SUBJECTIVE

MACROECONOMICS

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CONTENTS

INTRODUCTION

The future progress of economics as a science
strict should largely depend on our
acquisition of more precise concepts of
variable quantities involved in the theory.

William Stanley Jevons

Macroeconomics has been characterized, not so much by the relevance of the discrepancies around its definition, but by the scientific rigor of its content. It is a crucial discrepancy when establishing economic-social institutions, as long as they are supported by science.

In this paper, I present an alternative macroeconomics to the one we traditionally know, which I call objective macroeconomics, as it is based on assigning temporal functions to price variations (coefficient of quantities of economic goods exchanged). This is the true origin of its theoretical inconsistency, which is why it has no scientific rigor and cannot explain economic phenomena.

On the contrary, subjective macroeconomics, because they are statistical aggregates of microeconomic measurements, already has the temporality present in the wealth law (subjective decreasing marginal values assigned to the quantities of economic goods) incorporated.

NOTE: I am going to express myself in the first person singular. I never understood why books are written in the first person plural. I am responsible for this work, for which I have resolved to return to the first person singular as I did in ***Theory of Economic Relativity*** (***TRE***).
The reiteration of some concepts is expressly intended to highlight the essential ones.
Except in Barro and Menger, all other citations were own translations of the original text in Spanish.

Chapter I - Macroeconomics

Definition of macroeconomics

According to the epistemology that I have traditionally adopted, I will begin by defining the subject under study (the epistemological harmony with Carl Menger is not surprising).
Although various definitions of macroeconomics can be found, they all agree that:

- It is study the aggregates of microeconomic data.
- It is study of human economic activities using collective or global magnitudes.
- Etc.

This definitions have a common denominator, are statistical data on economic entities that share the same **dimension** (*the common factor*) by which the magnitudes that arise from each of them are grouped. Then we can define macroeconomics through its entity-object of study:

> **Macroeconomics studies aggregate magnitudes of data from individual economic entities that share the same dimension by which they are grouped.**

From this definition it is clear that macroeconomics is statistical (data). Thus, macroeconomics is a diagnostic tool. BUT, there will be as many diagnoses as there are theoretical burdens from those who generated the data and those who diagnose, which makes the theory with which the data are generated and analyzed relevant. That is, the epicenter in macroeconomics turns to the **scientific-epistemological rigor of the data**.

Whatever the accepted definition of macroeconomics, it is evident that it demands economic measurability, which implies that of its **wealth** element, the value of economic goods. The neoclassical and Keynesian schools gained space in macroeconomics because they offered measurability, despite the theoretical flawed framework derived from their objectivism.

Knowing the element under study of a science, what follows is to determine the laws that guide its behavior, with which we must introduce ourselves, yes or yes, into the theory that explains the origin or causality of macroeconomic data. To do this, I will consider the appropriate aspects for an analysis of the "*macroeconomic set*".[1]

Finally, I refer to which are some of the aggregates referred to by macroeconomics, all referring to **wealth**, as it is the element of the economy: *variation; proprietary distribution, imputation according to each factor of production (labor and capital); distribution according to*

[1] Sentence that would validate the suggestion of some mathematicians respect to study economics through set theory, it is very present in my work with the cognitive limitations of my case.

human actions to generate, save, exchange or destroy it; occupation of the factors of production (labor and capital); determination of prices; interest; coin; the unit of measurement;…

The current state of the macroeconomics

In order to reflect the current state of the macroeconomics, I consider it relevant to present the following quotes:

> Macroeconomics in in a state of flux. The Keynesian model, which was almost accepted as the basic paradigm until late 1960s, has become increasingly less popular. This loss in popularity reflects to deal embarrassments over past economic events – especially the failure of the model to deal satisfactorily with inflation and supply stock. It also reflects the theoretical and empirical progress of an alternative "market clearing approach", which is more closely related to the microeconomics that economists use successfully to study the behavior of individual household and businesses. Although some important problems remain, this approach provides a much more satisfactory macroeconomics than the one we had before. By more satisfactory, I mean that the approach avoids internal inconsistencies and also provides a better understanding of the real world.
> While the Keynesian model has been subject to increasing skepticism by economists, it has nevertheless continued to reign supreme in the main textbook. As a result, it has continued to organize the way the subject has been taught to students. Although aspects of the market clearing model have been presented in textbooks, this model has not been taken seriously when it comes to studying real world events or policy proposals. Furthermore, the explanatory power of the model has not been fully realized. This gap between textbook material and the knowledge gained in that last 15 years motivated me to write this book.
> Here, I present the market clearing approach as he general method for analyzing real world macroeconomics problems. In addition, I discuss the material in as simple a fashion as I have found possible, so that bock will be accessible to undergraduate students. Extensible review and class-testing to the material have assured me that it is – my students tell me that the book is easier than I am. This is not however, an attempt to provide a "balanced" treatment of alternative approaches to macroeconomics. There is no book –and probably could be none of substance- that is balanced in this respect. Although I deal in a serious manner with the Keynesian model in this book, I do not use his model for most of the analysis of economic events or policies. In any case, whatever one´s ultimate judgment about the value of Keynesian model, there is a very good reason not to start the study of macroeconomics with it. The Keynesian theory is an advance topic that cannot be fully understood an appreciated until the market clearing analysis has been worked out.
>
> *Preface* of *Macroeconomics* de Robert J. Barro (1984) (P: vii)

Barro clearly expresses the mistake of trying to make macroeconomics that is not based on microeconomics, *but does not notice the inconsistency in current microeconomic theory*.

Now I am concentrating on Hayek, [2] one of the most prestigious economists on macroeconomics. Let us see a quote from him (1996 a):

> "... At the moment I just want to remind you of another reason why I think that in the case of money, unlike in that of any other good, the question of its value in general is unimportant ..." (P: 44)

Sentence that reveals, in the light of the ***Subjective and Solidarity Economic Theory*** (***SSET***) - ***3rd edition*** (Bondone 2020), the current state of the theory of currency, interest, and the economic unit of measurement, with its consequences in the economic calculation (micro and

[2] In turn, the essence of its theoretical foundations does not differ from that of Mises (the main reference of the current Austrian School), which is considerably distant from Menger.

macro). This is in accordance with the fact that the expression *"its value in general is irrelevant"* could refer to the economic unit of measurement, which also does not allow accepting the sentence because:

• He does not attribute importance to the economic unit of measurement, which prevents economic calculation, a subject of which he was very jealous, like the entire Austrian School.

• It implies that a special theory of currency is needed, or that currency is not wealth.

• In turn, "underlying" the contradictions expressed is the idea of a theory of the economic unit of measure independent of the theory of currency. It is an issue that would only be noticed with the SSET.

Then he confirms the healthy attempt to discover a suitable theory:

> "... What we are only interested in is: *how the relative values of goods, as they represent sources of income or means of satisfying needs, are affected by money*." [3]

Obviously Hayek tries to understand a world with currency in terms of what a world without currency was. [4] In other words, Hayek validates the theory of the two worlds, one real and the other monetary. [5] I propose that I have rejected since my first writings: *there is only one world, which is real and monetary, just as before there was a world that was real and not currency*.

Hayek continues (always on the same page):

> "The starting point of the theoretical analysis of currency influences on production is not a stable currency in its value, but a *neutral* currency ..."
> "… And the first objective of currency theory should be to clarify the conditions under which currency can be considered neutral in that sense. We are still in the early days of this investigation."

Here we appreciate the confusion that macroeconomics presents in the hands of the current failed theories of currency and the economic unit of measure. This confusion would lead to the pretense of analyzing neutrality, characteristic of every unit of measure, from the theory of currency, which as wealth can never be economically neutral. **This paragraph could be considered a kind of synthesis of the state of current macroeconomics**, *which underlies concepts such as: "absolute value of the currency", "virtual currency", "currency that arises out of nowhere", etc*.

BUT, with this part of the quote: "The starting point ... is not a *stable* currency in its value, but a neutral currency ...", Hayek begins the theoretical path of something of transcendental importance: *the neutrality of the currency is not contradictory with the variation of its value*, a question that the SSET would definitively resolve by precisely demonstrating that its neutrality implies its variability, thus **the variability of the economic measurement unit will emerge as a necessary condition of the neutrality**. Unfortunately, as we will see, he does not notice.

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[3] I want to highlight the paragraph: *how the relative values of goods, as they represent sources of income or means of satisfaction of needs ...* because there underlies the concept of the SSET that income-income is the flow of wealth in the weather. On the contrary, the expression *"as"* cannot be accepted, since it leaves open the possibility of considering *an income or means of satisfaction of needs* other than wealth.

[4] It is equivalent to studying a world with a railroad based on what was a world without rail.

[5] It is in total harmony with the post-Menger Austrian School, and the rest of the economic theories.

Currency is not neutral (<u>because it is wealth</u>), as the economic unit of measurement <u>is (because it is dimension)</u>, a circumstance that is only noticed when the theory of the economic unit of measurement is independent from the theory of currency (intuitively underlying in Menger, which the SSET allowed to make explicit with scientific rigor).

Then Hayek express:

> "And yet, if someone were to ask if the understanding of the connection between money and prices has progressed much during these years, at least until very recently, or if the generally accepted doctrines on this point have advanced much more than what was known a century ago, I would be inclined towards a negative answer… "(P.25). "… According to most economists… it is probable that economic theory has reached a state of such perfection that any further progress must necessarily be moderate. But I confess that it seems to me that some of the most fundamental problems in this field remain unsolved…" (P.26)

<u>My highest honors to Friedrich von HAYEK</u>, for noting the problem and speaking with total intellectual honesty. I humbly believe that SSET (early 21st century) has collaborated to unravel the essence of the error to which Hayek referred.

Hayek (1996-c) says:

> "Rather I hope, therefore, that the need for macroeconomics will be the one that will drive the further development of microeconomic theory in the future ... although there is no longer an Austrian School as such, I do believe in the existence of a differentiated Austrian tradition , from which we can expect many contributions to the future development of economic theory. The fertility of its approaches is by no means exhausted, and there are still many tasks to which it can be applied with profit" (P: 115/6)

Task reflected in the SSET, for which it was necessary to return to Menger. Proof of this is this **<u>AMAZING</u>** quote from Hayek (1996-b):

> "… In other words, prices also play an extremely important role in regard to the distribution over time of individual economic processes, as guides and regulators of all economic activity in a market economy. And it is precisely this function that until now has not received much attention on the part of economic theory ... and of course, it has failed to complete them with a fundamental examination of the significance that its appearance has, for temporal structure of prices ... we realize that such is the degree of violence exerted on the reality of things by making abstraction of the element time ... what we now need is to study the need and the meaning of relative price levels in successive moments of time" (P: 127).

Quote of extreme relevance, as Hayek claims temporality to prices, which only corresponds to the relative values, whose temporality gives rise to them (prices are mere coefficients of exchanged-calculated quantities). In this quote it is very clear that *all currents of thought continued with the idea of J.S. Mill: with prices the theory of value is already finished, which implies assimilating value to price —objectivist reasoning that explains them in terms of the unfortunate supply and demand curves*.

By forgetting about "currency effects" Hayek rightly states:

> "... There is, therefore, no contradiction in saying that production and prices have to move in numerically opposite directions if we want to maintain equilibrium, when what have changed are the conditions of production..." (P: 161).

It is a situation that arises from the **laws of wealth and exchange** without incurring in the aforementioned contradictions.

It continues like this:

> "The thesis that we have advanced in all of the above is that if we want to avoid an excessive expansion of production, the prices of goods have to fall whenever, as a result of technical improvements, of similar organization, production tends to increase. But to this it could be objected that it is already the mission of the interest rate to maintain the necessary balance between production for the future and production for the present, so that any additional regulation of this kind of relationship between one and the other through the system of pricing would be unnecessary (P: 173: 4).

How could it be otherwise, without the tools provided by the SSET, in this quote Hayek contradicts himself by assigning the temporal aspect to interest, instead of assigning it to price variations as he did before. On the other hand, the SSET shows that *"any additional regulation"* would be counterproductive, not *"unnecessary"*.

Here it becomes clear that the prevailing theory does not warn what the SSET would demonstrate: the **currency interest** ($\boldsymbol{i_\$}$) is equal to the value-price of the currency [6] in the field of exchanges ($\boldsymbol{W_i}$), and the **wealth interest** ($\boldsymbol{i_w}$) is the value-price of the currency in the area of total wealth ($\boldsymbol{W}$), equivalent to the unit of measurement economy ($\boldsymbol{u}$). THEN: $\boldsymbol{i_w = u < i_\$}$.

Hayek confirms his contradiction:

> "So to speak, the **interest** rate serves to maintain equilibrium by preventing an excessive expansion of production in the future. But as a result of changes in production, disparities arise between the **prices** of the means of production and those of the goods produced with them, disparities that will not necessarily have to persist because of the scarcity of capital. **If the interest rate remains stable, even if it fluctuates, to maintain equilibrium, changes in the relative price levels of present and future goods may be necessary***"* (P: 174).
> Note: bold and own underline on original text.

Quote in which he validates his non-warning of the equality or equivalence between monetary interest and the price of the currency, but admits the possibility that prices and values have negative correlation, an impossibility demonstrated by the SSET. [7] BUT, it is more relevant to appreciate how natural causality reverses, where values determine prices ($\boldsymbol{v \rightarrow P}$), [8] by highlighting that *"changes in the relative price levels of present and future goods may be necessary…"* This is yet another manifestation that the theory does not notice the difference between the theory of currency, from which *currency interest* ($\boldsymbol{i_\$}$) arises, which acts as the value-price of wealth currency, which has a ***positive correlation with wealth*** ($\boldsymbol{\uparrow W \leftrightarrow \uparrow i_\$}$), with the *wealth interest* theory ($\boldsymbol{i_w = u}$) which acts as the unit of measure (**dimension**) of all wealth, which has a ***negative correlation with wealth*** ($\boldsymbol{\uparrow W \leftrightarrow \downarrow u}$). [9]

The following quote will allow us to summarize the state of the current macroeconomic, given that it belongs to the final paragraphs of *Monetary Nationalism and International Stability* (Hayek 1996-b):

> "As a complementary observation, it can only be added that the essential difference between the independent nature of the interest rate on one side and the difference in time of prices ... *the two phenomena are not related in a particular way as regards the direction of movement to follow for them.*

[6] The same if it is money (gold) and equivalent if it is credit-currency (paper currency or gold standard). Keynes was not wrong in saying the same, his failure was that he did not differentiate money from currency-credit, and he theorized by assimilating them - see development in (Bondone 2006) *Chapter XVI* of *Theory of Economic Relativity*.
[7] The SSET demonstrates these correlativities: $\uparrow W \leftrightarrow \uparrow i_\$ \leftrightarrow \downarrow u$, the reverse happens if $\boldsymbol{i_\$}$ is altered: $\downarrow i_\$ \leftrightarrow \downarrow W \leftrightarrow \uparrow u$.
[8] It is the essence of the subjective value theory.
[9] Which shows again in this quote: *"... it is impossible to establish a general «value of currency». Nor would it make sense to talk about differences in the value of currency, because differences in the value of goods are expressed in terms of differences in the monetary prices."* (P: 148)

> According to each one of the circumstances, it is perfectly possible that the future price of a given good will fall or rise with respect to its current price at the same time that the interest rate rises...
> Obviously, in this article we have refrained from discussing to what extent the two types of temporary differences in value - that expressed by the interest rate and those expressed by temporary differences in the price of goods - can influence or substitute one for another…" (P: 175/6).
> Note: own italics over original text.

It is clearly appreciated that the current theories do not distinguish the meaning between interest, **flow** or variation of wealth over time, and prices (coefficient of **stocks** of quantities exchanged), which makes the entire quote inconsistent. In Annex II - *Interest and price variation* I will refer specifically to the underlying argument in this summary quote from Hayek on the subject. BUT, again, the most relevant thing is highlighted in italics: 1) the ignorance of the causal correlation value → price, which it does by stating: *"... both phenomena are not related in a particular way..."*, and 2) it speaks again of temporality as a function of price variations without noticing that these arise from the variation in values, conclusions that ratify the rejection of the subjective value theory, while quantities (by themselves) explain value. [10]

The foregoing reflections make it clear that Menger's subjective marginal utility theory had not been understood, a task that SSET would undertake 150 years later.

I estimate that no further quotations or developments are needed to understand the state of confusion in economic theory. While Barro and the Austrians rightly pointed out that, microeconomic fundamentals explained macroeconomic aggregates they did not notice what, were the "objectivist" inconsistencies present in microeconomic theories. In this regard, are important these reflections that arise from the SSET:

- Hayek sensed that something was wrong, and it was, neither more nor less than: the way of doing theory as a function of *prices* is that of *objective value theory* — in total contradiction with Menger's **subjective marginalism**, and in tune with the *objective marginalism* of Walras that engulfed all current economic theory. [11]

- The preceding ruling arises from assimilating price and value, or being content with data (prices) to make economic theory, which implies scientific positivism.

- In this scenario it was impossible to notice that:

  The theory of the economic unit of measure was independent of the theory of prices. Failure to view it this way leads to inconsistent theories of economic calculation. [12]

  "Special" theory of currency: insofar as it is wealth, its behavior is explained by the **law of wealth**. Warned of this, the claim to elaborate a special theory of currency, and from there

[10] It is a circumstance that the defenders of the theory of subjective value do not notice, which they do by accepting that prices are determined by Marshallian supply and demand.
[11] It is even the subjectivist theorists who did not notice epistemological objectivism (settling for prices to refer to value, underlying adopting supply and demand curves).
[12] The economic unit of measurement is the lowest of all marginal utilities, as it is the last unit of wealth (exchanged or not) with decreasing marginal behavior. On the other hand, the marginal utility of the units exchanged arises only from the quantities exchanged, which are less than the total units of wealth. In other words, theory of economic calculation based on prices implies assuming that all wealth is exchanged, which implies **overvaluing total wealth**.

try to develop a theory of the economic unit of measure implies guaranteed general confusion.

Measurable value: Hayek´s dissatisfaction has its origin in the state of economic theory that dissatisfied him: the whole theory stated that subjective value was not measurable; as an Austrian, he assumed that prices underlie the presence of the subjective value that determines them, but he failed to establish a positive correlation between them; and that prices vary over time, which implies that all subjective values from which they arise do, including the one that is considered a unit of measurement — in this conceptual framework it is impossible to consider that the value measurable require the (UNNECESSARY) presence of the constant unit of measure. Then, when he did not find a satisfactory theory, he limited himself to suggesting as the best *factual solution* to consider a basket of goods as currency, inasmuch as he estimated it would give greater stability to its value-price, consider unit of measurement.

The foregoing shows that Hayek was dissatisfied with the theory of currency, interest, and prices (that is, of all economic theory), so he suggested a factual exit, while expressing his discomfort with the state of the economic theory.

Hayek´s dissatisfaction was a consequence of not realizing that: the economic unit of measure is variable, it is not constant (due to the *inverse causality* of the SSET); that the unit of measurement must only meet the requirement of being neutral, that is, it does not alter the value of the wealth to be measured in the act of measurement, which in economics does not arise from the constancy of the unit of measurement as in physics on the contrary, its neutrality arises as a result of allowing the dimension of the unit of measurement to emerge from, and for, each wealth that is measured.

