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The Win-Win-Win Papakonstantinidis Model and the Economic MRS: Some Lessons From Linear B

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Abstract

The suggested "win-win-win papakonstantinidis model" (coming from Nash[1] win-win extended approach) tries to find ways for the three-pole bargaining conceptual equilibrium, under conditions, thus maximizing expected utilities for all the involved parties AND the Community in local decision-making by applying a combination of Descriptive Behavior (DB), Rational Choice, Instrumental Rationality and the Applied Behavioral Analysis (ABA) methodologies, then an updating community's behavioral state is expected.

In the opposite, the Marginal Rate of Substitution - which is analyzed from the view of Political Economy- leads our thoughts into the pure individualism and the need to interpret all the transactions we make and the corresponding decisions through the maximization of our individual satisfaction

By this definition the win-win-win papakonstantinidis model[2] helps the scientific thought so to understand the "socially acceptable substitution" thus deriving profit from providing the community with the necessary “emotional intelligence” among the people of a self-organizing community, drawing stimuli from distributions made in the Greek area 1450 years BC.

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Introduction

The sensitization win-win-win process of the Papakonstantinidis model can achieve the marginal equilibrium-the “angel's point”-, concerning a bottom up collective bargaining process by propelling meta-capitalist evolution forward, in terms of participatory capital formation. The intuitive 3 win approach calls for (capital-based) bargaining mutualism and has its analogy in the many living examples of biological mutualism[3].

The essential purpose of negotiation is to develop a cooperative relationship, based on logical arguments, with the opposing side so that the negotiators' differences can be resolved. In order for a negotiation to take place, there must be reasons for competition that need a special agreement and discussion, the parties must each want to achieve the most favorable agreement for the same agreement, which will take the form of a unilateral victory (win/lose) or bilateral (win/win). However, in order to reach an agreement, cooperation and soft negotiation will be required, without which you lead the game to zero sum, i.e. to no result. In the first case of reaching the negotiation through a soft process the parties should avoid personal conflicts based on one-dimensional perception

Dealing will require cooperation and soft negotiation, without which the game is zero-sum, i.e. no outcome. Negotiations have largely disappeared in parts of the world where fixed-price retail outlets are most common. place to buy goods. However, for expensive goods such as houses, antiques and collectibles, jewelry, and automobiles, negotiation may remain routine Behavioral approaches emphasize the role that negotiators' personalities or individual characteristics play in determining the course and outcome of deals that are negotiating. Behavioral theories may explain negotiations as interactions between personality "types" that often take the form of dichotomies, such as shopkeepers and warriors or "hardliners" and "soft liners" where negotiators are presented as either cutthroat fights for all or diplomatically yielding to another party's demands for the sake of keeping the peace (Nicholson, 1964)

The tension that arises between these two approaches forms a paradox that has been called the "Toughness Dilemma" or "Negotiator's Dilemma"[4] The dilemma states that although negotiators who are "tough" during a negotiation are more likely to win more of their demands in a negotiated settlement, the trade-off is that by adopting this stance, they are less likely to reach an agreement[5].

In his seminal work on distributive justice and contract law, Anthony Kronman[6] argues that, even for libertarians, contract law should work to promote distributive justice by limiting one party's ability to "take advantage" of others by exploiting "superior information, intellect, or judgment, in the monopoly he enjoys in respect of a particular resource, or in his possession of a powerful instrument of violence or a gift for deception." It offers a "PARETO"[7] restrictive principle, a principle that "forbids us from granting to the possessor of an advantage the exclusive right to exploit it for his own benefit, unless those excluded from its ownership become better off than they would otherwise be that is, a case of being given a greater right to the advantage than anyone else". By focusing on the well-being of all those excluded from advantage, rather than just those involved in a particular transaction, we seek to promote overall social well-being. His formula requires that "the welfare of most people who are benefited in a particular way be increased by the kind of benefit." Contract law promotes distributive justice at a societal level.

Perhaps the best way to determine whether a minimum threshold of distributive justice has been met in a particular case is to ensure that basic standards of procedural justice are enforced.

Most research in the area of procedural justice focuses on processes involving third parties, such as mediation, arbitration, and adjudication. Recently, however, several studies have been conducted on procedural justice in negotiation. They show that many of the same factors that parties in third-party proceedings use to assess procedural justice apply in

negotiations. Specifically, the parties to the negotiation judge the process to be fair when they feel that they have been able to express themselves, believe that they can trust the other party, and feel that they have been treated with courtesy and respect. There is some evidence that market- based solutions are working:

$$y_i = x_i^{\beta} + lne^x$$

yi = $win - win - win$ acceptable options
xi = negotiators
β = behavior elasticity (0,1)

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Cases

1. If there are 2 negotiators (x =2) with perfectly inelastic behavior (β=0) then the socially acceptable choices are

$$y_i = x_i^{\beta} + lne^x$$
$$y = 2^0 + lne^2 = 1 + 2 = 3$$

2. If there are 2 negotiators (x =2) with perfectly elastic behavior (β=1), then the socially acceptable options are

$$y_i = x_i^{\beta} + lne^x$$
$$y = 2^1 + lne^2 = 2 + 2 = 4$$

3. If there are three (3) negotiators (x =3) then they will have 4 or 6 socially acceptable options depending on whether they have inelastic or elastic behaviors
4. This means that there is **at least** one additional choice among negotiators that is socially acceptable depending on (a) the number of negotiators and (b) the elasticity of their behaviors
5. Behavior is considered inelastic if at least one negotiator exhibits this inelastic behavior during the negotiation
6. Must $x \geq 2$. Otherwise there is no negotiation
7. The choice is approximate: For this reason the is used lne

