

Chapter II. Value, money and the economic system

Section 1. Value and value attribution

Goods are initially procured – gathered, hunted, fished, farmed and pastured – without the intermediation of exchange. In primitive societies, i.e., without an economic system, goods have value-in-use, but they have no value-in-exchange. Even if goods are forwarded or shared between tribe members, they are not “exchanged” in the sense proper. This is different in an exchange or barter economy, where we must distinguish between a flow of goods and services¹ travelling in one and a flow of other goods and services travelling in the other direction as a *quid pro quo*. Values-in-use have an infinite number of shapes, which matter for users’ value-in-use-considerations. In an exchange economy, commodities’ value-in-exchange means their power to be exchanged against other values-in-use or against more or less money. As soon as money emerges, everything is valued in money; as money is one-dimensional, a mere number in the respective money currency, be it a quantity of oxen, of pounds of grains, of gold or of Euro, says everything.

Many great economists have awarded an eminent place to the theory of value. Adam Smith did so in Book I of the *Wealth of Nations* and David Ricardo did likewise in chapter I of his *Principles*. Marx did the same thing in *Capital* and even shifted the theory of value and surplus value into the absolute center of his economics (and derived his disastrous theory of exploitation therefrom). The “marginalist revolution” largely consisted of amending the theory of value-in-exchange by adding a new aspect of utility (utility of the last unit). Other authors, however, e.g., Silvio Gesell or Max Weber,² regarded the notion of value as redundant and suggested working with prices only. We side with the first group of aforementioned authors and also find that the notion of value-in-exchange is basic to a conceptualization of the economy. Value-in-exchange is the stuff of which wealth consists. It also already exists even if,

1 We will often refer to “goods” if the emphasis is on value-in-use and to “commodities” if it is on value-in-exchange. Both terms also include services.

2 Gesell (1916) chapter 3.3; Weber (1980) page 31.

as we shall see, it is ascribed by third persons, before the price is paid. Value motivates purchases, makes prices, moves the economy's wheels even prior to payment. The expected ascribed value (M' in $M' - M$ is always the expected value) kickstarts capitalist circuits in both the productive and the sterile economies. The economic and social effect of expected future value at t_1 are not wiped out by the disappointing finding that no value-in-exchange, or perhaps less value-in-exchange than expected, remains when the return on the investment arrives at t_2 . Even after a transaction, the value remains important, e.g., for pledges, for bookkeeping purposes, or in the case of a resale.

Value-in-use depends on future utilities. Utilities ascribed in the future will make values-in-use and values-in-exchange and will lead to future prices. This expectation works its way backwards into the present and makes present values-in-exchange and prices. In values the difference between the presence and the future, thereby losing its relevance to some extent. Future values-in-use, future values-in-exchange and future prices are as uncertain as the future in general. Therefore, as Richard Cantillon has stated, an entrepreneur buys at a "prix certain" in order to sell at a "prix uncertain".³ A commodity owner can try to assess his commodity's future value-in-exchange by imagining future utilities (and market conditions), but prices may deviate from values-in-exchange – thanks to misjudgment, state price fixing, etc.⁴

If theories of value care about the potential of commodities to exchange against a certain amount of money, then they have different options about what degree of certainty they require for the exchange to take place. In an extreme version, they may identify value with the amount actually being paid as price. In this case, the payment of a price is not only the ultimate test for value ascription, but is identical with there being value and value-in-exchange; prices collapse into a theory of demand, of *débit*, of *Absatz* or "off-sale".⁵ We will not go so far and will instead consider value-in-ex-

3 See *Murphy* (2016) volume I, page 21.

4 Value and price have an interesting relationship. Value-in-exchange is very meaningful long-term, if only as the *prognosis* of a price, which may be realized because of a *later* value-in-exchange *attribution*. If you have a great product, then you have value before you have sold it for a price. (In this regard Marx was quite right to point to the increased value-in-exchange already existing in C'). Price is a much more practical and reliable thing, but it is only meaningful in the single moment of exchange and only if it is paid. Thereafter, it has already become a *past price* and past prices do not matter. The buyer now has the object and the object, again, has merely a value-in-exchange as a likely future price. Even if the price is the moment of truth for value, it makes sense to maintain the distinction for several reasons. E.g., imagine that the state was to fix prices. If the price is above the value-in-exchange, then nobody will buy it voluntarily; if the price is fixed underneath, it will sell easily (see also page 39).

5 See footnote 24 on page 207.

change as independent of a sale at this value-in-exchange (as a price) actually taking place. E. g., a bank may calculate somebody's net worth in order to hand out a loan. Value-in-exchange exists here as a relevant "fait économique" even if the amount assessed is never realized thereafter.

Value-in-use-attribution

Value-in-exchange ought to be developed from value-in-use. Values-in-use are attributed to things or services based on five aspects. They depend first on the thing or service; second, on the user and the uses; third on the availability of identical or substitute things or services; fourth, they depend on systems that emerge between values-in-use (or humans with regard to them) more generally; and fifth, they depend on the state.

Use-relatedness of objects

Things and services have properties. The properties have utilities for some purpose. Values-in-use are good *for* something from the outset and are, hence, *relational*. This something might involve storing fluids or cutting meat. While it may be possible to cut the skin of a deer on the sharp-edged rim of a pot, knives normally have higher levels of utility for cutting – as can be seen in the pottery and knives-section of the world's many archeological museums. Services, which prepare a field for wheat cultivation, are different from other services directed towards rice cultivation – as are the prepared fields and the crop. Bronze used to make a knife is different from the bronze used for jewelry. If I have an ox, a horse, or a cow, then what race they are matters as does whether they are young, healthy, strong, and well trained or not. The value-in-use of an ox also depends on the soil type I have.

If the objects change or the purposes of men change, then the utilities will change as well; the specific uses that I can make of an object or service result from the "fit" between the object and these uses. In stationary primitive (or tribal, segmented etc.) societies, only a few products existed; if the soils in a given region were similar, then only a *few utilities* for oxen and other tools actually existed. No relevant changes took place over many centuries, usually, given the then low speed of evolution. This began to differ in stratified societies⁶ when advances in science and technology led to the refinement of objects and utilities. Most utilities continued to refer to basic needs or social status.⁷ An explosion-like differentiation, complexifi-

6 We borrow the differentiation between segmented, stratified, and functional differentiation from *Talcott Parsons* and *Niklas Luhmann*.