The unsatisfactory current state of macroeconomics is a consequence of the fact that the theory of the unit of measurement had not been found that would allow consistent economic calculations, *within the theory of subjective value present in the* ***law of wealth***. Path impossible to find, as long as, the difference between the domain of **wealth** (of the currency) and the domain of **dimension** (of the economic unit of measure) is not distinguished. Impossibility derived from considering the subjective value as a non-measurable entity, a situation that the SSET reversed by demonstrating its measurability from a variable unit of measure — which underlies, without adequate precision, in Menger.

I begin the development of a subjective macroeconomics by identifying the *elements* that compose it, continuing with the laws that determine their *behaviors* (which are manifested in time) — epistemological path to a good theory.

Elements of macroeconomics

Given the concept of macroeconomics, it can be deduced that its element is a *set of microeconomic data*. Therefore, macroeconomics is composed of the elements of microeconomics, which arise from a life in society (exchanges). That is to say, to understand the behavior of the macroeconomic as a whole, we must identify the elements of microeconomic, and the laws that determine their behavior over time, considering that they interact with each other.

According to the SSET (3rd edition), **wealth is the element of the economy**, just as the **law of wealth** governs and explains its behavior over time, and the **law of exchange** that of these. [13] In other words, the SSET contemplates the behavior of the different manifestations of individual wealth, in a set of individuals who interact socially —scope of macroeconomic.

As a result of the foregoing it follows that in the theory of macroeconomics there are NECESSARILY these elements:

- **Human condition**: while we are talking about the economy of the human being, it is essential to refer to their natural economic condition regarding that we are beings: [14]

  Fallible: we are not perfect, that is why we suffer from needs (scarcity).
  Different: we are not the same — only before the law.

- **Wealth**: it is the element of the economy that means the subjective value that human beings assign to economic goods (useful and scarce things).

- **Utility**: dimension of wealth (value). [15]

- **Transitive relationship**: it is the one that allows comparing the differences between the different dimensions of the different wealth —feasible to do by sharing the same dimension as a common factor (utility).

- **Measurable value**: it arises from comparing any manifestation of wealth (subjective value) through a dimension selected as the *unit of measurement*, which becomes feasible depending on the regular natural legal behavior (law of wealth) of the *dimension* to be measured. [16]
  Without measurement, there is no consistent economic calculation or corroboration of economic theories, as they explain reality according to cause and effect. On the other hand, that there are inconsistent measurements may arise from wrong theories with adequate epistemology or from adequate theories with wrong epistemologies (theoretical subjectivists who explain in terms of prices: Jevons and those who see the origin of prices in supply and demand).
  In turn, economic calculations are measured based on prices, which arise from natural correlation: subjective values determine prices. This is a logical-deductive reflection that refers the measurability of subjective value to an epistemological question, since the theoretical feasibility has been demonstrated in SSET.

[13] Inter and intra personal.
[14] Which I have already dealt with in *Subjective and Solidarity Economic Theory* (SSET) - 3rd edition..
[15] It is of transcendental importance to consider the three entities of the economy, and their deductive epistemological correlation: **economic good** (useful and scarce things), **wealth** (subjective value of the economic good), and **utility** (dimension of wealth). Not having considered that deductive logical order of the three elements has prevented the adequate progress of economic theory, insofar as they interchangeably refer to one or another entity as if they were synonymous.
[16] It is a circumstance where regular does not mean deterministic constancy, but probabilistic.

Aware of all the foregoing, it is not scientifically rigorous to deny the feasibility of measuring subjective value. [17,18] This denial implied two very expensive consequences for economic science: a) not noticing the failure of the theory which continued to assimilate value and price, and b) it impeded the task of achieving an adequate epistemology that would allow value to be measured.

- **Law of wealth**: expresses that the dimension (utility) of wealth behaves marginally decreasing, [19] that is, unit ***n-1*** of wealth provides less utility than unit ***n***. [20]

- **General equation of the marginal utility of wealth**: in SSET I have proposed as such the one that arises from the quotient between the total quantity (q_t) of the economic goods that make up wealth, over the quantity (q_x) whose marginal utility [$U_{q(x)}$] we want to calculate as a contribution to total utility: $U_{q(x)} = q_t / q_x$. [21]

- **Relative values**: is the coefficient that arises between the marginal utilities (U) of different manifestations of wealth (x and y): $v_{x(y)} = U_x / U_y$, y $v_{y(x)} = U_y / U_x$, from which it follows that $U_x = v_{x(y)} * U_y$.

- **<u>Relative</u> marginal utility of an economic good x with respect to another economic good *y* [$U^r_{x(y)}$]**: equals its marginal utility (U_y): $U^r_{x(y)} = U_{x(y)} * v_{y(x)} = U_y$.

- **Law of exchange or relative marginal utility [$U^r_{x(y)}$] arises from the preceding equation that determines the exchange**: the relative marginal utility of one economic

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[17] Schumpeter (1971) tells us: "Now, quantity in this same general sense does not imply measurability, which requires the fulfillment of two more conditions: 1) that a unit can be defined; and 2) that the addition can be defined operationally, that is, in such a way that it can actually be developed." (P: 454 - Note 261) Conditions that I have shown exist in economics, as a consequence of warning of the utility as a subjective value dimension (SSET - 3rd edition and previous works), and to the existence of a neutral unit of measurement when measuring (essential requirement that Schumpeter does not mention), which implies its variability — which economic theory looked unsuccessfully in the theory of currency, which is wealth, not dimension.

[18] The theoretical challenge is to do macroeconomics from the theory of subjective value — since doing it from the objective value implies avoiding the value. Feasible task if the value is measurable, while macroeconomics is the operational addition mentioned by Schumpeter.

[19] That the *law of wealth* is expressed in terms of *utility* is a clear sign that this is its *dimension*.

[20] In *Subjective and Solidarity Economic Theory (SSET) - 3rd edition* I have extended the well-known law of *decreasing* marginal utility of an economic good to the *law of wealth*, task only feasible by virtue of considering wealth measurable (subjective value). Which Hayek (1996-c) expresses as follows: *"Menger's main achievement was this extension of the differentiation between the value of a good and its utility, from the case of a given quantity of consumer goods to the general case of all goods, including factors of production."* (P: 110)

[21] After my proposal (inspired by Menger's marginal subjectivism) I noticed that W.S Jevons also offered an algebraic (and geometric) expression of marginal utility. Quote from Jevons (1998): ***"Numerical determination of the laws of utility***: *... we cannot really elucidate the effect of any change in trade or manufacturing until we can with some approximation of truth to express numerically the laws of variation of the utility."* (P: 169). His equation, similar in appearance to mine ($\varphi x = m.\psi c$), was the origin of what came to be called the "ingenious resource of Jevons" ($\varphi x = m.\psi c$), was the origin of what came to be called the "ingenious resource of Jevons" —Annex II of SSET 3rd edition— which refers to a *static* explanation to explain a *dynamic* question, a task that he considered impossible to solve. It is a clear example of epistemological failure from a correct theory. Ingenuity that affected all later economic theory — proof of this is Hayek's uncertainty in not noticing the natural legal correlation between prices and interest, which SSET shows.

good with respect to another [22] is equal to the utility of the latter at the time of exchange. This is the only equality that arises from exchange, as a consequence of the fact that there is no equality of exchanged utilities, since there would be no exchange. [23]

- **Price**: coefficient of quantities exchanged [$\boldsymbol{P_{x(y)} = q_{yi} / q_{xi}}$].

- **Origin of prices**: it is a coefficient that arises from the exchange, which originate from the relative subjective values. In other words, the ***natural causality of relative values*** indicates that they determine prices: $\boldsymbol{v_{x(y)} \rightarrow P_{x(y)}}$.

- **Unit of measurement**: like all statistics, macroeconomics is not feasible without a unit of measurement that measures the dimension that originates the macroeconomic aggregates. Because it is prices that are observed, a price of a manifestation of wealth is adopted as a unit, instead of its relative value. However, the SSET has shown that it is feasible to calculate wealth at currency prices as a function of relative values, which corroborates and explains the causal order *values → prices*.
  The expressions in the preceding paragraph arise from the theory of the economic unit of measurement (neutral), independent of the theory of currency (not neutral insofar as it is wealth), developed in *SSET - 3rd edition - Chapter IX*.

In function of the element of microeconomics (wealth) and the laws that govern its behavior, we are in a position to begin the study of its aggregate data: *macroeconomic statistics*.

[22] That includes the same economic good for different applications (to which Jevons referred in his unfortunate exhibition "ingenuity").
[23] Unlike the other theories, which considers the equality of utilities ($\boldsymbol{U_{xi} = U_{yi}}$) as the origin of the exchange, which could not explain the exchange itself. In SSET, the positivity of the relative values [$\boldsymbol{v_{x(y)}}$ and $\boldsymbol{v_{y(x)}}$] explains that the exchange has its origin in the generation of wealth that the act of exchanging implies, which cannot be explained by assuming the equality of utilities. Thus, the *SSET* shows that **exchange is wealth**.

Chapter II - Macroeconomics in Menger

Macroeconomic fundamentals at Menger

Once again I must emphasize my admiration for Carl Menger. This time I mean that his two works, ***Principles of Political Economy*** and ***The Origin of Money***, constitute the best macroeconomics treatise that I have come across. This is due to the fact that Menger thought of the economy of a set of individuals, that is, he thought of the individual as the epicenter of the economy (origin of subjective value) interacting with his fellow men in a context of infinite manifestations of wealth. Which unfailingly implied the study of macroeconomics: ***aggregation of individual economic actions in a society, referred to multiplicities of wealth***.

This is how Menger organized his masterful work in a logical-deductive-natural way: he defined the elements and studied their behavior over time (marginalism), for this reason the consistency of his theory is difficult to match, as well as that derived from it. [24] Situation that allows us to detect the underlying deviations when one is in the conviction of staying on the right course (case of theoretical subjectivists but epistemological objectivists).

In this deductive logical order he began by defining the *good* (useful thing), from which he would separate the *economic good* (scarce good) and its relationship with the human being through the value (personal-subjective) that he assigned them. Later, the SSET gave greater precision to the terms *subjective value* (wealth as an element of the economy) and *utility* (dimension of wealth-subjective value) that allowed the different manifestations of wealth to be measured and compared.

Let us look at Menger´s macroeconomic fundamentals:

- ***Macroeconomics of the different manifestations of wealth***: he was immediately introduced to macroeconomics by determining the **links between the different manifestations of <u>wealth</u>**: *goods of a higher order (means of production) and lower order (goods produced)*. This he did by establishing that the prices of the former were derived from the prices of the latter. Thus Menger established the foundations of the macroeconomic calculation of the different manifestations of wealth, although he referred to prices instead of relative values, by SSET we know that he derived them from those.

- ***Macroeconomics of time***: with its derivation of the prices of production goods from the prices of final products, it established the behavior of the wealth generated (in any of its manifestations) over ***time***. Presence of the ***economic time*** that will capture with its marginal analysis.

- ***"Macroeconomic" law of wealth***: although it referred to the law of decreasing marginal utility of an economic good, the SSET extended it by making the **<u>law of wealth</u>** explicit.

- ***Macroeconomics of exchanges***: from the law of the marginal utility of an economic good, he founded the origin of exchanges, which originate prices. The SSET added scientific

[24] Which confirms the judgment of J.S. Mill, a proper theory of value is the foundation of a proper economic theory.

rigor by, *precisely determining the act of the exchange*, from which the **law of the exchange** arose.

- ***Macroeconomics of the distribution of wealth***: the theory of the imputation of utilities from the good of a lower order to the goods of a higher order (means of production) implies a theory of the distribution of wealth. The SSET shows that utility is what guides the four human actions around wealth: generate and save according to a descending order of marginal utility, and destroy and exchange with an ascending one. From the combination of these four human actions guided exclusively by utility, the distribution of wealth arises, confirming:

  The error of J. S. Mill: who maintained that there is a time to generate wealth and another to distribute it with its subsequent institutional theoretical consequences.

  The error of the generally accepted theory of the distribution of wealth, which arises from equating the ratios between marginal utilities and prices ($\boldsymbol{U_x / P_x}$) of the different manifestations of wealth (since the denominator is a variable dependent on the numerator, which is the one that gives rise to it).

- ***Theory of interest***: the SSET derived interest as the value-price of economic time, which is manifested in the changes in wealth, which are explained by the ***law of wealth (decreasing marginal utility)***. This is why Menger rejected the Böhm-Bawerk theory of time preference. [25] The SSET corroborates to Menger since it shows that **interest is equivalent to marginal utility**, as it signifies the change that takes place in wealth over time, which shows the inconsistency of proposing a "theory of interest" outside the **law of wealth**. [26]

- ***Currency theory***: it was limited to considering it wealth that satisfies the need for liquidity (to overcome the inefficient exchange of barter). He never doubted that it was wealth, and as such subject to the *law of wealth*. [27] Its only development over currency [28] was related to its origin (which the SSET would reduce to: the currency must only meet the simple condition of *wealth that satisfies liquidity*, without the need for it to have previously been wealth). [29, 30]

[25] With which no stock of wealth can be explained, which implies valuing the future more than the present.
[26] My theory of economic time is fully in tune with Menger's (1985) concept that change implies time; subject that I will expand in a quote to Menger.
[27] Therefore it was unnecessary to develop a *special theory of currency* to show that the law of decreasing marginal utility applied to it, a task in which Mises undertook. From this *"special theory"* the post-Menger Austrians derive their theories of interest, currency, and of cycles, which the SSET considers unnecessary.
[28] It is in addition to its essence in satisfying liquidity through its greater marketability.
[29] Paper currency (PC) arose from a legal provision that imposed (forced course) its acceptance (cannot be legally denied) as a means of payment (cash or cancel debts). In other words, the PC had no wealth condition prior to that institutional arrangement. Which is not to say that the State is the origin of the currency, which always resides in the market, since if it does not accept it as currency, it is not such.
[30] This is how the SSET explains the logic of currencies like Bitcoin, which disproves Mises´s regression theorem.

- ***Macroeconomic theory of the economic measurement unit***: it limited itself to saying that the price of the currency was the most suitable [31] to be considered the unit of measurement of all prices. It took 150 years for it to be discovered that the theory of the economic unit of measure was independent of the theory of the currency — which for him was wealth, could not emerge from nothing therefore could not alternatively be considered wealth and not wealth, as seen in all schools of thought. [32]

- ***Epistemology of macroeconomics***: macroeconomics must explain based on the foundations of microeconomics, from where it arises as a statistical aggregate. Menger was not only the epistemologist of macroeconomics in terms of microeconomics, but he could not conceive of another way of understanding it.

That is, the SSET derived from Menger's macroeconomic foundations what I call **subjective macroeconomics**, which I will develop.

[31] Insipient idea of a theory of the economic unit of measure independent of the theory of currency. I consider that he refrained from exceeding the concept of "the most suitable" as a consequence of not having investigated the subject with its characteristic logical-deductive epistemological rigor. We must not forget that he was referring to prices, not relative values, which only the SSET would incorporate at the beginning of the 21st century.

[32] As a consequence of not noticing the two different entities that are involved in the currency: *wealth* that satisfies liquidity, and *dimension* as a unit of measurement for the calculation.

Chapter III – SUBJECTIVE MACROECONOMICS [33]

Introduction

The subjective macroeconomics that I present here forms an extract-synthesis of what I called *Theory of Economic Relativity (TER)*, whose development I later expanded until I reached the *Subjective and Solidarity Economic Theory (SSET) - 3rd edition*. [34]

I will present the developments that I have arrived at in each of the topics in which the macroeconomic analysis repairs in order to complete the intended *subjective macroeconomics*. Developments that are related to the application of the ***laws of wealth*** and ***exchange*** (SSET), which arise exclusively from the decreasing subjective marginal value of wealth (Menger), which guarantees the exclusive participation of its utility dimension. [35]

The methodology consists of contemplating all the elements that I have considered necessary and sufficient for a consistent theory of macroeconomics, starting from the foundations of *Macroeconomics in Menger*.

Economics as science

In order to corroborate the category of science that I assign to economics, let's see its element and the laws that govern its behavior, by means of which we understand economic phenomena and thus be able to make predictions and diagnoses about them. Which, obviously, are in total harmony with what was expressed in *Macroeconomics in Menger*.

Wealth

From considering rigorous knowledge as a science that explains the facts according to the **cause → effect** correlation, which it does by *defining* the specific **elements** of its study and the **laws** that govern its *behaviors*, I have defined economics as a **science that studies value**. Thus I come to determine that the ***element*** of the economy is **wealth**, a subjective value that human beings assign to **economic goods** (useful and scarce things), whose ***dimension*** is **utility**, and its behavior over time is governed by two ***natural laws***: [36] **law of wealth** and **law of exchange**.

Let us then see the laws that govern the behavior of the wealth element, insofar as they are those that guide human, individual and social economic behaviors.

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[33] I must confess that the original title was *Austrian Macroeconomics*, the change is in total harmony with an expression by Hayek: *"... although there is no longer an Austrian School as such, I do believe in the existence of a differentiated Austrian tradition, from which we can expect many contributions to the future development of economic theory..."*. Very severe discrepancies arise from my works with developments in the Austrian School after Menger, the present not only which is no exception but could be considered a kind of epilogue to a subject of the utmost importance. I deal specifically with the subject in the section: *Subjective macroeconomics and Menger*, at the end of the text.

[34] Those interested in the evolution of my theories, can go to www.carlosbondone.com.

[35] No currency or interest theory, underlying picture at Menger.

[36] The presence of a **natural** law implies regularity, which declines in measurability to the extent that the element and dimension whose behavior is explained by the law is identified. That human beings have not precisely identified both entities, which allow measurement, is a sign of theoretical immaturity.

Law of wealth

We already know from the SSET [37] that wealth has a decreasing marginal behavior, which is defined by its utility dimension:

Law of wealth

Unit *n-1* of wealth provides less utility than unit *n*

Law that I have expressed in the form of an equation: the marginal utility (***U***) of a unit of wealth (q_x) is determined by the quotient between its total quantity (q_t) and the unit whose marginal utility is to be obtained (q_x):

***General* equation of wealth** [38]

$$U_{q(x)} = q_t / q_x$$

It is essential to note that the **marginal** concept, represented by the behavior of a totality as units are added, **implies the presence of time** that is, **it explains the behavior of the totality in time**. [39]

Law of the exchange

Now we must refer to the law that explains the exchange of wealth. [40] For this, we first need to know the relative values, arising from the law of wealth, between the different manifestations of wealth that determine the act of exchange. And this is how we obtain the equation of the relative value of one economic good with respect to another:

Relative value equation [41]

$$v_{x(y)} = U_x / U_y$$

[37] It is an extension, to all manifestations of wealth, of the law of decreasing marginal utility of an economic good. Just as Menger extended the concept of marginal utility and total consumer needs, to the means of production of the same, the SSET extends it to all manifestations of wealth.

[38] I also call it the general equation of diminishing marginal utility, etc.

