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THE MARKET FOR IDEAS AND ITS VALIDATION FILTERS: SCIENTIFIC TRUTH, ECONOMIC PROFIT AND POLITICAL APPROVAL

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Abstract

“The market for ideas” is placed by scholars and commoners between literary metaphors and catchy paraphrases. However, economics and political science, in addition to the sciences of cognition and communication, have at least something to say about the concept. The marketplaces of ideas entail a mixture of “cathedrae” (governed by the rigors of epistemological adequacy in finding scientific truth), “bazaars” (governed by profit-seeking in the confines of the law of demand and supply), and “agorae” (governed by the democratic rule of law or by the despotic rule of men). Ideas usually become scientific knowledge only after passing the test of reason, which needs to be informed by properly selected methodological toolkits. Far from being scarcity-proof objects, ideas are (serviceable) products (calculatedly) produced by (resourceful) producers, subject to economic scrutiny. Also, ideas are the offshoots of the more often than not overrated freedom of expression (tempered in the political arena by the power of either blunt majorities or active minorities). Thus, it is legitimate to continuously question which are and ought to be the mechanisms for securing the quest for truth, since only true ideas are ultimately prone to sustainable prosperity and peacefulness, though short-sighted profiteering and forced (or accomplice) obedience might suggest otherwise. Scientific truth (i.e., in social sciences) is caught amongst epistemic, as well as (pseudo-)economic and (poor) political filters. The purpose of this paper is to identify and investigate the frameworks for the evaluation and explanation of the markets for ideas, at the crossroads of the “true-false”, “profitable-unprofitable” and “approved-denied” mingled filters. The approach is equally conceptual (theoretical) and contextual (historical), and whilst being inevitably interdisciplinary, it ultimately relies on economic science, serving a dual role: as scientific decoder as well as decodable case study.

Keywords: knowledge, science, academia, economics, market, politics, government.

JEL Classification: B40, M20, D80, P00, Z10.

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Introduction

“It all started with Adam” (the eve of modern economics, that is), and there is a wealth of evidence in support of this claim (Smith, 1776), just as in the set-up of political science Niccolò Machiavelli (1531) has the principal (and quite a princely) role. Yet, the “forensics” of *ideas* – from the humanities to natural sciences, as spokes spurting of philosophy’s hub – finger-points at the Greeks as the “usual suspects” for having spoken the very first words of wisdom, to the same extent that the Chinese are credited for pioneering in terms of practical tooling. Even “idea” emerged from the Greek word *eidos*, meaning, roughly, the essence of a thing. Back then, ideas marked their formal, intellectualized, presence in Plato’s theory of (ideal) forms, whose shadowy embodiment our real world would be, only to be rebutted by Aristotle’s take on the unity of matter (observable and measurable) and form, whose joint essence we (re)cognize by sensorial faculties and reasoned experience. Adding Descartes, Locke, Berkeley, or Hume, with their timeless epigones and tireless faultfinders, and we are already trapped in some philosophical vertigo. And this is only the metaphysical side of the vortex. Howbeit, ideas are not the apanage of philosophers alone, but scientists and theologians have their fair share in the “market”.

The syntagm *market for ideas* unveils the professional formation of the present authors, besides the name of the journal: *economists*. This class of scientists is supposed to possess a minimal training in philosophy, for minimal epistemological purposes (Gordon, 1993), prior to making the mainstream ritualistic leap of faith into the abyss of (econo)metrics, at the same time being able to find (if only looked for) a sense of moderation and modesty coming from the science-religion dialogue, more so in social sciences than in quantum or astro- physics (Comşa and Munteanu, 2016). Despite inter-/multi-/trans- disciplinary paths, in its own tight confines, economics has its course set (and its “curse”, maybe) by *scarcity*. When put next to ideas, scarcity seems a wisecrack, for ethereal abundance is easily associated with ideas, knowledge, and thinking. Yet, this may be a frivolous, faulty premise, because even in public display (“free access” or “open access”, as proxies for non-scarcity), ideas employ scarce factors of production. Consequently, *the* market for ideas can be conceived as a whole structure of production, with its own width and depth, intertwined and embedded with the general structure of production for all goods and services. And, thence, a legitimate subject matter for economic science.

As object of study, ideas look like one of the most delightful endeavours a scholar (in the position of a producer) may pursue and from which a student (as a consumer) may benefit. Yet, as ideas are *about* and *in* “everything” (a harassing word for a scientist of scarcities), from high science and fine arts to media reporting of mundane events, no bibliography can do justice to referencing the *Idealtypus*-es and the *idiosyncrasies* of the market for ideas. However, trying to find its suited “place” (but noticing that we speak here of a *process*) can serve as a common-sense starting point. The *potential* “space” of the market(s) for ideas resides in the synergic sum of all conscious minds, synchronically and diachronically involved in roughcasting ideas *in foro interno* or broadcasting them, when ripe, to fellows (this is irrespective of domains or degrees). And the *effective* “spots”, of an orderly nature, stand out as publications (e.g., academic treatises, business patents, common laws), as well as any kind of platform (e.g., symposia, guilds, parliaments). In these ambiances, ideas are communicated, confirmed, consolidated, or excommunicated. The moves of either evolving or revolutionary ideas, from Copernicanism and Relativism to Impressionism and Socialist Realism, fit into this “market-mindset”.

This essay asks an original question on what is called, either with full scientific magistracy or employing a figure of speech, a metaphor, as *market for ideas* (or *marketplace of ideas*). Is it a *market* in its accredited economic(s) sense, an interplay of buyers and sellers, asking and bidding for goods and services, in direct contact with one another or mediated by specialized agents and institutional agency? Or is it a rather generic intercourse, valuable, whilst not necessarily money-priced, where: *i.* scholars (ex)change scientific ideas on the merit of carefully demonstrable truthfulness; *ii.* producers and consumers sift business ideas based on profitability out of satisfied needs; *iii.* (un)called for by their people, politicians in power regulate/outlaw critical societal ideas? In economic science, the concept *per se* looks underdeveloped, which could be indicative of its fragility, although it seems to play the part of a “silent partner” in the (overrated) *knowledge economy/economics*; as for its outstretched understanding, even if unnamed precisely in this manner, it had featured on some prominent social scientists’ research agendas. Building upon previous arguments, as well as breaking off with others, we aim to obtain, in the end, a brief chart of what could be tagged as open-road or dead-end in the market for ideas.

1. Setting the stage: *cui bono* studying the “market(s) for ideas”?

1.1. Problem statement

The *market for ideas* is far from constituting a clear-cut scientific concept, as we have already conceded from the outset. Adding to the empyrean understanding of *ideas* is the elongation of the meaning of the *market* beyond its main useance within economics – stretching it in order to provide a representation of the non-money-mediated production-distribution-consumption of knowledge in scientific conclaves and political communities –, we risk losing sight of the settlement of the proper epistemic jurisdiction of our inquiry. However, this is not and need not be the case, for the authors of this essay are *economists*, are aware of the epistemological cross-border, *interdisciplinary* issues between economics and other social sciences (i.e., sociology, a pertinent candidate for the status of scientific mainframe for such a theme), as well as of the inter-paradigmatic *methodenstreit* between economics in the neoclassical mainstream and the rather ignored, yet not inapposite praxeological perspective (i.e., instructive for framing the very complementarities between sociologic and economic lines).

By paraphrasing Friedrich A. Hayek’s penetrating caveat and counsel for his profession – “[N]obody can be a great economist who is only an economist – and I am even tempted to add that the economist who is only an economist is likely to become a nuisance if not a positive danger” (Hayek, 1956, p.463) –, this analysis is economic only up to the point of being in peril to be just economic, and, thus, too little economic, if at all. And a decent point of departure for every scientist (i.e., economist) is to accept what is in his scientific command and what exceeds the scope of his (and his science) abilities. There is one crucial sense in which “the market for ideas”, “the political market” and “the legal market” are not genuine markets (Hodgson, 2020): the true idea/theory/argument is not that of the highest bidder; the good rule or governance is not that of the highest bidder; the good legal ruling or arbitrage decision is not that established – again – by the highest price offered. There are distinct *genera*: science is not the market; civil society or *res publica* is not the market; and, again, justice is not the market.

True enough, these markets involve “exchanges” of ideas (but in the sense of communication and, eventually, consecration of the valid ones). They also indicate a touch of “property” (still

this is about semantics and avoiding deceptive meanings of the words, and only then about intellectual property exclusive possession). They imply a “price”, too (or an opportunity cost in time/effort/status of making an own statement rather than adhering passively to group-thinking and complicit conformity). Howbeit, in certain cases, phenomena proper to the economic realm occur, involving commercial exchanges of confidential, encrypted, or patented ideas, at monetary prices, and in more or less competitive market setups – these are situations in which economic science reigns supreme in providing explanations or predictions. Otherwise, the rest of the “markets” are to be studied in the light of other kinds of processes that deal with the accreditation of ideas as scientifically true, politically acceptable, and, in “the best of all possible worlds” (but not in Leibniz’s purport), profitable.

Such a point is worth making in order to dismiss both the haughtiness of translating everything into “economish” and the meekness of incapacitating even more the “dismal science”. As there are excesses in both camps. On the one hand, the Chicago perspective (Becker, 1978; Friedman, 1989) seems to sin in this respect, as it judges everything in narrow terms of cost-benefit analysis. In Milton Friedman’s tradition of positive methodology, it does not even matter if people actually behave in such a way. It suffices if, assuming things are as if they acted in that way, the predictions are successful. Interestingly, a profound thinker such as David Friedman, after judging even politics in strict economic terms and, thus, including any mechanism of social coordination and cooperation (even those generally considered aggressive or coercive, like the government) in the general category of social coordination, encloses any failure of social coordination under the “market failure” rubric. Thus, government failure becomes, oddly enough, the worst kind of... market failure.

