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Mono Mode Vs Multiple Modes in the Context of Complexity Economics Through Mmtpi and Abtwram Both in Developing and Developed Countries

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Abstract

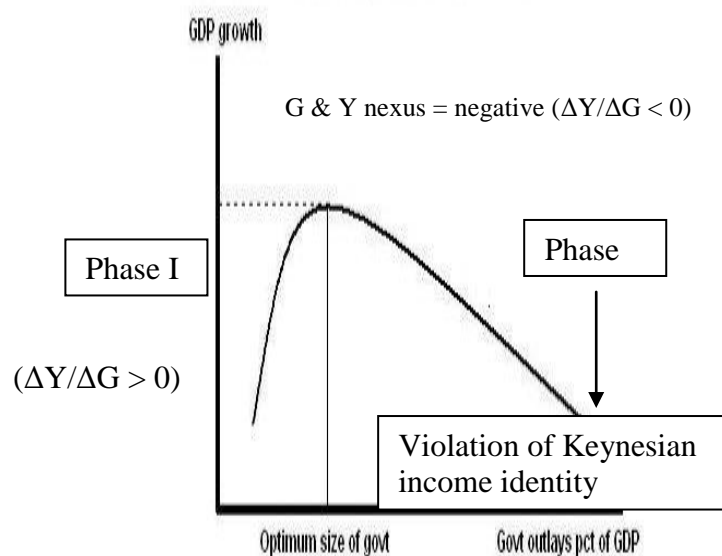
The patterns of evolutionary economics has illustrated the increasing gap of divergence between the traditional and assimilated realities, which were pointed out by Yin-Yang and vedic economics. The flow of research has illustrated the critical discussions on meso trajectory phases of innovation, and the interaction effects between Animal Spirits, Buchanan's taxonomy, Wagner's Law, Rahn-Arme y Curve and Metcalfe's Law in describing mono and multiple modes of complexity economics that are consist of actors of network, asymmetrical flow of information, inflationary risk, technological risk and environmental risk of public through the theory of structural change. The flow of research has proposed the balanced segments of government (proper regulation, the supervision of projects proposals and interactional upgrading of intellectual engagements), private and public institutions, actors of academic industry, nature of ethics, and etc that will be required for the maintenance of sustainable movement of evolutionary paradigm which will be directed through the concept on the modified version of meso trajectory phases of innovation that has also captured the main aspects of creative destruction (Mark 1), creative accumulation (Mark 2), mode of information accessibility, the number of actors in a structure of network. Besides that, the designed structure of this paper has dissected the importance of dual concepts of catching up and patching up from the ethnical view of the system.

Key words: Modified version of meso-trajectory phases of innovation, Buchanan Taxonomy, Wagner's Law, Metcalfe's Law, Rahn-Arme y Curve, complexity economics , Animal spirits, sustainable movement, structural change.

1. Introduction

The expansion of the evolutionary economics has indicated the decreasing pace of equalization among most of the developing and developed countries by taking the indicators of macroeconomics such as carbon emissions, cyber attacks and etc into the consideration. Based on the state of traditional reality, income per capita has been reflected as the most important proxy of economic development by enormous number of scholars around the globe, but, in actual, that should not be the case if we take into the concept of assimilated reality which has the broader scope than the traditional term. To the best of my knowledge, most of the scholars have just highlighted the signal of partial equilibrium which has just captured the discussion on the connection between gross domestic product or economic growth or economic development and size of the government by adopting the Wagner’s Law, Buchanan taxonomy, Rahn-Army Curve and etc. Not many has highlighted the interactional effects between human psychology and real economics in the context of public expenditure , assimilated reality and ethnical view of the system. In general, the transition of schools of economic thoughts can be reflected as the main attribute of evolutionary economics as it can be used as the benchmark for the evaluation of system in a more complex way. Classical and Neo-classical schools of economic thoughts have reflected the concept of invisible hand (the domination of market mechanism) as a tool to evaluate the wealth of nation, but, this may not be true with the occurrence of Great Depression in 1930s, where as Keynesianism has favored the mixed domination of public and private sectors in moving towards the process of achieving the equilibrium in the wealth of nation. Keynesianism has been strengthened in the implementation of public private partnership (hereafter PPP) projects in some of the developing countries, and this has captured the partial form of innovation in the system. Through the economic dynamism, information accessibility, and the pace of structural change are the two main underlying issues that can speed up the sustainable development from all the aspects . The additional features of interest that will be discussed throughout this study are consist of the discussion on the interaction aspects of animal spirits (fairness, degree of trust/confidence, value of money, and expected objectives) and Modified version of Metcalfe’s Law and meso trajectory phases of innovation that deals with the role of economic agents (society, public and private sectors) and other components of interest (degree of asymmetric information, concept of AAS, origination, diffusion and retention) through the creative destruction (Mark 1) and creative accumulation (Mark 2) that were developed by Schumpeter (1934).

