## Is there an economic system in the nature? Results of a hedonic approach including a vision to explain and meet problems of human societies

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## Subject and design of results

The question what could be a money equivalent in the nature makes sense if we assume the existence of an economic system within the nature. Introducing this assumption as a basic working hypothesis, and extending the classical economic principle that "scarce goods have a price" to "any good in the natural system has a price", the primary question is what could be a price equivalent to a good (or service) within this postulated economic system of the nature. To find such a price equivalent we observe different phenomena of the nature, and we try to interpret them as economic events like markets with supply of and demand for goods and services within the nature. This approach meets the fundamental requirement of hedonic methods to measure prices as functions of a set of independent and physical variables. In contrast to classical hedonic methods which use regression analysis to estimate prices on base of these physical variables, see Triplett (1986) and Fleming et. al. (1992), within this approach there is no need for regression analysis because the price specification turns out as an observable one.

A positive answer to the question what could be a money equivalent in the economic system of the nature is important. Having an estimation of such an equivalent we can measure the value of this equivalent in terms of common currencies (Dollars, Euro, etc.), we can compare these (different) measures, and we can derive conclusions concerning relations between these different measures. It is possible that the money equivalent in the nature measured in common currencies is overestimated by these common currencies, but it is possible that this money equivalent is underestimated by these currencies as well. And it is possible that problems and disparities within economies of human societies especially within monetary policies arise because these economies and monetary policies neglect the real price of a good (measured in terms of the money equivalent) within the economic system of the nature.

The study starts with the analysis of the observable phenomena in the nature that "deer are grazing on a meadow near a forest in the evening". Result is that this event can be explained as a market with the obvious specifications "supply of grass" (of the grass population) and "demand for grass" (of the deer population). But what is the price the deer pays for one unit of grass? A positive answer to this key question opens a door to the economic system of the nature. And a positive answer exists. Moreover, a lot of observable phenomena in the nature can be explained as markets as well. All these markets (within the economic system of the nature) show two characteristics. The first characteristic is that the demanders (animal or plant populations) pay for goods (or services) they buy with a currency of the nature which is transferable and convertible. In addition, there exists a set of different currencies in the nature, and representatives of different populations in the nature

are able to convert one currency into a different one, hence there exists a banking system within the nature. The second characteristic is that the markets (within the economic system of the nature) are dual markets. This means that agents of populations which meet on a market to exchange goods (or services) are both: suppliers of a good (or a service) and demanders for a good (or a service) as well.

The paper presents and explains this observable price specification within the economic system of the nature. Moreover, it explains how the price is being transferred from the demanders (who pay) to the suppliers (who get this money equivalent). Especially it explains what and how the deer pay for "grazing in a meadow in the evening near a forest", and how the population of grass gets this payment. It explains different currencies of the nature, it explains the fee within the nature which is charged when the money equivalent of one type (currency) is converted into a money equivalent of a different type, and it gives a vision of the central bank within the economic system of the nature which is an observable, independent and autonomous object of the nature. Using a simplified model of such a dual market in the nature, the paper substantiates the equivalence of the economic equilibrium conditions of supply and demand, and of costs and returns with two basic laws of natural sciences. Finally and focusing this money equivalent of the nature, the paper presents a vision how to explain and meet problems and disparities of present human societies (overcrowding, migration, aging, unemployment, poverty) in future.

## REFERENCES

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## RESUMÉ

Sur la base d'une approche hédonique, le papier présente et explique un équivalent d'argent, qui est représenté par des unités physiques dans un système économique postulé dans la nature, où chaque bien (et service) a son prix. Par ailleurs, il explique comment cet équivalent d'argent est transféré des demandeurs (qui payent) aux fournisseurs (qui obtiennent cet équivalent d'argent). En observant le phénomène naturel que (les cerfs pâturent le soir dans la prairie a côté de la forêt) il explique ce que et comment les cerfs payent pour (pâturer) et comment la population de l'herbe obtient ce payement. Il explique les différentes devises de la nature et il explique aussi les honoraires de la nature, qui sont chargés lorsque l'équivalent d' argent d'un type (monnaie) est converti à un autre équivalent d'argent d'un autre type et il donne une vision de la banque centrale dans le système économique de la nature, qui est un objet indépendant et autonome que l'on peut observer dans la nature (qui s'avère être un marché duel). Le papier justifie l'équivalence des conditions de l'équilibre économique de l'offre et de la demande et des charges et du revenus avec deux loi fondamentaux des sciences naturelles. Finalement et focalisant cet équivalent d'argent dans la nature, le papier présente une vision qui montre comment on peut résoudre dans l'avenir des problèmes et des disparités des sociétés humaines actuelles (surpeuplement, migration, vieillissement, chômage, pauvreté).