On the other hand, there is also an important sense in which the market-like aspects should not be minimized. In the same way in which, from outside economics, critics of economics – especially of “economic imperialism” – point to the unavoidable “embeddedness” (Polanyi, 1944; Granovetter, 1985) of the economy in non-economic aspects (cultural, anthropological, historical, metaphysical, religious etc.), the economist could – by turning upside-down the argument – point to the unavoidable “economic embeddedness” (or “economicness”, if one can say so) of things. Non-scarce non-material ideas need scarce material support and efforts to come to – and remain in – existence; civic discourse and civic presence in the agora require resources, materials, printing presses, and gathering halls; the same is true with scientific research logistics. And it so happens that it is of consequence whether providers of legal adjudication are monopolists, in a cartel, or in free competition. Economics does have something to say on such facets of the markets for ideas, even if not the last word.

Keeping the above in mind, one can still employ the “market for...” jargon when dealing with ideas, law, politics, family etc. The benefit would be a flexible framework to navigate between the rather more rigid “market limits” (Sandel, 2012) and “market without limits” (Brennan and Jaworski, 2015) views. And all the time is to be kept in mind the distinction between monetary (economic *stricto sensu*) and non-monetary (economic *lato sensu*) features bearing on the matters.

1.2. Aims of the research

As already noted, the present essay explores the market(s) for ideas via a triad of routes – that is, respectively, the dialogue devoted to truth-seeking within *scientific* communities, the *economic* exchanges in profit-seeking business setups, and the *political* regulations aimed at order-seeking societal configurations. It exploits pre-existing body of knowledge from these realms, using, as a common (sense) denominator, the logic of human action (the hereinafter-ratiocinated *praxeological* method). And, finally, it strives to expand the current understanding of the intra- and inter- workings of these fiefs of ideas, by proposing an original, although hidden in plain sight, stance. The originality resides in emphasizing that there are competing validation criteria, available on each of the three layers, and in glossing over the causes and consequences of their (lack of) convergence. Also, at the end of the theoretical discussion, some historical cases will be indicated.

Summing-up, the main study questions can be bundled into three crosscut categories. Firstly: how much rigour we may claim in using the syntagm *market for ideas* and why we should display some caveats when operating with it not only in relation to economic affairs, but also to politics and even to scientific research undertakings displayed as “markets”? Secondly: which are the proper *validation filters* or performance tests for each of the three so-called markets for ideas?; for instance, how to find successful ideas in (hard or soft) sciences, in economy (profit-making or cost-benefit analysis), in politics (masses or elites)? Thirdly: what does it mean when a criterion of success is met in a type of market for ideas, or in two, but not in all?; why and how do such anomalies appear?; do we have a larger share of ideas in the “sweet-spot” of triple validation, or human society is doomed to live with a minority of such fortunate coincidences (Figure no. 1)?

1.3. Research methods

The manifest *end* is to provide a theoretical/conceptual scrutiny on frameworks for ideas processing (plus a few historical illustrations), and the methodological *means* support this course. Short of entering into debates pertaining to the philosophy of science (see Section 2 for more on this), it is worth pointing out that the authors are being aware of the epistemological/methodological disparities between the social sciences and natural sciences (Mises, 2003). Thence, we opted for an “austere” methodological take of this research (as opposed to more “affluent”, data-infused inroads), considering it suitable and sufficient for our purpose.

In a nutshell, we rely on *praxeological*/deductive analysis for an account on the coherence of the “market for ideas” concept. That will clarify its main meaning, as well as the margins for metaphorizing (Section 2, devoted to the “*scientific* market for ideas”, hosts an outlook of praxeology and its epistemological implications for economics and for other social sciences – viz., sociology). This “paradigm choice”, with its assorted methodological approach, prioritizes *a priori*, deductive judgment over *a posteriori*, empirical observation, as non-contingent (theoretical) “literacy” has to precede contingent (historical) “readership”.

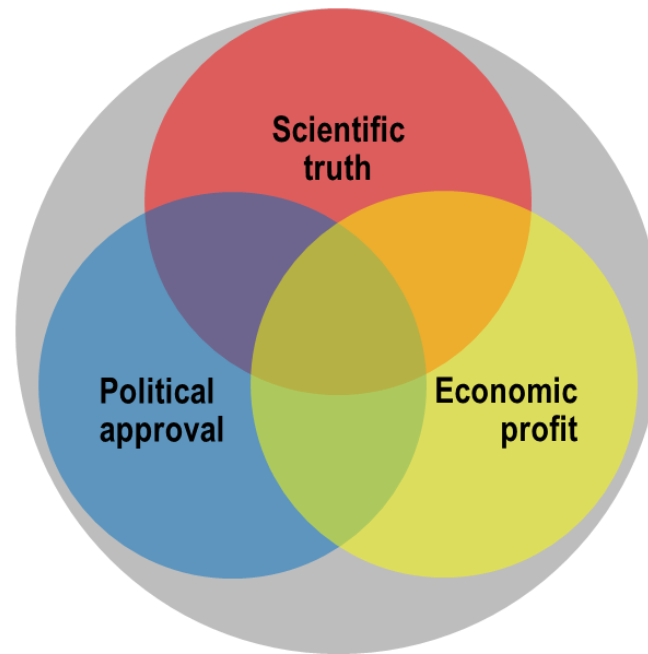


Figure no. 1. Overlapping markets for ideas: scientific, economic and political
Source: Authors' own conception.

2. The market for ideas: the *scientific/epistemological* judgment

This section concisely discusses the *cognitive success* (as well as *cognitive failure*) in the way sciences pursue knowledge, search for general truths, and determine fundamental laws. *Epistemology* is an old piece of human cogitation, knows generations of focuses, and has as contentious heritage the divide between those (many) who accredit the “one method fits all sciences” position and those (fewer) who advocate the unavoidable “man - nature” dualism.

2.1. From the science of goods scarcity to the scarcity of good science

The *scarcity* of ideas is essential because it decides whether they can be considered economic goods. If we cannot conceive of a scarcity of ideas, most of what we can say about them, from an economic viewpoint, is moot. Seemingly, as there is *no* market for non-scarce goods, there may be *no* market(s) for ideas, in the economic sense. But the statement that “ideas and information are not scarce” is not always true and it can be amended in at least two ways:

- when speaking of ideas not expressed in a public manner, as publicity is at odds with informational scarcity, or when public ideas become subject to political regulation and privilege;
- and when speaking of their factors of production, forming sub-structures that are part and parcel of the general structure of production for all goods and services generated in the economy.

While non-scarce, the essential point here is that some ideas can be considered goods, as opposed to bads or non-goods (that is, things that are unwanted, be they scarce or not). Thus, it makes sense to discuss about a market for ideas and a structure of production for ideas. As Tucker and Kinsella put it:

“To be sure, non-scarce goods can be economized and thereby commercialized by rationing the scarce means of their distribution. For example, a professor, whose time and body are scarce, is paid to share non-scarce ideas. This is a service, but once the professor’s ideas are shared, they enter into the realm of all non-scarce goods. What is paid for in fact is not the idea itself, but the presentation, the time required to share, the labor services of teaching, all of which are scarce goods” (Tucker and Kinsella, 2010).

Bearing this in mind, we can talk about all-things market when we talk about the market for ideas – even about market failure. And not only that the suppliers in such peculiar market for ideas are not immune to failure in delivering what the consumers demand but are in fact prone to underserve or to even make disservices to consumers, to the extent that there is state intervention in the market. As economists speak of malinvestments that result from government intervention, we can speak of malinvestments in the market for ideas, too.

The particular case of malinvestment that we want to emphasize here is the way in which research based on *methodological dualism* is crowded out by research based on *methodological monism*.

2.2. “*E pluribus unum?*” The case against “methodological monism”

Social sciences have long been divided by the way scientists consider science should be done, or knowledge acquired. On the one hand, we have methodological monism, and, on the other hand, methodological dualism.

Methodological dualism is defined as a requirement to approach differently the two distinctive object domains of scientific research: the *human* and the *natural*. The source of the markedly need for such dissimilar approach is the striking distinctiveness between what humans are and how we, as humans, can gain knowledge about ourselves versus what the non-human world is and how we can acquire knowledge about it. According to Mises, the fact that we do not know how external events affect human thoughts, ideas, and judgements of value “splits the realm of knowledge into two separate fields, the realm of external events, commonly called nature, and the realm of human thought and action” (Mises, 2007, p.1).

This distinction has a history of being contested. It stood at the centre of the *methodenstreit*, the dispute over method that involved – initially – early members of the Austrian School and the Historical School, spanning several decades and generations of debates (Huerta de Soto, 1998).

- Methodological dualism implies that human society cannot be viewed as a series of external events, but instead as a series of actions taken by conscious beings that are free to choose, unsuitable to lab-like experiments conducted on people, markets, or institutions. The split stems from the fact that research in human sciences is fundamentally based on deduction from axioms about human nature and behaviour, while research in natural sciences is fundamentally based on induction from empirical observations of the external world facts (Smith, 1994).