Marginal Rate of Substitution (MRS)[8]

In economics, the marginal rate of substitution (MRS) is the rate at which a consumer can give up some quantity of one

good in exchange for another good while maintaining the same level of utility. At equilibrium consumption levels (assuming no externalities), the marginal rates of substitution are identical. Marginal rate of substitution is one of the three factors of marginal productivity, the others being marginal rates of transformation and marginal productivity of a factor[9]

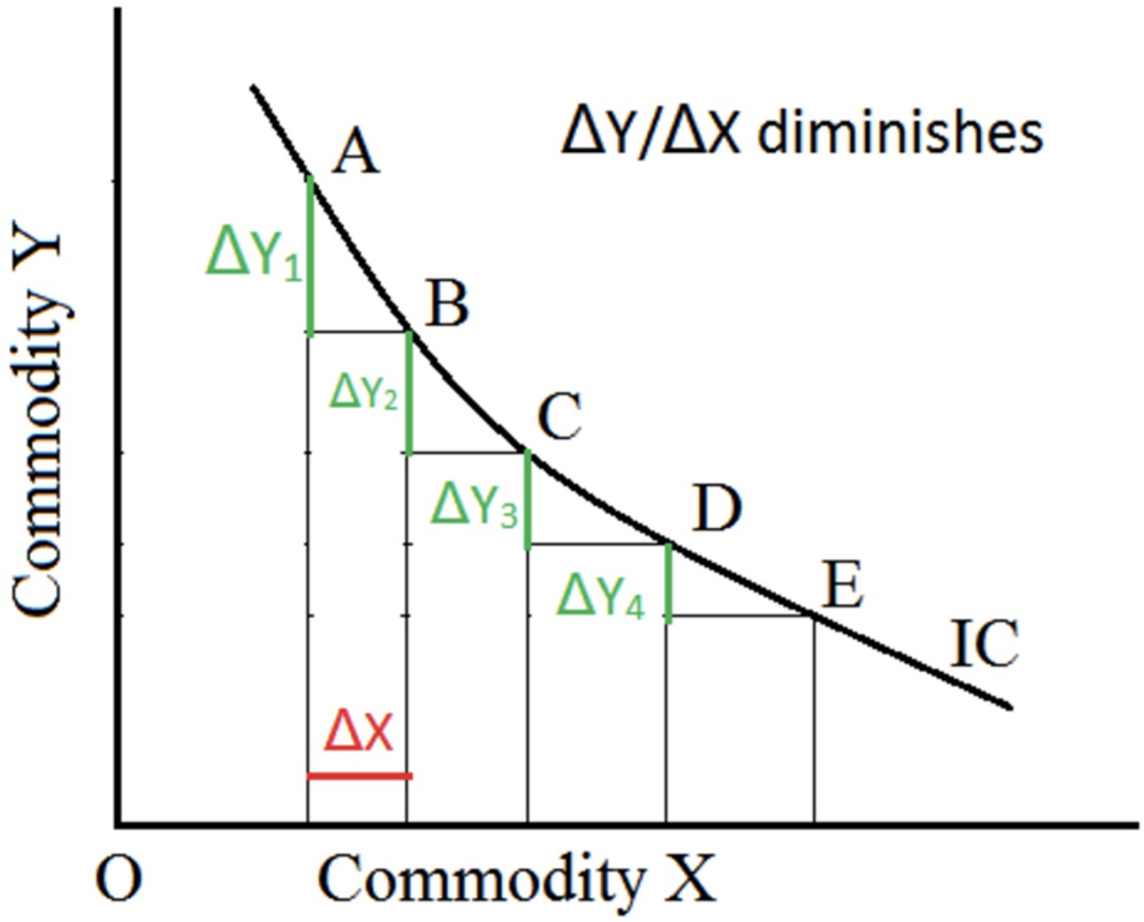
MRS is used in indifference theory to analyze consumer behavior. When someone is indifferent to substituting one item for another, their marginal utility for substitution is zero since they neither gain nor lose any satisfaction from the trade.

The slope of the indifference curve is critical to the marginal rate of substitution analysis. MRS is the slope of the indifference curve at any single point along the curve. The slope will often be different as one moves along an indifference curve.

