new threats are thus necessary to push human beings progress.

Another fact is that individual life is finite, but the life of a nation must be assumed to be infinite. Therefore, after having resolved the resource scarcity threat, each generation no longer has any superior right to infringe on the economic or even subsistence right of all future generations. First, society must achieve a highly stabilised environment; otherwise, individuals might fail by assuming those unnecessary excess risks that were not significantly diversified. Next, the most stabilised society should include all ecological, economic and social environments. Finally, only innovative destruction that can have positive impacts on environmental sustainability can be considered.

With awareness, human beings would probably not overproduce and consume to severely damage the environment. However, unless related natural laws are perceived and the effort of resolving the threat of resource scarcity can be limited, over—instead of sufficient—resolution will be inevitable, and so to, will be the emergence and flourishing of capitalism. However, due to over-exploitation of future needs, the threat of environmental destruction has become an inevitable tragedy that cannot be resolved by capitalism. This threat suggests that it is the time for capitalism to be replaced by socialism after having rendered meritorious service.

6. Capitalism vs Socialism

While capitalism can be deemed as being more concerned with production, trade and markets, then socialism can be deemed as being more concerned with production and distribution. The constraints of and opportunities for development are not the same; the way to achieve goals also differs. However, so far neither can endogenise the environment variable.

Karl Marx asserted that capitalism would sow its own seed of demise. However, this seed must have systematic instead of individual features and cannot be self-corrected by capitalism. The threat of the destruction of the global environment is a good example, especially as it is caused by capitalism. Nevertheless, we cannot declare here and now that capitalism should disappear forever. According to the *I Ching*, the mutual reaction between Yin and Yan is marginal. Therefore, there can only be socialism after capitalism. That is, only after all the

citizens' basic rights, including BERs, can be assured can socialism have a solid foundation to develop. Once socialism reaches its apex, it will still need to give way to the next new dominant force guiding the third FEDC.

Another serious error caused by capitalism is the exploitation and monetisation of future needs primarily through the financial market, and one of its consequences is to worsen the problem of wealth inequality [13]. Moreover, the exploitation of future needs also forces the economy to grow so it can maintain the plausibility of squeezing future wealth which through selfish interests infringes on everyone's basic right of subsistence.

6.1. Resolving Systematic Problems

A national government must serve all its citizens equally, including all future generations whose spokesman can only be the contemporary government. After the effective resolution of the threat of resource scarcity, all generations should have an equal right to use the national territory and its resources. Clearly, this must become national policy to protect the right of all future generations. Whereas this can easily be the core proposition of socialism, it is unlikely to be accepted in capitalism.

Taking the problem of wealth inequality as another example, as capitalism is to blame for creating this problem it cannot be expected to have any effective solution. Yunus [14] believes that this problem can be adequately addressed by promoting social businesses. However, it is a long-lasting and complicated problem that requires systematic prescriptions which, in turn, can most likely be adopted in a socialist regime.

First of all, all monetary games in the financial market must be largely reduced. Related suggestions were already mentioned in Section 4.2. Next, for those nations facing a more severe problem of wealth inequality, protecting their citizens' BERs will be even more critical. They can significantly relieve the pressure of conflict between both ends of wealth distribution.

Finally, wealth accumulation has long been achieved by sacrificing the quality of the environment and future needs, it is thus necessary for the rich to make up their long-time error of infringing on the systematic economic right of all through their selfish interests; to let part of their wealth be reintegrated into the stream of real investment. As mentioned in Section 4.2, wealth tax can thus be exercised on those who are not bound by such a regulation. Through an association of social businesses and a financial system capable of serving the poor, as wisely suggested by Yunus [14], the long existing problem of wealth inequality or even poverty ought to have a better chance of being effectively resolved.

6.2. The Markowitz's Portfolio Theory

It is possible to quantitatively perceive primary differences between capitalism and socialism by applying the Markowitz's portfolio theory. Following on from the related discussions in section 3.4 particularly Footnote 6, as efficiency is the

substance of capitalism, the market portfolio m can thus be taken as its best representative; whilst the global minimum-risk portfolio g can be taken to represent socialism when it is the most stabilised condition of development. As to the present situation, portfolio p , most likely lies beneath the EF and reveals a fact of having certain constraints, which in turn can contract the initial EF.

It is unnecessary to exactly duplicate the market portfolio m when its content can always be varied quickly based on competition or even destructive innovation. To raise the individual performance on the horizontal E axis can elevate the EF and be beneficial to all, but it cannot necessarily reduce the systematic risk represented by the global minimum-risk portfolio g . These variables are part of the unique features characterising capitalism. However, the capitalist emphasis on perfect competition must only focus on process instead of the result, because, in the end, perfect competition must be located in the vicinity of portfolio g instead of portfolio m . It also is one of the main reasons forcing capitalism to continuously grow.

Contrarily, as to the global minimum-risk portfolio g , most likely its content includes all participants. Therefore, changes in the weights of all participants or even the inclusions of new participants can have little significant influence on the level of systematic risk especially in the short time. Based on the economic viewpoint, to relieve the constraint of subsistence is the fundamental way to reduce the systematic risk relating to individual life, which clearly shows that management of systematic risk still has a long way to go.

Undoubtedly, even if economic development could be practised on the EF, the current situation or the portfolio p would still be situated between portfolios m and g based on the reality. Consequentially, a rational allocation of the government budget or even the actuarial determination of BERs will have a reasonable basis to follow.