- Conversely, methodological monism denies that the realm of knowledge should be split in two. What its critics called “physics envy” involves the treatment of human actions and interactions with the apparatus of natural sciences. This opens the perspective for the “science is measurement” approach, for statistics and mathematical modelling of human behaviour. It also closes the route for the kind of *logic-of-action* or *praxeological* approach that is peculiar for part of the Austrian School of Economics and others (Dolan, 1976; Rothbard, 1995).

Besides the main accusation of dualists against monists that their approach is invalidated by the inappropriateness of the object of study to the method of research applied – on which we do not wish to delve here –, there is a further consequence of the aforementioned inappropriateness: that the verification of empirical theorems about social matters is lax, and indeed impossible. This laxity opens the possibility for researchers to create economic models and theories about society that can be biased with impunity (Pfleiderer, 2020). In lack of rigorous verification, anything can be said, as long as it has the adequate scientific parlance.

This may explain the relative abundance of monist research versus dualist research in the market for ideas. There are various explanations for this fact. Hayek speaks of a pendulum: empirical research was subdued in favour of moral philosophy for a long time and, with the advent of Enlightenment Revolution, the physical methods begun their own revolution, or, in Hayek’s words, a “counter-revolution”. Thus, they began to gather a prominence that, as a pendulum, gained a momentum, which took them far beyond their legitimate realm, into what Hayek calls “scientism”. Noting that the Hayekian description is quite contradictory as it is itself a physics metaphor used to explain a social phenomenon, we understand that in fact he sees this evolution as an intellectual error of massive proportions (Hayek, 1979).

However, we wish to advance here another explanation. The aforementioned lack of rigorous verification is the main reason why methodological monism is much more open and prone to political manipulation, whereas methodological dualism is not. Given this asymmetry, and adding the factual observation that the market for ideas is heavily subsidized by public funds, we can infer a specific case of *malinvestment*, or the crowding out of the praxeological, logical-deductive approach in social sciences by the empiricist-positivist agendas.

Public funding of any type of activity is guaranteed to lead to malinvestment. By its own nature, public money is taken, coercively (despite “social contract” quasi-legitimacy), out of the hands of market participants and put into the hands of political actors and entities. These resources cannot then be used to incorporate the preferences of their legitimate initial owners, but the preferences of those who acquire their control after being extracted. In our case, they may be redistributed towards the production of ideas, whereas they might have had a completely different destination when left into the hands of their initial producers. Or, in reverse, they may be redistributed from the production of ideas towards other markets. It is impossible to assess beforehand if the market for ideas is thus bigger or smaller than it would have been without the redistribution. But, either way, the malinvestment is implicit.

Nevertheless, to the extent that resources formed through taxation would also have been initially directed towards the market for ideas, it is clear that in the hands of political actors they fund the subset of ideas that the political agenda is interested in – and the reality of taxation itself guarantees that the knowledge thus produced must be different from the subset of ideas produced with funds left to the initial owners. Since scientist research lacks proper

verifiability and is indefinitely elastic – as opposed to praxeological research –, it follows that publicly funded ideas will be rather produced with empirical-positivist methods instead of praxeological ones. Thus, we can talk about a specific case of malinvestment: a subtle yet substantial crowding out of methodological dualism in favour of methodological monism.

Such an insight resonates with considerations from Sections 3 and 4 of our research, where the *economic* and *political* filters are being evaluated, in addition to the *scientific* ones.

2.3. Disciplining interdisciplinarity: when economics meets sociology

Scholars (as students) of the social sciences should delineate between two fields: *economics* and *sociology*. While economics focuses on human action guided by profit-and-loss calculation and deduces what happens when rational economic decision-making becomes impossible (socialism) or is hampered by state action (interventionism), sociology studies human action in the absence of the guidance provided by the price mechanism. Both sciences recognize that individuals strive under the auspices of scarcity to improve their situation. Also, both sciences are based on the subjective theory of value. As Mises puts it, “[t]he modern concept of pleasure, happiness, utility, satisfaction and the like includes all human ends, regardless of whether the motives of action are moral or immoral, noble or ignoble, altruistic or egotistical” (Mises, 1951, pp.112-113). Yet, only economics studies the implications of human action guided by monetary calculation in its pursuit of “happiness”. All other types of human endeavours, i.e., all human action pursued outside the market, as long as they are voluntary, fall under the aegis of sociology. Or, as Hülsmann (2003, p.xvi) puts it, “[Mises saw it as] a hierarchical relationship between a more general discipline (sociology) and a narrower part thereof (economics), which deals with particular cases of human action”.

Social scientists have not always respected the clear boundary between the field of sociology and that of economics. There have been transgressions from both parts. Economists have used the tools of their trade to analyse purely sociological phenomena (the raised eyebrows from the members of the sociological community to Becker’s analysis of family life and marriage come to mind). In their turn, sociologists have been eager to shout foul while not shying away from calling into question the universality pretensions of economic law. For sociologists, the social and cultural embeddedness of all economic phenomena makes the validity of any theoretical inference dependent on circumstances and their historically dependent interpretation. To use an example provided by Bruce (2003, 22), we cannot infer anything by observing a man that is moving his hand. He might be trying to get rid of a muscle cramp, or he might be waving goodbye. We must first understand the context of his action so that we may then form an idea of what he is doing.

As far as historical interpretation goes, Bruce is correct, but it does not follow that all scientific studies of human action must be reduced to some form of history. The source of this error is another distinction that most social scientists fail to make and which Mises (2007) stresses. Therefore, we must keep in mind two clear distinctions:

- *sociology* from *economics* (two separate theoretical fields of study);
- *theory* from *history* (one uses deduction, while the other employs specific understanding).

On the one hand, we have the realm of theory (the science of human action), a field where logical deduction is employed to reach universally true statements. On the other hand, we have the field of history, where we employ the scientific conclusions provided by the sciences of human action (e.g., sociology, economics) and specific understanding to make sense of the aims and motivations of individuals acting in complex circumstances.

One area of study that both economists and sociologists have tackled is the field of *ideas*, taken here in the most general understanding of the term. If we unpack this encompassing concept, we will discover that both professions have delved into several lines of investigation.

“Interdisciplinary gains from trade”: M. Polanyi’s sociology and F.A. Hayek’s economics

For instance, both professions have inquired about how ideas are generated, vetted, recognized, applied, and (where possible) monetized. Michael Polanyi’s (1962) analysis of the scientific community’s mechanism of coordination is an example of sociological analysis focusing on this social group’s governance system. Here, Polanyi draws his inspiration from the functioning of the price mechanism.

To be more precise, Polanyi builds on Hayek’s (1945) contribution that presents the *price system* as a *knowledge transmitting mechanism* – prolonging (and diverting a bit) the first salvo, from 1920, in the economic calculation anti-socialist argument made by Mises (2012) –, although he does not directly mention the Austrian’s name. Polanyi’s attention is drawn by the fact that every member of the scientific community adapts his research plan to his abilities and the new discoveries in the field. He readily recognizes that the incentive structure in the scientific community is entirely different from that in market-based relations. While there is no (monetary) profit to be obtained in the case of fundamental research, the members of the scientific community are intrinsically motivated by truth-seeking and, at the same time, by the recognition of their professional peers, obtainable only by actively participating in the life of what Polanyi calls “the republic of science”. Once a new idea comes about in the mind of a scientist, it can only gain recognition after it is made public and submitted to the test of scrutiny and criticism of peers. Also, due to the system’s inbuilt incentive structure, all other scientists are stimulated to critically and creatively appraise the new contribution and, once accepted, to use it in their own line of investigation. This process leads to a quick exchange of ideas and to the update of all research plans impacted by the latest discovery.

According to Mirowski and Nik-Khah (2017), we can identify yet another phase in Hayek’s conceptualization of knowledge after the publication of *The Sensory Order*. Hayek’s contribution to psychology reverberated in his conceptualization of society. Much of human knowledge is inarticulable; it is destined to remain tacit and cannot be imparted through explanations or via statistical data. Thence, the importance of reason and the pretence that we can use it to consciously control all human activities must be relegated to the back seat in our conceptualization of society. *Spontaneous order* is what assists man in pursuing his aims. Because we have little understanding of it and do not possess all the relevant knowledge, we risk doing more harm than good when we try to manipulate social processes. In his Nobel speech, Hayek (1974) warns that “to act on the belief that we possess the knowledge and the power which enable us to shape the processes of society entirely to our liking, knowledge which in fact we do not possess, is likely to make us do much harm”. He then adds: “we are only beginning to understand on how subtle a communication system the functioning of an advanced industrial society is based – a communications system which we call the market

and which turns out to be a more efficient mechanism for digesting dispersed information than any that man has deliberately designed”.

Hayek’s (2002) last phase in conceptualizing knowledge presents the market and *market competition* as a *discovery procedure*. The market participant is not aware of the “given” quantity of scarce goods, as the model of perfect competition postulates. Neither does he know all the potential uses of his resources and skills. This kind of knowledge must, in its turn, be discovered, and it is the market that informs him of these matters. “Each individual’s particular combination of skills and abilities – which in many regards is always unique – will not only (and not even primarily) be skills that the person in question can recite in detail or report to a government agency”, but this kind of knowledge depends on the “ability to detect certain conditions – an ability that individuals can use effectively only when the market tells them what kinds of goods and services are demanded, and how urgently” (Hayek, 2002, p.13). In other words, without the market there to tell us, we cannot fully discern even our endowments. Mirowski and Nik-Khah (2017) mention that Hayek’s treatments of knowledge, initially stimulated by the socialist calculation debate, represented the flashpoint for a number of market-socialist, neoclassical economists that coagulated around the Cowles Commission and became preoccupied with the formal, mathematical treatment of information, as a scientific ally for state policies.