[39] While marginalism was presented simultaneously in the 1870s by Menger, Jevons, and Walras, only Menger did so within the subjective value theory, as Jevons' objective epistemology excludes it.

[40] Inter and intra personal exchanges.

[41] In total contradiction with Jevons' **exchange relation**, which limited itself to expressing it as: *"... when we speak of the exchange relation ... there is no doubt that we intend to refer to the relation between the number of units of a commodity and the number of units of the other merchandise for which it is exchanged..."* (Jevons 1998 - P: 123). That is to say, here Jevons is a methodological objectivist insofar as he tries to explain the exchange through quantities of economic goods exchanged (prices), not through their relative values, from which the exchanged quantities arise.

With the preceding elements we have shown [42] that the exchange occurs when the *relative marginal utility of each economic good* (U^r_q) equals the *marginal utility of the other economic good* ($U_\$$): $U^r_q = U_\$$ y $U^r_\$ = U_q$, which It occurs due to the relative values between both manifestations of wealth $v_{\$(q)}$ and $v_{q(\$)}$, which arise from the subjective values, whose stocks are prior to the exchange:

$$U^r_{\$(q)} = U_\$ * v_{q(\$)} = U_{q(\$)}$$

$$U^r_{q(\$)} = U_q * v_{\$(q)} = U_{\$(q)}$$

We can well summarize the exchange in this general expression:

Exchange equation

$$U^r_{x(y)} = U_x * v_{y(x)} = U_{y(x)}$$

$$U > 0$$

$$v > 0$$

With which we express the

LAW OF THE EXCHANGE

> **The *relative* *marginal utility* of an economic good is equal to the *marginal utility* of the other economic good to which it is relative (exchanged and / or compared)**.

Law from which this is derived

[42] It was development in *Chapter V - Exchange*, section *The exchange equation.*

Corollary of the exchange

The rise (fall) of the value of a manifestation of wealth (v_x) with respect to another (y), means that a greater (less) quantity of the second [$q_{y(i)}$] must be delivered in exchange with respect to the quantity of the first [$q_{x(i)}$]:

$$\uparrow v_{x(y)} \rightarrow \uparrow q_{y(i)} \rightarrow \downarrow q_{x(i)}$$

Economic time and interest

According to the SSET, it is essential to separate the concept of ***economic time*** (***wealth***) from that of **interest** (***value-price of wealth economic time***), while we are referring to the entities: **economic good time** (useful and scarce), **wealth** (value of time economic) and **utility** (dimension of all wealth).

Economic time

We must begin by noting the one-to-one correlation between ***behavior*** ↔ ***time***, since one does not exist without the other, which allows us to express that **in all science**: **the study of time is the study of the behavior of its elements**. That said, if we understand the natural laws that govern the behavior of the elements of a science, we are understanding the laws of time in that science.

From the central idea of time, present in the reflection shared by Heraclitus and Aristotle:

With time everything changes

We deduce this "Kantian" reflection

Change implies presence of time

Reflection that allows us to assert that:

The **study of time** aims **to know the laws that determine changes**

From the foregoing we deduce that:

Economic time

Changes in wealth

We deduce that: the laws that explain the changes in wealth, which is equivalent to explaining the behavior of wealth, are the laws of economic time.

It is important to note that my theory of economic time is in total harmony with the concept that Menger (2007) had of it:

> **"I mean differences in the magnitude of value of goods.**
> **With an answer to the question as to the ultimate causes of differences in the value of goods, a solution is also provided to the problem of how it comes about that the value of each of the various goods is itself subject to change. All change consists of nothing but differences through time. Hence, with a knowledge of the ultimate causes of the differences between the members of a set of magnitudes in general, we also obtain a deeper insight into their changes."** (P: 122)

In other words, the **Theory of Economic Relativity** (**TER**): *time materializes-represents-means the change in wealth*, underlay Carl Menger. Which does not surprise me, except in that the underlying thing in that quote has not been EXPLAINED: [43] that the value-price of economic time wealth (interest ***i***) was the marginal utility itself (***U***), that explains the variation of wealth over time, which would have prevented delays in the progress of economic theory, with its consequences still in force.[44]

Another relevant aspect to highlight of the quote is: *"With an answer to the question as to the ultimate causes of differences in the value of goods, a solution is also provided to the problem of how it comes about that the value of each of the various goods is itself subject to change."*, where the measurability of the subjective value underlies, while the element to be measured recognizes as the *"with a knowledge of the ultimate causes of the differences"* the decreasing marginal regularity of the magnitude of wealth (utility).

Interest

Warned that *economic time* is *wealth in motion*, it is appropriate to explain its value, which we call and define as follows:

Interest

[43] Perhaps he considered that his subjective marginalism was so clear and evident that it did not need further development.

[44] Especially those that gave rise to institutions that affect the natural economic order.

Value of economic time

Reviewing the concepts, we have:

Law of wealth: expresses the behavior of wealth over time, based on its utility dimension: $U_q = q_t / q_x$.

Law of exchange: bases the exchange on relative values: $v_{x(y)}$.

Interest (***i***): since the variation of wealth ***x*** in time is the one that occurs according to the **law of wealth** ($U_q = q_t / q_x$), and that it value relative to other wealth ***y*** arises from the **law of exchange** [$U^r_{x(y)} = U_x * v_{y(x)} = U_{y(x)}$], we know that:

$$i \equiv U$$

$$i_{x(y)} = v_{x(y)}$$

Given that economic time is a useful and scarce thing, whose subjective value is wealth, whose dimension is utility, it could not behave outside the two laws of nature. The opposite would be to deny the character of wealth to economic time.

The foregoing leads us to reflect on the absurd: *it is absurd to propose a **theory** of **economic time** and **interest** outside the natural laws of wealth and exchange, which govern all economic phenomena*. [45]

Having understood the natural laws that govern the behavior of wealth, we proceed to analyze how they guide human economic actions, which develop over time.

Human actions as the origin and distribution of wealth

Economic theory, from understanding the foundations of human actions over time, must explain how wealth is generated and distributed. [46] A theme that, starting with Mises, SSET deepened, made explicit, and demonstrated, which it did in the following way:

[45] I believe that this is the reason for Menger's expression (quoted by Schumpeter): *"The time will come when people will realize that the Böhm-Bawerk theory is one of the biggest mistakes ever made"* (Schumpeter 1971. Note 36 P: 386). I believe that TRE and SSET, here referring to economic time and interest, returned the state of affairs to the terrain of Menger's marginal subjective foundations.

[46] To speak of human action is to speak of Mises´s *Human Action*.

The UTILITY explains HUMAN ACTIONS [47]

Then:

HUMAN ACTION is the origin of WEALTH

Which is to say that

Wealth does not come out of nowhere

Sentences that exempt from the need to state that the investment (***I***) arises from the previous saving (S), which favors the failed models: ***S = I*** and ***IS-LM***, to which I will refer in *Annex I*.

Then it follows that

UTILITY is the center of economic calculation

Which places us in what I have called

Axiom of the efficient distribution of wealth [48]

Wealth is distributed according to the marginal utilities of the human actions that determine it: in *decreasing* order to generate and conserve it, and *increasing* to exchange and destroy it.

[47] It refers to actions that are intended to be explained through: philanthropy, ethics, morals, religion, politics, etc. A *prima facie* we could say that utility could be the economic scientific path to happiness, which would be indicating that the concept of **utility implies humanism and happiness**. If so, it seems that happiness has a lot to do with the primacy of reason (utility) over the senses. **If the utility is perceived in a context of scarcity, we are in the field of economics**.

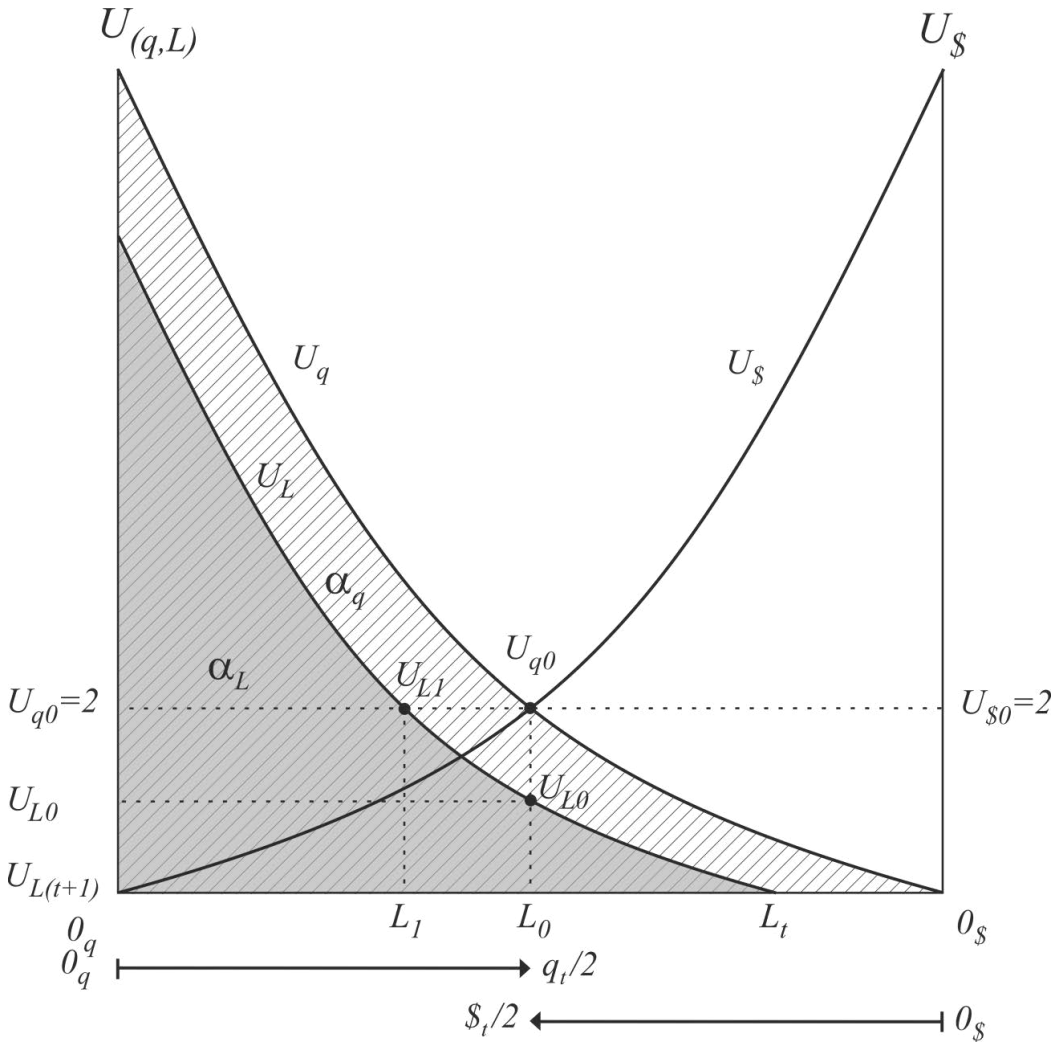
[48] This axiom (demonstrated in *Chapter XIII of SSET 3rd edition*) denies: 1) what is called the law of time preference, since the present is not always valued more, otherwise the stock of wealth cannot be explained , which arises because it is considered more useful for the future; 2) the theory of the distribution of wealth that we know as a function of the prices and marginal utilities of each manifestation of wealth, since the former are dependent variables on the latter; 3) the proposal of J.S. Mill according to which wealth is produced and then distributed; and 4) the proposals of the classics, concerned with the distribution of wealth (whit full employment: James Mill and Say), which Keynes tried to solve unsuccessfully by replacing it with the study of the generation of wealth that did not It always presented a level of full occupation, given the "insufficient effective demand" derived from Malthus (I expand in *Annex I*).

Let us look at other central issues of macroeconomics based on knowing that utility determines all of them.

Distribution-imputation of wealth among the factors of production

The definition of capitalism implies that during its validity human beings generate means of production (capital factor ***k***) [49] that allow them to enhance the wealth obtained with the labor factor (***L***). Using the graphical characteristic of the closed box of the SSET, I proceed to analyze the "capitalist system" [50] in the following graph.

Imputation of wealth to the factors that generate it [51]



[49] Technology, innovation, knowledge, ..., everything that implies enhancing the generation of wealth from work, as well as the capital that contributes to reducing the destruction of wealth.

[50] Understanding by such a system based on the two natural economic laws: wealth and exchange, without institutional alteration of any kind, characterized by the capital factor arising from human reason, which the other species do not have.

[51] I estimate it is the graph that Jevons (1998) did not notice, who with total intellectual honesty said: *"I do not see a way to accurately represent the theory of capital by means of a diagram."* (P.247)

U_L indicates the marginal utility generated by the work, and Uq the marginal utility generated with the two factors. [52]

An upward shift in production (U_q) is observed when adding the capital factor to the production obtained only with work (U_L): $U_q > U_L$ throughout the entire route.

For expository purposes, I focus on the behavior of capitalism at the ***evolutionary middle point*** (**EMP**), [53] where:

- $v_{q(\$)0} = v_{\$(q)0} = P_{q(\$)0} = P_{\$(q)0} = 1$: total symmetry of the **EMP** (U_{q0}), origin of the neutrality of the economic unit of measure, of mi theory of economic time and its value-price interest.

- $U_{q0} = U_{\$0} = 2$: [54] *marginal utility*, which arises at the **EMP** level.

- U_{L0}: *marginal utility point of labor, with the capital factor*, is less than $U_{\$0} = 2$.

- U_{L1}: *marginal utility point of labor, without the capital factor*, where $U_{L1} = U_{q0} = 2$.

- $q_t / 2 = \$_t / 2$: quantity symmetry of the closed box.

- L_0: *quantity of work in the EMP, with the capital factor*.

- L_1: *quantity of work in the EMP, without the capital factor*, where $L_1 < L_0$.

- α_q = *Cumulative utility of total wealth (capital and labor)*: it is the *total* area with oblique hatching.

- α_L = *Cumulative utility of total wealth (capital and labor)* <u>*imputable to work*</u>: it is the *partial* shaded area.

Thus, **<u>with capitalism</u>**, the **EMP** tells us:

[52] It would be my graph of the Theory of the imputation of utilities of the ***SSET*** in line with the Austrian School.
[53] It is an excellent economic analysis tool that I have incorporated into ***SSET - 3rd edition***, where you can find its complete development.
[54] Essential equality in the study of the value of wealth relative to itself, the full development of which can be found in ***SSET - 3rd edition***.

Marginal utilities

$U_q > U_L$	$U_{\$0} = U_{q0} = U_{L1} = 2$	$U_{L1} > U_{L0}$	$U_{L(t+1)} = 0$ [55]

Accumulated utilities (α)

$\alpha_q > \alpha_L$	$\alpha_{q0} > \alpha_{L0}$	$\alpha_{L0} > \alpha_{L1}$

Quantities of economic goods (q) and labor (L) [56]

$$q_t > q_0 > q_1$$

$$L_t > L_0 > L_1$$

Relative values

$$v_{q(\$)0} = v_{\$(q)0} = P_{q(\$)0} = P_{\$(q)0} = 1$$

$v_{q(L)} > v_{L(q)}$	$v_{L1(L0)} > v_{L0(L1)}$

[55] With or without capitalism, the unit L_{t+1} will always be $L_{t+1} = 0$. This is the ***economic concept of full employment***, with which the *Theory of subjective value* works. What has no value is not wealth (such as effort that is not work), although cleaning with a vacuum cleaner has more value than by hand, nevertheless the two tasks generate value, they are "occupied" economic wealth. In other words, **the subjective value theory is incompatible with the feasibility of "wealth unemployment."** Without realizing it, the classics were correct, but this success was incompatible with the theory of objective value that they postulated, within which wealth unemployment is feasible, since wealth has value by itself BUT it is feasible that human beings do not they are assigned it, then it is *"unemployed wealth"*. This is how we understand the link between the classics and neoclassicals, a failure that gave rise to the concept of aggregate demand, from which failed economic theories arose, origin of the disastrous institutions to "generate employment".
The foregoing also applies to the inconsistency of postulating and/or discussing Say's "Law".

[56] As we move to the right we know that q increases the inverse to the left, which implies the same behavior of α and q — due to the positivity of the marginal and total utilities.

The incorporation of the capital factor into work is also explained by the presence of the ***law of wealth***:

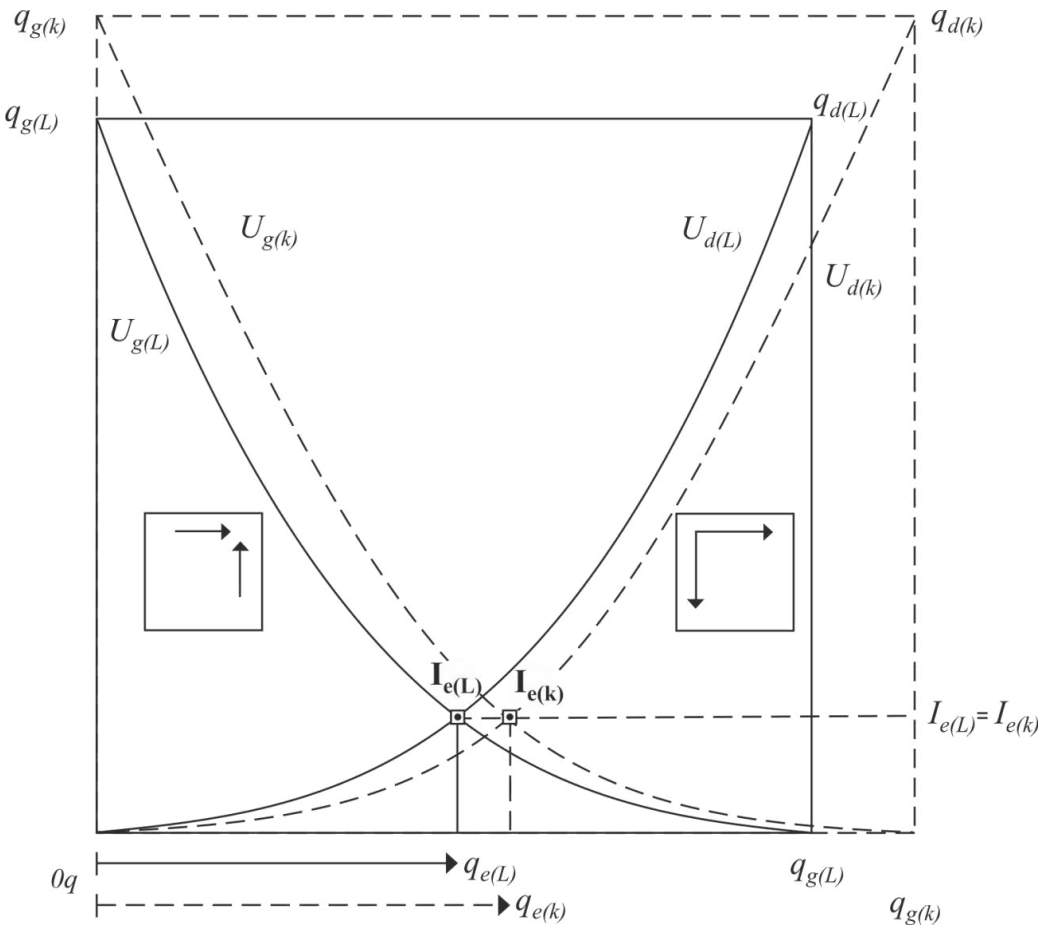
• The presence of the capital factor implies greater wealth: at the same level of ***L*** and ***q*** of the abscissa, we have: $U_q > U_L$ y $\alpha_q > \alpha_L$.