Under the standard assumption of neoclassical economics that goods and services are continuously divided, the marginal rates of substitution will be the same regardless of the direction of exchange and will correspond to the slope of an indifference curve (more precisely, the slope multiplied by –1) passing from said bundle of consumption, at that point: mathematically, it is the implicit derivative. MRS of X for Y is the amount of Y that a consumer can exchange for one unit of X locally. The MRS is different at each point along the indifference curve and is diminishing Marginal Rate of Substitution) Further under this assumption, or otherwise under the assumption that utility is quantified, the marginal rate of substitution of good or service X for good or service Y (MRSxy) is also equivalent to the marginal utility of X against marginal utility of Y . Is:

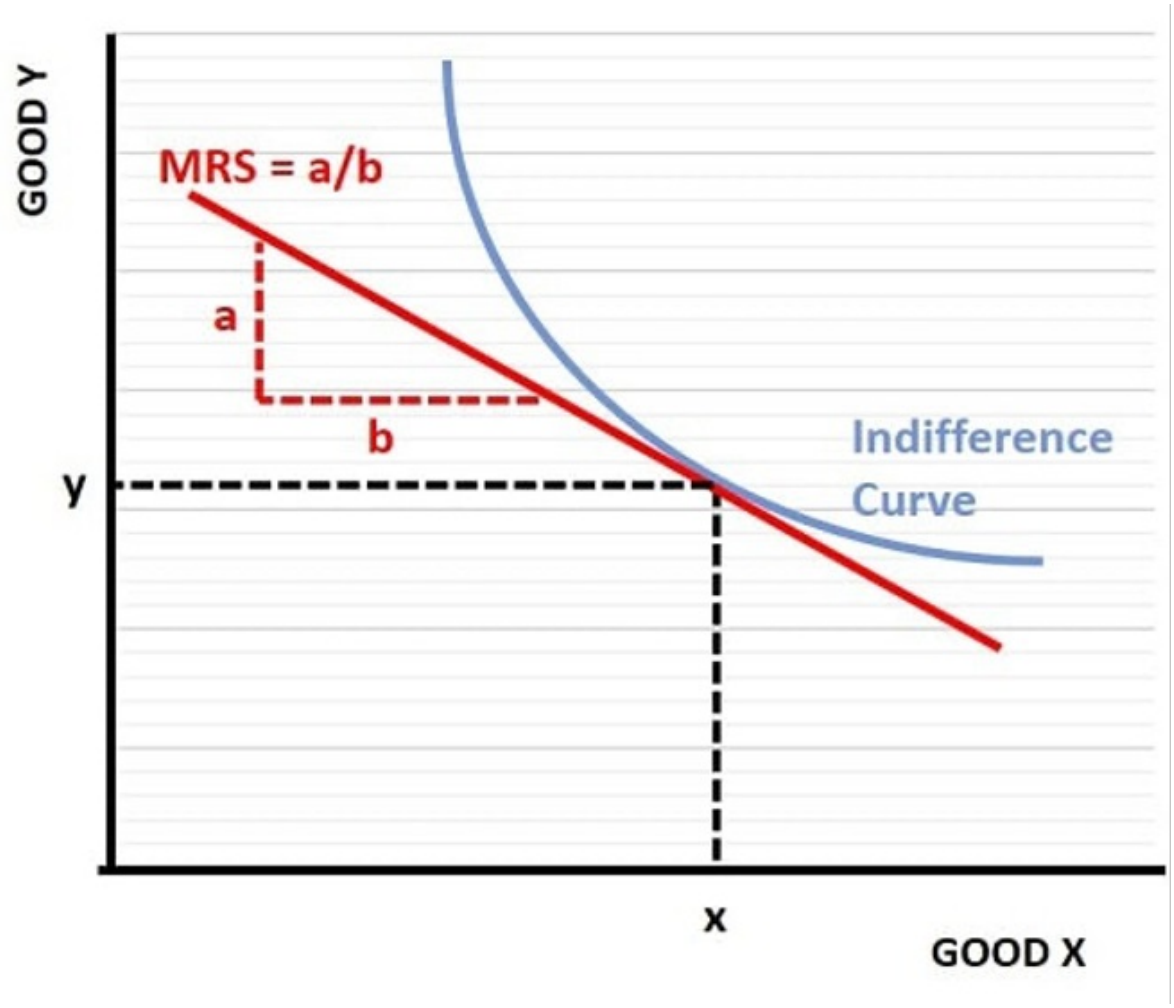
$$MRS_{xy} = -m_{\text{indif}} = -(dy/dx)$$

$$MRS_{xy} = MU_x / MU_y$$



In economics the Marginal Rate of Substitution (MRS) is the rate at which the consumer is willing to give up up) from one good, in exchange for the acquisition of another good, so as to maintain the same level of utility[10]

Marginal Rate of Substitution, as "slope of the indifference curve (negative, with respect to the origin of the axes = - MRS)



According to the usual assumption of neoclassical economics that goods and services can be divided continuously, the marginal ratios of substitution will be the same, regardless of the direction of exchange and will correspond to the slope of the indifference curve, in this point [precisely - ...toward the slope of the indifference curve, multiplied by the factor (-1), due to a negative slope of this indifference curve (Indifferent Curve = I . C) going through the search 'bundle of consumer choices] Mathematically this is the partial differential derivative of the utility function $U(x, y)$

$$m_{\text{indif}} = m_{\text{budget}}$$

$$-(MRS_{xy}) = -(P_x/P_y)$$

$$MRS_{xy} = P_x/P_y$$

$$MU_x/MU_y = P_x/P_y$$

$$MU_x/P_x = MU_y/P_y$$

$$-\frac{dy}{dx} = \frac{px}{py}$$

When consumers maximize utility with respect to the budget constraint, the indifference curve is tangent to the budget line, hence, with m representing the slope:

$$MU_x/MU_y = P_x/P_y$$
$$MU_x/P_x = MU_y/P_y$$

Therefore, when the consumer chooses his "shopping basket" (combination of goods) that maximizes his individual utility, given the income constraint line