For the purposes of our paper, it suffices to observe that Hayek’s successive treatments of knowledge – gathered through the price mechanism, communicated through the price mechanism, and revealed by the price mechanism – represent more of a systemic approach than an analysis of how new ideas come about. His treatment sees the market as a precondition for the transmission of impersonal and clear to interpret information but has nothing to tell us about the process of idea generation. In addition, this understanding of knowledge influences his larger worldview on the nature of social interaction. For Hayek, spontaneous order is the most important feature that arises from human cooperation, and any direct attempt of top-down control risks damaging it. This view constitutes one more epistemological argument against political intervention: we know too little, and what we can apprehend is entirely due to the market, so we should refrain from “policing” markets. At the same time, we have seen that Polanyi found some inspiration in the workings of the price mechanism, pinpointing to some significant sociological and political implications that Hayek draws from his theory of knowledge transmission through the price mechanism. In other words, the contributions of these two authors constitute clear examples of the cross-pollination between economics and sociology on matters concerning (the market for) knowledge.

The “intellectual class”: magisters or Cerberus, manufacturers or counterfeiters of idea(l)s?

Other economic and sociological spillovers can be found in the analysis of the *intellectual class*, i.e., the popularisers of ideas or “second-hand dealers in ideas”, as Hayek (1960) famously called them. For instance, Schumpeter (1942) analysed the sociological role of intellectuals in criticizing capitalism and bringing its dissolution. Mises (2008) also had a socio-psychological analysis of the anxieties that plague opinion moulders (intellectuals, artists, and actors) and make them susceptible to an anti-capitalistic mentality. These sociological analyses present the intellectual class as driven not only by the purity of ideas, but also by material self-interest. This kind of approach complements Polanyi’s view.

Although Polanyi talks about the scientific community and not of intellectuals *per se*, he makes two observations that can be linked to the Austrians' sociological analysis mentioned above.

The first observation concerns the set of values that the members of the scientific community must hold so that its governance mechanism can properly work and weed out meritorious research results from the chaff. In this sense, Polanyi distinguishes between an "open society" and a "free society". An open society is a social order in which individuals are free to pursue any private course of action as long as they do not infringe upon the rights of another. The free society is different: it involves freedom tempered by a set of virtues and the duty to pursue them. Thus, a free society must be "fully dedicated to a distinct set of beliefs" (Polanyi, 2002, p.vii), which includes the transcendent realities of truth, justice, charity, and tolerance. Without this bedrock of beliefs, the pursuit of truth cannot work. The second observation is dependent on the aforementioned set of beliefs, but also adds another dimension: our civilization's beliefs about the nature of things, or "scientific orthodoxy". Anyone promoting an idea that cannot be fitted in this orthodox framework does not come under the protection of "academic freedom". As Polanyi explains:

"[O]ur civilization is deeply committed to certain beliefs about the nature of things; beliefs which are different, for example, from those to which the early Egyptian or the Aztec civilizations were committed [e.g., sorcery, astrology]. It is for the cultivation of these particular beliefs – and these alone – that a certain group of people has been granted a measure of independence and official support in the West. This is what we call academic freedom. Replace science as we know it, by some other study we do not believe in and we cease to protest against political interference with its pursuit" (Polanyi, 2002, pp.27-28).

The Austrians' analysis of the intellectual class as a self-seeking interest group that is biased toward socialist ideas injects a dose of reality into Polanyi's theory. The scientific world is not an aseptic environment where only the truth is pursued. Nor are all those that perceive themselves as scientists adherents to a generally accepted orthodoxy. The phenomenon of rival schools of thought is especially endemic in the social sciences, where ideological biases tend to seep in and shape what gets researched and published and who gets to occupy various academic and administrative positions. The tensions become exacerbated as society itself tends to become more ideologically polarized. Relative recent phenomena like "cancel culture" and systematic disinformation campaigns are just manifestations of these problems. It is in this context that Rauch (2021) calls for the establishment of a "constitution of knowledge" in which truth, as a good in itself, is pursued, and strong, independent institutions (universities, the press, the law profession) maintain high professional standards and signal who can make authoritative statements to the public.

The "fundamental vs. applied research" bifurcation: perilous schism or division of labour?

Another topic of interest for the sociological and economical treatment of the realm of ideas is the difference between *fundamental* and *applied research*. Both professions have tackled this issue, but with a different focus. For instance, sociological analysis has zeroed in on the distinct principles of organization that fundamental and applied research must conform to due to their different method of validating results (Polanyi, 2002). Fundamental research

leads to incremental insights into the nature of things, which only incidentally lead to practical results. Applied research, on the other hand, is focused on facts concerning a specific industry. Only practical results are sought, and these are evaluated based on two criteria: how urgent the need addressed by the invention is, and respectively, how scarce the resources needed to produce the invention are. In other words, Polanyi sees applied research as being guided by economic calculation. From this, he draws the following conclusion concerning the organization method that prevails in each type of research: fundamental research requires a system of thought to build upon and a validator scientific community. The community provides the incentive that stimulates pure research endeavours: peer recognition. Applied research uses the scientific method, too, though, in its case, the task is straightforward, as the viability of the result is gauged by the profit-and-loss test of the market. While fundamental research seeks the recognition of the scientific community, applied research seeks consumers' recognition.

In his analysis of the difference between fundamental and applied research, Polanyi comes very close to Mises's (1944) distinction between *bureaucratic management* and *profit management*. This is another implication of Mises's calculation argument that also brings some interesting sociological insights to the fore. If an organization does not operate in a market, it is forced to use a bureaucratic approach to decision-making. Without profit and loss calculation, all decisions are based on a budgetary allocation and on a strictly regulated top-down approval procedure. Bureaucratic decision-making also means that an employee cannot be evaluated on an objective standard, i.e., his marginal value products, but only based on the impressions he has left on his superior. That is why bureaucratic organizations never seem to promote people based on merit and why getting under the superior's skin is a top priority for all underlings. Polanyi does not push his analysis as far as this, mainly because his understanding of the market process has been more influenced by Hayek. Also, we can admit that the world of academia is less hierarchical than the post office. The scientist has a wide margin of discretion regarding the subject of his research. Yet, Mises's socio-economic analysis of bureaucracy can still further our understanding of the difference between fundamental and applied research. In such an environment, each scientist is constrained to adhere even more closely to the "distinct set of beliefs" pointed out by Polanyi for the scientific community to function properly.

3. The market for ideas: the wealth and welfare economics trial

This section examines the scientific legitimacy of the very concept of a market for ideas in the confines of *economic science*. Prior to looking at performance criteria akin to economic affairs, appertaining to the *efficiency* buzzword, a probe is made into the micro- and macro-economics of (non)scarce ideas. In this drilling, of main concern are the sequences of structures of production, ordered by profit-seeking, where ideas feature as inputs or outputs.

3.1. The treatment of ideas as manipulable quantity

When it comes to ideas, economists have been mainly focused on determining the right amount, not the right quality, which has been implicitly assumed to be adequate. The focus on improving the "quantity" of ideas put into circulation is due to the economic profession's bent on mathematization. Because quality cannot be modelled and mathematically

manipulated to find an optimum, it has been relegated to a secondary position. Also, when considering ideas and their implications, mathematical economists mainly refer to technological know-how or skills that improve productivity.

Less formal economic models have been able to account for a more encompassing definition of the term. For instance, when Schumpeter (2017, p.66) talks about “new combinations”, he refers to five possible situations that push the economy toward a new equilibrium position: the introduction of a new good, a new method of production, the opening of a new market, gaining access to a new supply of raw materials or semi-finished goods, and, finally, the carrying out of a new organization of the industry. More historical studies have also taken a broader definition of ideas when analysing their role in promoting economic development. The days when economists rode the Marxian hobby horse of material forces of production to explain historical changes have been left behind, although not entirely forgotten. Neo-institutionalists that emphasize the role of the (non-material) rules of the game (North, 1999) and meta-studies that focus on the importance of value systems and culture (Weber, 1904; McCloskey, 2017; Mokyr, 2017) for economic development have more recently brought to the fore the consequence that ideas have in shaping our world.

Nevertheless, the mainstream mathematical treatment of ideas has remained faithful to modelling them as an amorphous blob with only a quantitative dimension, which reduces things to an estimated monetary value, years of schooling, or IQ scores. This remains true for both micro- and macro- economic approaches. Before the interwar period, economists treated education as something pertaining to the political and moral level, while economic growth was something inherent in the workings of the market. Things began to change as the state began assuming a more active role in guiding the economy through welfare fine-tuning or by directly spurring development. Economists quickly produced the theoretical underpinning for these types of policies, on both micro and macro levels.

- *The micro approach* treats the production of ideas within the framework of positive externalities. Both the activity of looking for new ideas (research) and imparting already accepted ideas to others (education) have been treated as beneficial to society’s welfare. Furthermore, the net social benefits associated with these activities are thought to outweigh the net private gains that accrue to those that provide them (McMahon, 1987). Therefore, the state can improve society’s welfare by subsidizing positive externality-generating activities. Arrow (1962, p.623) concludes that “for optimal allocation to invention it would be necessary for the government or some other agency not governed by profit-and-loss criteria to finance research and invention”, while Becker (1964, p.11) infuses his concept of “human capital” with all “activities that influence future monetary and psychic income by increasing resources in people”. Yet, human capital was contested conceptually (e.g., education also plays a screening function, and human capital also involves a consumption component), and Becker himself was reticent in overselling its social benefits because he felt that solid empirical proof was missing (Teixeira, 2014).