7 An example of this can be observed in the way in which Champa-rice, which can be reaped only 60 days after seed, was introduced from Vietnam into China during the Sung dynasty. See *McDermott/Yoshinobu*, *Economic change in China, 960–1279*, page 394.

cation, and a new interdependence set in only when functional differentiation and the division of labor arrived. Every specialized functional subsystem now developed its own utilities and demanded much greater adjustment from the objects that it could use. Men also had to relate to several functional subsystems and value-in-use accrued to a greater number of objects. For example, handicraft production of final goods demanded better raw materials from primary production and scientific or technological knowledge allowed and facilitated better tool engineering (which in turn demanded better materials). New lines of communications created awareness of substitute or complementary products elsewhere and alternative inputs for their production in general more rapidly. Such inputs were available faster, via newly opened trade and transport routes from farther away. The same applies to parts and complementary products. The opening up of such routes was initiated upon the discovery of such potential uses.

Subject-relatedness and the systemic character of values-in-use

Even from their first breaths, and even in the most remote periods of time, men have been biased. Man, the subject, brings needs and purposes with it; only an understanding of the interplay of these, and how they relate to the world, will allow us to discover utilities or disutility. The utility of a thing or a service depends not only on the use but also on the *user*; it also depends on other objects and practices that can be found in the environment. The same thing may have different utilities for different men. If I have shelter and a warm bed for the night, then an available similar bed has less value-in-use for me. The fourth, fifth, and sixth things normally have generally less utility for me than the first thing (and the second or third, which may serve as reserves). The value-in-use of an additional, seventh ox may be negligible if my land is small. Its value-in-use also depends on whether I have substitutes, such as horses, slaves,⁸ or tractors. High concept users, technologically or with regards to markets, can ascribe higher utilities to things than low concept users. If there are uses for rare earths or for a movie star in an advertising campaign for coffee, this is because a particular scientific and technological stage has been reached or a certain cultural environment with certain available marketing tools has arisen. If we combine the object- and use-relatedness, as presented in the previous section, and the subject-relatedness,⁹ as presented in the present section, then we might even speak

8 On the advantages of using free labor, rather than slave labor, See *Weber* (1980) page 40 and 94 et seq.

9 Talking about value-in-use in terms of "*subject-relatedness of value*" means that every patient needs medicine that is correct for his specific illness and condition, that a hand injury causes more financial damage to a professional piano player than to a high school kid etc. This "subject-relatedness", though, has little to do with people seeing things too rosy, too grey, discretionarily or with error. Sound subject-relatedness of value ≠ subjective fallacy.

of a *systemic character of values-in-use*. Hundreds of millions of cables lose their values-in-use if large electronic firms change the types of their plug connections.

The state and time horizons for values-in-use

Quite obviously, values-in-use have time horizons. As grain rots, old grain has less value-in-use than new grain.¹⁰ Everybody (robber individuals, war lords, gangs of bandits, social revolutionary movements, or even your neighbor) may rob from you at the next street corner whatever you obtained at the street corner before it, at least in a situation of anomy or civil war and if there is no law and no state with an effective monopoly on physical violence. Your house, your cattle, your harvest, and your land may be subject to requisition, whereby they lose much of their utility and of their value-in-use for you. This is because the *expected time span* of their use or utility goes down; it becomes uncertain but will very likely be much shorter than the time until its natural decay. If you are calculating advantages from the use of these objects, you will not know whether you can keep them for five days, five months, or five years. In fact, you will be aware that the more useful the object is for you, the more likely it will be that somebody will try to take it away from you. In anomy, thus, the time span you can keep it, depends on your proficiency at hiding or to defending it (either with your personal force and weapons, with your private army or at least thanks to a warlord who is friendly to you and who will hopefully continue to control the area and remain strong, friendly, and loyal to you). Unfortunately, there will be, in such circumstances, little motivation for you to engage in activities that require a lot of time and continuous effort to bring about results. Kill your cow, if you can, and distribute it amongst your family and friends and eat it up quickly because there is probably no point in raising cattle or sowing seed¹¹ or even filling storehouses with grains or smoked meat (unless, again, you have a strong army or warlord to protect you). Get weapons for yourself, if you can, to defend you (even if the weapons themselves might attract others to take them away from you). Production goes down dramatically in these Hobbesian situations of *bellum omnium contra omnes* where *homo hominem lupus*¹² (of which there were many throughout history and which should still be regarded as a point of departure for modern social sciences). Fields lie fallow, fences fall, irrigation systems decay, the number of cattle and horses shrink,

10 Therefore, it has also less value-in-exchange. See *Golas*, The Sung fiscal administration, p. 205, with regard to grain in granaries, which has to be replaced after some time being worth less than the amount need to pay for new grain ... at times of the Sung dynasty.

11 The increase of the planting of olive trees under Peisistratus is seen as an indicator of confidence in future prosperity. (*Burn* (1990) page 124).

12 Some say that Hobbes' metaphor missed the point, as wolves are not nearly as bad as humans.

deer is hunted, and fish are fished to extinction, trade collapses, bridges and roads degenerate.

All this was well understood already by the Chinese legalist state theorists of the 3rd century BC, e.g., *Han Fei*, and many centuries later by European natural law thinkers such as *Hobbes*, *Pufendorf*, and many others. Pacification is required and it is in the general interest that any *one* of the combatants (which may all be very horrible people) actually win. The victory of *any* warlord (or even of a bandit gang¹³) is, at the very least, much better than a continued state of war or of civil war. A certain softening of the state power is, in fact, very likely to occur not very long after victory (perhaps after one more proscriptive drive to preventively eliminate assumed remaining challengers). Despots learn that states must be run in a different way than the way in which they were conquered and that they need to find consensus, acceptance, and legitimacy (even if with a healthy dose of fear in the background). Ideologies or religions, which new regimes will promote, e.g., Confucius in Han China, Buddhism in T'ang China or Christianity in Christian Rome, will educate their promoter-despots themselves. If not, the despots' daughters and sons (sometimes even their wives, although this is less likely) may educate and moderate their fathers. Laws are drafted, judicial interpretations are finetuned, administrations develop routines, regularity and foreseeability evolves... Even the worst despots, if their regime only acquires a certain stability, thus, will likely soon bring some sense of security and raise values-in-use as people can enjoy uses from objects over longer terms. Agriculture resumes, the number of cattle and of horses recovers, bridges and roads are repaired, and trade quickly reaches and overshoots prior peaks. The governance of an undisputed monopoly state power – *status civilis* – endows goods with surplus value-in-use without any physical feature of these objects having been changed. We may even speak of a *state theory of value-in-use*, which explains the increase of the present value of things, due to the anticipated enjoyment of “future values-in-use”¹⁴ over longer periods. “Etatism” sometimes works.

