

”The Guidance of Production in a Socialist State”

(Taylor 1929)

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The paper tackles the following crucial problem: what is the best way of deciding what and how many goods should be produced from a given community’s economic resources (defined as the ”stock or income of primary factors”)? In this article, the author expresses his interest in dealing with this question in the framework of a socialist state (i.e. a state that is the sole producer in the economy and thus the only entity allowed to use the community’s economic resources to produce commodities), and he directly lays out at the beginning what he thinks is the proper solution and answer (that I will call the ”method” for the rest of the report) to the previous main question. The process of production decision in a socialist state, i.e. the method, is as follows:

- first, the citizen is provided with money income from the state (the state making this decision would ensure that the interests of citizens are not ”sacrificed to the interests of particular individuals”);
- second, the citizen engages in an exchange relation with the producer (i.e. with the state that sells the commodities which it produces) and makes choices on which commodities they want to buy (this would ensure that individual tastes are not ”sacrificed to some standard of consumption set up by an all-powerful state”);
- third, the state, as producer, ”submit[s] to the dictation [or choices] of the citizen” and produces what they ask for, with the condition that the citizen has enough money income to pay prices equal to the production costs of the goods they want to buy.

Thus, the goal of the paper is not to determine a proper production method from scratch, but rather to prove that the method laid out in the beginning is ”sound”,

robust, effective, i.e., according to the author, that it is reasonable in light of the characteristics of a socialist state. The defense of this method of guiding production is done in two parts.

In the first part, the author lays out the direct reason why the method is sound. However, as a preliminary, he makes a very strong assumption, which is that the socialist authorities are capable of "ascertaining" the "effective importances or values" of the different primary factors ("effective importance", expressed in terms of money value, is defined as the relative level of importance of a factor with respect to its available quantity), which are then summarized in "factor-valuation tables", from which one can compute the "resources-cost" (i.e. the cost of producing a commodity) this way: for a given commodity with resources-cost C , n kinds of primary factors whose quantities are $(Q_i)_{i \in [1, n]}$, with effective importance values $(v_i)_{i \in [1, n]}$ summarized in the factor-valuation tables, we have

$$C = \sum_{i=1}^n v_i \cdot Q_i.$$

Following this, the author very quickly goes over a few assumptions that should be included in the method (such as, for example, the fact that the citizens should have access to the commodity prices before making a decision), which he considers as "needing no defense". Instead, he focuses on what he considers to be the most important characteristic of the production method (I already introduced this in the third step of the method at the beginning of the report): the economic authorities should fix the selling price of any commodity as equal to the resources-cost of said commodity. The author essentially argues that the method is "sound" because this last point is the best thing the socialist authorities can do, as it is the only way of preserving the income system that was already decided upon in steps one and two of the method. In the following, I use my own example (in brackets) to ease the understanding of the reasoning. The citizen was given a determinate money income (let's say \$10) which implied that he had the right to claim such an amount's worth of the productive resources of the state (for example, he can claim and get 10 goods of production cost \$1 each). But if the selling price (let's say \$2 for each good) fixed by the authorities is, for example, higher than the "resources-cost" of the good (\$1 each), then the money income of the citizen would be reduced (because he can only get 5 goods with his \$10, and thus get only \$5's worth of the productive resources of the community because each good is still produced with a production cost of \$1, whereas

it was agreed that the citizen would get \$10's worth of the resources!). Thus, the point made before (selling price = resources-cost) is the best possible action for the authorities, and the production method with such a provision is sound and robust, the author argues.

Finally, in the second part, the author deals with a preliminary problem to this method, namely the very strong assumption (that the socialist authorities are capable of "ascertaining" the "effective importances or values" of the different primary factors) made at the beginning of the first part. The author argues that the socialist authorities are in fact totally capable of solving this "imputation problem", through a method of "trial-and-error", which consists in holding prior beliefs about each factor's correct valuations, then looking for signs that some prior valuations are incorrect (this will be visible because if the valuation of a factor is incorrect then an incorrect amount of it will be used for production and thus there will be either surplus or deficit in its stock at the end), and then correcting them, until no other sign is visible. The author finally concludes that the socialist authorities would totally be able to solve the "imputation problem", enabling them to know the effective importance values, and thus to compute the resources-cost of any commodity, and thus to determine the correct selling price, and thus to determine what commodities they should produce (which is the goal of the method!). The main potential point of contention of the first part's method being solved, the author concludes that the latter provides the best possible use of the economic resources in a socialist state.