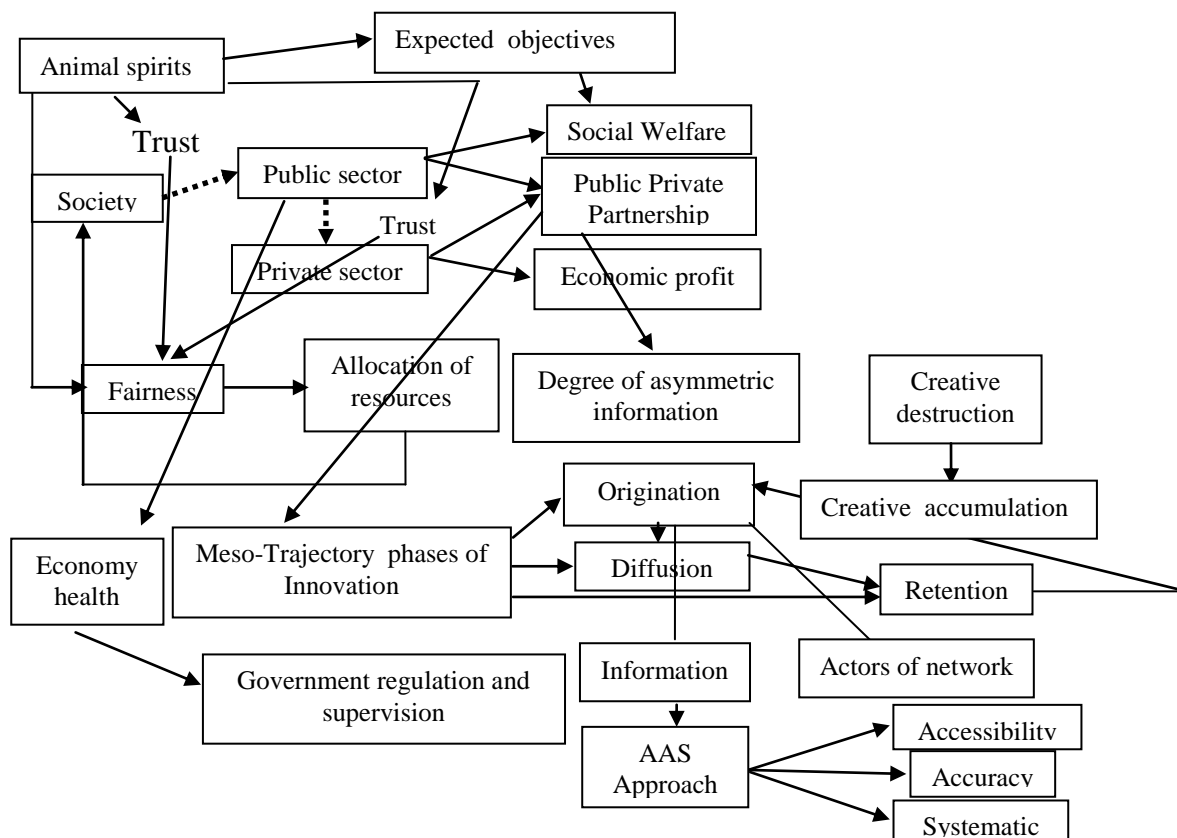
2. Critical Evaluations on the Interactional Effects Between Rahn-Army Curve, Buchanan’s Taxonomy, And Wagner’s Law



Sources : Author and Dopfer et al (2004).

