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## FRANÇOIS QUESNAY THE FOUNDER OF ECONOMIC SCIENCE

*by*

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Essentially, the economic decline in France started with the death of Louis XIV who left behind an enormous public debt, which was fifty times more than the annual income of the state. At the same time France received blows in its colonial trade from the Dutch and the English and sank deeper into chaos with the scandal of the Royal Bank of Law (1720). It would have been a faster economic recovery for France in the nautical power of England as well as the foresight of the English political leaders had not existed.

In order to confront this situation France, which had rich soil at its disposal, could only base itself on the sector of agriculture. The physiocratic teaching had precisely that aim of turning the people's attention to the rich French soil and to justify this policy with the idea that only land is productive. Thus around the middle of the 18th century Physiocrats<sup>1</sup>, called the first economists and founded by François Quesnay, appeared.

1. A. Oncken : Oeuvres énomiques et philosophiques de F. Quesnay, Paris, 1888, G. Weulersse : Le Mouvement physiocratique en France de 1756 à 1770, Paris, 1910. P. Moride : Le produit net des physiocrates et la plus - value de Karl Marx, Paris, 1927. A. Fanfani : Dal Mercantilismo al Liberalismo, Milano, 1936. Schatz - Gaillemier : Le Mercantilisme Liberal à la fin du XVIII siècle, Paris, 1906. M. Beer : An Inquiry into Physiocracy, London, 1939. H. Higgs :

François Quesnay was born in the village Mere close to Paris in 1694, the eighth child of an extremely poor family, numbering thirteen children in all. His leaning toward science appeared in him from an early age, and he eventually left the paternal roof and went to Versailles, where he established himself next door to a surgeon in order to learn medicine. In order to procure the necessities of life and to cover the expenses of his medical studies, he worked at the same time for the copper sculptor Pierre de Rochefort. Completing his studies, he turned to the study of philosophy and the physical sciences, and subsequently acquired the degree of Maître des Arts. In 1717 he married and began work as a surgeon and a gynecologist. Within a few years he had acquired great fame as a surgeon and later switched to pathology and writing. As a result of his intellectual superiority and the stir caused by his medical work «Essai Physique sur l'Économie Animale» as well as «Examen Impartial des Contestations des Médecins et Chirurgiens» (1748) he became the official attending doctor of the King's favorite, the influential Madame Pompadour. Besides the above mentioned, works Quesnay wrote: «Fermiers» (1756), «Grains» (1757), «Tableau Économique» (1753 - 1758), *Maximes Générales du Gouvernement Économique d'un Royaume Agricole* (1760) and «Droit Naturel» (1760). He died in 1774.

The work of Quesnay influenced by Locke, Condillac, Descartes and Malebranche was forgotten until Eugene Daire called attention to it in his publication (*Collection des Principaux Économistes*). Though Karl Marx considered Petty as the founder of economic science<sup>1</sup>, he gave particular value-

Six Lectures on the Physiocrats, 1897. Eshnein: La Science politique des Physiocrates (Speech at the Congress des Sociétés Savantes), Paris 1906. P. Gemaehling : Les Grands Économistes Paris, 1933. Ch. Turgeon—Ch. H. Turgeon : La Valeur d'après les économistes anglais et français, Paris, 1925, as also La Valeur, son origine et son caractère physiologique, Paris, 1927. J. Bernard : Marx et Quesnay, Paris, 1958 (Collection des Grands Économistes). L. Salleron : Le Produit net des physiocrates in «François Quesnay et la Physiocratie» (Collection des Grands Économistes), Paris, 1958. H. Woog : The Tableau Économique of François Quesnay, Berne, 1950. R.L. Meek : The Economies of Physiocracy, London, 1962. N. Moes : Y a-t-il une Théorie de la croissance économique chez François Quesnay? in «Revue d'Historie Économique et Sociale», 1962, No 3, Vol. XL. M. Lutfalla : L' Evidence fondement nécessaire et suffisant de l' ordre chez Quesnay et Morelly in «Revue Économique», No 2, Vol. XLI, 1963. R.V. Early : A Physiocratic Model of Dynamic Equilibrium, in «Journal of Political Economy», Vol. 77, No. 1, 1969. P. Buffandeau : Le Tableau Économique dans l' Historie de la Pensée Économique in «Revue d' Histoire Économique et Sociale», Vol. XLV, No. 3, Paris, 1967. L. Th. Houmanidis : E physiocratai kai ekonomiki anaptixis (in Greek in the Volume dedicated for the 50 years of the «Archeion ekonomikon kai oionikon epistimon», Athens, 1976.

1. K. Marx : Capital ed. Progress Publishers Moscow Vol. I p. 259 and Theories of Surplus Value ed Progress Publishers, Moscow 1969 Part I p. 44 ff.

to the physiocrats. Of the moderns, Schumpeter, considers Quesnay as one of the greatest economists who presented a composite table of the flow of income by means of the various social classes, having a general view of the economy<sup>2</sup>.