- *The macro approach* is primarily preoccupied with the effects the evolution of technology and aggregate investments in physical and human capital have on economic growth. In neoclassical economics, the classical distinction is between exogenous and endogenous growth theory. The exogenous growth theory developed by Solow (1956) emphasizes the decreasing returns that characterize capital investment at a constant population level. Here capital is taken to include both physical and human varieties. In the long run, economic growth can occur only through technological improvement or population

growth. Both factors are considered exogenous to the model. However, that is not to say that there is nothing that government policy can do to spur technological progress (Solow, 1994). The endogenous growth model (Romer, 1994) drops the assumption of diminishing returns on physical and human capital investments, at least at the aggregate level. Here, investments in research and development (R&D), patents, and better education play a permanent positive effect on growth. Thus, the government policy that encourages such investments can lead to faster economic development.

The issue with these quantity-focused micro- and macro- economic models is that they assume that a greater stock of ideas, i.e., more education and more innovation, are in themselves good. However, dangerous ideas might spur or intellectual malinvestments might occur. Either generated by dishonestly-self-interested, non-public-serving researchers, or by communities of scientists and funders honestly misled by loose monetary policies that falsify the profit-and-loss guidelines, leading to discoordinated research, or by public policies that encourage technologies while complementary factors of production are not available/affordable, ideas, even scientifically sound one, may fail economically (Lerner, 2009).

Furthermore, operating with an aggregate, blob-like notion of ideas also comes into conflict with the concept of *marginalism*. For instance, there is no such thing as “education” or “innovation”. Nor is talk of STEM (science, technology, engineering, and mathematics) or computer processors technology any more precise. There is a myriad of specific skills and technologies that all these concepts encompass. If the talk of optimality is to be credible, economists should be able to identify the right proportion of each. To complicate matters, not all schools and students are equally endowed. Some are better than others. Therefore, the problem is infinitely more complicated than economists usually suggest in their models.

3.2. The structure and re-structuring of idea production

Some economists have tried to peek inside the “black box” of *idea production* and look at its *structure*. In the following, we will briefly examine three approaches that can be fitted under this attempt.

- Firstly, we have attempted to quantify the *contribution* of each type of economic activity in the *production and use of ideas*, or as Machlup (1962) called it, the “production and distribution of knowledge”. Besides providing a very detailed classification of the types of knowledge and the methods of producing it, Machlup distinguishes between investment, intermediate, and final consumption knowledge products. However, these elements are only instrumental. Machlup’s goal is to approximate the “knowledge production” that the education system, R&D activities, the media, information machines (computers), and information services provide. One of Machlup’s conclusions was that the US economy had already suffered a structural change: it had already incorporated more knowledge production activities than ever before.

- The second approach can be found in the policy-oriented discussions on the *inability* of the *profit and loss system* to finance research at the scale that modern science requires or to supply the adequate proportion between fundamental and applied research. Invoked during the late 1930s in Great Britain (Polanyi, 2002) and more vocally in the 1950s in the United States (Rothbard, 2015), praising Soviet Union’s achievements and clamouring for similar top-down, scientifically planned approach to research, the narrative is fragile. While Polanyi

warned against the risks of unsettling the subtle mechanism that governs the scientific community, Rothbard drew on calculational-chaos theoretical counterarguments and historical facts pointing to Soviet technological qualitative inferiority and to private R&D surprising resilience.

- The third view is also policy-oriented and focuses on the *incentive mismatch* between the *two main types of research*. For instance, Mazzucato (2015) sees fundamental research as an endeavour with uncertain and remote results, rendering it out of the reach of private actors, with the state in need to assume an entrepreneurial role and invest in promising research. The private sector's forte is in applied research. The profit motive is a workable incentive for using the insights pre-packed by state-subsidized fundamental research and then design goods that can be brought to market smoothly and swiftly. Therefore, financing and risk-taking on the part of government agencies become prerequisites for a successful private sector. An interesting implication of this argument is that the state's financing of fundamental research leads to the creation of new markets. According to Mazzucato, the distribution of incomes and merit recognition skewed the structure of the research endeavours that are undertaken: the private sector gets all the profit and praise for innovating, while the public sector is emaciated of tax income and is constantly blamed for blatant inefficiency. The proposal is that the state should not shy away from assuming a more entrepreneurial role: it should tax more – it is just taking back something that it helped generate – and invest more in fundamental research so as to prolong the virtuous circle.

The problem with this last argument is that it assumes too much. The fact that successful firms subsequently implement some research results that the government financed does not exclude the possibility of the public sector squeezing out private initiatives, depleting them of financial and human/intellectual resources. Neither does it show whether society as a whole benefits or only the well-connected R&D intensive companies stand to gain at the greater expense of others – the taxpayers, competitors and consumers. If the government experts are so good at picking the successful technologies of the future, why not opt to make all this knowledge public, along with other useful information that government agencies provide, and let the private sector sieve through it – that is, let them gamble their own money instead of letting the government do the gambling for them.

Most importantly, an “entrepreneurial state” is a misnomer. It would be more accurate to talk about the entrepreneurial-bureaucrat, but here the oxymoron catches the mind of those understanding the alloy of each character within the social division of labour. Behind the state apparatus, a state employee makes these decisions with resources taxed away from the private sector. Not only does the bureaucrat not risk his own money, but he stands to gain nothing from a successful idea, i.e., he does not own the capital value of the result, nor its proceeds (interest and profits), nor does he stand to lose anything. He only mimics diligence in cost-benefit analytical surrogates (Iacob, 2016). Therefore, the “entrepreneurial state” has no measurement for performance, nor motivation for prudence. The empirical record from McCloskey and Mingardi (2020) attests to all of the above.

3.3. The treatment of ideas as manipulable quality: there is no market to fail our expectation

The last type of analysis treats ideas not as an *input* for other markets, but as the *output* of a specific market: the market for ideas. The canonical use of this concept can be found in an

article by Ronald Coase (1974), although it is as fecund for reasoned reflection (the present essay being a testimony), as it is fragile in its own economic(s) employability.

The concept does not indicate a specific market, i.e., a virtual space where property rights are voluntarily exchanged between buyers and sellers that freely agree upon a specific exchange ratio, i.e., a price. Although Coase talks about producers and consumers of ideas, his use of the term should be understood as, basically, a metaphor. We recognize that there are certain merits to the allegory between a market *qua* economic institution and the elaboration, dissemination, and debate of ideas and their final acceptance as true and valuable. However, we must not overlook the fact that there are also numerous reasons to dismiss the concept's relevance. As already emphasized: in their common meaning, ideas are *not* scarce. Thence, it makes no sense to talk of their ownership or ceding this ownership through an exchange akin to other economic goods. Ideas are psychological phenomena, i.e., they are borne and bear fruit only in one's mind. While access to them can be limited due to the scarcity that characterizes the channels for delivering/transmitting them, ideas are not rendered unusable by their dissemination and transposition into practice. Also, while we can loosely talk about the act of "producing" an idea, we should be aware of the difference between this process and that involved in economic production, in its proper meaning. Two more considerations are worth making.

- It is not obvious if, in the realm of producing ideas, we encounter *diminishing returns* when it comes to the labour of scientists. Due to the immaterial dimension of the creation process and the obtainable output, a larger community that analyses, contests, and builds upon the research results of another may generate an (ever-) increasing number and better-quality ideas. The gist of this argument rests on the fact that in the realm of ideas, complementarity, not substitutability, characterizes the production activities and results of research. Complementarity may hold even in the case of rival ideas, considering that one can better define his argument by showing its superiority in relation to competing explanations. To quote Mill (2001, p.35): "He who knows only his own side of the case knows little of that. His reasons may be good, and no one may have been able to refute them. But if he is equally unable to refute the reasons on the opposite side, if he does not so much as know what they are, he has no ground for preferring either opinion". The complementarity between rival ideas may also apply to certain types of intellectual pursuits. Take, for instance, public debates concerning the merits of different ideas. Participants in such arguments or members of the public that attend them may derive pleasure from the duel of ideas, i.e., from the sheer diversity of expressed positions and the eloquence with which they are delivered. As in a boxing match, the point is not necessarily knowing who the better fighter is, but maybe the prowess and spectacle of the engagement.

- The idea that there is an actual market for ideas that needs to be corrected from time to time suffers from what we may call a dubious *mission statement*. Ultimately, the market process tests entrepreneurial ideas based on the popularity they gain among consumers. The market test is not an objective test of truthfulness, beauty, or morality. It could be argued that a framework of voluntary exchange is a prerequisite for the pursuit of such higher goals, but in itself, the market is not primarily concerned with such matters. The goal sought by entrepreneurs is to engage in those activities that garner profit. Profit-and-loss are the outcome of an immanently social process. The decisions/preferences of all active market participants are reflected in the monetary prices. Profit and loss are only the final results obtained from subtracting production costs (the price of factors of production) from the final

good prices. In this sense, the remuneration obtained by entrepreneurs (the residual claimants of each economic endeavour) is more than an incentive. It plays a gratifying role for the resource-enhancing decision-makers. That said, the activities which gain such profit-recognition are ultimately as noble or ignoble as the consumers that patronize them. Therefore, can we blame an alleged market for ideas for failing, i.e., for not producing “the truth, the whole truth, and nothing but the truth”, when all it can do is test the popularity of intellectual products among consumers? No, for this “market” is not perfectly overlapped on Polanyi’s ideal “republic of science” – as it extracts profits out of poise and poison alike.