It has clearly been observed that the statement of Keynes (1936) on “we are all dead in the long run” contradicts with the assimilated reality as the real solution was not identified in a more formal way. Contradiction of thoughts on the government expenditure-economic growth nexus between John Maynard Keynes, Richard Rahn and Arthur Armey can be seen in Phase II. Rahn -Armey Curve has captured the positive and negative connectivity between the government spending and economic growth using an aggregated approach in which phase 1 is the reflection of Buchanan’s taxonomy on government by people where as phase II is the reflection of the taxonomy on government against people. According to the scholars of public finance, the increase in the government expenditure may enhance the level of economic growth if government can maintain the rule of law and property rights and this is in line with the Keynesian approach. At the initial stage, most of scholars would say that there is no life without government. Societies need government to fulfill their needs on basic public utilities such as health care services, education, electricity and etc. The reason behind negative connectivity between government expenditure and economic growth was depicted by Sinha (1998), through the theory of public choice of bureaucracy, in which public sectors will be maximizing their own utilities without even caring about the societies needs and large expansion of government expenditure may lead to a higher level of tax imposition which may reduce the private consumption. Higher external public debts can also be resulted from the expansion of government size. In order to avoid public debts, most of the developing countries in recent years are moving towards public private partnership with the mixed mode of risk sharing and combined roles of public and private sectors. The dual concepts of Rahn-Arme y Curve can only be taken into the consideration as the reflection of traditional reality that has just captured the partial equilibrium. Besides that, the development of Rahn-Arme y curve is just based on the aggregated approach in which it doesn’t capture the segregated analysis of public expenditure as the internal impacts of public spending might be in a reverse position compared to the traditional Rahn Arme y Curve. The usage of gross domestic product is not the appropriate measure as it doesn’t really capture the environmental risk (the prediction risk of disaster, carbon emissions, costs of climate adaption and adoption, greenhouse emission and etc). The discussions on the Rahn-Arme y Curve have not captured the concentration on the interaction effects between political risk, human psychology (public rating), infrastructure and government expenditure from the aspects of segregated and aggregated analysis.

3. Modified Versions of Metcalfe’s Law And Meso Trajectory Phases of Innovation



Sources : Akerlof and Shiller(2009), Schumpeter (1934), Dopfer et al.(2004), and Author.

The strand of this study has modified the versions of Metcalfe's Law and meso trajectory phases of innovation that were developed by Robert Metcalfe ,Dopfer et.al (2004) and Dopfer (2012) based on the crucial elements of complexity economics. As mentioned earlier, Modified version of Metcalfe's Law in this study involves multiple levels of integration among the particles (economics agents) and other components of interest (aspects of Animal spirits [fairness, degree of trust, value of money and expected objectives] and the modified version of meso-trajectory phases of innovation that are consist of origination, diffusion and retention through the actors of network and AAS approach of information. Animal spirits may reflect the level of optimism (positive side of economics) and pessimism (negative side of economics).Higher degree of trust among society, public and private sectors in the effective process of allocation of resources (fairness) play an important role in determining the implementation and effectiveness of public private partnership projects. Proper government supervision and regulation are needed to improve the economy health because higher expansion of PPP projects may lead to corruption, monopolies and so on and the latter were supported by [9]. The misalignment of objectives between two economic agents (public and private sector) can be served as a problem to achieve the effectiveness in PPP projects. So, it is always good to have equal weight of the expected objectives (higher social welfare and economic profits). Lower degree of asymmetric information must fulfill the AAS Approach in order to maintain the effectiveness of the projects. Extraction of new knowledge and ideas from the old ones is the reflection of the creative destruction and the value addition of the system can be considered as the reflection of creatice accumulation. The evaluation of the patching up in terms of the diffusion of certain parts of the system is crucial in measuring the speed up of catching up with international competitors and other nations in all the aspects of interest. The modified version of meso trajectory phases of innovation will go through the consideration on the value of money and ethical view of the system from the holistic approach. It applies the same to the evaluation on other issues of interest such as environmental risk, technological risk, and etc. The increasing pace of technology readiness can also be taken into the consideration as an important tool to reduce the severity of asymmetrical flow of information with strong concentration on the perception and adaptive capability of the economic agents in lighting up some portions of successes without distortions than failures

4. Concluding Remarks

This study has played an important role in capturing the modified versions of Rahn-Arme y Curve, Metcalfe's Law, and meso trajectory phases of innovation that will capture certain segments of the evolving complexity economics. The discussions on the Rahn-Arme y Curve have not captured the concentration on the interaction effects between political risk, human psychology (public ratings on different measurements), design of infrastructure and government expenditure from the aspects of segregated and aggregated analysis. The flow of this research has highlighted the importance of dual concepts of catching up and patching up from the ethnical view of the system. Besides that, the critical points on the pressing issues of complexity economics were highlighted through the suggestions on the modified version of Rahn-Arme y Curve, Metcalfe's Law and meso trajectory phases of innovation.

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