Quesnay and the other physiocrats : Victor de Mirabeau (1715-1789) (*Ami des hommes, Philosophie morale ou Économie générale et Politique de l' Agriculture*, 1763), Le Trosne (171-1761) (*De l' intérêt social*, 1777). Mercier de la Riviere (1721-1793) (*Première introduction à la Philosophie Économique*, 1771), Dupont de Nemours (1793-1817) (*Physiocratie ou Constitution naturelle du gouvernement le plus avantageux au genre humain*, 1761) etc., in opposition to the mercantilists, who were occupied with the extension of the external market, turned in particular to the internal market seeking a way by which to increase the income per capita and thus achieve economic development.

Quesnay and his adherents accepted the natural order of the world<sup>3</sup>, which is governed by natural laws and towards which the economy must

1. We include among these, Anne Robert Jacques Turgot (1721 -1789) (*Reflexions sur la Formation et Distribution des Richesses*, 1766, published in 1769, *Valeurs et Monnaies*, 1769) and Jacques Claude Marie Vincent de Gournay (1712-1759) (*Observation sur la Liberté des Trois Points*, 1755 and *Observations sur l' Agriculture, le Commerce et les Arts de la Bretagne*, 1757) who is considered by them as the co-founder of Physiocracy, as well as the Germans, Schletwein, Schmals, etc. Also in England we meet physiocratic conceptions in the work of an anonymous writer under the lengthy title : «Sketches on Political Economy illustrative of the interests of Great Britain intended as a reply to Mr. Mills Pamphlet Commerce defended with an exposition of some of the leading tenets of the economist» (1809). (E. Seligman : *Essays in Economics*, New York, 1925, pp 67-68). Up to a certain point Condillac is influenced by the physiocratic teachings, accepting, however, that the work put into the earth augments its productivity. (E. Bonnot de Condillac : *Le Commerce et le Gouvernement considérés relativement l' un à L'autre*, 1776, p. 220) K. Marx : *Das Kapital*, Moscow (english tr.) p. 520 Stanley Jévens : *The Theory of Political Economy*, 1871, Ital. trans. 1970 pp, 242-243).

2. J. Schumpeter : *Economic Doctrine* : p. 44 and *History of Economic Analysis*, p 123ff. Also see P. Samuelson : *Economics and the History of Ideas in «American Economic Review»*, 1962, No. 1, p. 3.

3. J.J. Rousseau in the *Contract Social* (1762) could be characterized as having a relationship to the physiocratic conceptions but despite all the efforts of Mirabeau to present him as a physiocrat he was not included among the adherents of the physiocratic doctrine (Ch. Gide -Ch. Rist : *Histoire des Doctrines Économiques*, Paris ed, 1913 p. 6). In fact, Rousseau, concerning the relationships of people within society, does not feel that they are directed by natural laws, since it is not the natural but the moral ones which relate to consciousness. According to him, man consciously seeks a form of symbiosis providing for the interest of the totality without destroying the freedom of each individual. (A. Chabert : *Rousseau Économiste in «Revue d' Histoire Économique et Sociale»*, 1964, No. 2, Vol XLII pp. 145ff).

be adapted. For the physiocrats natural law in its application in society meant two things: physical and biological. By means of this conception they drew an analogy with the natural order of things<sup>1</sup>.

According to François Quesnay, as doctor and the leader of the School<sup>2</sup>, just as a natural being is a biological organism, the society composed of biological individuals is in the same way a biological organism<sup>3</sup>. Thus, Quesnay in his agricultural system presents production, distribution and consumption of wealth as being like the human organism. Because just as the continual circulation of blood gives life to the living body, so does the continued circulation of income give life to the social body. Moreover, this is the reason why money is necessary, just as the blood is for the body, for the circulation of wealth in the economy, but nothing remains neutral<sup>4</sup>.

The natural function of the social organism is called natural order which only comes about when and if freedom is established, which is freedom of cultivation, freedom to appropriate the product and freedom of exchange so that the best possible price (*bon prix*) can be achieved, satisfying both buyer and seller not only in relation to individuals but also to the trade between countries<sup>5</sup>. And for that the following slogan is adopted: "*Laissez faire, laissez passer, le monde va de lui même*"<sup>6</sup>.

1. Ch. Gide —Ch. Rist : *Histoire des Doctrines Économiques*, p. 58

2. Quesnay was the founder of evidence, (M. Lutfalla ; *L' evidence, fondement nécessaire et suffisant de l' ordre naturel chez Quesnay et Morelly* in «*Revue Économique*» No 2, vol. XLI, 1963), influenced as we have said above by Locke, Condillac, Descartes and Malenbranche. Professor Fatifani calls the physiocratism, naturalism of evidence (*naturalismo dell' evidenza*). (A. Fanfani : *Storia delle Dottrine Econorrliche*, Milano, 1955, p 272). This evidence relates to the existence of an order which is independent of place and time and which is uncovered in human reason, but not always because it is hidden by the weaknesses of people. It is this; evidence which combines the particular interest of the human being with the general one and justice and is also that which insures the identity of the interest of the leader and the nation.