Value-in-exchange-attribution

We meet the features encountered in values-in-use at the level of values-in-exchange once again. Value-in-exchange is also object-related, subject-related, and both subjective and systemic. And it also depends on the state. Some aspects of this relationship still deserve a special emphasis.

13 E.g., *Chu Yüan-chang* (1328–1367), borne in a household of destitute farmers became a leader of the Red Turbans' rebellion against the Mongol Yüan dynasty and, under the name of *Hung wu*, later the founder of the Ming dynasty (1368–1644). See *Mote*, *The rise of the Ming dynasty*, page 44 et seqs.

14 As we know from business valuation, uncertainty and risk increase discount rates.

The state, owner power, and value-in-exchange

Once a monopoly of physical force of the state and the law are established, you cannot normally, as we have seen, take something away from somebody *without his consent*; this has tremendous structural and social benevolent consequences on the pacified territory. It not only greatly increases values-in-use, but also helps an exchange economy to take off, to develop, and to stabilize as a distinct and largely independent social system.

Make no mistake, though, the suppression of prior forms of violent and physical power and of tradition and myth only enables a regime of a different and new form of social power, of owner power. The basis of the new regime is the decision of owners to allow or forbid specific uses of their property. Pacification plus owner power is the *conditio sine qua non* of exchange and of the arrival of values-in-exchanges. Value-in-exchange accrues to goods – based on their value-in-use – because prospective users cannot access them except for by buying the owner's consent by paying. Other would-be-users will have to *lure* me with something they offer in exchange, but only if I am free to do what pleases me. Now society begins to think and talk about values-in-exchange and can move towards it as its main principle of distribution of goods.¹⁵ As owner's power results from the power to exclude the non-haves from using objects owned by the haves,¹⁶ it, of course, works best for those who already have considerable possessions, notably for large landowners, and less for small farmers and slaves. It will also become the basis for city landlords' power over those who seek shelter, and, in a famine, of merchants (who have filled granaries) over those who are hungry.

In a way, thus, all pricing is “power-based” and all prices are “monopoly prices” and “rent-seeking” from the very beginning. This monopoly power of owners is only mitigated by competition from other owners,¹⁷ and if that competition ends for some reason, then the original pure owner power becomes visible once again as monopoly power. Therefore, owners react to competition by setting up coalitions, cartels, and alliances, etc. to reduce its detrimental effects on their collective power

15 Quesnay sees this so clearly that he puts it in capital letters: “LA SÛRETÉ DE LA PROPRIÉTÉ EST LE FONDAMENT ESSENTIEL DE L'ORDE ÉCONOMIQUE DE LA SOCIÉTÉ.” Quesnay in Cartelier (2008) page 238. See also Macpherson (1962).

16 See, e.g., Sect. 903 of the German Civil Code: “The owner of a thing may, to the extent that a statute or third-party rights do not conflict with this, deal with the thing at his discretion and exclude others from every influence.”

17 There is an interesting evolution in the views on competition in the history of economic thought. Quesnay derives competition as a cheap substitute for *policing*, which forces the merchants to fulfil their role in his *royaume agricole*. “Qu'on maintienne l'entière liberté du commerce; car la police du commerce extérieure et intérieure la plus sûre, la plus exacte et la plus profitable à la nation et à l'état consiste dans la pleine liberté de la concurrence.” (Quesnay, Cartellier (2008) page 244).

(organizing cooperation between owners instead of letting the prisoner dilemma damage them). At the next level, states pass antitrust and anticartel laws to mitigate owners' power.

The non-owners (without significant land, other means of production, etc.) also live in a general "ownerhood"-structure, in a world of possessive individualism. As such, they are at least not slaves and are not bound to some plot of land, but are instead in control of their body and of their brains and, hence, of their labor power. They can, thereby, exercise supplier power in the labor market and, at least to the extent that they have earned salaries, also enjoy some power as demanders in consumption goods markets. The liberty of owners of all sorts to decide on what they own is the very basis of market discipline and for the value-in-exchange of a commodity becoming relevant in both profit economies and in capitalism more generally. As soon as both sides march into markets, they know, before their first encounter, that they will be subjected to the power resulting from the owners' power of other owners which is guaranteed by the state and by the law.

Theory of value and theory of "deal-making" and pricing

Many authors have propagated the view that equal values exchange against each other, in principle at least, which implies that the paid price is also, at least in principle, the commodity's value-in-exchange. Marx, being one of these authors, made this proposition a corner stone of his economics and called it the "brazen law of value" (ehernes Wertgesetz). Many practical people are to be blamed for making the same mistake. E.g., jurists typically assume that in transactions, e.g., in M&A-transactions, the price paid corresponds to the business-value. They, therefore, refer to the relationship between the price and the transferred business as "equivalence" and, if they find that, e.g., due to a deception or a breach of warranty, the price has to be adjusted, then they speak of the "adjustment" of the "equivalence". However, the theorem of an exchange of equal values, whether of Marxian or whatever origin, is meaningless and fallacious.

We can already see intuitively that something is wrong with the idea: First, why would businesses be so desirous to dispose of their produce if they were as wealthy before (with their produce) as afterwards (with the sales proceeds)? Moreover, why would sellers, if a buyer wants to return a commodity, normally refuse to repay the price received? Second, if bookkeeping conventions try to give a fair and true view of a business's financial position, why do they not already allow for capitalization if the production of a commodity is only completed? Why only after the commodities have been sold and delivered? Third, how come manufacturers give away commodities to intermediary traders for 70 % of the resale price, or even less? Fourth, and finally, when a bank assesses a person's credit worthiness, would it not normally – as an expert in value – prefer to see that person holding an amount in cash rather than owning furniture just purchased for that same amount?