4. The market for ideas: the *political* (versus *civil society*) purge

This section forwards a series of considerations related to the policing and politicization of knowledge. If censorship and prohibition are the bluntest forms of intellectual suppression, there are other subtler methods of melting and moulding the *public opinion*, a crucial asset for any kind of governance: the *political* confiscation of expertise by “technocrats”, countered by a kind of *civic* engagement towards an educated “constitution of knowledge”.

4.1. The problem of public opinion at the intersection of “the market for ideas” and “the political market”

The idea of public opinion occupies centre place in modern discussions of social science: political philosophy, politics, economics, sociology, public relations etc. Ever since Etienne de La Boétie’s (2002) *Discourse on Voluntary Servitude*, in which it was maybe for the first time with clarity that the rule of what amounts to a minority over the majority of the population, which could easily revolt and overturn it, in some way or another, must depend somehow on the opinion of the subjects. Whether it is enthusiasm for the rulers of just plain resignation in the face of what appears to be the futility of rebellion, government must finally be based on public opinion (Lippmann, 1922).

It is not so great a stretch of argumentation to state that *public opinion* is forged on – and is a product of – the market for ideas. It has subcomponents, such as “scientific public opinion”, mentioned by Michael Polanyi, which in itself seems to govern what the same author has called “the republic of science” (evoking another phenomenon undoubtedly associated with opinion – “the republic of letters” of late medieval and early modern Europe). Recently, with the Covid experience, we could say that the subspecies “medical scientific opinion” and even a general “public opinion on medical matters” came to the forefront.

We argue that there are two extreme perspectives on public opinion, and that in this case indeed the “golden mean” or “royal path” might lie somewhere in the middle.

- The first view is “the Enlightenment view” (Mises can, arguably, be included here), according to which public opinion is, in a sense, a mature phenomenon in itself, somehow fully formed at each moment – ready to hear in its tribunal the contest of ideas, arbitrated first and foremost by reason, justified opinion, arguments, demonstration, and the like. A version of this Enlightenment view admits that the public might be uneducated to hold mature opinions, but sees the panacea precisely in formal instruction or education in the modern (scientific) sense. The idea that there is more to mature opinion than the acquisition of information by formal instruction (“critical thinking” included) – namely, elements of virtue,

such as modesty, humility, love for the truth even when uncomfortable and disadvantageous, love of others even when they disagree, elements of asceticism etc. – is foreign to this perspective. What lies beyond knowledge understood in this narrow, quasi-scientific (or, more adequately, scientist) way is considered to mean nothing but dogma, obscurantism, and superstition.

- The second view, which we might call the “public relations view”, with Edward Bernays (1928), the nephew of Freud, being a notable exponent, according to which there are almost unlimited ways and possibilities of moulding public opinion and “engineering consensus”. The key aspects in such a view are not rationality, argument, or dialogue. On the contrary, the subconscious, feelings, habits, passions are the strings by the pulling of which the public relation specialist can obtain almost any “public opinion” outcome is desired.

We offer the view that while public opinion is ultimately unavoidable, it is not given. There is a space of public opinion, ultimately grounded in human nature, in which one can work on it. It can be primed by education and experience. Education not only in the formal sense, but also in the informal and practical sense. There is also a moral – even ascetical – side of the public opinion problem. One should abstain from conveying things in certain ways (an ethics of public discourse); one should, on the other hand, abstain from consuming information in certain ways and of certain kinds (an ethics and hygiene of communication and information consumption).

4.2. Technocracy and the tyranny of experts

A form of perversion of the market for ideas by way of the political sphere is the technocratic devolution into the “tyranny of experts”. William Easterly (2013) has consecrated the expression and documented it in the field of development economics. The basic idea is that accepting that experts have a privileged epistemic position, which must be matched by a privileged decisional or political position leads to unfortunate (if unintended) consequences. The modern respect for the expert and his “smart” solutions to narrow problems and for a more “technical” perspective on thing as opposed to an ideological, doctrinal or political one has created this niche for the action of these modern mandarins. Their accession to power has the more familiar name of “technocracy” – on technocracy’s intercourse with economics, see, *inter alia*, Cerna (2016) and Stamate-Ştefan (2017). The intuitive appeal of such a perspective is based on simple ideas such as the fact that one wants the best surgeon (the expert) to perform the operation on himself or on someone dear. Moreover, at the societal level, expert rule is appealing as it seems efficient, somewhat of a smart shortcut to the desired beneficial result. Democratic processes, education of the general public, explanations in the general media and to various stakeholders capable of strong veto would be too costly, too messy and too slow for the too urgent or important matters such as poverty. Or, more recently, a pandemic.

The perspective has a number of presuppositions (discussed by Easterly) which are rather problematic. The first is an a-historical perspective (“blank slate”), some sort of “social engineering” paradigm according to which the economy, society or various subsections of them (such as the medical sector) can be reframed from scratch, according to new “science based” principles, to be enrooted in “experts’ consensus”. On the one hand, history does not quite matter in comparison to latest expert knowledge; this implying also a severe discounting of the classical respect for broad practical wisdom (understood as a form of wisdom; usually

based on historical/track-record experience as one necessary ingredient) and an overblown respect for narrow scientific expertise. On the other hand, this allows for the reframing of problems, which have a clear political, doctrinal, rights related, cultural etc. aspect into dry and much more unproblematic technical ones. Easterly exemplifies by mentioning reluctance – in development dialogue – to discuss farmer property rights, focusing instead on the use of fertilizers or antibiotics. The second and the third presuppositions consist in, respectively, a holistic focus on the aggregate indicators instead of individual welfare and a clear option for top-down, centralized, and planned programs instead of bottom-up, decentralized and more spontaneous order-like solutions. The market for ideas must not, therefore, fall prey to this form of perversion.

4.3. The market for ideas, the ethics of argumentation and the constitution of knowledge

Under this heading we will briefly explore two possible presuppositions of a functional market for ideas: one specific (Hoppe's "ethics of argumentation") and the other more general (Rauch's idea of a "constitution of knowledge"). The better order of exposition might be the reverse.

Jonathan Rauch (2021) points that the market for ideas has a general background of presuppositions which could be called the "constitution of knowledge", much as a functioning market economy in general presupposes respect for legitimate property rights and social peace and order (aspects arranged in the context of the so-called constitutional level of society). He reasons in an almost analogous and parallel fashion with the debates in political philosophy, pointing to a "state of nature" in the realm of knowledge, which would be akin to a "Hobbesian epistemic order". This state of affairs is highly unstable for multiple reasons having to do with aspects ranging from individual biases (such as confirmation bias, but the list is extensive), group mechanics (enforced by conformity biases), further developing into a kind of "epistemic tragedy of the commons" – quoting Kahan et al. (2011) –, which leads to a progressive diminishing of the common grounds and common accepted truths. This in turn leads to the phenomenon of trolling (more on the right side of the ideological spectrum, according to Rauch) or cancel culture (on the left). Precisely to solve this Hobbesian problem, more than the (good and useful) free market of ideas is needed – namely a "constitution of knowledge".

Invoking the model and the way of thinking of James Madison (US President, contributor to the ratification of the American Constitution and author of *The Federalist Papers*), Rauch presents the "constitution of knowledge" as a system of checks and balances. It is established among a number of pillars or entities (academia, media, government and law), together with a number of principles and core ideas (first and foremost the non-definitive character of any peace of knowledge, and second, the "no authority" principle, understood to mean that propositions must be accepted on the basis of arguments, facts, reasons, and not on the basis of who utters them; and a few secondary others). But it is not the purpose of this paper to enter into a detailed discussion of the proposal, with its own issues (again, akin to the classic political philosophy conundrums: who leads the leaders?; who controls the controllers?; who checks the checkers?). We only have to retain the idea that while a free market for ideas is desirable, it has assumptions that it cannot simply give itself. Whether the said "constitution of knowledge" is more political and institutional, in the formal sense or, rather, more cultural

and institutional in the broad cultural (even metaphysical, worldview, or religious) sense is another subject-matter.

If we were to push Rauch's metaphor further, we would say that, as in the political philosophy sphere, men do not simply exist in the epistemological sphere in a Hobbesian vacuum. Giving the discussion a Lockean twist, we could observe with Hans-Herman Hoppe that there are "rights" – in our analogy, "true opinions" – even in that "epistemological state of nature". Things do not just start from scratch there. Even the possibility of getting along to move past the epistemological chaos has presuppositions that must be adequately acknowledged and put to work. As we have already said, Hoppe has conceptualized this problem, taking over an idea from his first mentor, Jürgen Habermas, as "the ethics of argumentation" (Hoppe, 1988) – conducive to a non-utilitarian plea for a property rights order. Notwithstanding the more or less controversial character of this argument, it is important precisely as a possible continuation of the previous discussion. What is already presupposed in the idea of a "constitution of knowledge"? Hoppe's answer is to start from the idea of argumentation and from the fact that truth is discovered and acknowledged in dialog, via argumentation. Moreover, civilization implies functioning on the basis of principles and rules that require argumentation.