• The incorporation of capital improves the level of all variables without altering those that would have been obtained without the assistance of the capital factor:

$U_q > U_L$	$\alpha_q > \alpha_L$	$q_0 > q_1$	$L_0 > L_l$

In other words, the natural laws of wealth and exchange have allowed us to corroborate the efficiency and equity of capitalism - ***the highest point of solidarity merited by others***.

The capital factor (*k*)



Let us see another graphic representation of the consequences of the capital factor, which will allow us to appreciate its multiplier effect from another point of view. We consider two scenarios: 1) work without capital [$\boldsymbol{L}$, $\boldsymbol{U_{g(L)}}$ and $\boldsymbol{U_{d(L)}}$ with a solid line in the closed box by $q_{g(L)}$], [57] and 2) work with capital [$\boldsymbol{k}$, $\boldsymbol{U_{g(k)}}$ and $\boldsymbol{U_{d(k)}}$ dotted line in the box closed by $\boldsymbol{q_{g(k)}}$]. [58] We represent both manifestations of wealth on the same abscissa. Then, the point of intersection of both curves [$\mathbf{I_e} \leftrightarrow \boldsymbol{U_g} \cap \boldsymbol{U_{d)}}$] will occur at the same ordinate level: $\mathbf{I_{e(k)} = I_{e(L)}}$. [59]

There is a shift up and to the right of the closed box with the presence of the capital factor ($\boldsymbol{k}$), which will allow us to appreciate the consequences that arise from its incorporation.

Let us analyze the consequences of incorporating the capital factor into work, in its two actions: generating and destroying wealth.

Wealth generated

- *Greater generation of economic goods at the same level of marginal utility*: $\boldsymbol{q_{e(k)} > q_{e(L)}}$ with $\mathbf{I_{e(L)} = I_{e(k)}}$.

- *Higher marginal utility of the wealth generated*: in the entire course of the curves $\boldsymbol{U_g}$ it can be seen that $\boldsymbol{U_{g(k)}}$ is above $\boldsymbol{U_{g(L)}}$: $\boldsymbol{U_{g(k)} > U_{g(L)}}$ at every level $\boldsymbol{q_{(k)}}$ or $\boldsymbol{q_{(L)}}$.

- *Greater accumulated wealth generated*: greater accumulated value generated at the same marginal value, and at the same amount of economic goods, imply that the value of accumulated wealth generated is greater with the concurrence of the capital factor: $\boldsymbol{\alpha_{g(k)} > \alpha_{g(w)}}$. [60]

Wealth destroyed

- *Greater destruction of economic goods at the same level of marginal utility*: $\boldsymbol{q_{d(k)} > q_{d(L)}}$ with $\mathbf{I_{e(L)} = I_{e(k)}}$.

- *Lower marginal utility destroyed*: $\boldsymbol{U_{d(k)} < U_{d(L)}}$ at the same level of economic goods destroyed [$\boldsymbol{q_{d(k)} = q_{d(L)}}$].

- *Less accumulated utility destroyed* [$\boldsymbol{\alpha_{d(k)} < \alpha_{d(L)}}$] at the same level of economic goods [$\boldsymbol{q_{d(k)}}$ or $\boldsymbol{q_{d(L)}}$].

Synthesis: the incorporation of the capital factor implies that human beings benefit both from human action to generate wealth and from destroying it, which means that it is the optimal option to improve the level of wealth (generated and destroyed) per capita. [61] In turn, it is noted that

[57] Where $\boldsymbol{U_g}$ is the decreasing marginal utility curve of wealth generation, and $\boldsymbol{U_d}$ is the increasing marginal utility curve of wealth destruction.

[58] It is with the typical symmetry of the *Subjective and Solidarity Economic Theory* (SSET) when we refer to wealth relative to itself.

[59] It is an expository simplification that does not affect and enriches the analysis.

[60] Where each $\boldsymbol{\alpha}$ is the area under the marginal curves.

[61] At the same time, it confirms that the economy deals with and is explained only by utility, not by costs.

individual and collective well-being arises from the generation of capital, not from promoting the destruction of wealth, [62] which naturally increases with the increase in the capital factor.

This exercise has simply consisted of ***understanding*** and ***corroborating*** the presence of the ***law of wealth***, the only way to notice the consequences of the expansion (contraction) of wealth, which is equivalent to understanding the presence of time in the economy. This law allows us to understand the economic relationship between (objective) quantities of economic goods and (subjective) it values.

Is what is exposed here a corroboration of what is intuitively called "the spill effect"? Judging by the economic evolution since the industrial revolution (explosive appearance of the participation of intensive capital) it seems that it has.

It is clearly appreciated that the capital factor not only enhances the generation of wealth, but it does so without altering the preceding order without its concurrence: [63]

- Boost the *result* of the work ($\uparrow \boldsymbol{q}$). [64]
- *Generation* of labor ($\uparrow \boldsymbol{L}$).

Both effects combined generate a better standard of living for everyone, except for those who do not participate in the capitalist system, which allows us to express with total scientific rigor:

The greatest wealth generated by capital does not arise from withdrawing it from that generated by labor. [65]

CAPITALISM is the economic system of human nature [66]

In capitalism you get the ***highest level of solidarity, collectively evaluated***.

[62] As proposed by the theories based on the "deficiency of aggregate demand", which I will deal with in *Annex I*.

[63] Which is very evident with Robinson Crusoe: that you can get more fish with a net does not alter what you could get without it.

[64] It implies: $\uparrow \boldsymbol{q} \leftrightarrow \uparrow \boldsymbol{W} \leftrightarrow \uparrow \boldsymbol{q_i}$. The arithmetic richness W would be represented by the areas α of the graph.

[65] Capitalism generates greater wealth and employment and, not only does it not appropriate the utility generated by work, but it improves it by raising wages.

[66] Capitalism denies: the classic-neoclassical and Malthusian apocalypse; the increase in prices as a requirement for the presence of corporate profit according to Keynes; etc…

Which I will corroborate when studying affected capitalism, product of interrupting the full force of natural economic laws.

Important

> The *SSET* develops **theory of capital <u>without</u>** concurrence of **theory of interest** or **theory of currency**.

Sentence that corroborates Menger's theory of subjective marginalism, where everything is explained by utility, without a special theory of currency or theory of interest — price-value of time expressed in the decreasing marginal temporal behavior of the wealth.

I end this section by suggesting that you dedicate the necessary time to fully master it, which will allow you to understand the simplicity of the behavior of the economic nature, explained in two graphs— it is very useful for me to have an attached photo of them , on another device, while reading your performance.

We already have the necessary tools to study another subject sensitive to macroeconomics, the proprietary distribution of wealth.

Proprietary wealth distribution

In *Chapter XIII* of *SSET 3rd edition* I have shown how the property of wealth is naturally distributed in the simultaneous process of its creation, saving, exchange and destruction —in time, a requirement of every process, which in turn implies change. In other words, wealth is being distributed as it is SIMULTANEOUSLY generated, saved, destroyed and exchanged.

In order to determine the variation of wealth, or ***net wealth*** (***W***) generated, in a space-time moment, **<u>of an owner or set of them</u>**, [67] we must consider the differential of human actions to generate (***g***) and destroy (***d***) wealth, what provides us with wealth savings (***S***). In this way, the variation in wealth-value, ***saving***, is a consequence of the differential between human actions to generate it (***g***) and destroy it (***d***). [68]

For expository purposes, which will allow us to obtain a better visualization of the economic calculation, I begin with the graphical structure of the Evolutionary Middle Point, BUT, I place the ascending marginal utility curve of wealth destruction ($\boldsymbol{U_d}$) with a descending orientation, just like the marginal utility curve of wealth generation ($\boldsymbol{U_g}$). This task is accompanied by considering negative (-) the values of Ud, keeping those of $\boldsymbol{U_g}$ positive, which is why we appreciate the $\boldsymbol{-U_d}$ curve. [69]

Let us study the graph of the *net wealth* (***W***) *generated – savings* (***S***), which I built according to the premises of the *Subjective and Solidarity Economic Theory* (*SSET*):

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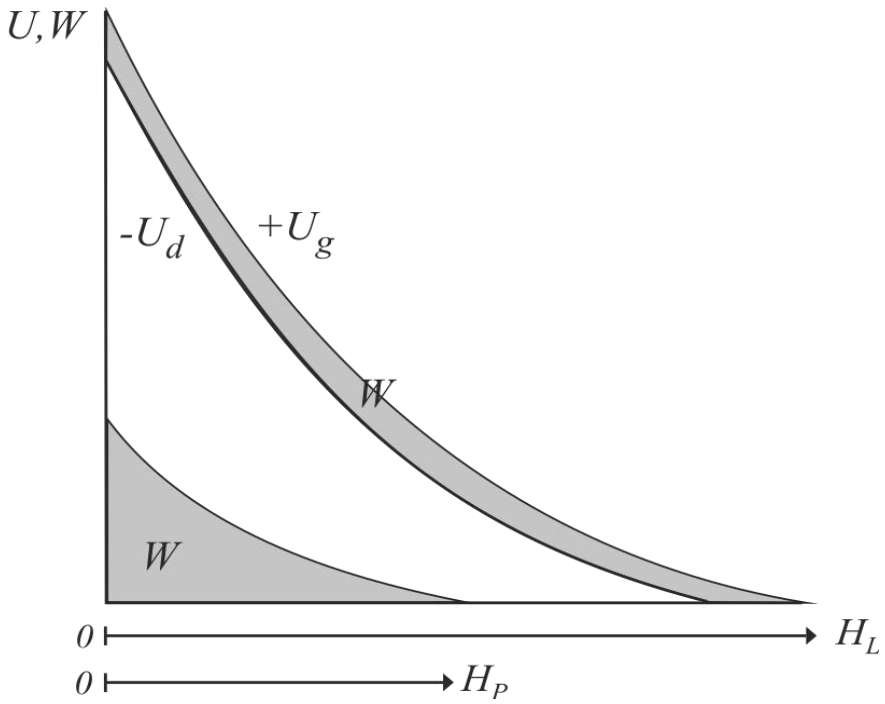
[67] According to the **wealth-owner axiom** of the *SSET,* one cannot exist without the other.

[68] Here I considers that the action of exchanging wealth is part of generation, and saving arises as a differential between generating it and destroying it, which is why I consider $\boldsymbol{W = S}$.

[69] **<u>Explaining the destruction of wealth ONLY in terms of utility implies a turning point in economic theory: it corroborates the subjective value theory (utility), while banishing the objective value theory (cost-prices)</u>. This is the essence of the difference between Menger´s marginalism with that of Jevons and Walras, well captured by Schumpeter - the reason why he spoke of *creative destruction,* which the *Subjective and Solidarity Economic Theory (SSET)* corroborates**.

Net wealth generated (*W*) - savings (*S*) [70]



Ordered: they represent the marginal utilities (***U*** curves) and accumulated (***W*** areas).

Abscissa: of the same extension as the ordinate —both represent marginal (***U***) and accumulated (***W***) utilities - to which I have added the inhabitants (H) who have worked to generate it ($\boldsymbol{H_L}$) and the owners ($\boldsymbol{H_P}$) of the net wealth generated- saved at the end of the period (***W***).

Marginal wealth generation ($\boldsymbol{U_g}$): human action to generate wealth is guided by a *decreasing* marginal order of utility.

Marginal destruction of wealth ($\boldsymbol{-U_d}$): human action to destroy wealth is guided by an *increasing* marginal order of utility ($\boldsymbol{U_d}$), which I represent by adding the negative sign (-) to the curve that is seen as decreasing ($\boldsymbol{-U_d}$). [71]

Net generation of wealth (***W***) ***or wealth savings*** (***S***): represented by the shaded areas:

- *Throughout the period (W)*: is the differential between wealth generated and destroyed: $\boldsymbol{U_a = U_g - U_d}$ — upper landscape shaded area, between the curves.

[70] The areas $\boldsymbol{W_g}$ and $\boldsymbol{W_d}$ are those that are below each of the $\boldsymbol{U_g}$ and $\boldsymbol{U_d}$ curves that origin both.

[71] The essential thing is to note that the **destruction of wealth is explained in terms of the utility that it reports: IT IS NOT A COST**.

- *At the end of the period according to its owners (W)*: I have also represented it accumulated from the origin according to the owners of the same ($\boldsymbol{H_P}$) —condensed lower shaded area.

  That is, the two shaded areas (*W*) are of the same dimension.

It is relevant to appreciate how the human condition of beings different from each other manifests itself: $\boldsymbol{H_P < H_L}$, which is why it is unnatural to postulate the possibility of $\boldsymbol{H_P = H_L}$.[72] Therefore, economic theory must explain —as I show it here— what are the *conditions for this difference to be the optimal level of equity and solidarity feasible to achieve, based on the merit that the group assigns to each individual in the solution of the shortage*.

Once again we can appreciate how, based on Menger's subjective marginal value and the two natural economic laws (wealth and distribution), which the SSET derives from them, the origin and consequences of the proprietary distribution of wealth are also explained.

With the wealth distribution theory of the SSET, the inconsistency of the wealth distribution theory that we know is solved, which consists of equating the coefficients between marginal utilities and the prices of all manifestations of wealth ($\boldsymbol{U_a /P_a = U_b /P_b = \ldots U_n /P_n = U_\$ /P_\$}$). Inconsistency that is present when noting that the denominator $\boldsymbol{P_a}$ is a dependent variable of the numbered $\boldsymbol{U_a}$, since the *relative marginal utilities* determine the exchanges, from which the exchanged *quantities* arise, whose coefficients generate the *data* that represent the relative prices. The fact that the aforementioned inconsistency has arisen from the SSET shows that none of the currents of thought understood the scope of Menger's theory of marginal subjective value, which represents a compelling example of the *state of current macroeconomics*.

Time in wealth production

I can consider the following section us the summary of the foundation of the formation of prices of Menger, based exclusively on the subjective value according to the higher and lower order assigned to the different manifestations of wealth. An approach that, as we have seen, exempts from all theory of interest, since this order arises, explains and implies the presence of time, a necessary requirement in the process of producing wealth.

The production of wealth implies considering the following aspects:

- *The production process*: consisting of gradually adding wealth of a higher order to that of a lower or final order (Menger).

- *Time*: its presence is a necessary condition in the production process.

- *Origin of wealth production*: it is in allocating wealth of a higher order to a lower order because it is considered more useful than in its current state.[73]

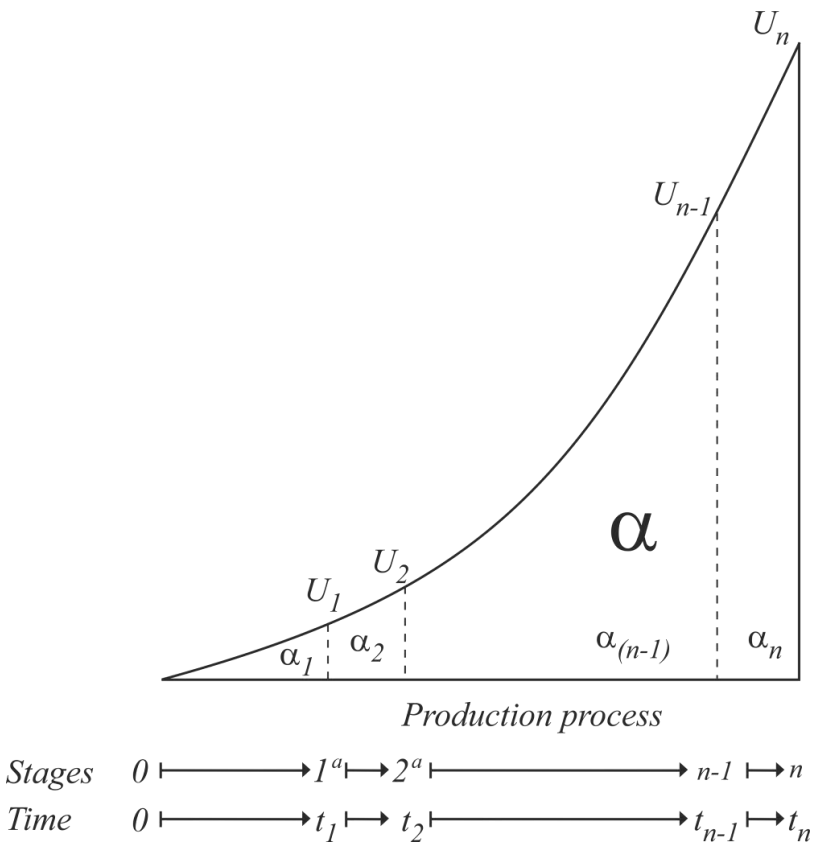
[72] This is a situation that does not even occur in countries with extreme collectivism. It equality implies assuming that we are all equal.

[73] As a result of this reflection, I never understood why Menger designated goods of a higher order than those of lesser utility, and vice versa.

- *Marginal utility guides human action to produce wealth*: since the foundation of production consists of allocating wealth to a higher stage, it implies that human actions of exchange and / or destruction of wealth [74] are the ones that guide the human action of produce wealth. Both actions are oriented according to an increasing order of marginal utility. [75]

Let us see its exposition in the graph ***Time of production*** [76] using the rising **curve** of the marginal utility of wealth, which guides the human actions of destruction and exchange of wealth $\boldsymbol{U_{(d,i)}}$ implicit in the productive process, and the **area** of the accumulated wealth in both cases [$\boldsymbol{\alpha_{(d,i)}}$].

Time of production [77]



Since we are interested in explaining-demonstrating-understanding the temporal process of wealth generation, I will directly use the symbols $\boldsymbol{U}$ (marginal) and $\boldsymbol{\alpha}$ (accumulated), knowing

[74] Schumpeter´s creative destruction, and exchange in the sense of exchanging one stage of wealth for another.
[75] It is development in *Chapter XII of SSET 3rd edition.*
[76] It is *graphic 32 of SSET 3rd edition.*
[77] It is evident that the graph *Time of production* — the *triangle of production* — not only exempts the *"Hayek triangle"* but also *arises directly from the* ***law of wealth***, without the need to add interest or currency theory to explain both the production process such as the economic cycles - this as a consequence of the equivalence between marginal utility and interest, with which *more is said with less*.

that they represent the wealth produced as guided by the ascending tracing of the law of wealth, which explains the human actions of exchanging and destroying wealth, by which we warn the **creative human being**.

On the *abscissa* I have represented:

- Stages of production: 1st, 2nd,…, n-1, n.
- The time taken in each stage of the production process: t1, t2,…, tn-1, tn.

