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# **The Fundamental Solution to Economics**

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## **Opinion Article**

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**Keywords:** Macroeconomics, Microeconomics, Cusack's Universe, Wave equation. In the same way that there are fundamental forces in Nature (Gravity, Nuclear, and Electromagnetic) the same appear in Economics. In the same way that these Macro forces (Cosmological) can be reduced to Quantum Forces (the Wave Equation). Economics too has the same equation. This paper provides the calculations that lead to the Fundamental Solution to Economics.

ABSTRACT

## THE INTEREST FORMULA





(1+ i)^N

Then,

(1+Rm)^Pi

Rm = Resistance to Mass formation; or the cost of money i.

Pi = time t.

E = Energy = GDP

So, we take the sum of Inputs Interest and Material and Labour which sum to the GDP or Energy:

e^(-t) = Rm + Ln E Money Supply = M.S. = 7 = 10/sq. rt 2 7.07 = (t-E) + Ln E 8.07E = Ln E E = 0.868

#### **Quantum Mechanics, Position Equals Velocity**

Let,

 $L = v (L = Position; v = Velocity from Quantum Mechanics)^{[1]}$ 

Integral L = Integral v

Money Supply = M.S = L

Integral L = L

M.S. = L = v

#### The Super-force and the Grand Unified Theory <sup>[2]</sup>

M.S. = sin theta = F = Ma = P = Mv = Super-force

F = 8/3 = 2.667

Money Supply/ Individual's Money = M.S./I.M = sin theta \* M

8.3 = sin theta M^2 8/3 = 0.8415 M^2 M = 3.16~Pi = t I.M. = Pi^2 = 1.7802

Pi^2/11521 = 1.7802/115 = 1.548~1.5

Mass Gap = 1/G where G = 2/3 = Gravitational Constant.

Since it takes money to make money, the more money one accumulates, the more one has to invest and make more money. It is the same with Mass or matter. Gravity works the same for money as it does for matter.

F = 8/3 = Ma = Mv a = v = 0.8415 M = F/a = 8/3/0.8415 = 3.1689 = Pi = t M = t dM/dt = dt/dt = 1Integral dM/dt = M = 1 E = 1/t = 1/1 = 1 = World GDP

#### **Golden Mean Energy Parabola**

 $t^2-t-1 = E = e^{(-t)}$  2Ln t-Ln t-0 = -t Ln t = -t 1/t = 1 t = 11/2 \* E\*t\*s = 1/2 (0.868)(1)(4/3) = 1/sq. rt 3

#### **Schrodiner's Wave Equation**

The Wave Equation governs atoms and individuals in an economy.

U+ iV = 1+ (1)(0.618) = 1.618 1.618 = 1/ sqrt (2\* PI)\* e^k k = 14.001 Now, (1+ e^t) = 1.73 = eigen vector.  $e^t = 0.73$ Ln (0.15t) = Ln 0.73 15t = 3.14 t = 2.098 = 2.15 Ln (t)\* Ln 2.15 = 3.069 = c Ln t = t 1/t = t E = t

## CONCLUSION

The Economy is always seeking to find this Optimum condition. When Individuals seek to save 15% or 1/7 or their Income which is used for Investment, the Economy is functioning "on all cylinders". It creates an economic situation where the velocity of money is equal to the supply.

## DISCLOSURE

There are no funding sources and no conflicts of interest.

## REFERENCES

- 1. Bohm D. Quantum Theory. Dover Publications. 1989;1-30.
- 2. Paul Cusack TE. Astro-theology: Cusack's model of the Universe. Lulu Publications. 2015;1-629.

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