Rule of law, governance, parliamentary debates, policy etc. involve persuasion by means of argumentation. Thus, starting from the somewhat tautological basis that "one cannot argue that one cannot argue" without engaging in performative contradiction, Hoppe derives the implication that anything that one wants to defend by argumentation must be defended together with argumentation and its presuppositions. The label "ethic of argumentation" is precisely the name of these presuppositions. Hoppe is keen on emphasizing that among these presuppositions, one can find the legitimate private property rights to person and property as proposed by modern libertarian theory. Again, it is not the purpose of this paper to settle the matter of Hoppe's specific statements, but only to point to a level of the dialogue, which is in the final analysis unavoidable. Yet, the argument for argumentation, obviously, appeals to a sense of decency and honesty, as it becomes futile when some substitute sophisms for logical reasoning, deceiving for documented facts or "monologued dialogue" for accountable conversation that takes into account the other side's inputs to the debate (as in many governmental "public consultations").

5. The market for ideas: something more than mere metaphor?

As we have suggested throughout this paper, there is the ideal possibility that truth, profit, and acceptance of ideas may converge in society. But the reality shows that there are so many cases in which we can identify only bilateral intersections or even solitary instances. This is a study route for economics and sociology. For the scope and scale of our research, it is important to emphasize that the examination of the causes and consequences of such misalignments for private wealth and public welfare may be instructive and inspiring. Irrespective how immaterial ideas appear, they do matter and bring with them "material" imprints in our lives (if the "spiritual" dimensions of life are to be seen as secondary or superfluous for the hard-reality-oriented scientists).

It suffices to say that these misalignments of the markets for ideas are indicative of more or less severe malfunctions in the basic workings of the social compound. For when scientific truth is not valued in the economic marketplace, this may only signal that a certain idea/innovation is not of immediate concern entrepreneurially, being found not remunerative

enough as against other outcomes. But when scientific truth gets politically repressed (and collaterally it becomes inefficient to pursue), this is a serious fracture within the broad social fabric. Likewise, when scientific errors are consciously incorporated in business undertakings, they become frauds, and when they are positively sanctioned by political/governmental bodies, being allowed to proliferate, and even being institutionalized, this can lead to social disasters of epic proportions.

**Table no. 1. Overlapping markets for ideas and their validation filters:
selection of illustrative cases**

Scientific truth	Economic profit	Political approval	Illustrative cases
X			<ul style="list-style-type: none"> • Gene editing for breeding supermen. Outrightly prohibited for now. And costly to pursue even in “black markets”. • Vesalius’s study of human anatomy by dissecting bodies – a practice that was frowned upon on religious grounds and that subjected him to heated debates and loss of income. • Buffon’s theory of evolution. To shelter himself from the religious censorship of the Sorbonne, he formulated his theory along dubitable lines: “were it not for revelation, one might come to think that...”.
	X		<ul style="list-style-type: none"> • Subjecting oneself to self-medication that is not certified by the authorities or by the scientific community – holistic medicine has been contested by the medical profession’s regulatory body. • Commercials that promise wondrous results, Ponzi schemes and other kind of scams that, before being outlawed, they defy logic. • Astrological, numerology palmistry, types of “services/consultancy”.
		X	<ul style="list-style-type: none"> • Publicly funded education for the masses – not only it is doubtful that such a large-scale and long-term endeavour could find private patronage to make it economically viable, but the scientific case for such schemes which is based on welfare calculation is also contestable. • Modern monetary theory, critical race theory, and gender studies are politically accepted despite their doubtful scientific soundness and economic viability. Also, the genetics of Lysenko in USSR, socialism-realism cultural current or eugenics fit the description. • Compulsory protectionist “Buy national” programs.
X	X		<ul style="list-style-type: none"> • The possibility of developing more efficient internal combustion engines, even if there is a “climate change” moratorium on them. • Blood banks and organ donation centres that could operate on a profit basis in order to break the bottle necks that affect medical services. • Emperor Tiberius’ glassworker who claimed to have discovered a formula for unbreakable glass; he was executed for <i>status quo</i> reasons.

Scientific truth	Economic profit	Political approval	Illustrative cases
	X	X	<ul style="list-style-type: none"> Fiat paper money and fractional reserve banking are both highly contested by economists, yet such practices are favoured by businessmen and endorsed by the state. Phrenology, a pseudo-science that allegedly help reading one's personality, was politically permitted and economically viable during the first half of the 19th century. Scientific research, yet debatable at best, that flourish by advancing political agendas favouring the rising of a constellation of individual and corporate contractors.
X		X	<ul style="list-style-type: none"> The exploration of outer space, having a doubtful economic value in the current international legal configuration. The push for researching and implementing "green energy", thus impoverishing businesses and consumers. Pioneering (politically non-subversive) work by creative innovators in areas not yet economically viable.
X	X	X	<ul style="list-style-type: none"> Some of the innovations that are currently being patented, though many patents are applied for not because of their economic potential, but for their possible use in future litigation. Citrus consumption by sailors to combat scurvy. The Royal Navy had to constrain its sailors to take their daily dose of vitamin C. And it proved to be a boon for Sicilian citrus plantations. Fritz Haber's development of chemical fertilizers and, later in his career, of poison gas for the battlefields of World War I. Both products were in high demand and accepted for the powers that be.

Source: Authors' own conception.

Conclusions

Is there an actual *market for ideas*? The above discussion suggests there is none in the *economic* proper sense – it is just a *metaphor*. However, does this mean that we must cleanse our vocabulary of its use? We must admit that the concept is not entirely nonsensical – it is not on par with a concept like "round-triangle". Nor is it void of any similarity with the competition in the market for goods: until consensus is reached, rival ideas must battle it out to gain recognition. As far as everyday usage goes, the concept of the market for ideas *qua* metaphor could prove helpful. This is especially so because it suggests the indispensable role of the free-market system in the proliferation of ideas. However, economists should clarify one thing: a metaphor implies, *volens nolens*, a non-metaphoric meaning. When we say that an individual is a "pillar" of his community, we mean he can be compared to an architectonic element in the sense that his behaviour and personal example maintain the cohesion of the group. However, it is plain to understand that the respective individual is not a pillar, but has a social role that can be comprehended as a load-bearing construction. Therefore, economists owe it to themselves and the larger public to delineate the realm of the market from that of ideas and to abstain from (mis)using the tools of their trade on distinct forms of organizing social cooperation.

The places where economic analysis can shed more light, in the sense of complementing the sociological analysis of the scientific community, are listed below.

- Is there a (more) relevant market for scientific research (fundamental and applied)? Yes, the availability of *capital* represents the objective limit to scientific endeavours and the transposition of new ideas into practice. There are always some ideas that can improve labour productivity, but remain unimplemented as capital is too scarce and is better allocated to some other economic ventures. Thus, we may say that (in a roundabout way) the capital market is the constraint for implementing and testing ideas. Any attempt to accelerate research or the adoption of a particular technology comes at the expense of other technologies (new or old). All such adventures lead to the waste of saved goods.

- The economic theory of *interventionism* can offer some interesting insights. As we argued above, the sociological mechanism for selecting and recognizing scientific contributions is based on a specific set of fundamental values. It is also the apanage of a small elite community that governs itself. State funding is like throwing sand into a delicate mechanism. Like any community, its good functioning and merit recognition is dependent on direct familiarity with another scientist's work. If subsidies lead to the over-expansion of this community and if excellence is traded for any given social objective (education for the greatest possible number, hiring opportunities for as many individuals that fancy themselves as scientists etc.), it can only spell disaster. Like in any other industry, subsidies will lead to an outgrowth of supply and a drop in quality, as hiring and the selection criteria used become bureaucratized and politicized. The system may also become a sensitive political issue, busier with keeping jobs and other privileges than producing scientific output. A self-governing community metamorphoses into an over-expanded, bureaucratized system with its parallel promotion and merit recognition criteria. The theory of interventionism offers insight into how public funds can pervert communities.

- In a true scientific community, fundamental research and the truth it searches for are goods in themselves. Their merits and benefits do not require a monetary calculation. The scientist who chooses not to compromise a study for monetary gain or for the sake of a position he may occupy cannot be thought of as primarily motivated by money. The scientist does not try to maximize his monetary gain when he engages in research. If he were to compromise on such matters, he would suffer a psychological loss that only he is in any measure to appreciate. He does not need a monetary calculation for his own evaluations. But incentives do matter. Such an individual would have to be even more vigilant and indifferent to materialistic benefits if he refused to delve into such dubious practices in a system that legitimizes them and finances them generously. Exacerbating this is the peer pressure: if the system gets eschewed due to the government dole, the individuals operating in it that accept more dubious practices will tend to eliminate their more upright colleagues since their dubious practices risk being revealed for what they are – a Gresham's Law for "intellectual currency". The system tends to develop a selection bias, becoming more and more welcoming to individuals with no qualms in accepting state's sponsorship.

The free market is supposed to have what it takes to go hand in hand with a robust scientific community and honest truth-seeking, as with democratic (yet not as simplistic majoritarianism) legitimacy and civic (powered by the ethics-of-argument-dialogue kind of) engagement. If the metaphor "market for ideas" can be used rhetorically to promote this genre of common sense savvy, we see no risk of "market failure" in making full use of this.