Recontextualizing this paper enables us to better understand the initial aim of the author. He does not specifically study the production problem in the framework of the socialist state for the sake of "entertainment" or of naive personal questioning. This actually follows an almost 100-year-old tradition of debates between the potential virtues of capitalism and socialism which culminated in the early twentieth century. In fact, at that time, several political and social forces reaffirmed the increasing relevance of strong states in the economic realm: World War 1 (1914-1918), for example, showed that states and governments' interventions in the economy were necessary to effectively wage war (through the necessary increase in production of weapons, ammunition, the development of a war economy, and so on); the Bolshevik revolutions at the end of the 1910s consecrated the vigor of the socialist ideals in Europe. The liveliness of the socialist thought between the two world wars ignited academic debates about the actual feasibility of economic planning in the context

of socialism. This paper is indeed part of this context. The main question in these debates was the following: how can a socialist authority/state/government effectively determine the prices for goods or services without the use of free markets (among other things)? Proponents of central economic planning argued that money and markets were somehow "out-of-date", and that a utopian socialist economy could emerge where central planners do "calculations" (of some kind) without money, favoring social welfare over utility maximization. Opponents of central economic planning, such as von Mises, argued that in the absence of money, markets and private property, rational economic "calculations" would not be possible, since actual prices would not be effectively determined, and it would not be possible for the socialist authorities to know the effective valuation of production factors as they cannot be exchanged on markets, making the whole production process definitely imperfect and flawed. This is where Taylor's paper makes an entrance, as it attempts to invalidate von Mises' theoretical argument that socialist economies could never efficiently manage complex production processes: according to the former, theoretically, an ideal socialist state definitely has the ability to solve the "imputation problem" (as seen before) and thus by extension to determine correct selling prices and what commodities to produce.

Thus, I can definitely say that the paper is in line with the most intense political and economic debates at that time. The already existing academic literature focused mainly on the emerging question of socialist "calculation". I think that Taylor probably wrote his very well written (and easily understandable) paper with the idea in mind that it would close the debate once and for all, as it lays out a complete theoretical framework for managing production in a socialist state, as well as an answer to the main point of contention such a method could have (i.e. the "problem of imputation" in the second part of his paper). However, we can definitely affirm that such a debate closure did not occur for a few reasons. First, the paper does not necessarily "demonstrate" (through mathematical proofs or empirical/data work) its claims, it rather looks like the author "conjectures" them (but this remark is probably due to my own modern bias since today's economic papers try to prove everything with mathematics and data analysis, which was not as much the case a century ago). Second, Taylor, voluntarily or not, actually confirms one of von Mises' claims, which is that there need to be known valuations for the primary factors: in fact, at the beginning of his paper, Taylor does not reject the premise of market capitalism since his socialist "method", he argues, is similar to some extent to the production process that would happen in a market economy.

Third, the paper actually re-ignited the debate over the socialist calculation problem in the following years as, in fact, it stated the first principles of what would be theorized as "market socialism" by Lerner ("Economic Theory and Socialist Economy", 1934) and Lange ("On the Economic Theory of Socialism: Part One", 1936). Both acknowledged that the previous debates had finally given socialists the opportunity to realize the "importance of an adequate system of economic accounting to guide the allocation of resources in a socialist economy" (Lange 1936). To put it simply, the role of the socialist state is to "perform the function of the market". These results had actually already been anticipated by Barone ("The Ministry of Production in the Collectivist State", 1908) who drew an equivalence between the "optimal allocation of resources" in a socialist economy and the "equilibrium" of a competitive market economy. Following these papers, the debate over the socialist calculation problem has never actually stopped: in 1945, Hayek's "The Use of Knowledge in Society" was published and argued about the practical impossibility of effective economic planning in a socialist state, since "unregulated interactions" between economic agents cannot be effectively simulated through central planning; post World War 2, liberal Keynesianism thought dominated, before making way to neoliberalism at the end of the 1970s; then the collapse of the Soviet Union in 1991 led to the belief that centralized planning was not a rational economic idea.

Finally, still today, the economic and political consequences of the socialist calculation debate can be felt by everyone. Taylor's paper, which aims to defend the idea of the feasibility of effective complex production process management in a socialist state, is thus a fundamental work that constitutes a thorough assessment of the state of the first quarter of the twentieth century's socialist thought. Nonetheless, it is only one step and an introduction to the evolution of the socialist thought and debate of the second quarter of the twentieth century. The author succeeds in clearly and effectively explaining his solution to the initial problem.