The important conclusion that emerges from this process tells us that utility is maximized when the consumer's basket is distributed (combination of goods) in such a way that the marginal utility/benefit per monetary unit (e.g. euro) spent is

equal for each product If this equality is not achieved, then this means that the consumer could increase his/her own utility, simply by cutting the expenditure he makes on a product of lesser personal utility, and correspondingly, increase the expenditure on the other product (which possibly gives him/her greater satisfaction/benefit/usefulness which, however, is constantly decreasing. This constitutes both the content and the definition of the so-called "law of of diminishing marginal utility' , : According to this law: As the consumer increases the consumed quantity of a good per unit of time, the total (psychological) utility he enjoys from this consumption increases, however, after a certain point, the additional (marginal) utility resulting from consuming an additional amount of the good per unit of time tends to zero. Going from positive, to zero, and then to negative values of marginal utility is another way of saying that marginal utility is diminishing. We have seen that the marginal ratio of substitution is given by the slope of the indifference curve at a certain point on it. This behavior of the marginal ratio of substitution to decrease along an indifference curve from its upper to its lower part is called the principle or law of the decreasing marginal ratio of substitutionand explains the convexity of indifference curves with respect to the origin of the axes. Or, to put it another way, the convexity of indifference curves captures the validity of the law of diminishing marginal rate of substitution, that is, the decreasing rate of substitution of one good for another (good Y for good X) along an indifference curve and from up down.

The Socially Acceptable Substitution

The beginnings of the following analysis can be found in one of the 60 oldest texts inscribed on clay tablets, in Linear B, in Knossos (1450 and 1100 BC..)

Linear B was the writing system used during the Mycenaean Period. Samples of this script have been found in Late Minoan II sites in Crete and in Mycenaean IIIA-B sites in mainland Greece, suggesting that the script was in use between 1450 and 1100 BC. The use of Linear B was limited to important palace sites such as Knossos, Mycenae, Pylos, Thebes and Tiryns. Most Linear B inscriptions are found on clay tablets and largely involve the documentation of the financial transactions of the palace administration, but there are also a few instances related to military activity.

According to G. Lyckouras[11],

Linear B is the Oldest Preserved Form of Written Greek that we know.

The Greeks were not the only ones to invent a syllabic writing system: several such writing systems had been used by contemporary neighboring Near Eastern peoples. Linear B includes 90 syllables and an unspecified number of idiograms. Each syllabic symbol represents either a vowel or an open syllable (syllable ending in a vowel), but cannot represent symphonic clusters.

Origin of Linear B

Linear B is the oldest preserved form of written Greek that we know of. At the time when we first encountered this writing system, Greece and various areas of the western coast of Asia Minor were already Greek-speaking. Linear B was used to

write an archaic type of Greek known as Mycenaean Greek, which was the language used by the Mycenaeans. The inscriptions found in Crete appear to be older than those found in mainland Greece. The oldest confirmed Linear B tablets are the so-called chariot hall tablets at Knossos and have been dated between 1450 and 1350 BC, while the tablets found at Pylos have been dated to around 1200 BC. This suggests that Linear B was invented in Knossos (Crete), around 1450 BC, when the Mycenaeans took control of Knossos, and from there it spread to mainland Greece. Whether by peaceful annexation or armed invasion, we know that the Minoan civilization was replaced, both in Crete and mainland Greece, by the Mycenaean civilization.

Long before the Mycenaeans took control of Knossos, the Minoan civilization used a writing system known as Linear A, which was used to represent the official Minoan language. Its linguistic affiliation remains a mystery, but the prevailing opinion is that this language was not Greek. It probably wasn't even a language of the Indo-European family. Since Linear B shares many symbols with the earlier Linear A we are led to conclude that Linear B was created when scribes adapted Linear A to a new language: Greek. This view is further supported by the fact that Linear B is not suitable for rendering the Greek language. For example, in Linear B no distinction can be made between long and short vowels and between "λ" and "ρ". As a result, words like "white" had to be spelled "re- u-ka". Another difficulty was the fact that Linear B cannot render symphonic clusters. Thus, names like "Knossos" had to be rendered as "ko-no-so" and words like "axon" or "demnia" (bed, slats) had to be rendered as "a-ko-so-ne" or " de-mi-ni-a" respectively. In a few specific examples such as the word "Egyptian", written as "a-ku-pi-ti-jo" the limitations of the script for the rendering of the Greek are clear.

Decipherment and content of Linear B

Although the first examples of Linear B were discovered in the early 20th century, the texts of these tablets were not published until 1952 AD. The meaning of the Linear B texts remained shrouded in mystery until 1953 AD. , when an architect named Michael Ventris managed to decipher it. Ventris interpreted the script as an early form of Greek, which was unexpected, as most scholars at the time believed that Linear B represented a form of Minoan language distinct from Greek. Although most Linear B texts can be read today, some elements of the writing system remain obscure. Not all syllables have been definitively identified.