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References

- Arrow, K.J., 1962. Economic Welfare and the Allocation of Resources for Invention. In: NBER. *The Rate and Direction of Inventive Activity: Economic and Social Factors*. Princeton: Princeton University Press, pp.609-626.
- Becker, G.S., 1964. *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. Reprint 1993. Chicago: University of Chicago Press.
- Becker, G.S., 1978. *The Economic Approach to Human Behavior*. Chicago: The University of Chicago Press.
- Bernays, E.L., 1928. *Propaganda*. London: Routledge.
- Brennan, J.F. and Jaworski, P., 2015. *Markets Without Limits: Moral Virtues and Commercial Interests*. London: Routledge.
- Bruce, S., 2003. *Sociologia: foarte scurtă introducere*. București: Editura ALL.
- Cerna, S., 2016. Tehnocația și economia. *Æconomica*, 25(1-2), pp.5-30.
- Coase, R.H., 1974. The Market for Goods and the Market for Ideas. *The American Economic Review*, 64(2), pp.384-391.
- Comșa, P. and Munteanu, C., 2016. A Personalist Approach to the Dialogue between Economics and Religion. *Æconomica*, 25(3-4), pp.49-66.
- Dolan, E.G., 2005. Austrian Economics as Extraordinary Science. In: Dolan, E.G. (ed.). *The Foundations of Modern Austrian Economics*. Carmel: Liberty Fund, Inc.
- Easterly, W., 2013. *The Tyranny of Experts. Economists, Dictators, and the Forgotten Rights of the Poor*. New York: Basic Books.
- Friedman, D., 1989. *Machinery of Freedom*. Chicago: Open Court.
- Gordon, D., 1993. *The Philosophical Origins of Austrian Economics*. Auburn: Ludwig von Mises Institute.
- Granovetter, M., 1985. Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology*, 91(3), pp.481-510.
- Hayek, F.A., 1945. The Use of Knowledge in Society. *American Economic Review*, 35(4), pp.519-530.
- Hayek, F.A., 1956. The Dilemma of Specialization. In: White, L.D. (ed.). *The State of the Social Sciences*. Chicago: University of Chicago Press, pp. 462-473.
- Hayek, F.A., 1960. The Intellectuals and Socialism. In: Huszar, G.B. (ed.). *The Intellectuals: A Controversial Portrait*. Chicago: The University of Chicago Press, pp.371-384.

- Hayek, F.A., 1974. The Pretence of Knowledge. [online] Stockholm, Sweden: The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1974. Available at: <<https://www.nobelprize.org/prizes/economic-sciences/1974/hayek/lecture/>> [Accessed 10 August 2022].
- Hayek, F.A., 1979. *The Counter-Revolution of Science. Studies on the Abuse of Reason*. First published 1952. Indianapolis: Liberty Press.
- Hayek, F.A., 2002. Competition as a Discovery Procedure. *Quarterly Journal of Austrian Economics*. First published 1968, 5(3), pp.9-23.
- Hodgson, G.M., 2020. How Mythical Markets Mislead Analysis: An Institutionalist Critique of Market Universalism. *Socio-Economic Review*, 18(4), pp.1153-1174.
- Hoppe, H.H., 1988. *Theory of Socialism and Capitalism*. Auburn: The Ludwig von Mises Institute.
- Huerta de Soto, J., 1998. The Ongoing Methodenstreit of the Austrian School. *Journal des Economistes et des Etudes Humaines*, 8(1), pp.75-113.
- Hülsmann, J.G., 2003. Introduction to the Third Edition: From Value Theory to Praxeology. In: Mises, L.v. *Epistemological Problems of Economics*. Auburn: Ludwig von Mises Institute, pp.ix-lv.
- Iacob, M., 2016. *Costuri și beneficii ale analizei cost-beneficiu. Înainte de pragmatism, înapoi la principii*. București: Editura ASE.
- Kahan, D.M., Wittlin, M., Peters, E., Slovic, P., Ouellette, L.L., Braman, D. and Mandel, G., 2011. The Tragedy of the Risk-Perception Commons: Culture Conflict, Rationality Conflict, and Climate Change. *Temple University Legal Studies Research Paper No. 2011-26*. [online] Available at: <<https://ssrn.com/abstract=1871503>> [Accessed 10 August 2022].
- La Boétie, E.d., 1576. *The Politics of Obedience: The Discourse of Voluntary Servitude*. Reprint 1975. Montreal Black Rose Books.
- La Boétie, E.d., 2002. *Discours de la servitude volontaire, suivi de Les paradoxes de la servitude volontaire*. First published 1576. Paris: Vrin.
- Lerner, J., 2009. *Boulevard of Broken Dreams: Why Public Efforts to Boost Entrepreneurship and Venture Capital Have Failed – And What to Do about It*. Princeton: Princeton University Press.
- Lippmann, W., 1922. *Public Opinion*. New York: Harcourt, Brace&Co.
- Machiavelli, N., 1531. *The Prince*. Reprint 2003. London: Penguin Classics.
- Machlup, F., 1962. *The Production and Distribution of Knowledge in the United States*. Princeton: Princeton University Press.
- Mazzucato, M., 2015. *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. New York: Public Affairs.
- McCloskey, D. and Mingardi, A., 2020. *The Myth of the Entrepreneurial State*. Great Barrington: The American Institute for Economic Research.
- McCloskey, D.N., 2017. *Bourgeois Equality: How Ideas, Not Capital or Institutions, Enrich the World*. Chicago: University of Chicago Press.
- McMahon, W.W., 1987. Externalities in Education. In: Psacharopoulos, G. (ed.). *Economics of Education*. Oxford: Pergamon, pp.133-137.

- Mill, J.S., 2001. *On Liberty*. First published 1859. Ontario: Batoche Books Limited.
- Mirowski, P. and Nik-Khah, E., 2017. *The Knowledge We Have Lost in Information: The History of Information in Modern Economics*. Oxford: Oxford University Press.
- Mises, L.v., 1944. *Bureaucracy*. New Haven: Yale University Press.
- Mises, L.v., 1951. *Socialism: An Economic and Sociological Analysis*. New Haven: Yale University Press.
- Mises, L.v., 2003. *Epistemological Problems of Economics*. First published 1933 (German), 1960 (English). Auburn: Ludwig von Mises Institute.
- Mises, L.v., 2007. *Theory and History: An Interpretation of Social and Economic Evolution*. First published 1957. Auburn: Ludwig von Mises Institute.
- Mises, L.v., 2008. *The Anti-Capitalistic Mentality*. First published 1956. Auburn: Ludwig von Mises Institute.
- Mises, L.v., 2012. *Economic Calculation in the Socialist Commonwealth*. First published 1920. Auburn: Ludwig von Mises Institute.
- Mokyr, J., 2017. *A Culture of Growth: The Origins of the Modern Economy*. Princeton: Princeton University Press.
- North, D.C., 1999. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- Pfleiderer, P., 2020. Chameleons: The Misuse of Theoretical Models in Finance and Economics. *Economica*, 87(345), pp.81-107.
- Polanyi, K., 1944. *The Great Transformation. The Political and Economic Origins of Our Time*. New York: Farrar & Rinehar.
- Polanyi, M., 1962. The Republic of Science: Its Political and Economic Theory. *Minerva*, 38(1), pp. 54-73.
- Polanyi, M., 2002. *The Logic of Liberty*. First published 1951. London: Routledge.
- Rauch, J., 2021. *The Constitution of Knowledge. A Defense of Truth*. Washington D.C.: Brookings Institution Press.
- Romer, R.H., 1994. The Origins of Endogenous Growth. *Journal of Economic Perspectives*, 8(1), pp.3-22.
- Rothbard, M.N., 1995. *An Austrian Perspective on the History of Economic Thought* (2 vol.). London: Edward Elgar.
- Rothbard, M.N., 2015. *Science, Technology and Government*. Auburn: Ludwig von Mises Institute.
- Sandel, M., 2012. *What Money Can't Buy: The Moral Limits of Markets*. New York: Farrar, Straus and Giroux.
- Schumpeter, J.A., 1942. *Capitalism, Socialism and Democracy*. Reprint 2003. London: Routledge.
- Schumpeter, J.A., 2017. *Theory of Economic Development*. First published 1934. London: Routledge.
- Smith, A., 1776. *Wealth of Nations*. Reprint 2012. Wordsworth Classics of World Literature. Ware, England: Wordsworth Editions.

- Smith, B., 1994. The Philosophy of Austrian Economics. *The Review of Austrian Economics*, 7(2), pp.127-132.
- Solow, R.M., 1956. A Contribution to the Theory of Economic Growth. *The Quarterly Journal of Economics*, 70(1), pp.65-94.
- Solow, R.M., 1994. Perspectives on Economic Growth. *Journal of Economic Perspectives*, 8(1), pp.45-54.
- Stamate-Ștefan, A., 2016. In Romania, Unquestioned Rule by “Experts” is Alive and Well. *Mises Wire*. [online] Available at: <<https://mises.org/wire/romania-unquestioned-rule-experts-alive-and-well>> [Accessed 10 August 2022].
- Teixeira, P.N., 2014. Gary Becker’s Early Work on Human Capital – Collaborations and Distinctiveness. *IZA Journal of Labor Economics*, 3(1). [online] Available at: <<https://izajole.springeropen.com/articles/10.1186/s40172-014-0012-2#citeas>> [Accessed 10 August 2022].
- Tucker, J. and Kinsella, S., 2010. Goods, Scarce and Nonscarce. *Mises Daily*. [online] Available at: <<https://mises.org/library/goods-scarce-and-nonscarce>> [Accessed 10 August 2022].
- Weber, M., 2002. *The Protestant Ethic and the Spirit of Capitalism*. First published 1904. London: Penguin Books.