In the *ordinate* I represent the increasing marginal utility curve that is incorporated with each stage of production ($\boldsymbol{U_1}$, $\boldsymbol{U_2}$,…, $\boldsymbol{U_{n-1}}$, $\boldsymbol{U_n}$). What has enormous relevance in the SSET, since we know that $\boldsymbol{U = i}$, therefore the slope is the behavior of the production time.

Then the accumulated production at each stage arises through the surfaces under the curve ($\boldsymbol{\alpha_1}$, $\boldsymbol{\alpha_2}$,…, $\boldsymbol{\alpha_{n-1}}$, $\boldsymbol{\alpha_n}$), and the area of the total accumulated production $\boldsymbol{\alpha}$.

In this way I am considering all the variables involved in the wealth generation process: time, production stages and wealth (marginal and accumulated, of each stage and of the aggregate).

It should be noted that, since interest is the value-price of economic time, its low does not necessarily indicate the origin of more extensive productive processes in time, [78] since they can also be the origin of the production of new wealth, or multiplying the number of processes that take less time.

In addition to demonstrating the temporal aspect of wealth generation, two extremely relevant macroeconomic conclusions are corroborated: the *creative destruction of wealth* and the *theory of imputation*.

Creative destruction of wealth

It clearly emerges that each completed stage is "destroyed" to be incorporated into a new manifestation of wealth. In this way, through utility, we explain the concept of *creative wealth destruction* coined by Schumpeter, in line with Menger who explains economics only in terms of **utility** (value dimension), not in costs or prices.

Theory of imputation

As each stage incorporates the utility accumulated in it (αt), it is evident that its participation is being imputed to the final wealth of which it will be part. Which corroborates, as it could not be otherwise, the **equation of total wealth from the relative values (utility) of each of the manifestations of wealth that compose it** $\boldsymbol{v_{q(\$)} = v_{q1(\$)} + v_{q2(\$)} + \ldots + v_{qn(\$)}}$]. [79] That is, the SSET graphically also corroborates the arithmetic demonstration of Menger's **utility *imputation theory***.

It is important to note that we are referring to the temporal aspect of the production of all manifestations of wealth, which can be configured by wealth to destroy (consumption), capital

[78] It is foundation of some theories of business cycles.
[79] Equation presented in *SSET 3rd edition.*

(investment), or save. In this way we are imputing the wealth that is generated according to the final destination of it. [80]

Let us look at the powerful epistemological aspect implicit in the theory of imputation.

Epistemology of macroeconomics

The "triangle of production" presented clearly expresses that macroeconomics is made up of the aggregates of microeconomics, which makes the epistemology that explains the macro in terms of the micro, an entity without which it has no existence, necessary. With this we are dispelling the haze of the current state of macroeconomics that I have described, generated as a consequence of not having understood everything that underlay in the Menger's ***theory marginal subjective value***.

Another relevant epistemological aspect that subjective macroeconomics solves is of the inconsistency in what is called the economic *"compositional fallacy"*.

Macroeconomics of subjective economic evolution

The idea underlying macroeconomic equilibrium models is that of an economy that generates the same wealth that is destroyed. But if that is what it is intended to demonstrate, the ***Evolutionary Middle Point*** expresses it clearly, with the advantage that:

- It arises from the natural behavior of the four human actions guided by the laws of wealth and exchange.

- This natural economic evolution implies a growth with equity and natural solidarity, not an economic stagnation, which could be presumed when observing that in the EMP the marginal utilities of the four human actions are equal, BUT they do so at a positive level: $\boldsymbol{U_m = 2}$. [81]

The **theory of *Efficient and Equitable Economic Evolution*** (**E**$^{\mathbf{4}}$), of the *SSET*, maintains:

The ordinal and transitive character of ***marginal utilities*** *(U), which* **guide** ***human actions*** *that determine the distribution of wealth, based on its cardinal measurability*:

• *In descending order (highest to lowest) to generate and save wealth*: $\downarrow \boldsymbol{U_{(g,a)}}$.

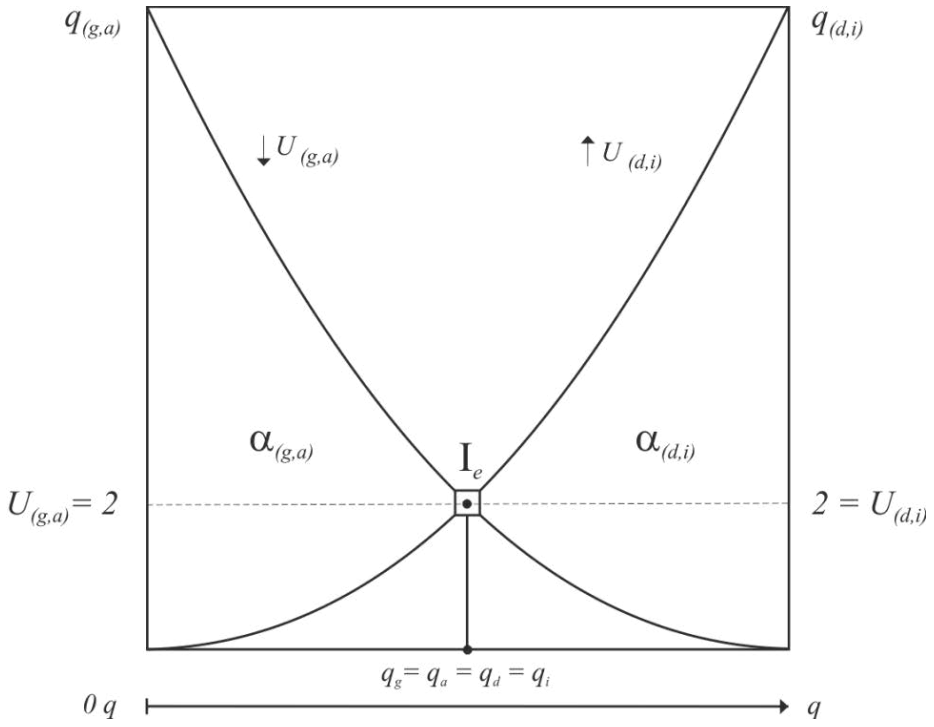
• *In increasing order (lowest to highest) to exchange and destroy wealth*: $\uparrow \boldsymbol{U_{(d,i}}$.

[80] This exempts having to refer to the fact that investment arises from savings, which could not explain the creative process of ideas, which generally "arise" in moments of leisure, when we assume that the brain is resting — I have experienced it on many occasions in my research assignment.

[81] It is corroborated by the statistics of the growth of the gross product of the last 150 years in the developed countries that maintained a reasonable state of validity of the laws of wealth and exchange.

This allows us to develop the graph of $\mathbf{E^4}$ by means of the **EMP** ($\mathbf{I_e}$) [82] according to the marginal behavior of the activities of generating and saving wealth [$\downarrow \boldsymbol{U_{(g,a)}}$], and destroying and exchanging it [$\uparrow \boldsymbol{U_{(d,i)}}$].

E^4 at the Evolutionary Middle Point (EMP)



The **EMP** ($\mathbf{I_e}$) arises from the ***closed symmetric box with origin at 0, from which emerge: the <u>decreasing</u> marginal utility curve of the wealth generated and saved ($U_{g,a}$), and the <u>increasing</u> marginal utility curve of the destroyed and exchanged ($U_{d,I}$)***. Both curves are identical, which makes facing them represents an exact closed box symmetry.

In the PME the marginal utilities and quantities of the four human actions coincide:

$$\boldsymbol{U_g = U_a = U_d = U_i}$$

$$\boldsymbol{q_g = q_a = q_d = q_i}$$

These equalities imply that any position of $\boldsymbol{q_{(g,a,d,i)}}$ that is not in the EMP (Equilibrium **I**ntersection: $\mathbf{I_e}$), will be driven towards it by natural laws. In EMP the economy is at a level of

[82] The following graph is similar to the one that I have presented under the title Neutrality of the economic measurement unit, in *SSET - 3rd edition*, to which I have only incorporated the terminology that we need to explain the consistency of the presence of $\mathbf{E^4}$ under the rules of the laws of nature.

evolution with the four human actions in harmony, [83] not in "equilibrium". All this because in the EMP it is presented simultaneously:

$$\boldsymbol{v_{(g,a)} = v_{(d,i)} = v_{q(\$)} = v_{\$(q)} = 1}$$ [84]

$$\boldsymbol{U_{(g,a)} = U_{(d,i)} = q_t / (q_t / 2) = \$_t / (\$_t / 2) = 2}$$

Then, each economy in a given space-time environment presents its:

EMP = 2

Precisely, because the EMP refers to the economic evolution (micro and macro) in a given space-time moment, then, given that with time everything changes, it is evident that we will have as many **EMP = 2** according to the space-time to which we refer. In this way we have:

$$\boldsymbol{2^E_{t1} \neq 2^E_{t2} \neq \ldots. \neq 2^E_{tn}}$$

What the ***subjective macroeconomics of natural economic evolution*** shows is that it presents a standard growth at a rate of $\boldsymbol{U_m = 2}$. [85]

With what has already been stated, we are in a position to synthesize economic calculation in subjective macroeconomics.

Economic calculation based on the subjective measurable value [86]

In SSET I have proceeded to the calculation of wealth based on relative values, which implies the following essential questions in economic theory and analysis:

- **Wealth** is the element of the economy.
- Wealth is the **subjective value** that human beings assign to **economic goods** (useful and scarce things).
- **Utility** is the **dimension** of value. La **utilidad** es la **dimensión** del valor.

[83] Which is not by chance since the ***general*** **equation of wealth** gives rise to the harmonic series, which implies the number e. Its development is in *SSET - 3rd edition.*

[84] The axiom of ONE of the relatives of SSET: $\boldsymbol{v_{(g,a)} * v_{(d,i)} = 1}$ y $\boldsymbol{v_{q(\$)} * v_{\$(q)} = 1}$, is fulfilled for relative values equal to 1, which only It is presented in the EMP — and in the economic unit of measure.

[85] See note 81 above.

[86] This was the subject of my doctoral thesis: *La importancia del CÁLCULO ECONÓMICO en la ACCIÓN HUMANA de MISES para la TEORÍA ECONÓMICA.* The evolution of the later developments is clearly appreciated, as I delved into the investigations.

- The economic calculation depends exclusively on the utility.

- **The subjective value is measurable** because it has dimension.

- **Relative values** arise from the marginal utilities of different manifestations of wealth (exchange or calculation), including those parts that make up an total aggregate (production process).

- The economy has a neutral unit of measurement, like all sciences, otherwise the economic calculation could not be carried out, due to the impossibility of measuring an infinity of entities without a transitive relationship that allows the use of the unit of measurement.
  The neutrality of the economic unit of measurement lies in its statistical origin of observed data, which arise from *inverse causality* (the dimension of the unit of measurement arises from and for each measure of wealth). [87] With its ***general*** **equation of wealth (decreasing marginal utility of wealth)** the SSET guarantees the conditions of the unit of measurement and neutrality of said dimension: $\boldsymbol{u = \$_t / W}$. This is given that it considers the marginal utility of the total stock of the economic good whose value will be considered a unit of measure ($\boldsymbol{\$_t}$), relative to the total wealth measured with it ($\boldsymbol{W}$). This implies considering the lower marginal utility of all the wealth to be measured, which, because it is contained in all manifestations of wealth, becomes the only common factor of the wealth set.
  The measurability of the subjective value is shown (it can be calculated) through the data that are observed (prices), which arise from the exchanges-calculations originated by the presence of the subjective value that gives rise to them.

- Reflecting on the absurd, the denial of the use of mathematics (measuring subjective value) in economics can be disqualified: *there is no economist who, defending the theory of subjective value, denies the data provided by money prices*. Which arise from the underlying presence of relative subjective values, entities other than relative prices. That is, without the relative values the price *data* used in economic calculations would not exist.
  Rejecting mathematics (measurement) in economics represents accepting that with the theory of prices the issue of value was already solved (J. S. MILL). This implies accepting the supply and demand curves as the origin of prices (instead of utility), which is equivalent to doing economic theory based on the theory of objective value.
  On the other hand, obtaining a neutral unit of measurement, obtained from subjective values, is a clear sign that it is measurable. This arises from considering that the neutrality of the dimension considered a unit of measurement is the raison d'être of the measurability that has it as a common calculation factor. [88]

In the theory of subjective macroeconomics we only need to know that:

- Wealth at currency prices is feasible to calculate from relative values. However, it should be noted that the observable entities are the currency prices, from which we can calculate

[87] Its development is in *SSET 3rd edition.*

[88] See Notes 12 and 17 above. Further development on the unit of measurement in science, and especially in economics, can be seen in my doctoral thesis.

the relative values that gave rise to them. In other words, we must not forget that relative prices arise from exchanges and stock calculations, which are determined by relative values. Situation that needed demonstration, such as the one provided by the SSET.

- Macroeconomics is *aggregate statistics of microeconomics*, which emerges from the values of, and for each, manifestation of wealth, which allow its numerical aggregation through the utility dimension, a feasible task due to the transitive relationship of the economic calculation (micro and macro) by a unit of measure (which must be neutral in the calculation). We have already seen that the statistical origin and the inverse causality, of the economic unit of measure are guarantors of its neutrality in the macroeconomic, which implies variability not constancy.

Natural economic evolution

Given that *subjective macroeconomics* maintains that the economy tries to maximize, not to balance — be it a currency world or without currency (both are a world of wealth barter) —, I next refer to the evolution of the economy according to this approach.

Let us see the synthesis that the *SSET* presents to us through what I called ***Natural Economic Evolution***, which expresses the chain of correlations between the variables that make up the macroeconomic:

Natural economic evolution [89]

$$\uparrow H_L \leftrightarrow \uparrow k \leftrightarrow \uparrow q_t \leftrightarrow \uparrow q_i \leftrightarrow \uparrow W \leftrightarrow \uparrow D \leftrightarrow \uparrow H_P \leftrightarrow \uparrow i_{\$} = v_{\$(q)} \leftrightarrow \downarrow \$_i \leftrightarrow \downarrow u = i_w = v_{q(\$)} \leftrightarrow \downarrow P_{q(\$)} \leftrightarrow \uparrow P_{\$(q)} \leftrightarrow \uparrow H_{\$}$$

Let us analyze the chain of correlations exposed in the box, ***which arise where the two natural economic laws (wealth and exchange) rule***:

The rise in labor $\uparrow H_L$ implies a rise in capital $\uparrow k$, [90] which together imply the rise in total economic goods $\uparrow q_t$, from which the increase in exchanges $\uparrow q_i$ arises; which is concomitant with the increase in wealth $\uparrow W$ — up to here Adam Smith´s division of specialized labor. In turn, given that $\uparrow W$: is equivalent to the increase in future credit (present wealth that is equivalent to the savings granted in future credit), [91] which is made up of that granted in availability to third parties $\uparrow D$ and that kept by the owners; the currency interest rate ($i_{\$}$) [92] increases, which is equivalent to the relative value of the currency with respect to the non-currency wealth

[89] In this correlation we identify: H_L = number of workers; k = Capital; q_t = total quantity of economic goods; q_i = quantity of economic goods exchanged; W = wealth monetarily measured; D = credit-debt; H_P = number of owners; $i_{\$}$ = currency interest; $v_{\$(q)}$ = value of the currency relative to wealth (equivalent to $i_{\$}$); $\$_i$ = amount of currency exchanged; u = economic unit of measure; i_w = interest wealth (equivalent to u); $v_{q(\$)}$ = value of wealth relative to currency (equivalent to $i_w = u$); $P_{q(\$)}$ = currency prices of non-currency wealth; $P_{\$(q)}$ = price of currency relative to non-currency wealth; and $H_{\$}$ = currency wage.

[90] The capital stock, generated by the man who creates wealth, is the essence of development.

[91] The development of it is in *Chapter XV-Saving and credit-SSET 3rd edition.*

[92] This according to the liquidity equation of the *SSET* currency: $i_{\$} = \$_t / W_i$, where W_i is wealth exchanged. See demonstration in the section *Correlation of wealth with currency interest*, in *SSET - 3rd edition* — **in $i_{\$}$ the cross correlation of the exchange is applied because it is the price of the entity currency wealth**.

exchanged $i_{\$} = v_{\$(q)}$; implies a fall in the amount of currency exchanged $\downarrow \$_i$, for units of each manifestation of wealth; fall in the economic unit of measurement ($\downarrow u$), equivalent to the interest wealth (i_w) [93] and the relative value [$v_{q(\$)}$] of non-currency wealth with respect to the currency $u = i_w = v_{q(\$)}$; decrease in currency prices $\downarrow P_{q(\$)}$; rise in the price of the currency $\uparrow P_{\$(q)}$; and rise in the real currency wage $\uparrow H_{\$}$.

In the ***Natural Economic Evolution*** exposed, it is interesting to highlight these "logical-deductive compartments":

Origin of wealth (*W*)

$$\uparrow H_L \leftrightarrow \uparrow k \leftrightarrow \uparrow q_t \leftrightarrow \uparrow q_i \leftrightarrow \uparrow W$$

Proprietary distribution of wealth

$$\uparrow D \leftrightarrow \uparrow H_P \leftrightarrow \uparrow H_{\$}$$

Behavior of the relative values and prices of wealth and currency [94]

$$\uparrow i_{\$} = v_{\$(q)} \leftrightarrow \downarrow \$_i \leftrightarrow \downarrow u = i_w = v_{q(\$)} \leftrightarrow \downarrow P_{q(\$)} \leftrightarrow \uparrow P_{\$(q)}$$

The *Natural Economic Evolution* has as corroboration:

- Pareto´s Law.
- Okun´s Law.
- Positive slope of the Phillips curve.
- Gini´s coefficient.
- The monetary economic cycles, which is explained based on the theory of price control (that s not exclusive to the currency or interest).
- The statistic that corroborates the PME = 2.

The fact that the currency authorities "intuitively" are oriented according to a currency expansion of 2% in systems where paper currency rules. Which "would imply" that the EMP of

[93] This according to the *SSET* wealth liquidity equation: $i_w = \$_t / W$, where W is total wealth. See demonstration in the section *Correlation of wealth with wealth interest*, in *SSET - 3rd edition* — **in i_w the cross correlation of exchange is not applied because it refers to the entity dimension of wealth**.

[94] This replaces, synthesizes and gives consistency to what is studied under the concept of "indirect transmission mechanism", and of **the relationship between interest and price changes, the epicenter of Hayek´s distrust of the level of economic theory** (which I treat in Annex II).

the SSET would act as a kind of "currency rule" [95] to judge the actions of the "currency authorities", as well as a "kind" of theoretical support, which today they lack to guide their actuate.

- *Currency policies*, by $\uparrow \$_t$, and / or induction to $\downarrow i_\$$, originate: $\downarrow v_{\$(q)} \leftrightarrow \downarrow P_{\$(q)} \leftrightarrow \uparrow P_{q(\$)} \leftrightarrow \downarrow W \leftrightarrow \downarrow H_L \leftrightarrow \downarrow H_P$. That is, these currency policies produce the opposite effects to the "benefits" with which they are promoted —because they are supported by the theory of objective value, from which a solvent economic theory cannot be built.

