A New General Theory of Economic Equilibrium
with
#JAM - Janakalyana Arthikanithi Muladhara
a.k.a #PCME - Population Centric Macro Economic Model
Created: 2017 – Updated July 12, 2017

For thousands of years the ability of an economic system to grow was constrained by the availability of capital. This constraint was magically relaxed in the second half of 20th century as nations moved away from commodity or metal backed currencies to fiat currency. The ability to increase or decrease the level of money supply in an economy through the exercise of sovereign power created Money Gods popularly referred to as Central banks. The monetary policies exercised by these institutions have been driven by economic theories that were highly evolved and pertinent in the earlier economic systems where money supply was constrained.

In the world of economics as in other biological eco-systems there are dependencies between various actors and their activities. Some of those dependencies are obvious and have been known to generations of economists. Some are either generally unknown or were weak enough to be neglected prior to the introduction of fiat currency. A new theory of economic equilibrium is proposed to help governments in framing macro economic policies that are intended to support the creation of stable and robust drivers of economic growth leading to prosperity of nations.

JAM – PCME
Population is central to all macro-economic theories. Production and consumption tend to reach a state of equilibrium in any economic system. Globalization preserves that equilibrium on the larger global canvas. In the world of currency – the role of population extends beyond the production and consumption roles. Workers and savers lay the basic platform for an economy creating a flow of money that in turn powers a world of investors and business. Competition and creativity further connect the world of investors to the world of innovators and entrepreneurs that transform economic activities to create new sources of competitive advantage for individual businesses and national economies alike. The basic force driving these activities can be described as an expectation of a higher return on the quantum of money employed by a saver on savings, an investor on business investment and an entrepreneur on innovation. It is important to understand that these roles are not mutually exclusive. An innovator or entrepreneur; a business person or investor are simply different types of workers giving rise to a population centric view of an economy. The impact of fiat currency and its management on an economic system needs no special emphasis.

Janakalyana Arthikanithi Muladhara (JAM)
or Population Centric Macro Economic Model
JAM / PCME was developed by IGES over a period of several years and has benefited from several round tables organized by Gravity 2.0 Research Foundation and the many conversations on the twitter network (twitter.com) with several people – but most importantly John Hearn (@jbhearn). Many of these conversations can be viewed through a twitter search for the handle @gravity_v20 and hash tags #PCME #JAM #IGES.
The JAM model of macro economic equilibrium states that return on savings, investment and innovation are inter connected. This equilibrium can be described as a set of 3 equations and functions as follows:

\[ RoS : \text{Return on Savings} = f_1 (RoI, RoI) \]
\[ RoI : \text{Return on Investment} = f_2 (RoS, RoIn) \]
\[ RoIn : \text{Return on Innovation} = f_3 (RoI, RoS) \]
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The above set of equations and functions abstract away several details of production and consumption creating a simple and elegant framework to aid governments in creating and operating monetary and fiscal policies.

JAM / PCME – Some Observations

The most significant observation that follows from JAM is that return on savings is a function of investment and innovation. Any change to RoS therefore is a result of changes to the worlds of investment and innovation. RoS is a function of the macro economy and is not a controlled variable set by a monetary authority.

JAM shows that “interest rates” should be broadly regulated and the actual rates must be determined by market forces only. Any monetary policy that sets the RoS therefore can be considered as a dangerous interference in the operation of free markets.

**Observation 1:** Don’t Manipulate RoS by any name including Interest Rates

Additional observations are possible. In particular it can be seen that the macro-economic returns applicable in the highest connected economic system broadly follows the relation.

**Observation 2:** RoS <= RoI <= RoIn

It is also useful to define a gross macro economic property that would closely correlate with the economic growth rate – RoE (Return on Economy) as a geometric mean of the 3 returns and observation 4 immediately follows.

**Observation 3:** Return on Economy : RoE = Geometric Mean ( RoS, RoI, RoIn )

**Observation 4:** Low value for any of the 3 returns RoS, RoI and RoIn drives down RoE

JAM / PCME – Conclusion and Future Work

A simple and elegant population centric economic model has been developed. The power of the model can be seen from the set of useful direct observations that follow. Future work may focus on deriving alternate policy models for macro economic management. Send collaboration inquiries to iges@gravity20.org

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