We can distinguish between a *theory of value* and a *theory of deal-making* and we can combine it with another distinction, which comes from mathematics, between *monomial theories* and *polynomial (binomial) theories*. There are monomial theories of seller's value, buyer's value, and bystander's value, which follow a single mono-logic, and there is a polynomial (here binomial) theory of when a deal is struck, which is also a theory of pricing.

(Monomial) theory of value: Seller's value, buyer's value and bystander's value

The proposition that "commodities exchange at *their* values" is irreconcilable with the *value's subject-relatedness*. Different valuation subjects have different utilities, concepts, and synergies and they, therefore, also have different subject-related values-in-use and values-in-exchange. Accordingly, there is simply *no* such thing as the "*one and only value-in-exchange*" of a commodity, of a business, or of anything; there are always two at least, normally many more.

The *value-in-exchange attributed by the buyer* comes from utility – but that means what, exactly? Assuming a *single commodity* is an investment good (to allow quantification in money units), such as equipment or inventories, he will look at his present financial state without the commodity and at a (by that time still fictive) financial state with the commodity; he will do so by setting up two business plans and by calculating present values. If the present value of his business with the commodity is sufficiently higher than the costs of the commodity (considering alternative investments), then he will try to buy. If we look at the other side of the trade, we might ask: Where does the value-in-exchange attributed by the seller, come from? It does not come from his costs of production plus the added profit margin. It is true that the seller hopes to recover his costs and to make a profit (and will only continue producing under this assumption), but if a seller hopes to sell for a certain amount, he does not attribute value-in-exchange to a commodity; only non-owners of the commodity in question with the needed financial means and the will to sacrifice them can do this. Still, the commodity may retain some other value-in-exchange, but how much? The general answer is: If the seller can use the commodity to generate a surplus by holding onto it, e.g., if he can use a horse on his fields or if a builder can rent out a house that he has built for sale, then the seller's value-in-exchange will at least be the present value of his surpluses from the use of the horse or from the leasing out of the house. If the commodity, if it is kept in the seller's property, does not generate such a surplus, e.g., a car in a car manufacturer's storehouse, then the seller's value will only be the present value of the highest sales prices that he can expect (adjusted by costs of storage, marketing, etc.).

If the purchase or sale of a business is considered as a whole (in M&A), then the approaches taken by sellers and purchasers will not be different. The purchaser will plan the surpluses of the purchased business, on the basis of his specific concepts, synergies, and dis-synergies and will compare its present value to his specific alter-

native investment opportunities. The seller of a business will compare the purchase price that he will receive to the present value of the surpluses if he continues to run the business “stand alone”. We may call this valuation *cardinal*.

If a consumer values a meal, a piece of furniture, a vacation, or another consumption good, then the value-in-use or utility for him is too fuzzy to be expressed in a cardinal number (as x or y Euros). The consumer will, guided by his budget limitations and, after having taken other goods into consideration for which he has esoteric demand, normally only be able to attribute an *ordinal* number (as a rank of preference) thereto. From there, the consumer enters into a price negotiation with the seller.

All of this is also valid if we eliminate “bad subjectivity”, error, misunderstanding, discretionary assumptions, or problems of anticipation. Even in a world of (fictive) perfect foresight, where “bad subjectivity” does not exist, attributed values-in-use and values-in-exchange are, thus, always “subject-related” because of different concepts, synergies, and dyssynergies (which all reflect subjects’ different properties).¹⁸ If we embrace the view that all value is subject-related, then it becomes clear that the statement “commodities exchange at their value” is meaningless, given that it does not tell us whether they exchange at the seller’s value, at the buyer’s value, or at the value of other competing or prospective buyers, such as the value attributed by bystanders.¹⁹

(Binomial) theory of deal-making and pricing

Assume men and women consider pairing up. It is clear that men have criteria and that women have (other) criteria. The result – a pair coming together – is only brought about if she meets his criteria and if he meets hers and if both have no better alternatives. Two sets of criteria, logics, or algorithms, a specific male and a female set, must coincide in order to yield a result. Interestingly, the success of paring-up can be described from each perspective in a monomial way (forgetting about the criteria of the other side). He may think “she is the wonderful and wealthy Rubenesque-lady that I have always dreamt of” – and may believe that this alone is the reason why they got together. Or she might think “he is the beautiful and slender intellectual I have always admired from French movies” – and may believe that that explains everything. Insofar, if the match-up works, monomial theories seem to

18 This speaks to the benefits of avoiding the expression “subjective theory of value” in favor of “subject-related theory of value”. See: *Wächter/Wollny* (2018) page 80 et seqs.

19 The term “subjectivity of value” already implies this. With there being more than one subject, objects of exchanges should have *different* values. Yet, *Turgot* also saw that the commodity received must have a higher value for the purchaser than the commodity given away by the seller. See *Faccarello* (2016) page 79. *Menger*, too, saw the inequality of the value for the two parties (*Hoffmann* (1964) page 137). On the effects of this on damages in post M&A-disputes, see *Wächter* (2022), pages 552 and 587 et seq.

work as well. But that is a self-deception. Assume she loves body-builders – the slender intellectual will get nowhere. Thus, to truly function, a “theory of closure” or of “deal-making” or a “theory of pricing” must be binomial. The seller’s *and* the buyer’s algorithms, which are different, must allow an overlap-range of attributed subject-related values coming from two different points of departure.

As such, *monomial* theories of deal-making quite simply do not work and the proposition that “commodities exchange at their values” must be substituted by the proposition that the buyer’s value must be above the seller’s value in order for a deal to be concluded. Only then will it be possible to agree on a price above the seller’s and below or equal with the buyer’s value-in-exchange; this enables both sides to increase their wealth and makes economic sense. The exchange is useless even if the buyer’s value-in-exchange is only equal to the sellers’ value; both parties only avoid worsening their situation, but nobody improves on this basis. Things travel to where they are valued most highly. This leads us to the observation that exchanges normally transport goods and services “uphill”, from owners with less utility to owners with higher utility and investment goods are transported from low concept and low synergy sellers to high concept and high synergy buyers.