- *Gresham´s "Law"*: unnecessary in the presence of the **law of exchange** (SSET) that involves it, according to which: if the value of a manifestation of wealth decreases, the exchanges of it increase (circulation). Then a bad currency (which loses its value) will circulate instead of a good one (which retains its value).

- *Say´s "Law"*: as long as **an entity is or is not wealth**, (it cannot be and not be wealth at the same time) it makes no sense to postulate said law.

- *Supply and demand*: wealth to be such has to satisfy a need (demand) from scarcity (supply), therefore the *demand* for **wealth** ≡ the *supply* of **wealth**, whether it is demanded to exchange it or keep it in stock.

- *Unemployment*: in line with the fact that demand and supply refer to the same entity wealth, it implies that there is no unemployed wealth. Say again: wealth is, or is not, wealth. [96]
  We can treat the issue from two points of view:

  Objective value: The mere fact of considering the concept of unemployment of wealth could imply accepting the coexistence of two theories of value. This is because: according to the objective value the wealth would have a value per se, which is not appreciated by the subjective value, the difference "would" be what is considered unemployment.

  Subjective value: within the subjective value theory, the *SSET* makes it clear that it is not scientifically rigorous to consider the wealth that is not exchanged as unemployment, since it is equivalent to considering that its stock is not wealth. Specifically applicable to work, the fact that there is unemployed labor implies that the value that others are willing to validate to exchange is not accepted. We must not forget that action that does not generate wealth is not work.

- *Theory of well-being*: arisen from Pigou´s postulation that proposes to increase the general well-being through the redistribution of the wealth generated, from the poor to the rich. Theory supported by the fact that the *general* benefit arises as a consequence of the marginal utility of the wealth of a poor person being higher than that of a rich person. The

[95] With irregular credit-currency (PC) the issue is unavoidable, while the independence of the "currency authority" from political power is impossible. Will 2% be the least damaging "rule" while it is in existence?
[96] See note 55 above.

SSET showed that the marginal utility to consider is that of the wealth generated, not the relative utility between rich and poor.

- *Distribution of J.S. Mill*, who postulated a time to generate wealth and another to distribute it (underlying livelihood in Pigou), is replaced by the distribution theory of *SSET*, which imputes it to the simultaneous combination of the four human actions of generating, saving, destroying and exchange wealth.

- *Theories of the equilibrium of the two worlds*: the *SSET* demonstrated that **there is only one world, real and currency, whose behavior must explain the same economic theory**, where wealth is exchanged through wealth currency. Which implies that:

  > *Currency is present wealth, it does not emerge from nowhere, it is not a "virtual veil", nor does it have absolute value. The currency is a manifestation of wealth that satisfies the need for liquidity from scarcity.* [97]

  This theory arises from differentiating barter (exchange of wealth) with indirect exchange, with the use of currency. This differentiation assumes that currency is not wealth, since if we consider it as such, there is no difference between barter with exchange with currency, with respect to which wealth is exchanged. The currency is a technological innovation that multiplied the barter-exchanges, as the railroad did with transportation.

- *Theory of interest*: as interest is the decreasing *marginal utility* of wealth (***i* = *U***), no theory of interest is needed, it is already included in the **law of wealth**.

- *Currency theory*: as wealth is, it does not need any special theory. Currency is one more manifestation of wealth that is granted in barter, whose economic function is to satisfy liquidity to facilitate exchanges, which is manifested through its ***quantitative characteristic: the amount of exchanges is greater than its stock*** (Menger´s salability). [98] In other words, the currency must be interpreted as a technological advance that multiplied exchanges (exchange of wealth), otherwise we would have to have a theory of the railway. Human beings are constantly searching to find technological advances in the field of currency (bitcoin, cybernetics, etc.) that allow reducing wealth (marginal utility) destined to satisfy liquidity and avoid inflation.

[97] Considering that the currency is not wealth, directly or indirectly supported by all schools of thought, has been (and is) a consequence of one of the largest damages against humanity. **This error opens the way to state discretion**.

[98] Error of which I have only appreciated recognition in Hayek, who also developed currency theory in terms of *distinguishing barter from exchange with currency*, rather than circumscribing it to a technological advance that facilitated exchange (barter). His enormous intellectual capacity led him to state that *"something was wrong with economic theory."*

- *Theory of the economic unit of measurement*: the NECESSARY neutrality, of all units of measurement, in economics arises from an independent theory of the theory of currency — underlying Menger, which made explicit the *SSET*. [99]
  The variability of the economic measurement unit, demonstrated by the SSET, consists in appreciating that it is the only way to explain economic reality: the same economic measurement unit (price-value) can acquire different dimensions relative to the same economic good, in hands of different people, or the same person at different times.
  That is, only from the theory of the subjective value can explain the comparison between different manifestations of wealth, as well as the variations in its value over time, which is only feasible to do based on considering that the value is measurable and conceivable from a unit of measure whose dimension varies over time. [100]

- *Quantitative theory of wealth*: given that in *SSET* $\boldsymbol{i_{\$} = \$_t / W_i}$ e $\boldsymbol{i_w = \$_t / W}$ it appears that $\boldsymbol{i_{\$,w}}$ is **coefficients of liquidity** [101] (reverse rotation) of the stock of currency ($\boldsymbol{\$_t}$), as referred to exchanged wealth ($\boldsymbol{W_i}$) or total wealth ($\boldsymbol{W}$), from which the validity of widely used financial analyzes is inferred. That the liquidity index, in general use, equals the marginal utility of the currency is a corroboration of the spontaneous order that the theory must simply explain (as does the *SSET*).
  Furthermore, the *SSET* tells us that $\boldsymbol{i_{\$} > i_w}$ as a consequence of $\boldsymbol{W_i < W}$, which discredits any attempt to *anti naturally approximate* $\boldsymbol{i_{\$}}$ to $\boldsymbol{i_w}$ (currency policies), especially the claim to make $\boldsymbol{i_{\$} = 0}$, which implies that the currency ceased to be wealth.
  It is important to note that from the *quantity theory of wealth* arises what I called the *quantitative characteristic of the currency*: its exchanges-calculations are greater than its stock.

- *Aggregate demand*: given that the net wealth generated arises as a consequence of subtracting the wealth generated from the destroyed one, a theory that claims the growth of wealth by encouraging its destruction (consumption) has no support. This emerges from the concept of encouraging needs (aggregate demand) in order to increase the occupation of labor, wealth, etc. The chain of causalities of *Natural Economic Evolution* clearly shows that encouraging the destruction of wealth produces all the effects that are counterproductive to those intended: $\downarrow W \leftrightarrow ...$

- *Theory of economic cycles of monetary origin*: in *SSET* they are included in the consequences of all price controls, for which a special theory of cycles originating in the manipulation of the value-price of the currency does not merit. [102]

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[99] A compelling example of the independence of the theory of the economic unit of measure (**dimension**), of the theory of currency (**wealth** that satisfies liquidity), is evidenced by the existence of several types of currency that are named-quoted in oneself.

[100] **In other words, only the SSET offers an adequate theory to understand the reality that we all accept: the price of the currency is used as a unit of measurement, which varies over time. Because of the absurdity: if the economic mean unit does not vary, it is impossible to explain how the dimension of the same wealth varies (value of the same economic good)**.

[101] This confirms that the currency is wealth that satisfies the need for liquidity, which multiplies exchanges.

[102] Either via quantities or control of its price, which implies that the natural order is affected both by establishing "policies" of "quantitative currency expansion goals", or "inflation goals".

The foregoing tells us about the inconsistency of analyzing: 1) the influence of currency in terms of separating the consequences that it brings with respect to an economy where there is no currency (known as barter), and 2) that in a currency world it is currency is economically neutral, understanding as such "a world that works with currency but is not affected by currency." Theoretical attempts involving any of these circumstances:

Currency like wealth: what is currency is not be wealth since it can never be neutral (it has value).

Neutrality of the currency: to require the currency to be neutral is to attribute to it the conditions of a *unit of measurement*, an entity in which neutrality is a *necessary and sufficient condition*. But the unit of measurement refers to the scope of the **dimension**, not the **wealth**, to which the currency belongs.

The inverse causality of relative prices-values, applied to the currency in its function of economic measurement unit (*SSET*) — by making its dimension emerge from the measured wealth magnitudes —, *guarantees the necessary and sufficient conditions of neutrality of all unit of measurement, which it does through its* ***variability****, not constancy*.
It follows from the foregoing that theories that explain business cycles outside of the general theory of price control do not consider the independence of the theory of the economic unit of measure from the theory of currency.

Consequences of currency manipulation: the chain of correlations of Natural Economic Evolution allows us to appreciate the consequences of imposing prices outside the natural economic order. To visualize the effects, just start the chain of correlations exposed: $\downarrow \boldsymbol{P_{\$(q)}} \rightarrow \downarrow \boldsymbol{v_{\$(q)}} \rightarrow \downarrow \boldsymbol{W} \rightarrow \ldots$ [103] [104]

Based on *natural economic evolution*, it will not be difficult for us to identify the institutions that affect it, as well as to understand their consequences.

Macroeconomic institutions that affect the microeconomics

Since macroeconomics is a statistical calculation added to the calculations arising from microeconomics, here I refer to human decisions that, without noticing this causality, institutionalize an order of decisions inverse to that mentioned. For this reason, these institutions affect the natural economic order arising from causality: *microeconomics determines macroeconomics, and that relative values determine exchanges, from which prices arise, which fulfill the function of data in macroeconomic aggregates*.

From *subjective macroeconomics*, it is a simple task to understand that the institutions that affect the natural economic order are those that undermine its foundation: *the subjective value manifested in freedom*.

[103] See *Chapter XIX - Capitalism affected in SSET 3rd edition*.
[104] The "currency policies" that seek to balance what would be unbalanced, constitutes a true, and unacceptable, scientific determinism, which implies leaving the destiny of many in the hands of the few.

Although the economic calculation is done using the observable money prices [$P_{q(\$)}$], by the SSET we know that these are mere coefficients (data) of quantities exchanged (calculated) that arise from the subjective relative values expressed currency [$v_{q(\$)}$]. That is, it is the relative values that explain the **natural logical causality of the price data**. From there I derive the: [105]

The natural causality of economic calculation

The relative values *determine* relative prices

$$v_{q(\$)} \rightarrow P_{q(\$)}$$

From this we deduce that price impositions imply reversing the natural causality of economic calculation

ANTI-natural causality of economic calculation

$$P_{q(\$)} \rightarrow v_{q(\$)}$$

Imposing prices *affect* relative values

Causality that summarizes the impact that occurs to the *Natural Economic Evolution* when unnatural prices are imposed, which will affect the relative values, which must be adapted to the new compulsory legal order.

It is important to note the use of the term **affect** because, once the ANTI-natural prices are imposed, by the laws of nature (wealth and exchange) mean that the relative values must be adapted to the new institutional reality that altered the natural order. In turn, the new unnatural relative values will cause changes in prices ... from which the "cycles" arise.

Not appreciating the natural logical causality of economic calculation arises from the failed theories based on objective value, which excludes the human being from the economy because it assumes that economic goods have value *per se,* from which economic "theories" arise that seek to explain from the quantities of economic goods (prices), without considering the values that originate them. [106] The way in which objective value was implemented (which many

[105] In *SSET 3rd edition*, and previous writings, I have called it *natural causality of the value-price relationship*, but it seems to me of greater rank to refer to the economic calculation, since it also includes the calculation of the wealth not exchanged.

[106] It is an inconsistency of mentioning data without referring to the state of the theories that support them.

subjectivists did not notice) was assimilating price and value, a foundation adopted from J.S. Mill, [107] from which the Marshallian supply and demand curves emerge as the origin of prices.

The unnatural causality of economic calculation can be carried out through different institutions:

- Taxes, tariffs, subsidies, etc.
- Price control (maximum prices, minimum wages,…).
- Direct intervention in quantities of economic goods (bureaucracy, rationing,...).
- Currency policies: manipulating the amount of currency or its price the interest.
- Expropriating international trade, through state intervention of all income and outflow of foreign currency.
- Customs barriers.
- Disrupting the exchange (such as epidemic quarantines).
- Establishing unique and compulsory unions.
- Etc.

In ***Subjective and Solidarity Economic Theory (SSET)*** - 3rd edition I have developed the consequences of each of the institutional forms of altering the natural order. To understand its consequences, we only need to reverse the chain of causalities of Natural Economic Evolution:

ANTI-natural economic evolution

$$\downarrow H_L \leftrightarrow \downarrow k \leftrightarrow \downarrow q_t \leftrightarrow \downarrow q_i \leftrightarrow \downarrow W \leftrightarrow \downarrow D \leftrightarrow \downarrow H_P \leftrightarrow \downarrow i_{\$} = v_{\$(q)} \leftrightarrow \uparrow \$_i \leftrightarrow \uparrow u = i_w = v_{q(\$)} \leftrightarrow \uparrow P_{q(\$)} \leftrightarrow \downarrow P_{\$(q)} \leftrightarrow \downarrow H_{\$}$$

Given the correlation nature that exists between the variables, the institutional alteration of the evolutionary economic chain can begin from any of them, continuing through all the others, according to the institutionally affected variable. [108]

Economics and politics

Given the correlation nature that exists between the variables, the institutional alteration of the evolutionary economic chain can begin from any of them, continuing through all the others, according to the institutionally affected variable.

It is worth closing this chapter by answering these two questions: *Should economics include to the politics*? And, *Should politics include to the economics*?

It is worth closing this chapter by answering these two questions: *Can economics include politics?* And, *Should politics include economics?*

Questions that are not raised regarding physics, as its natural laws leave no room for politics. From there we derive that the existence of the questions implies that the economy does not have natural laws with the scientific rigor of physics.

[107] It is generalized by the failed "ingenuity" of Jevons. This development is in *Annex II of SSET 3rd edition*.
[108] The interruption of exchanges due to an epidemic quarantine would begin with $\downarrow q_i$.

This work aims precisely to provide scientific rigor in economics, the only way to generate natural laws, and eliminate these two questions that reveal the degree of immaturity of economic science.

The framework of fallibility of the human being (lack of information) that conditions their actions is not a reference to disqualify the scientific rigor feasible to achieve, which must be considered within the probabilistic scope, as do the "exact" sciences (quantum, Heisenberg's uncertainty principle, Gödel's incompleteness theorems,…) without impeding their scientific rigor. This work shows that macroeconomics is a simple statistical tool of microeconomic aggregates, reason for which those that arise from the microeconomic sphere must be respected as natural laws: **law of wealth and law of exchange**.

The subjective macroeconomics and Menger

Before concluding with the main body of this work, I think it convenient to elaborate a little more on why this work does not have the title of *"Austrian Macroeconomics"*.

The Subjective Macroeconomics that I have developed - based on Menger, the *Theory of Economic Relativity* (*TER*), and the *Subjective and Solidarity Economic Theory* (*SSET*) - clearly shows that Menger did not need, as neither *TER* and *SSET*, the development of special theories about *currency, interest, credit,* and *cycles.* [109] Let us see each of them:

Currency theory: because it is wealth, a *"special"* theory is not necessary to demonstrate the presence of subjective value —like all wealth, currency behaves according to the **law of wealth**. From there it arises that: the only possibility of claiming that the currency is subject to said law is the absurdity of considering that THE CURRENCY IS NOT WEALTH. Which implies not realizing that this is the domain of the **dimension** of wealth, an area in which its relative price-value is considered a *unit economic of measure* (which is not the domain of **wealth**), which arises from the *inverse causality of the relative economic in the ambit of the unit of measurement*. [110]

[109] Developments in which the exponents of the Austrian School were, and still are, involved, that is why I did not choose the name Austrian Macroeconomics.

[110] But, as we saw, the *SSET* demonstrates the neutrality of the currency as a unit of economic measurement by applying reverse causality in the currency as a unit of measurement, there is no neutrality in the currency as wealth. On the other hand, for Mises the subjective value of the currency will be determined at the moment of the exchange, he does not realize that *in all exchange the relative values of the pre-existing wealth that are exchanged are determined. That is, the currency does not become wealth in the exchange. On the contrary, it is exchanged for being wealth*.

Proof of this is the inconsistent question that Mises (1997) himself asks himself, precisely referring to Menger's **"forgetfulness"**: "what are the determinants of the objective exchange value of money?" (P: 91). Question whose answer is simply: **LIQUIDITY (from Menger)**: **THE NEED THAT THE CURRENCY SATISFIES SINCE THE SCARCITY**. Mises wanders with the absurd concept of "objective" in the midst of subjective value, and *this as a consequence of having to go to look for the subjective value of currency in the "objective" exchange value of another manifestation of wealth* (that by which will be exchanged). That is an unnecessary proposing because would fit in any economic good destined to exchange, in addition to DENY the subjective theory of value itself, which is implicit in denying the need for liquidity, the origin of wealth, currency. In other words, Mises did not understand Menger: currency arises to satisfy the need for liquidity from scarcity, which implies saying that it is wealth; BUT given that this is difficult to accept, the only explanation for Mises´s error is to assume that

Theory of interest: as interest represents the variation of wealth over time [111] and the value-price of economic time, the *Law of wealth* (marginal utility ***U***) expresses to the interest: $\boldsymbol{U = i}$. [112]

Credit theory: as credit is exchange of wealth in time (intra or interpersonal) and, since *interest is the value-price of economic time*, then *the interest is the value-price of credit*. In other words, credit does not merit a special theory of subjective value either. [113]

Cycle theory: given the natural economic evolution, which arises from the validity of the natural laws of wealth and exchange, we could say that Menger did not make explicit the unnatural (institutional) circumstances that could "cyclically" alter that natural order. BUT, if he had developed the subject, I have no doubt that I would have treated it with simplicity within the framework of subjective value, without ad hoc theories ― as the *SSET* ended up doing.

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he tried to explain the economic unit of measurement from the theory of currency, then, his entanglement does not escape that of all current theory ―stated by Hayek.

In tune with J.S. Mill, a failure in the theory of value implies inoculating generalized inconsistency in the economic theory that derives from it. Then, to fail in the theory of the value of currency, in economic theory is of a greater scope than in any other manifestation of wealth.

Finally, Mises´s question implies that the relative value of the currency is always one, given that $\boldsymbol{U_{\$} = U_{q}}$.

This footnote arises motivated by a very interesting exchange of letters with Manuel Polavieja.

[111] To which, without the precision of the SSET, that Menger alluded accord to quote that I have presented in the text.

[112] It is worth assimilating this concept with those of gravity and acceleration in physics.

[113] Here it is worth remembering the broad concept of credit (***SSET – 3rt edition – Chapter XV***) equivalent to the available wealth that is offered as credit for the future, whose availability can be lent to third parties (credit-debt) or preserved.

Annex I - The current objective macroeconomics

Objective basis of current macroeconomic models

All known macroeconomics starts from the concepts of "supply" and "demand". [114] Let us then see the sub-world of current objective macroeconomics, specifically referring to its essence: *the intersection of the "supply and demand" of an economic good determines it price*:

Demand: it is the amount of economic goods that human beings want and can buy at a given price, in a **given** space-time area.

Offer: it is the amount of economic goods that human beings want and can sell at a **given** price, in a specific space-time area.