Linear B texts are mainly administrative in nature, often in the form of inventory lists, receipt declarations, and records of commercial transactions. Tablets found at Pylos, for example, provide details of the manufacture and distribution of goods overseen by palaces, such as woolen and linen cloths and perfumed oils.

Linear B was a syllabic alphabet that was the first writing of the Greek language. It comes from the earlier Linear A and was used during the Mycenaean Period, from the 17th to the 13th century. BC, mainly for keeping accounting records in the palaces. The oldest writing in the Mycenaean language that has been discovered dates to around the 15th century BC

It was discovered in the early twentieth century at Knossos by Arthur Evans, who named it so because it used linear characters (rather than pictorial ones, like Minoan hieroglyphic writing) inscribed on clay tablets. But it differed from an earlier similar script, Linear A, also found at Knossos and southern Crete. Clay tablets with Linear B writing were later

found in the Mycenaean palace of Pylos in Messinia and in other locations in mainland Greece.

In total, about 5,000 texts have been found in Linear B (mainly tablets and, secondarily, vases). Of these, around 3,000 come from Knossos, around 1,400 from Pylos, around 300 from Thebes, 90 from Mycenae while a smaller number comes from Chania, Malia, Tiryns, Eleusis, Orchomenos and elsewhere.

The dating of the texts is disputed. The oldest dates back to around 1450 BC. and is written on a clay tablet discovered in the summer of 2010 in Iklaina, Messinia, by Professor Michalis Kosmopoulos. Others, written a little later, come from Knossos and belong to the Late Minoan II period (around 1400 BC). The remaining texts from Knossos are, according to my opinion, from 1370 BC. before the destruction of the Mycenaean palace. However, the opinion that they are a century younger is also supported. The remaining texts date from the 13th century BC.

Based on the handwriting of the scribes, archaeologists assume that the Knossos tablets were written by at least 60 different scribes, while those of Pylos by at least 30.

Linear B was initially not identified with any language, considered by Evans to represent a separate language he called Minoan, while he was almost entirely convinced that it could not possibly have been Greek.

Linear B includes 89 syllabaries, which represent syllables with phonetic value, and about 260 ideograms (or logograms), which convey meanings such as man, woman, cow, oil, wine, etc. and symbols for rendering numbers.

Drawing amazing stimuli from the book "The Pythagorean Hippasus the Metapontine of the musical properties" of the distinguished expert "harmonic" musicologist researcher and engineer Mr. G. Lykouras, who - among other things - cites on page 113, an inscription of Linear B and observes that for the keeping of accounting records in the palaces, it refers to the distribution of rams between Phaistos (pa - i - to) that is, of the Lord and the Subjects according to the proportion

$$\frac{1509}{2440} = 0,618$$

or vice versa,

$$\frac{2440}{1506} \approx 1,618$$

ΓΡΑΜΜΙΚΗ Β ΔΙΑΝΟΜΗ ΚΡΙΩΝ ΜΕΤΑΞΥ ΑΡΧΟΝΤΑ (ΦΑΙΣΤΟΥ) ΚΑΙ ΥΠΗΚΟΩΝ 1150 π.Χ

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Αναλογία διανομής κριών μεταξύ ΦΑΙΣΤΟΥ[pa-i-to] (ΑΡΧΩΝ) και των ΥΠΗΚΟΩΝ

$$\frac{pa-i-to}{\upsilon\pi\eta\kappa o o\iota} = \frac{1509}{2440} = 0{,}618$$

ΛΥΚΟΥΡΑΣ 113

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This observation is surprising at the present stage as it shows that not only does the "bureaucracy" with the ruler receive the smallest amount in relation to what the subjects receive, but even further that the ratio of this division is given by the golden extreme and the mean. ratio, φ or 1/φ

We say "in the present phase" with 2 meanings

First of all, we should be concerned about the current bureaucracy which seems to be emerging as a scourge of public life (consultants on call, numerous government schemes, many levels of government which all together reverse the golden ratio and even further exceed it. Let it does not escape the fact that we have very rich rulers and poor citizens

Second, it gives us an amazing opportunity to move towards self-organization, dominated by sympathy (win) and community contribution (win), along with individualism (win). A win - win - win agreement is therefore acceptable in the process. of self-organization

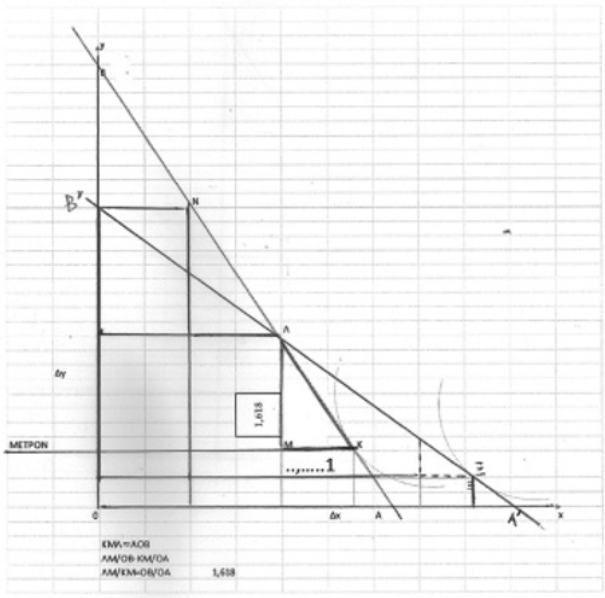
This, however, is not enough if we do not incorporate the "Metro Ariston" (The value of Measure in our Life) by Cleobulus of Lindius (560 BC)