As we have seen, the fallacy of monomial theories of deal-making or of the “commodities exchange at their values”-proposal is often hidden. *If* a deal is concluded – in this case, there is an overlap of the price ranges by definition –, the agreed upon price can *always* be explained in two monomial ways from both perspectives. A monomial theory of deal-making can also explain why a deal failed very well. It can always argue that the buyer was not offering “the” value of the commodity (meaning the seller’s value) or that the seller was asking more than “the” value” (now meaning the buyer’s value). However, monomial approaches continue to miss out on the fact that a price or an agreed valuation always depends on two different logics and two different valuations, which may or may not enable an overlap.

Nominalism and reflexivity in the theory of value-in-exchange

It is generally more realistic to be a “nominalist” than a “realist” within the meaning of the medieval debate between nominalists and realists. Value-in-exchange, as it is understood by believers in the labor theory of value, i.e., by Ricardo, Marx and his followers, is also in the grip of reifying “realistic” thinking. Value-in-exchange becomes a stuff, a mass or weight, an abstract substance or an abstract “real” property of objects. Although Marx elsewhere strongly, advocates capital as a *relationship*, he here flips into reification, and, via Hegel, even comes close to Plato. Let us phrase the issue in terms of the central question of medieval philosophy: Is value-in-exchange *ante rem* or *in rem*, as the realists, e.g., Plato and Aristotle, thought? Or is it *post rem*, as the nominalists, e.g., Roscelin, Abaelard, Wilhelm von Ockham, and the Salamanca school thought? The correct answer must be that value-in-exchange is attributed *post*

rem, much like how attraction of “mass” depends on other mass and love lies in the eyes and desires of others.

Value-in-exchange is also *reflective ab initio*. Value is not attributed by solipsistic units, which only observe and attribute value to things in parallel: Rather, everybody is also observing how the thing is observed and valued by others. One must observe the observations of others to fully “see the value”. In a constructionist or systems theoretical expression, there is observation of observers, observation of the second or third degree. This leads to a feature of values-in-exchange which is as important as it is irritating: If only one agent values a single good, service, or business more highly than the subjective values-in-exchange of any number or other valuation subjects, then the *value-in-exchange of this object rises for everybody*. A price, which will realistically be paid in the market, feeds back at the level of values and moves up the value more generally. One might say that only the price, at which the commodity can be sold, moves up, but that underrates what actually happens. The readiness to pay a top price by the “top value attributor” (which goes along with the money and the will to sacrifice it) creates a new utility for everybody: buying the object and selling it to the top value attributor.²⁰ It is irrelevant for this effect to materialize, whether the top valuation is economically sound or erroneous. Even frivolous value attributions move the market, if they readiness to pay the top price is only serious, sufficiently lasting, and is accompanied by the purchase power required.

Hence: an erroneous, irrational, or outright absurd valuation, as long as it only materializes in a price offer, changes the world for everybody and justifies the same valuation by all secondary valuers whose secondary valuations will now be correct, rational, and responsible! It is like magic and a wrong valuation by one valuation subject (and consequential market behavior) renders the same valuation by all other valuation subjects correct! We can observe this in bubbles, e.g., in bullish real estate, bonds, or M&A markets. Real estate agents and investment bankers will tell buyers that they are lucky if they can still buy at 110 % of the price of last month and as they all continue to tell this story, it will vindicate itself and will propel the market higher. We have self-fulfillment and wrong statements render themselves correct. The mechanism has already been illuminated by Keynes when he compares the stock market

20 Three comments: First, there is obviously no certainty that the top valuer will stick to his valuation forever. Appreciation may end, utilities may change, or the purchasing power, which must join in, may be spent elsewhere or lost. Second, the margin by which the value attributed by the top valuer exceeds the new value will normally not be equal to the net proceeds from a hypothetical sale thereto. Costs of sale and opportunity costs must be deducted and the top valuer may succeed in paying less than his top value etc. Third, as we have said, even if we favor using the notion “value-in-exchange” apart from price or expected price, “value-in-exchange” always remains dependent on future behavior – will they pay? – of third agents and, thus, also remains a prognosis. Disappointments, lucky surprises and radical uncertainty are ubiquitous, and economic theory must capture them.

to a particular kind of beauty contest: Not the most beautiful person is to be picked in this contest, but instead the person whom the majority of the jurors believe the majority of the jurors will pick. Keynes correctly speaks here of “the third degree, where we devote our intelligence to anticipating what average opinion expects the average opinion to be” being reached.²¹ Systems theorists,²² *Heinz von Foerster*, *Niklas Luhmann*, and *Dirk Baecker* for instance, are also working with second level and third level observations. If systems observe themselves, then there is second level-observation; if they observe self-observing systems, there is a third level-observation.²³ There is always third level-observation at work in the economic system: third observers observe observers observe. “Man kann anhand von Preisen... beobachten wie andere den Markt beobachten.”²⁴ Valuation, as such, is intrinsically an observation of observers, i.e., observation of the second or third order. In “situations with thinking participants”, according to *George Soros*, in what he calls his “theory of reflexivity”, “the participants’ view of the world is always partial and distorted. That is the principle of fallibility. The other is that these distorted views influence the situation to which they relate because false views lead to inappropriate actions. That is the principle of reflexivity”.²⁵ Provided that we believe him, Soros owes much of his financial success to this theory.²⁶ The point is not solely that a deception is effective (that is often so, but deceptions still do not influence what they observe). The point is that deceptions stop being wrong and instead become true, indistinguishable from other truths, because they change what they observe. Bubbles are not systems of deception, but they do create true value which is as good as value can be as long as the

21 *Keynes* (1936) page 156.

22 For an introduction to systems theory see *Luhmann* (2011).

23 *Luhmann* (1984) page 25 and 593 et seqs.