7. Conclusion

The long history of human beings shows a struggle for resolving the threat of resource scarcity. However, our world economy has already reached an era of excessive redundancy [15], plus a threat of severe environmental destruction. It is the over-satisfaction of personal physical needs that contrarily damages the environment providing all physical resources. However, after effectively resolving the resource scarcity threat, it is no longer acceptable to continuously damage the environment for reasons of survival or even through naivety. However, there is a sense of urgency to restore the environment to avoid the difficulty of increasing the marginal cost of production or even the threat of subsistence. It is necessary to develop in mainstream economics, which emphasises individuals, a new category of “individual vs system” to resolve the threat of environmental destruction. Also, since the threat of resource scarcity has already been effectively resolved, the basic right of subsistence of all citizens must thus become part of systematic rights that cannot be infringed on by selfish interests.

As to the job of economic analyses, system variables can only exist after the number of participants conforms to the “Fama threshold”. The system variable must evaluate both the concerns of risk and real performance, be endogenised as an environmental factor in the asset pricing model, be applied to represent the best stabilised environment or even bridge microeconomics and macroeconomics. Such an undertaking suggests that a significant number of economic issues can already be more practically analysed [4]. Nonetheless, the importance of system variables remains to be unveiled.

Human subsistence needs differ slightly. However, it was not until the 1950s that the threat of resource scarcity was resolved; and only recently, have a few northern European nations started to release their citizens from the fetters of national subsistence needs by providing citizens with basic incomes. Once all citizens’ subsistence needs are fully protected, these nations can move on to develop the next systematic basis of safety needs, and stride far ahead of other nations on the road towards the eternal goal of human life.

Northoff [16] believes that both science and philosophy make theoretical adjustments for the same purpose, that is, to help us to be at ease in our world. However, humans did not just make a sufficient but an excessive use of the transcendence ability. The consequences shortened the process of resolving the threat of resource scarcity and damaged the environment that provided resources. We certainly cannot look for any useful answer in mainstream economics to addressing the threat of environmental destruction as it is mainstream economics that is the culprit. It is also beyond the capability of mainstream economics to establish universal ethics as the basis of obtaining global consensus as a possible solution because it primarily emphasises positivism. A new category of “individual vs system” must thus be added to economics to meet future challenges and needs.

Hicks [17] once mentioned, “There is, there can be, no economic theory which will do for us everything we want all the time.” That is because, as can be seen in the *I Ching*, though infrequently, phase transitions can still occur, as they do during the process of economic development. Accordingly, related economic theories and analytical approaches must be recreated. Understanding natural laws is therefore equivalent to an efficient way of recreation and a wiser use of scarce resources.

In essence, we can make the best use of our wisdom and potential whenever we are confronted with life threats. Before achieving the eternal goal of life, it is necessary for people to be repeatedly challenged by new life threats to progress. It is clearly the operation of the invisible hand helping us to achieve our eternal goal of life. By looking into the heritage of human wisdom, it becomes possible to identify this hand to help us avoid the stupidity of recommitting similar errors, and to construct a better foundation of analytical approaches in economics.

Organisms can negatively affect the environment. However, only human beings can create destruction of the environment on a global scale and threaten

everyone's basic right of subsistence. To pursue the eternal goal of life has also been neglected as the ultimate purpose of using resources. After resolving the resource scarcity threat, it will be time to focus on the collective instead of the individual. The message is clear: individual selfish interests cannot infringe on the basic subsistence right of all.

As long as related natural laws can be conformed to, the economic world can be largely stabilised, and many economic problems including wealth inequality can resolve, as can the effective resolution of the threat of environmental destruction and so on. It is time for capitalism to abdicate and be replaced by socialism, especially when the threat of environmental destruction cannot be resolved by the former.

In the future, during the process of resolving the environmental destruction threat, another new and even more severe threat to human life will again inevitably accumulate. The inevitable future challenges to economics will be to answer the following two questions: What will that new threat be? How to effectively deal with it?

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendix. Two Coefficients in a Bivariate Model Can Be Summed to 1

For a bivariate model like $Y = \alpha_1 X_1 + \alpha_2 X_2 + \varepsilon$, estimators of both coefficients can be listed as

$$\hat{\alpha}_1 = \frac{\sum x_1 y \sum x_2^2 - \sum x_2 y \sum x_1 x_2}{\sum x_1^2 \sum x_2^2 - (\sum x_1 x_2)^2} \quad (3)$$

$$\hat{\alpha}_2 = \frac{\sum x_2 y \sum x_1^2 - \sum x_1 y \sum x_1 x_2}{\sum x_1^2 \sum x_2^2 - (\sum x_1 x_2)^2} \quad (4)$$

Assume Y is the return on stock, X_1 is return on the stock market's system variable, X_2 is the stock issuing company's real variable like return on assets. Risk of Y or X_2 can be defined as f (individual risk, systematic risk) or g (individual risk, systematic risk), respectively. By applying the unique feature binding the system variable, that is, $\text{cov}(X_1, Y) = \text{cov}(X_1, X_2) = \text{var}(X_1)$, Equations (3) and (4) can be transformed into:

$$\hat{\alpha}_1 = \frac{\sum x_2^2 - \sum x_2 y}{\sum x_2^2 - \sum x_1 x_2} \quad (5)$$

$$\hat{\alpha}_2 = \frac{\sum x_2 y - \sum x_1 x_2}{\sum x_2^2 - \sum x_1 x_2} \quad (6)$$

hence an outcome of $\hat{\alpha}_1 + \hat{\alpha}_2 = 1$.