Taking into account the above observations we could now "build" self-organization on the foundations of self-awareness and giving

Drawing stimuli from the distribution of rams in the distant 15th^{century} BC between the ruler (strong) and the subjects (weak) in Phaistos, I can now proceed with the risky proposal, that, at least in self-organization, the powerful through self - knowledge and offering can - and must-sacrifice more than what he expects to gain In fact he aims for any intangible benefits

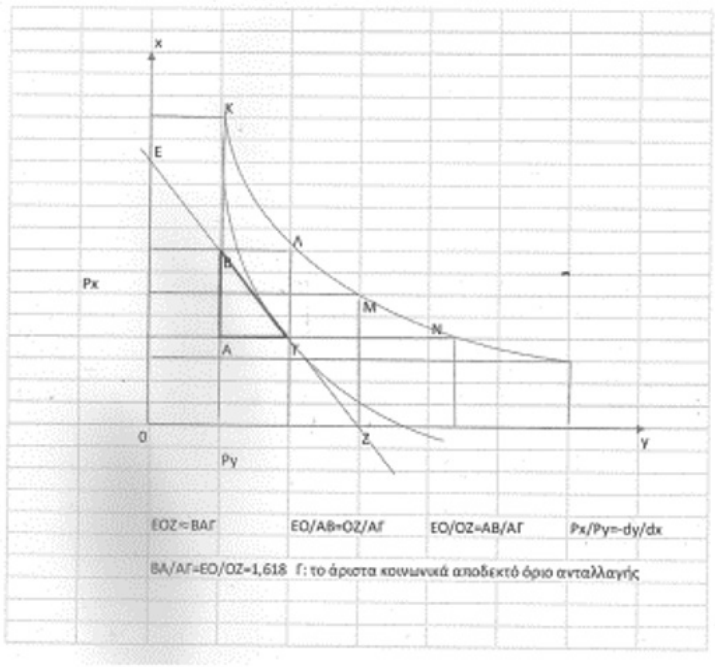
Thus the socialized egalitarian principle is "forced" to put a barrier to its claims arising from social contribution and appreciation

The Equator Principle with the social barrier of MEASURE is shown below



The (rectangular) triangle KML is similar to the triangle AOB This means that LM/OB=MK/OA or LM/MK=OB/OA= Px/Py, But, LM/MK= -dy/dx That is,

$$-dy/dx = Px/Py$$


x
K
E
A
B
Px
M
N
A
Γ
0
Z
y
Py
ΕΟΖ≈ΒΑΓ
ΕΟ/ΑΒ=ΟΖ/ΑΓ
ΕΟ/ΟΖ=ΑΒ/ΑΓ
Px/Py=-dy/dx
ΒΑ/ΑΓ=ΕΟ/ΟΖ=1,618 Γ: το άρυστα κοινωνικά αποδεκτό όριο ανταλλαγής

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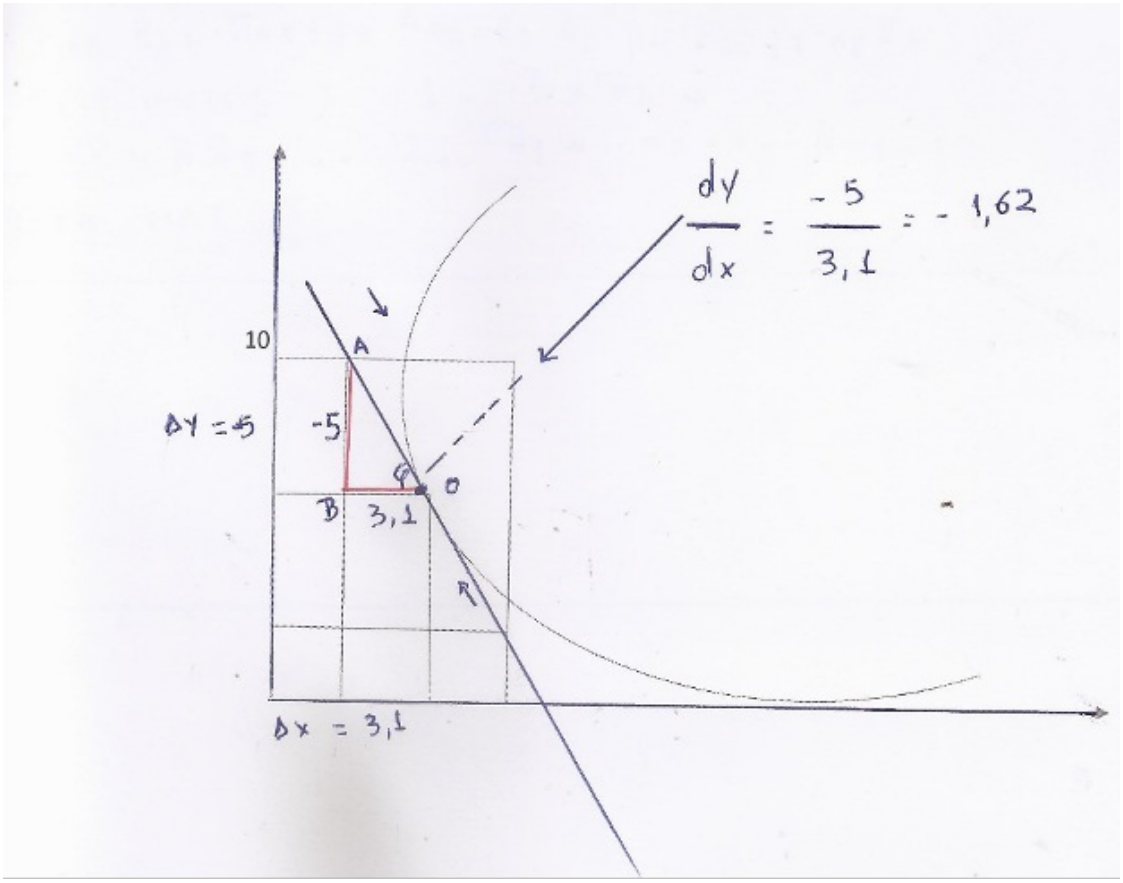