24 “Via prices... one can observe how others observe the market”, translation by the author, quoted from *Luhmann* (1988) page 18. This is already, as in Keynes’ metaphor, “third level”, given that prices already reflect observations. See also *Luhmann* (2002) page 136 and *Baecker* (2008 and 1988). *Luhmann* and *Baecker* see prices as the way of operation of the “internal autopoiesis of the system” and “values” as “representing the social relevance of economic occurrences” (*Luhmann* (1988) page 55). Hence, values belong to the non-economic parts of the social system. We differ in this point.

25 *Soros* (2010) page 10 and (2003). See also *Luhmann* (1974) page 92 et seq.; (2006) page 85 et seq.

26 Soros explains how he operates: “According to my theory of initially self-reinforcing but eventually self-defeating trends, the trend is your friend most of the way; trend followers only get hurt at inflection points... Most of the time I am a trend follower, but all the time I am aware that I am a member of a herd and I am on the lookout for inflection points... This line of reasoning leads me to look out for the flaw in every investment thesis. My sense of insecurity is satisfied if I know what the flaw is... I know what is wrong while the market does not. I am ahead of the curve, watch out for tell-tale signs that a trend may be exhausted. Then I disengage from the herd...” (*Soros* (1995) page 12).

bubble lasts (just as thunderstorms lift up air). Value is homogenous, as long as it is there; as long as it remains there, it is not possible to distinguish reflexivity-driven value from other value. Everything is based on reflexivity – observing the observations of suppliers, of customers, and of competitors – and what may first be based on an error of judgement may vindicate itself and become a reality first for others and then even for the original inventor of the error; in that case, the error is no longer an error, in fact, it is indistinguishable from truth. Something was created that was originally false but which then became true, even for the creator. This effect is not reserved for lofty stock, bonds, FOREX, and derivatives markets but may, in principle, apply to all value-in-exchange, including even money.²⁷

Attribution of value-in-exchange and “esoteric”, “effectual”, and “effective” demand

We have already touched several times on the fact that for demand to be economically relevant, it needs to be accompanied by purchasing power and the will to make the financial sacrifice of the payment. When *Adam Smith* referred to “effectual” demand, he meant exactly this, demand in the sense of a need or desire for something which was combined with both the purchasing power and the will to pay.²⁸ The name-giving “effect” of this “effectual demand” was, thus, *making the final purchase* in the second leg of $M-C-M'$, the money M' flowing to the firm for the commodity C . Accordingly, “effectual demand”, points to the final goal of capitalist firms, whereby the initial investment is vindicated and the outlays are recovered with a profit. If there are either no means or no will to make the payment, including instances in which other expenditures take priority, then there is only “esoteric” demand (e.g., the hungry, the homeless, or the sick can have esoteric demands for food, shelter, or medical treatment, even if they cannot pay for them).

If people have money, then it is still a serious *sacrifice to part with it* in order to obtain a valued good. This is so because money represents the capability to make payments and, hence, to make purchases in the future. There is less left for future purchases after each payment, and he who pays increases his inability to be able to pay for desired goods in the future. Transferring money not only means transferring “payment capability” in one direction, it also means transferring “payment-

27 *Luhmann* greatly stresses the power of theories of reflexivity to feed back on the observed system; “Reflexionstheorie” has to “vor allem auf die durch die selbst mitbewirkten Zustandsänderungen (zu) reagieren...” (*Luhmann* (1988) page 81).

28 The term “effectual demand” was used by *Smith* (1776) Book I Chap. 7, to distinguish mere “physical demand” from demand with purchasing power. *Mill* referred to earlier writers having “... defined demand as “the wish to possess, combined with the power of purchasing” and continued “(to) distinguish demand in this technical sense, from the demand which is synonymous with desire, they call the former effectual demand.” (*Mill* (1848) Book III, Chap. II., § 3.)

incapability” in the other.²⁹ In order to properly understand the economy, Niklas Luhmann argues, it may be more helpful to think of a flow “payment capability” in one direction and of “payment incapability” in the other, rather than thinking of a flow of goods in one and a flow of money in the other direction.³⁰ This view renders the function of the money code, which is to organize legitimacy for the distribution of scarce goods socially manageable, more palpable: Money solves the social problem of dealing with scarcity of goods by making legitimate access to scarce goods dependent upon payment of scarce money.³¹

If Keynes used the term “effective” demand, we believe, he, at least in many instances, meant something else than Smith’s term of “effectual” demand.³² He means demand, which already becomes “effective” at an *earlier stage* by the entrepreneur *making* (not receiving) money payments. This type of demand’s name-giving effect is to initially *induce an entrepreneur to make investments* and to start a new circuit. If we apply Marx’s M–C–M’-notation, the effect of Keynes’ “effective demand” is already the *pay-out* of the amount M by the entrepreneurs that allows the circuit to be *started*. The first leg of M–C–M’, the purchasing of equipment, inventories, and labor, is “effected”, not only the later reception of the amount M’ to conclude the circuit (by C–M’).

Most importantly, “effective demand” remains “effective” in this regard even if the underlying expectation that there will later be “effectual demand” for the produce proves erroneous and if the investment is not vindicated. For macroeconomics or political economy,³³ thus, Keynes’ “effective” demand is more important than Smith’s

29 Luhmann (1998) page 134 f.; Baecker (2006) page 63. Sismondi (1827) page 379, 318 also uses the French word “sacrifice”.

30 Luhmann (1998) page 136.

31 Luhmann (1998) page 252. To enable this, the money code, although it remains “communication” – the general mode of operation of social systems – acquires a particular property. While other communication only *share meaning* (the emitter does not give away what he shares), communication in the economic system becomes a *transfer*. The payor loses what the payee receives (page 247).

32 “... the effective demand is simply the aggregate income (or proceeds) which the entrepreneurs expect to receive...” (Keynes (1936) page 55). Or: “The actually realized results of the production and the sale of output will only be relevant to employment in so far as they cause a modification of subsequent expectations” (see Keynes (1936) pages 55, 47 and 25). Even if Keynes had meant the same thing as Smith, our distinction between “effectual” and “effective” remains helpful.

33 The traditional term “political economy” (with no named opposite; e.g., “economic economy”, “physical economy” etc.) pointed to that part of the economy which was politically relevant. An understanding of political economy served princes, kings, and emperors to bring about growth and prosperity, to win wars and to avoid rebellions. The term macroeconomics (with microeconomics as its opposite) gives up “politics” as a criterion and implies a more neutral “small”/“big”-or “outer”/“inner” difference.