Wealth exchange: an act that occurs when supply and demand are equal. [115]

Price: coefficient of exchanged quantities, which arise from the intersection between supply and demand.

Let us see, according to the ***SSET***, the inconsistencies present in the entities used by *objective macroeconomics* to make economic theory:

- The category of **wealth** (***supply***) that satisfies human **needs** (***demand***) from scarcity (***economy***), comprises supply and demand that refers only to the exchanged wealth. In other words, all wealth cannot be explained from the exchanged supply and demand subsets.

- It is inconsistent [116] to define the demand and supply of economic goods according to their prices, together with asserting that demand and supply determine those prices - a vicious circle that invalidates all economic theory based on the fact that supply and demand determine prices . [117]

- The concepts of economic demand and supply refer to the need that can be satisfied otherwise they do not belong to the field of economics. Inconsistency that the ***SSET*** does not present as it considers the **total** stock (flow) of wealth destined for the needs (demand) that can be satisfied (supply), not only the exchanged (to which supply and demand alludes).

[114] A renowned economist went so far as to affirm that: if you know the supply and demand curves, you know economics.

[115] Be it interpersonal (an individual chooses in time) or intrapersonal (between different individuals), which is what the "supply" and "demand" of *objective macroeconomics* specifically allude to.

[116] It can be seen that the price of an economic good is determined without making it relative to another manifestation of wealth, since the **given** *monetary price*, to which they refer, arises from curves relative to an "absolute", "virtual", or "neutral" currency, not to another manifestation of wealth, which can never be neutral.

[117] This reflection invalidates the criticism made to the classical school regarding vice: *costs determine prices, but prices arise from supply and demand* (since they do not determine it either).

- The concepts of demand and supply, which determine prices, arise exclusively from the wealth exchanged — with the inconsistency noted that the wealth exchanged depends on prices — a circumstance that does not allow a price to be assigned to the wealth not exchanged.

- The act of exchange arises from the ***relative values*** [*equation of exchange* $\boldsymbol{U^{r}_{x(y)} = U_x * v_{y(x)} = U_y}$], from which the exchanged quantities that determine prices arise. That is, the exchange-calculation does not arise from the intersection between "supply" and "demand".

We can well synthesize the inconsistency of economic theory based on supply and demand, in which it tries to explain statically (prices) what a dynamic explanation needs (origin of prices). Which is to finish assuming that the current economic theory remained in the epistemological objectivism of Jevons´s "ingenuity", instead of doing economic theory from the subjective marginalism of Menger: where the subjective values of economic goods determine **total** wealth, from which arises the ***part*** that will be exchanged-calculated; if it is, the relative values that determine the observed-calculated prices arise.

In the preceding paragraph I have highlighted the term ***part***, in order to reflect that it belongs to a higher **total** quantity, from which the *marginal utility of each unit that composes it arises*. [118] In this way, the *marginal utility of the unit that corresponds to the exchanged-calculated quantity is lower than that of the preceding unit and higher than that of the subsequent unit*. Then, if we stick only to the quantity exchanged (present at the intersection of supply and demand), it fulfills the function of ***total*** quantity, not of part of the wealth to which it belongs, which invalidates the consistency of the data that is obtained by only considering the quantities that arise from the prices: **by considering the exchanged parts as totals**. It follows that prices do not determine exchanges, but are a consequence of them, which arise from the subjective valuation of all available wealth. [119]

Due to the notable inconsistency, it is that economic theory was forced (ad hoc) to assign a *"temporary role to prices"*, a task that corresponds to the values that arise from considering total wealth. [120] Clear signs of the fatal error are the existence of a multiplicity of theories, contradictory and inconsistent, regarding the currency, interest, prices, occupation, cycles, etc.

Given that the current macroeconomic has *economic goods* as an economic entity — because it explains in terms of their quantities (prices), instead of considering **wealth** as an element of the economy (subjective values assigned to economic goods) — it is prudent call it ***objective macroeconomics***. Given that it requires the presence of the objective theory of value that assigns value *per se* to economic goods, without the need for man to value it, that is, the economic good *is unusually assigned the power to define utility and scarcity of things, which man considers wealth*.

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[118] This "forgetting" is present in the Jevons graph, where it crosses ***part*** of the marginal utility curves of two manifestations of wealth, which underlies its *declared impossibility of finding a dynamic* (geometric and algebraic) exit from the static one. *Task that he believes is impossible, for which he is satisfied with his static epistemological "ingenuity"*, with which he believes he has solved **the problem of value that belongs to the dynamic world**.

[119] The marginal utility of unit 6 over a total of 6 units is not the same as that of unit 6 out of a total of 10 units.

[120] The reason for Hayek´s dissatisfaction with the state of economic theory, the origin of which was that economic theory had deviated from Menger´s subjective marginal utility, which he failed to notice.

Next I am going to present in a synthetic way the inconsistencies that, at first glance from the ***SSET***, can be seen in the best-known theoretical proposals.

Macroeconomics of equilibrium S = I

From the SSET it appears that saving (***S***) is the accumulated net wealth (***W***) at the end of a period (***W* = *S***), [121] which is formed, according to the model under analysis, by capital-investment wealth (***I***) and consumption-destruction (***C***):

$$W = S = I + C$$

Given that the *"macroeconomic equilibrium"* that we know implies:

$$S = I$$

Then, the condition for the known *"macroeconomic equilibrium"* to be fulfilled is:

$$C = 0$$

The error of assuming the equality of saving and investment arises from the failed idea that if there were no possibility of investing, there would be no saving. Let us look at the inconsistencies here:

- The *SSET* expresses that the equality to be considered is the one that exists between present wealth (***W***) and savings (***S***). Present or saved wealth (***W* = *S***) whose destination can be: consumption, exchange, speculation, investment, etc. That is, while ***W* = *S*** implies considering all types of wealth (stock or flow), that of ***S* = *I*** considers only the capital wealth (***I***).
  To appreciate the preceding reflection, it is worth mentioning that the origin of ***S* = *I*** is the tautologies present in the definitions of stock of wealth (***W***) or wealth flow (income-income ***Y***) involved:

$$W(Y) = C + I = C + S$$

- Models that assume ***S* = *I*** are forced to incorporate *ad hoc* other "motives" as the destination (origin) of wealth: transaction, speculation, hoarding, etc. This *ad hoc* shortcut can be seen mainly in the resource used to explain demand-supply in the *"special theories of currency and interest"*, which corroborates that ***$ ≠ I***.
  Once again the sentence of J.S. Mill referring to the fact that an error in the theory of value inoculates inconsistency on all economic theory.

- Referring to equality between saving and investment is not the same as stating that without saving there is no investment.

[121] Since the concept of income or rent is the variation of wealth, it is the same to refer to the stock or flow, which is the way in which the *S = I* model is exposed (income or rent).

- In *subjective macroeconomics*, it makes no sense to postulate that all investment arises from prior saving, since all wealth is generated by human action, which contemplates existing wealth. If the origin of capital were only existing wealth (accumulated savings) humanity would not have been able to evolve as it did, since the stock of wealth of ideas does not exist as saved wealth. Yes: **the creative man is the origin of economic evolution**, a creation that arises from ideas and makes up the stock of accumulated knowledge. [122] **This is how subjective macroeconomics gives wealth entity to economic ideas**. [123, 124]

IS-LM model

As we have already seen, the ***S* = *I*** model makes the mistake of wanting to make prices play a temporary role, a temporality that is exclusive to value. Given the difficulty that this entailed, the theory was necessary to incorporate interest ad hoc to "close" the inconsistency of making prices assume that temporary role. [125] That it does by incorporating to the interest as one more ingredient as a determinant of *"aggregate demand"*, a task it performs through the ***IS-LM*** *model, considered the core of modern (objective) macroeconomics*.

I am not going to stop at the graphic or algebraic exposition of the curves:

- ***IS*** corresponds to the market of the "interest of economic goods" compatible with the equilibrium ***S* = *I***. It refers to the **"non-currency real world"**.
  Thus, the *"interest of the economic goods"* (in the ordinate) has a *negative slope* with respect to the increase in wealth (abscissa).

- ***LM*** corresponds to the market of "monetary interest" compatible with the equilibrium ***S* = *I***. It refers to the **"non-real currency world"**.
  Thus, the *"money interest"* (on the ordinate) has a *positive slope* with respect to the increase in wealth (abscissa).

- The ***IS-LM*** "equilibrium": it is defined at the intersection of the ***IS*** and ***LM*** curves. Equilibrium that guarantees the tautology of the imprecise equation-equivalence ***S* = / ≡ *I***, simultaneously for the two worlds, the **"non-monetary real"** and the **"non-real monetary"**. Equilibrium that the ***SSET*** does not need for two reasons: it works with **a single world that is real and monetary**, which by axiom is always **in disequilibrium**: ***S* ≠ *I***.

As can be seen, in terms of the ***SSET***, the IS curve refers to ***wealth interest*** (i_w) and the LM curve to ***currency interest*** ($i_\$$). In turn, the ***SSET*** has shown the correlation between both interest rates and wealth:

[122] The available technology is the materialization of the ideas that gave rise to it. Thus, learning to use technology is to incorporate accumulated theory.
[123] SSET integrates *World 3*, that of Popper's ideas, into the field of economics.
[124] Therefore subject to the wealth-owner axiom and the laws of wealth and exchange.
[125] As you can see, not only Hayek appreciated this inconsistency. Proof of this is that the Austrian School would also incorporate the ***S* = *I*** and ***IS-LM*** models, an issue that Menger would never need — nor the *SSET*.

$$\uparrow W \leftrightarrow \downarrow i_w \leftrightarrow \uparrow i_\$$$

That is, the *SSET* demonstrates the correlations that the ***IS-LM*** curves fail to explain. Thus, the ***SSET "model"*** outperforms the ***IS-LM*** curves since: ***"apparently it says the same thing"*** in a simpler way.

BUT the *IS-LM* and *SSET* models do not say the same. Let us see what underlies as a relevant question that reveals the inconsistency of the ***IS-LM*** curves, which the ***SSET*** does not present.

The ***IS-LM*** curves arise from the I = S equilibrium that does not exist, which is why it cannot explain the real world. That is why the "monetary policy", which is derived from the ***IS-LM*** model, from lowering the monetary interest ($\downarrow i_\$$) so that they rise: wealth ($\uparrow W$), employment ($\uparrow H_L$), wages ($\uparrow H_\$$), etc. ..., generates the opposite effect to the one sought

$$\downarrow i_\$ \leftrightarrow \downarrow W \leftrightarrow \uparrow i_w$$

$$\downarrow W \leftrightarrow \downarrow H_L \leftrightarrow \downarrow H_L$$

In other words, the ***IS-LM*** model cannot explain economic phenomena, [126] and this is a consequence of describing a reality that does not exist, present in these inconsistent foundations:

- To hold that the interest determines wealth (even if it is presented as a dependent variable in the ordinate), instead of seeing it as dependent on it. Which implies support in the theory of objective value, which seeks to understand reality from prices and not from the relative values that determine them, in this case that of *wealth economic time* through its *value-price interest*.
  This situation can only be seen in the inconsistency of make emerge interest rates in a world of equilibrium that does not exist, that of $S = I$. By the other hand in the SSET the correlations between wealth and interest are maintained for any level of wealth, which occur in the real world where $S \neq I$.
  In other words, the correlations between currency interest and wealth with wealth, which appear to have the same behavior in the ***IS-LM*** model and the SSET "model", are not, since they represent completely different entities.

- The ***IS-LM*** curves cannot explain what happens in an unbalanced world, such as the real one. The reason for this is that objective macroeconomics sees the imbalance of reality as an anomaly, which it wants to "amend" by changing the natural causality where values determine prices ($v \rightarrow P$), by the ANTI-natural causality whereby prices alter values ($P \rightarrow v$). What is "legally" institutionalized with the aim of *"making the economic imbalance disappear"* which *objective macroeconomics* believes exists.

- The most evident demonstration of the disagreement between the models of objective macroeconomics and that of subjective macroeconomics is revealed by noting that:

  In the ***IS-LM*** model the equilibrium $i_\$ = i_w$ is assumed. It is a theoretical foundation of currency policies to bring them together.

[126] Situation reported on Barro and Hayek quotes.

In the ***SSET*** *"model"*, by axiom $i_{\$} > i_w$. Theoretical foundation that explains the failure of currency policies to attempt the naturally impossible, [127] as well as the demonstration that the origin of currency business cycles is explained by price control theory - no need for cycle theory.

It clearly emerges that economic institutions, counterproductive to the natural economic order, are the consequence of ***objective macroeconomics*** that serves as their "theoretical foundation".

Thus, ***subjective macroeconomics*** constitutes the economic theory behind which Hayek was [128] which he could not discover as a consequence of the fact that all the economic theory [129] assumed that value and prices were synonymous, which is why they ***believed*** they were in subjective micro-macroeconomic terrain.

The general equilibrium of Walras

Given that one of the most popular expressions of current macroeconomics is represented by the *Walrasian general equilibrium*, I think it appropriate to refer to it. [130]

In terms of the briefness of the exposition, some quotes from Eric Roll (1994) are worthwhile, who appreciates that Walras noticed (imprecisely by the way) the difference between the currency like medium of exchange and like the unit of measure:

> "… Walras did not say clearly if he conceived that operations could be carried out at prices outside of equilibrium or not; if they can be done, obviously the ratios of the participants' marginal utility change, as do their demands and supplies. Consequently the equilibrium price will be different than it would have been otherwise. If no transactions are verified, the Walras equilibrium arises…" (P: 358)

In this quote it is appreciated that the *Walras equilibrium* only refers to the exchanged wealth ("inside or outside the equilibrium"), it does not include to the non-exchanged wealth, which is also wealth (it has positive marginal utility), which influences the exchanged as ***the marginal utilities that determine the exchanges arise from considering the entire stock of wealth***.

It is extremely important to give it the dimension that corresponds to the observation that I reiterate in the preceding paragraph, while Roll´s criticism of the Walrasian equilibrium model (like all theory) only makes mention of the exchanges carried out outside of the "equilibrium" (a simple technical detail that is theoretically inconsequential), forgetting the lower marginal utilities of stock that is not exchanged, which are precisely those that define exchanges. [131]

Let us look at another quote from Eric Roll (1984):

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[127] This is due to the fact that $i_{\$}$ arises from the exchanged wealth subset (Wi), which is lower than the total wealth set (W): $W > W_i$. Then, unfailingly $i_{\$}$ is determined at a lower level of wealth than that which is determined i_w, then, by the law of wealth it appears that $i_{\$} > i_w$. The broad development of the topic can be seen in *Chapter XIV - Economic time - Interest - in SSET 3rd edition.*

[128] It, as we saw, was very dissatisfied with the current theories. He perceived (rightly) that they were working on quicksand, since reality could not be explained - without realizing why.

[129] It is without distinction of schools of thought (whether by theory or epistemology).

[130] Especially since together with Menger and Jevons they started marginalism in economics. BUT, Walras and the epistemologist Jevons, did it in an objectivist framework, as opposed to Menger's subjective marginalism.

[131] It is precisely what Menger´s marginalism alludes to, which expresses exchange as a function of the marginal utility of the first unit that is not exchanged.

> "Here too Walras uses a resource of his invention: that of the "numerary "(numéraire), which is a commodity that is used as an account pattern. But it is not currency, in the ordinary sense of the word, because Walras assumes that it is merely a unit of account and that there is no demand for it other than for its non-currency qualities. The use of this resource allows us to say that if there are n goods, we have n-1 equations of supply and demand (that of the numéraire is derived from the others) and n-1 unknown prices that must be determined. This means, says Walras, that there is a certain solution to the general equilibrium problem. The method of analysis employed by Walras provides a picture of the general system of the interdependence of prices, demands, and supplies; **but it is weakened by the aforementioned obscurity of his method of relating it to marginal utilities**. (P: 358).
> NOTE: own bold on original text.

It is clear that Walras did not notice that:

- The unit of measurement emerges as a mere coefficient of the aggregates of wealth subject to measurement (exchange or calculation), which determined its value-price in each measurement.

- The *economic unit of measurement is not wealth* therefore there are not n commodities, but ***n-1***. That is, it does not realize that *currency is wealth*, which is included in the ***n-1*** commodities, while the *"nth commodity"* (***n***) is the economic unit of measurement, which is not wealth but arises as a simple coefficient that considers to all goods with it measured (***n-1***).
  The contradiction of considering currency alternately as wealth (merchandise) and as a unit of account that is not merchandise, BUT that tries to calculate based on considering it wealth (merchandise), is appreciated in Walras. [132] Contradiction of ambivalence present in all current economic theory (absolute price of currency, virtual currency, currency that is not wealth, currency that is wealth but is neutral, currency that arises out of nowhere, etc.).

- The unit of measurement is independent of currency theory.

- The Walras numéraire is, according to the *SSET*, the marginal utility of the last unit of wealth, which is the lowest of all of them, therefore it is a common factor included in all manifestations of wealth. Then, given that Walras only considers the exchanged wealth (origin of "equilibrium"), which is less than total wealth, it follows that numéraire can only arise from total wealth, not from exchanged wealth, which confirms the concept of economic unit of measure of the *SSET*. [133]

The Walras equilibrium model is a true reflection of the current state of macroeconomics, where the economic unit of measurement does not arise as a simple statistic of aggregated microeconomic data. On the contrary, it is a model that attempts to develop a macroeconomic theory, without realizing that it is a mere statistical technicality of aggregate data. Proof of this is the final part of Eric Roll´s quote: **"but it is weakened by the aforementioned obscurity of his method of relating it to marginal utilities"** which is a devastating blow to any economic theory that is not based on value subjective microeconomic, from which prices (relative values through)

[132] Present at the beginning of the appointment: *"... the "numerary" (numéraire), which is a commodity that is used as an account pattern"*. It is without noticing that it is the dimension of the value whose merchandise is used as a unit of measurement, not the merchandise (wealth).
[133] Here it is worth remembering that: $\boldsymbol{i_{\$} > i_w = u}$.

arise as data that feed macroeconomic statistics. Eric Roll does not notice that Walras applied marginal calculus within the framework of objective value theory, which is why he would never use marginal utility, which is the dimension of subjective value, in his models — a situation that would only come to light with the ***SSET*** at the beginning of the 21st century.

But Eric ROLL continues his excellent synthesis of the Walras model:

> "… Walras gives another set of equations that inverts the Jevons procedure and takes prices rather than quantities exchanged as independent variables. It states that, given certain prices, each individual will proceed to change accordingly until the ratio of the marginal utilities of the two merchandise is equal to his exchange ratio. This gives us certain functions of supply and demand, a number of equations equal to that of unknowns, and with it a certain equilibrium. It has recently been argued against this reasoning that, like Jevons, it actually separates the causal-genetic problem, that is, the problem of the origin of price, from its roots of subjective value. This judgment seems justified, **and makes Walras an important initiator of the modern trend, which is to abandon the investigation of the origin of value in favor of a purely formal but absolutely general theory of functional interdependence."** (P: 359).
>
> NOTE: own bold on original text.