dy/dx = -5/3,1 = -1,62
10
A
ΔY = -5
-5
B
3,1
Δx = 3,1

Conclusions

Combining the win-win-win concept with the MRS-in the prism of the LINEAR B- a number of views are resulted:

Based on knowledge and attitudes, to achieve self-organization, at the point of choice, for the leaders of a self-organized community

1. consciously sacrificing more to consciously gain less with the overall benefit in mind
2. empathy: I put myself in the place of the other, in the community
3. I am not entirely ignorant of my own self-interest
4. The absolute exchange size of a completely socially acceptable MRS solution is 1.618
5. The Law of Diminishing Marginal Ratio of Substitution dy / dx tells us to sacrifice an ever smaller part for equal (at least) gain
6. The absolute amount of socially acceptable exchange for the leaders determines where we stop this exchange in the case of self-organization
7. The extreme limit of such a socially acceptable exchange is 1,618:1
8. The quantity 1,618 was chosen because it expresses universal harmony
9. The sacrifice-gain difference (1.618-1=0.618) expresses the conscious contribution at the individual level, for the formation of social capital necessary for the case of self-organization
10. As – dy / dx = Px / Py this means that Leaders consciously pay a higher price for some good (eg at a Love bazaar, or Christmas) in the case of Self-Organization, as the goal is not to win but to contribute to the general good
11. The win - win - win model representing the benefit for the "opponent" in any interaction (negotiation), the individual benefit (1) and at the same time the benefit for the community

Finally,

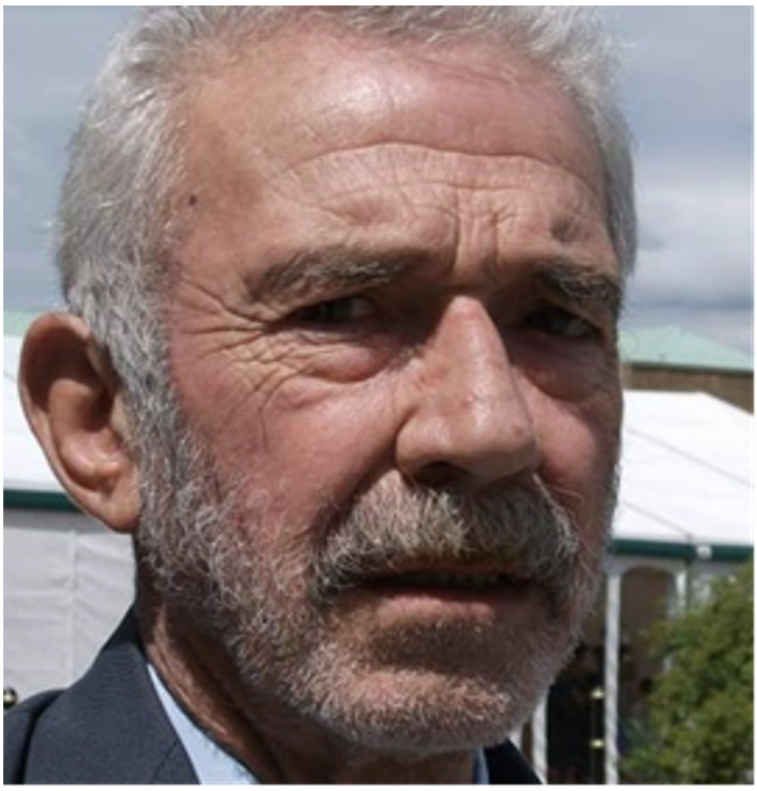
The rationally thinking consumer will agree to an exchange of the form (-1) dy / dx < 1 ie where he derives marginal satisfaction greater than the marginal sacrifice

Gradually the relationship passes from the point (-1) dy / dx = 1 to end up in the self-evident relationship (-1) dy / dx < 1 ie "I sacrifice as little marginal sacrifice as possible, for as much marginal satisfaction as possible"