“effectual” demand because only Keynes’ “effective” demand triggers circuits. The amounts paid out, as parts of effective demand to other firms for equipment and inventories and as salaries, are employment-generating spending; they refill the reservoirs which feed the worker’s effectual demand in the future. Effective demand – set loose by the anticipation of future effectual demand – is key to greasing the economy’s wheels. Whether there will be “effectual demand” allowing profits matters mainly for the generation of investing capitalists later; whether there is effective demand matters immediately for workers, other firms and everybody.

Merchant heroes and trade systems

The systemic character of values-in-use entails the possibility to jointly create higher values-in-use through cooperation. Millions of short-, medium-, and long-term, local, national, or supra-national trade chains, trade systems, or trade networks (we use trade systems) have come into being and disappeared throughout the course of economic history, like species throughout natural history. It is their destiny to always be in the process of being discovered, growing, fighting for survival, shrinking, or decaying – depending on whether the products of their cooperation are valued sufficiently. War heroes often come first. Those who conquer foreign territories, e.g., Ephialtes and Pericles for Athens, Alexander the Great for Macedonia, Scipio Africanus and Caesar for Rome, Charles V for Spain, William the Conqueror or Henry V for Great Britain, Louis XIV and Napoléon for France, Fredric the Great and Bismarck for Germany, thereby also lay the foundations for new trade systems; these systems naturally mostly favor the firms from the conqueror’s country. The war heroes are often merchant heroes too; otherwise, merchant heroes follow soon afterwards, as the Venetian, Spanish, Dutch, or English merchants followed their fleets and military. Alternatively, there was a mix of adventure, private warfare, and commercial ingenuity from the outset, which is nicely captured in the term “merchant adventurers”.³⁴ Merchant heroes were also occasionally scientists or technicians, who built trade systems around new technologies, or social innovators, great marketeers or salesmen who built them around new products or services or new ways to distribute them (without warfare), the Fugger, the Hanse merchants, James Watt, Thomas Edison, Gottlieb Daimler, Henry Ford, Bill Gates, Steve Jobs, Jeff Bezos, and Mark Zuckerberg.

The crucial breakthrough sometimes came from venturing into oceans that nobody had crossed before and from discovering new continents, as Columbus had, from opening new routes of travel and commerce for goods and men on land and water, such as the silk road, the trading places of Hanseatic League, the traffic to the Americas, the Magellan Street, or the sailing route around the Cape of Good Hope.

34 See Graeber (2011) page 293 et seq.

Merchant heroes were also builders of Canals, such as of the “Great Canal” connecting the southern rice palties of China to the northern capitals for centuries, or the Panama- or Suez-Canal. Merchant heroes also introduced new methods for men and goods to travel, by boat, ship, railway, car, truck, airplane, drones, spacecraft, etc.

Once trade systems were established, e.g., a logistic infrastructure to carry great loads through a desert by a sufficient number of camels, less adventurous people followed to stabilize, administer, and optimize them, like sons of the Roman nobility or of the British gentry in their respective Empires. They attracted and directed flows of goods and capital and educated and disciplined the traders, political powers, and workers along their routes to provide their services and to accept appropriate remuneration. New trade systems always encounter opposition from those involved in old trade systems, with the latter often representing the wealthy and powerful of their times who were supported by states, ideologists, and priests. A battle between trade systems lay behind many bloody wars. If new trade systems win, as they mostly do, at least after some time, their profiteers, of course, turn conservative and now it is up to them to seek the support of states, ideologists, and priests to petrify the situation.

Trade systems follow the principles of value-in-use and value-in-exchange generation and are relational, systemic, and synergetic. The trade system dies, beginning at the end product, if the utility disappears, which is served by the end product. Not only is, then, the end product itself cleared from the shelves of the retail dealers and from the storehouses of the wholesalers, but the raw materials and semi-finished and spare parts also lose their utility. As the production of the input grinds to a halt, no one requires the old services of the different intermediaries, agents and brokers, banks, consultants, lawyers, translators any more. A breakdown of a trade system may also start from the early chain links. If mines of a raw material are exhausted, e.g., the silver mines of ancient Athens in Laurium or the Spanish silver mines in Potosi in Bolivia,³⁵ then security people, policemen, bartenders, cooks, shopkeepers, and prostitutes in Laurium and Potosi can go home and many jobs on the road to Athens and in the ports and cities of Havana, Seville, or Cadiz will be lost. The chain may also break in the middle: If *Lin Zexu*, a Chinese official, succeeded in enforcing the prohibition on the English to import opium into China in 1839,³⁶ the English Triangle trade (luxury goods from the UK to India, Opium from

35 Between 1556 and 1783, writes *Ferguson* (2008) page 24, the Spaniards carried 45,000 tons of pure silver from Potosi to Seville, leading to the value of the metal dramatically declining and to the “price revolution” of 1540–1640 in Europe. According to *Beck/Bacher/Hermann* (2017) page 46, 17 million kilograms of silver and 181,000 kilogram of gold were carried to Spain from Peru and Mexico.

36 *Ferguson* (2008) page 290. It is noteworthy that the British historian *Ferguson* also refers to the British Empire as “...history’s most successful narco-state” (page 291). If *Lin Zexu*, the

India to China, tea from China to the UK) would have been severely damaged, not just with regard to opium in storehouses in Calcutta, but also with regard to tea in storehouses in Shanghai and luxury goods in storehouses in Liverpool. Wars and natural catastrophes can interrupt trade systems at any link. They may destroy production facilities, render raw materials inaccessible, drive away or kill labor, disconnect logistic transportation lines, or block activities through a pandemic.³⁷ Parts of former unified supply systems, if interrupted and much like a worm cut into half, seek to survive separately. The lower part, which is closer to raw materials and basic inputs, will attempt to develop alternative products in order to sell them to wholesalers; this part and the upper part will study sales markets and look for suppliers of more promising goods. However, if the upper part of the lower, cut-off, part does not find new customers quickly, then it will lose its lower end. If the lower part of the upper cut-off part does not find new suppliers quickly, then its upper part will also disconnect. While the parts of the “worm” fight for survival, of course, the market for the end-users may be taken over by substitute products from completely new trade systems.