This quote clearly reflects the current state of economic theory, and perfectly locates the contribution of ***SSET*** to the science:

- Walras, like all theory, terminated the study of value (a statement by J.S. Mill to which Jevons epistemologically adheres, as stated here by Eric Roll), because prices were sufficient. It does so by leaving aside the causal-genetic problem (of prices in the subjective value that determines them) and conforms to a purely formal but absolutely general functional interdependence. It is the origin of the current macroeconomics that ignores its microeconomic roots and is satisfied exclusively with the data (prices) and their variations - Jevons to one hundred percent.

- Walras takes prices as independent variables, "rather than the quantities exchanged", that implies ignoring that first are coefficients of the seconds — relevant error at the level of Jevons and Walras, especially at the first, as he was a subjectivist theorist.

- The paragraph: ***"****... makes Walras an important initiator of* ***the modern trend, which is to abandon the investigation of the origin of value in favor of a purely formal but absolutely general theory of functional interdependence.",*** **is an excellent synthesis of the state of the objective macroeconomic**s formalized by abandoning subjective value to conform to the formal technique that arises from objective value (quantities represented in prices). It confirms that the issue of value was terminated, as postulated by J.S. Mill. In this theoretical framework, Jevons´ objective epistemological "ingenuity" would become the required *general formal technical* support, serving as the foundation of Walras´ *general equilibrium*. In this way we have the clear picture offered by *objective macroeconomics*.

- Thus, only the ***SSET*** deals with reestablishing Menger's subjective marginalism, solving the dissatisfaction that Hayek manifested with respect to the *"modern trend"*, which had nothing to do with modernism, as economic theory returned to the objectivism, only that now in a "marginal format".

- The current theories do not warn that the category of "currency veil" [134] [135] that they assign to the currency, refers to the economic unit of measurement (which is neutral), which belongs to the **dimension** entity, not to the currency, which belongs to **wealth** entity, which cannot be a "neutral veil" because no one would accept it in the exchange: there is no exchange of entities that are not wealth —then, currency is wealth. [136]
  The preceding paragraph includes the post-Menger Austrian School, for example this quote from Mises (1997) suffices:

  > *""As there is no direct relationship between money as such and human needs, individuals cannot form an idea of its usefulness, and therefore of its value, other than by assuming a certain purchasing power." (P-84)*

  For Mises, money is not wealth, since it does not satisfy human needs but through what can be bought with it, [137] *which is equivalent to NOT considering liquidity as a need that is satisfied from scarcity*. [138] [139] It is VERY IMPORTANT to note that it is the same foundation that Hayek uses, with the difference that he expressed dissatisfaction with the state of the theory, shown in the rugged and fruitless way of explaining the temporal aspect of the economy via prices. [140]

The ruling by which the ***SSET*** considers that: **affirming that supply and demand determine prices —** a consequence of assigning them a temporal aspect, as current theories do **— is the most pernicious sequel in the development of science economic, origin of the institutions that affect the natural economic order**.

Aggregate demand

To conclude with the references to the "models or expressions" of *objective macroeconomics*, here I refer to the one that is based on the idea of **influencing** the level of "aggregate or effective demand" in order to "restore equilibrium".

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[134] It implies "absolute value" or "virtual entity that arises from nowhere".

[135] "Veil" that underlies the failed idea expressed in the quote: "… Walras gives another set of equations that inverts the Jevons procedure and takes prices rather than quantities exchanged as independent variables". It is implausible to separate prices from the quantities exchanged since they arise from these. This unhappy appreciation could only occur if *prices are considered absolute-independent of exchanges*, which is what underlies the concept of absolute value-price that objectivism assigns to the currency. Then, money prices "would" also become absolute independent of exchange. It is a VERY THICK THE ERROR.

[136] All currents of thought navigate the same nebula, not just the neoclassical ones.

[137] Which is pertinent to all wealth destined for exchange, from which it follows that **"exchange is not wealth"** —dramatic regression of economic theory to Aristotle.

[138] Accepting the concept that the currency will acquire value when it is exchanged - since it does not assign value in the act of exchange in which it is received - is equivalent to saying that the currency received has an ad referendum value to the one assigned to wealth for which it will be given in exchange, which implies not considering it as wealth that satisfies liquidity, since the scarcity status, in the exchange in which it is received. The exchange is carried out between present wealth - be it present value or current value -, then if the currency were not present wealth, it would not be exchanged.

[139] With which it enables the "currency policies" arising from the ***S* = *I*** and ***IS-LM*** models. Very strong sentence, which is appreciate as a consequence of reestablishing the foundations of Menger (***SSET***), which is why I quote Mises.

[140] Unresolved temporal aspect that Jevons also noticed, but considered that a dynamic explanation was impossible, for which he was satisfied with his static "ingenuity", which ended up imposing itself in the "modern trend".

In the light of the ***SSET***, the "theory of aggregate demand" is an "applied theory" of *objective macroeconomics*, given that its function is to "correct" economic "imbalances" by promoting demand to avoid the presence of *"unoccupied wealth"*.

Having said the foregoing, let us see how the models that propose increasing aggregate demand are appreciated, from ***subjective macroeconomics***. To this end, I present several ways to demonstrate the inconsistency of such proposals, according to the format presented:

Equation of net generation of wealth:

According to the ***SSET***, the ***net wealth generated*** (***W***) arises from the differential between that generated (W_g) and that destroyed (W_d):

Ecuación de la generación neta de riqueza:

$$W = W_g - W_d$$

It is clearly seen that encouraging destruction-consumption ($\uparrow W_d$) implies a fall in wealth ($\downarrow W$), with the consequent impact in the natural ANTI economic evolution: $\downarrow W \leftrightarrow \downarrow H_L \leftrightarrow \downarrow H_P \leftrightarrow \uparrow P_{q(\$)} \leftrightarrow \downarrow H_\$ \leftrightarrow \ldots$, which represents the opposite of what is intended to be obtained

Equation of the composition of wealth:

According to ***SSET***, net wealth (***W***) is composed of wealth destined for destruction (W_d) or for capital (W_k): [141]

$$W = W_d + W_k$$

It clearly emerges that encouraging destruction ($\uparrow W_d$) can only come from lowering capital wealth ($\downarrow W_k$). Then, given the multiplier effect of the capital factor in employment (H_L), property (H_P), wages ($H_\$$), and the generation of net wealth (***W***), it shows that the consequences of encouraging the destruction of wealth are the opposite to those intended —which can be seen in the chain of causalities of the ANTI-natural economic evolution: $\downarrow W \leftrightarrow \downarrow H_L \leftrightarrow \downarrow H_P \leftrightarrow \uparrow P_{q(\$)} \leftrightarrow \downarrow H_\$ \leftrightarrow \ldots$ [142]

Encouragement to public works:

Given that another way of "stimulating demand" is by *encouraging public works with fiscal resources*, let us see what *subjective macroeconomics* tells us. For this, I decompose the term capital wealth between private (W_{kP}) and state ((W_{kE}):

$$W = W_d + W_{kP} + W_{kE}$$

[141] Disregarding the exchange, since the wealth exchanged will have capital or destruction as its final destination.

[142] It is a task that can be performed in various ways, such as imposing monetary interest below the natural one. With which the *SSET* explains the currency cycles without the need for a special theory of currency or interest.

It clearly emerges that encouraging state work ($\uparrow W_{kE}$) can only come from lowering private capital wealth ($\downarrow W_{kP}$) or from destruction ($\downarrow W_d$). Which implies that the consequence of increasing public works arises from the decrease in the destruction of wealth (consumption) [143] and/or the decrease in the wealth of private capital (which is more efficient than that of state capital), then we again witness : $\downarrow W \leftrightarrow \downarrow H_L \leftrightarrow \downarrow H_P \leftrightarrow \uparrow P_{q(\$)} \leftrightarrow \downarrow H_\$ \leftrightarrow \ldots$. [144]

[143] Given the higher relative incidence of destroyed wealth in the lower-income population, it implies financing public works essentially at the expense of the population´s consumption.

[144] This shows that public works must be financed with long-term credits, a task that in underdeveloped countries must be external because their ***interest in wealth*** (i_w) is very high due to their low level of wealth, whose amortization and interest must be arise from the "toll-benefits" that they will generate. ***With the introduction of the full force of natural laws, added to this criterion of financing and payment of the necessary infrastructure, it is not so difficult to leave underdevelopment.*** **This final paragraph constitutes an economic plan for Argentina**.

Annex II - Interest and price variation [145]

In the section *The current state of macroeconomics*, I have emphasized that one of the most concrete manifestations of its deficiency is highlighted by appreciating the inconsistency of economic theory when it tries to explain the relationship between interest and price changes. [146] On the other hand, although such inconsistency disappears when we analyze said relationship based on the *SSET*, I thought it appropriate to add this annex.

I start by remembering the meaning of the concepts involved:

Economic time: variation that occurs in wealth (subjective value assigned to economic goods: useful and scarce things).

Interest (***i***): value-price of economic time. According to the *Law of wealth*, it appears that: $\boldsymbol{i = U}$, where ***U*** is the marginal utility that incorporates a unit of wealth ($\boldsymbol{q_i}$) in the total ($\boldsymbol{q_t}$), whose general equation I have defined: $\boldsymbol{U_{qi} = q_t / q_i}$. In turn, since there are countless manifestations of wealth, the SSET uses two types of interest:

> *Currency interest* ($\boldsymbol{i_\$}$): it is the price of economic time referred to the **wealth exchanged** ($\boldsymbol{W_i}$), that is to say, of the currency wealth exchanged. Then
>
> $$\boldsymbol{i_\$ = \$_t / W_i}$$
>
> *Wealth interest* ($\boldsymbol{i_w}$): it is the price of economic time in the scope of **total wealth** (W), which refers to the *currency as economic unit of measure* (u). Then $\boldsymbol{i_\$ = u = \$_t / W}$.
>
> $$\boldsymbol{i_\$ = u = \$_t / W}$$

Price of an economic good [$\boldsymbol{P_{x(y)}}$]: amounts that are received from a manifestation of wealth ($\boldsymbol{y_i}$) for each unit of wealth ($\boldsymbol{x_i}$) that we give in exchange, then $\boldsymbol{P_{x(y)} = y_i / x_i}$. Since we always

[145] Here it is worth quoting Eric Roll (1994): *"Menger examines the problems that the existence of a unit of computation gives rise to and from him much is derived from the current Austrian theory on the problem of currency policy in relation to prices"* (P: 356). Topic that finds a new "Austrian" approach in the SSET by referring the subject to price control, in this case that of the currency, within the explanatory simplicity of cause and effect of Menger without the need for the theory of interest, of the currency, nor of cycles, as the laws of wealth and exchange include both entities.

[146] Subject dealt with the classical-neoclassical concept of "indirect transmission mechanism".

refer to money prices (price of non-currency wealth relative to the currency), they arise from this expression $\boldsymbol{P_{q(\$)} = \$_i / q_i}$.

The *natural economic evolution* (SSET), where the laws of nature govern, indicates this chain of correlations between the variables that we are analyzing:

$$\uparrow W \leftrightarrow \uparrow \boldsymbol{i_\$} \leftrightarrow \downarrow (\boldsymbol{i_w = u}) \leftrightarrow \uparrow \boldsymbol{P_{\$(q)}} \leftrightarrow \downarrow \boldsymbol{P_{q(\$)}}$$

$$\downarrow W \leftrightarrow \downarrow \boldsymbol{i_\$} \leftrightarrow \uparrow (\boldsymbol{i_w = u}) \leftrightarrow \downarrow \boldsymbol{P_{\$(q)}} \leftrightarrow \uparrow \boldsymbol{P_{q(\$)}}$$

Thus, the *SSET* explains in a simple way the correlations that worried to all the theorists, BUT only Hayek intuited that:

- The problem was in the inconsistency of the accepted theories.
- That the solution would come from the foundations of the Austrian School.

Task that the *SSET* would carry out, for which it had to return to Menger´s marginal subjectivism and note that: the theory of the economic unit of measure was independent of the theory of currency; and that currency is always wealth, while the economic unit of measurement is dimension, and it is not constant. Tools that were not available to Hayek, who only saw the correlation as evident: $\uparrow W \leftrightarrow \downarrow \boldsymbol{P_{q(\$)}}$.

Annex III - Value use versus exchange value [147]

Given that the consistency of all economic theory (micro and macro) that is developed from it depends on the theory of value, [148] it is prudent to refer to the subject of this annex, even if it concludes that the proposal itself is inconsistent.

The theory of value, since its dawn (Aristotle,...), implied referring to two concepts: *use value* and *exchange value*. Having assimilated them has caused dire consequences of the rank of lesa humanity, insofar as it underlies as the theoretical foundation of the current unnatural economic institutions.

The important thing about the subject is to determine what economic theory should explain in this regard:

- If there is use and exchange values: what are their meanings?
- If both concepts exist: are they the same?
- If one is independent of the other.
- If one is dependent on the other: which one precedes-determines the other?

Let us see how the *SSET* solves the issues raised. I start by defining the concepts involved:

Use value refers to the subjective value that human beings assign to economic goods.

The **exchange value** refers to the subjective relative value assigned by the human being to the economic goods that he exchanges.

From the concepts raised it appears that:

- It is important to start by considering that use value includes exchange value, because one of the uses that human beings can give wealth is to exchange it. The clear example of this is the exchange of our work by currency, which has as a general purpose to be exchanged - the same term with which currency is defined, *commonly used in exchange*, validates the previous reflection.
  Then it follows that the subjective value is equivalent to the value in use, an assertion with which the "dispute" of value in use versus value in exchange can be terminated. However, I will refer to the limited aspect of the subject, and I will refer to *exchange value* as that which refers exclusively to that which arises from the exchange of wealth.

- Use value (subjective) exists even if there is no exchange.

- The SSET shows that: from the comparison of the different subjective values, the relative values arise, which determine the exchange, from which the prices arise (data of exchanged quantities).

[147] This section is dedicated to my friend Manuel Polavieja, who aroused the concern of referring to the subject since there is no adequate clarity about it, which is derived from assimilating value and price.
[148] In coincidence with J.S. Mill said.

- Menger´s theory of imputation, where he shows that the prices of the means of production are determined (imputed) by the price of the final product, are a clear example that the "final" use value is what determines the exchanges.

- The existence of wealth that is not exchanged only means that the parties do not agree on the value that each one assigns to the manifestations of wealth considered. In other words, even if there is no exchange, there is use value.

- The natural economic evolution, of man in society, has meant that the "totality" of the wealth that is generated has an exchange destination proof of this is that exchanges are carried out (calculated) by currency (shown in its *characteristic quantitative*). [149]

- In economics only wealth is exchanged, which implies the precedence of subjective value of the things to be exchanged. This is so even if the origin of wealth is exchange, which does not imply assigning "collective value" to the subjective value that each human being assigns to the economic good, currency, or telephone.

- The exchange is wealth, insofar as it is carried out because the parties add value to their wealth by accepting what they receive (which assign greater value) in exchange for what they deliver (which assign less value).

Let us see how the *SSET* ratifies what has been said:

- The precedence of the use value to the exchange value (without which it does not take place), and the wealth it generates, is shown by the *SSET* as follows:

  The holder of ***q*** is in the position where the marginal utility of the last unit that delivers in exchange ($\boldsymbol{U_{qi}}$) is: lower than the marginal utility of the unit prior to the one exchanged, and higher than that of the next unit that will not exchange ($\boldsymbol{U_{qi+1}}$):

  $$\boldsymbol{U_{qi-1} > U_{qi} > U_{qi+1}}$$

  The holder of ***$*** is in the position in which the marginal utility of the last unit delivered in exchange ($\boldsymbol{U_{\$i}}$) is: lower than the marginal utility of the unit prior to the one exchanged, and higher than that of the next unit that will not exchange ($\boldsymbol{U_{\$i+1}}$):

  $$\boldsymbol{U_{\$i-1} > U_{\$i} > U_{\$i+1}}$$

  It is confirmed that the best moment of exchange for both parties occurs in $\boldsymbol{U_{qi}}$ and $\boldsymbol{U_{\$i}}$. Which does not arise from $\boldsymbol{U_{qi} = U_{\$i}}$, but precisely as a consequence of $\boldsymbol{U_{qi} \neq U_{\$i}}$.

  - The ***law of exchange*** corroborates the precedence and determination of the use value over the exchange value:

[149] It is an expression that I have coined to give greater precision to Menger´s *higher salability* term.

$$U^{r}_{\$(q)} = v_{q(\$)} * U_{\$(q)}$$

$$U^{r}_{q(\$)} = v_{\$(q)} * U_{q(\$)}$$

In turn, the relative values, different from each other, show that $U_{qi} \neq U_{\$i}$.

- The ***positivity of the relative values***, $v_{\$(q)} > 0$ and $v_{q(\$)} > 0$, guarantees that exchange is a generator of wealth (utility).

- The ***axiom of ONE of the relative values*** [$v_{\$(q)} * v_{q(\$)} = 1$], indicates precisely the wealth (utility) that the parties perceive, according to the relative subjective valuations that each one makes of the goods economic exchanged.

Once again, from the theory of subjective value, the *SSET* has solved the *unnecessary* problem raised around opposing the use value to the exchange value. The exchange of wealth is one more option to the destiny that we give to it, according to the subjective value that we assign to it (keep it, destroy it or exchange it).

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I wish to submit **Subjective Macroeconomics** to the ESSENTIAL and SEVERE CRITICAL in post of scientific rigor, derived from my previous works, all based on the foundations (and epistemology) of Carl Menger (1871), who did microeconomics in a macroeconomic framework.

That the subjective macroeconomics, underlying in Menger, was not made explicit beforehand was an enormous regression in economic theory, since the massive diffusion of **the only and failed objective macroeconomics** offered in the universities would have been avoided, as evidenced by stating: curves of supply and demand determine prices; $\boldsymbol{S = I}$ and ***IS-LM*** models; theory of two worlds to balance (monetary and real: Wicksell, Walras ...); distribution theory $\boldsymbol{U_a / P_a =\ldots U_n / P_a}$ (from which the inconsistent "welfare theory" arises); assign temporary aspect to prices; Wicksell "virtual" currency; Misess ´"out of nowhere" currency; Hayek´s "triangle"; Mises regression theorem; quantity theory of currency; Say´s Law; Gresham´s Law; Pareto´s Law; Optimal of Pareto; aggregate demand (sub consumption); unemployment; "Monetary rule"; Phillips curve; interest theory (Böhm-Bawerk time preference, and natural versus monetary interest); currency theory; currency neutrality; credit theory; composition fallacy theory; absence of a theory of the economic unit of measure independent of currency theory; cycle theory; tax theory; dichotomy of prices; etc.

The failure in the prevailing economic theory is the origin of the nefarious economic institutions in force, **making economic-social crises necessary and recurrent, which lead to economic inequitable, destroying and concentrating wealth**.

The **subjective macroeconomics** proposed here, because they are statistical aggregates of the microeconomic measurements, already has the present temporality incorporated in what I have called the law of wealth and the law of exchange.

HAYEK WARNED THAT THE ECONOMIC THEORY WAS NOT CONSISTENT, my research allows me to conclude that *Subjective Macroeconomics* opens a path towards the scientific rigor that it claimed.