Our proposal, for the case of self-organization, focuses on the relationship,

$$(-1)dy/dx = Px/Py = 1.618$$

About the Author



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Lawyer and Economist with Master in Regional (II. 9.29), Rural Development (B) Doctorate in Local Development since 1989 served as member of the Agricultural Bank (Senior Advisor on European Affairs, Head of the Local Development Office (1991-2001) , a member of the European Centre for Public Enterprises (CEEP) in the capacity of General rapporteur of the regional Affairs Committee, member of the "Green Team» GREEN TEAM European Commission (Commission), member of the Committee of European Experts on rural tourism, rapporteur for the Community Initiative Leader (1989) and negotiator national file Leader in Brussels (on 02.02.1992)

He introduced rural tourism in Greece (1980) - see description «father of Rural Tourism in Greece" GTP 7/94, the idea of the integrated design of the development of small sites (1985-1989) and from there the «Leader philosophy" (EU Commission) (1989), pioneered the establishment of the first Women of Rural Cooperatives. Introduced and imposed in the international literature, practice and programs, the concept of "local awareness" and from there the formation Methodology Social Capital called "win-win-win Papakonstantinidis model".

48 books / monographs, 3 part of the Book, 336 publications in scientific impact journals (Journals) and announcements published in Proceedings of International Conference, 72 scientific research / studies is a member committees of international organizations and journals such as the International Sociological Association (ISA) member of the Advisory Editorial Board of the Journal of Applied Economics and Management-5 times in the list "25 most downloaded papers"- RESEARCH LEAP

See Net "Academia"

Footonotes

[1] Nash, John F. Jr. (1950a). "The bargaining problem". Econometrica. 18 (2): 155–162.

[2] Papakonstantinidis LA (2002) the "win-win-win model" Euracademy, Gotland Campus, Visby, SW

[3] Papakonstantinidis L.A (2007)"Bargaining and Local Development"- BOOK- DARDANOS-GUTENBERG Ed. 2007

[4] Zartman, 1978 2; Lax and Sebenius, 1986 Negotiator's Dilemma

[5] Nicholson, H., 1964. Diplomacy. Oxford University Press, New York, USA.
Zartman, WI, 1978. The Negotiation Process: Theories and Applications. Sage Publications Beverly Hills, California, USA.
Lax, DA and Sebenius, JK, 1986. The Manager as Negotiator . Free Press, New York, USA.

[6] Anthony T. Kronman. (2007) Education's End: Why Our Colleges and Universities Have Given Up on the Meaning of Life. Yale. 2007. ISBN 978-0300122886.

[7] PARETO V. (1902) Les Systèmes Socialistes (in French), 1902

[8] Papakonstantinidis LA (2002) "The strategy of Economic and Regional Development- BOOK DARDANOS GUTENBERG Edition

[9] ADAM HAYES (2023) MRS in Economics: What It Is and the Formula for Calculating It Reviewed by MICHAEL J BOYLE

[10] Paul Krugman 2008 Microeconomics- 2nd edition

[11] G. Lyckouras (2020) The Pythagorean Hippasos, the Metapontine of musical asymmetries (Self-published, arch. Striligas 2020

References

- Nash, John F. Jr. (1950a). "The bargaining problem". Econometrica. 18 (2): 155–162.
- Papakonstantinidis LA (2002) the "win-win-win model" Euracademy, Gotland Campus, Visby, SW

- Papakonstantinidis L.A (2007)“Bargaining and Local Development”- BOOK- DARDANOS-GUTENBERG Ed. 2007
- Nicholson, H., 1964. Diplomacy. Oxford University Press, New York, USA.
- Zartman, WI, 1978. The Negotiation Process: Theories and Applications. Sage Publications Beverly Hills, California, USA
- Lax, DA and Sebenius, JK, 1986. The Manager as Negotiator. Free Press, New York, USA.
- Papakonstantinidis LA (2002) “The strategy of Economic and Regional Development- BOOK DARDANOS GUTENBERG Edition
- ADAM HAYES (2023) MRS in Economics: What It Is and the Formula for Calculating It Reviewed by MICHAEL J BOYLE
- Paul Krugman Microeconomics- 2nd edition
- Anthony T. Kronman. (2007) Education's End: Why Our Colleges and Universities Have Given Up on the Meaning of Life. Yale. 2007. ISBN 978-0300122886.
- PARETO V. (1902) Les Systèmes Socialistes (in French), 1902
- George Lyckoyras

1. Pythagorean Music and the East 1994. (Syrtos 1994).
2. Philolaus and the division of tone (Syrtos 1994).
3. On the Musical Geography of Delphi (Archaeology and Arts vol. 86, 2003).
4. The approach of “π” to Homer (Archaeology and Arts vol. 96, 2005).
5. Rising Sun and setting Suns (Presented 2012).
6. Dear Director, Mr. Sfyri . (Ilion Music School library, 2016).
7. The Pythagorean Hippasos, the Metapontine of musical asymmetries (Self-published, arch. Striligas 2020).
8. The Bathers of Akrotiri of Thera (Self-published, Striligas archive, 2022).
9. Odysseus of Lisbon (Self-published, Strilingas archive, 2023).
10. Alcman of Sparta and the pannychis of the autumnal equinox (Sponsored by “George Drosini Museum Foundation”, 2024).
11. Hesiod. 500 years before Archimedes. (Sponsored by “George Drosini Museum Foundation”, 2024).