The pacegeneticity and bellogeneticity of trade systems

Domestic, regional, and international trade systems may favor and induce both peace or war – but it is difficult to anticipate if they will turn *pacegenetic* or *bellogenetic* in the individual case. Malthus spelled out this paradox. On the one hand, easily accessible sales markets and many other supplier firms may be great for each other: “It is... a ...general rule in political economy, that the wealth of a particular nation is increased by the increasing wealth and prosperity of surrounding states ...”. However, Malthus qualifies in the same sentence, that this is only valid “...if these states are not successful competitors in those branches of trade in which the particular nation had excelled.”³⁸ Hence, the increasing wealth must lead to increased “demand for its products, and call forth more effectively its resources.” “But”, Malthus goes on to remark, “if this rule [meaning the positive effect of wealthy surrounding states] be repeatedly insisted upon without noticing the above most important limitation, how is the student in political economy to account for some of the most prominent and best attested facts in the history of commerce. How is he to account for the

leader of the Chinese “war on Opium”, had Opium thrown into the sea, the Cantonese variant was not quite as successful as its “Boston” predecessor. Rather, the English won, reinstalled the freedom for their trade and annexed Hong Kong.

37 Today's capitalism, driven by highly leveraged financing and low costs of communication and transport, has an aggressive bias for huge interdependent “un-robust” trade systems in space (many partial inputs) and time (“just-in-time-delivery”). Since the Corona crisis many business leaders now praise stable supply structures, but they will soon resume the hunt for cost savings through riskier supply chains.

38 Italics added.

rapid failure of the resources of Venice under the increasing wealth of Portugal and the rest of Europe, after the discovery of a passage to India by the Cape of Good Hope,³⁹ the stagnation of the industry of Holland, when the surrounding nations grew sufficiently rich to undertake their own carrying trades, the increasing trade and wealth of Great Britain, during the war of the French Revolution, under the diminishing trade and increasing poverty of the greatest part of Europe, and the comparative distress of America, when other states were enabled to participate in those trades, which as a neutral she had carried on during a great part of the late war with such signal success.”⁴⁰ In other words, large markets with easy access, many firms, and rich neighbors are *not always* good for businesses in the surroundings, but may also kill them. Whether accumulations of other firms are *benevolent* or *malicious* for their fellow firms depends on the roles these other firms (and their mother countries) play in trade systems and upon whether they nurture trade systems with cheap inputs (in a complementary way) or as rich voluminous demanders of the end product – which is both benevolent and yields love and peace –, or whether they compete for cheap supplies and demand for the end product – which yields dislike, hatred, and may mean war. Profit economies and capitalism are, in other words, *pacegenetic* and *bellogenetic depending on the circumstances* and, at the same time, may be *pacegenetic* or *bellogenetic in different directions*. Explanation for all this can already be found in trade systems. Much warfare in capitalism may already be conditioned as deep as at the level of the theory of value.⁴¹

Our elementary economics of profit economies will now move on to examining the issues of money and of money creation.

39 Doing away with the century old Asian Spice Road, see *Ferguson* (2008) page 128.

40 *Malthus* (1836) page 13.

41 As *Polanyi* (1944) puts it: “In the past the organization of trade had been military and warlike; it was an adjunct of the pirates, the rover, the armed caravan, the hunter and trapper, the sword-bearing merchant, the armed burghesses of the town, the adventurers and explorers, the planters and conquistadores, the man-hunters and slave-traders, the colonial armies and chartered companies” (quote from page 16). Only the 19th century shows “a decisive turn in favor of measures to safeguard the economic system in times of war” (page 16). He connects this to haute finance, that functioned as “The main link between the political and the economic organization of the world” (page 10). “They [the Rothschilds] were anything but pacifists; they had made their fortune in the financing of wars; they were impervious to moral consideration; they had no objection against any number of minor, short or localized war. But their business interest would be impaired if a general war between the Great Powers should interfere with the monetary foundations of the system”. (p. 11).

Section 2. Money and money creation

Most economists, philosophers, sociologists, historians see the crucial thing in money in its being a practical intelligent technical improvement over barter and in state fiat money in its being a similar improvement over commodity money (gold and silver). In addition, they are interested in theoretically understanding the “phylogenetic” origin of money and of state fiat money, as a social invention, a technique, a structure, an institution, or as a code or as a media of communication as a more academic issue. These are all, indeed, interesting and important questions. However, the crucial thing about money, for a theory of capitalism, which includes its prosthetics, is neither the general origination of money nor the technical advantages, which money and state fiat money carry. It rather is that in an *existing* world of money, you may be able to create more of this scarce and powerful stuff, already via merchant credit money creation, much more via private bank credit money creation and limitlessly more via state fiat money creation. In particular, state fiat money gives a power to the states, which is often more valuable than all its policemen and soldiers. It is also the single method of the state to procure value without having to take something away from somebody else and using force. In other words, it makes a lot of sense to look at money backwards from what it can do today

If we take this into account, then the insight may strike us that the rather recent ultimate historic transition from commodity money, gold and silver, to state fiat money in 1971 (paper, token coins and account entries with no right of conversion into commodity money) may not have been due to the greater elegance, practicability, and cost efficiency, etc. of state fiat money over commodity money, but primarily to state fiat money radically easing money creation, to an extent, which was far beyond alchemist hopes.

Yes, money creation also existed prior to state fiat money, but how clumsy it was to find gold or silver and to mine it (or to rob it)! In fact, even money creation by merchants and private fractional reserves banks, as we shall see later, while much more powerful than finding and mining or robbing gold and silver, turns out only to be an intermediate stage on the way to state fiat money and to state alchemy at an industrial scale.

Money

Many “left-wing” economists – Sismondi, Marx, Keynes, Kalecki, Minsky – occupy prominent places in this book. However, regarding insights into money, money creation, and fiat money this book owes more to the other side of the spectrum. Marx made a few interesting and critical remarks about money creation in the third volume of *Capital*, but even he presented himself as more amused by just another of