3. B. Alliy : *Le Physicisme des Physiocrates* in «*Revue d' Économie Politique*», Paris, 1911.

4. F. Quesnay : *Tableau Économique*, 1969 édition, p. 71ff.

5. «... Only through the greatest possible competition, allowed to all the merchants— Quesnay says—» can a nation insure the best price and the most profitable distribution of the products of its land. . .» (F. Quesnay : *Tableau Économique*, 1969 edn., pp 67-68). Gonnard mentions D' Argenson and Gournay as the first ones conceiving of the freedom of trade. (R. Gonnard : *Histoire des Doctrines Économiques*, Paris 1930 p. 82).

6. We could say, however, that the father of the slogan was the mercantilist of the transitional period, Dudley North, who believed that through the freedom of exchange in the external as well as the internal trade of a country a harmony of interests was achieved (See also J. Oser : *The Evolution of Economic Thought*, p. 40).

Thus, freedom is fundamental principle of natural order, that is the logical state of affairs arising from the highest natural law, which was decreed by God for man.

People, Quesnay declared, do badly by erecting barriers between themselves, which remove them from the natural order and calls on them to harmonize the positive order (*ordre positif*) with the natural order and to enact laws, positive laws (*lois positives*) whose aim will be to assist natural laws and to hold in equilibrium the free society, composed of the social classes the hierarchy of which is inviolate and determined by natural order, without which there would be only confusion and anomaly. The task of discovering the natural and moral laws and the enacting of positive laws, the physiocrats placed with the economists and the politicians, who advise the leader on what is needed, while this authority in this turn governs subject to natural order.

Through these ideas Quesnay formulated a naturalistic point of view on things. If they want to, he maintained, people can achieve happiness, if the leader desires the prosperity of his people, he is only to grant complete freedom, and the natural laws will function normally.

Freedom, individual ownership<sup>2</sup>, and commerce, must, however, be under the control of reason, which springs from the Creator of nature, and is the highest natural law. Hence this positive justice must not disagree with the will of God. It is understood that freedom has limits determined by the positive law, which aims at the preservation of natural law, of which the individual is probably ignorant<sup>3</sup>.

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1. Descartes cultivated the ground in this direction. Sartre, commenting on freedom and influenced by Descartes, says that : Man is the being through which truth appeared in the world, he is responsible confronting freedom. This directs the thought of enquiring spirits, but for success freedom is necessary ; it is the creative force and the basis of all truth. And Sartre maintains that Descartes constructed the truth section by section within freedom of a created *forcé*. (J.P. Sartre : *Descartes, Classiques de la Liberté*, Paris- Genève, 1946, pp. 15,24).

2. François Quesnay insisted on the existence of the institution of individual ownership, since without ownership the ground would remain uncultivated. Hence this positive justice is obliged to protect ownership which constitutes the basis of natural order. (A. Oncken : *Maximes*. . . Chapter V).

3. This Deistic conception, Heimann says, places natural order as a creation of God while its application is left to people. (E. Heimann : *History of Economic Doctrines*, Oxford Universi-

According to Quesnay, the only productive class is the farmers<sup>1</sup> because only from agriculture does the net product arise<sup>2</sup>. This is not a surplus for the social wealth in an abstract concept (exchange value) but a specific material wealth of useful goods. This conception of the physiocrats established agriculture as the only productive branch and the only one able to be subjected to taxation (*impôt unique*)<sup>18</sup>. The rest of the classes consequently did not create a surplus because their contribution to the product equalized by the expenditures of their employment; because of this these classes are sterile (*classes stériles*). The class of landowners is that which has the ownership of the land producing the net products and is considered, after the sovereign, the most indispensable vehicle of the existence of natural order, and of the logical state of affairs which springs from the supreme natural law (class hierarchy-individual ownership-freedom).

So that while the mercantilist faced the economic surplus with the supremacy of exports over imports (national profit) according to their titanic perception, the physiocrats attributed the existence of this surplus to agricultural reproduction and the rest of the active forces they saw being

ty Press, 1933, p. 49. Schumpeter also says : « . . .the reader will presently see that the economic proposition of Quesnay's rests upon any theological premises or would be affected by discarding what we know about his religious beliefs» (J. Schumpeter : *History of Economic Analysis*, p. 233).

1. This perception is not unrelated to the reaction to the Colbertian production class, that of the merchants who as middlemen and entrepreneurs within the markets turn the work of production to account.

2. K. Marx says that the Physiocrates distinguished industrial from agricultural labour which produce the net product-rent as the only form of surplus value. . .And this in the case with agricultural labour. The seller sells what he has not bought (K. Marx : *Theories of Surplus value* (Progress Publisher), Moscow 1969 Part I p. 47-55). The conception of the Physiocrats concerning net product, W Stark says, led them astray and made them identify this with the concept of wealth (W. Stark : *The History of Economics*, p. 15 and P. Moride : *Le Produit Net des Physiocrates et la Plus -Value de Karl Marx*, Paris, 1908). Concerning this distribution, Ch. Gide by a successful example presents each of the social classes and its place within natural order through the following example : « We could» he says, «compare the three social classes of the physiocrats with three people who must share the water of a well. The productive class is the one which pumps the water, the land - owing class receives it in its hands, but does not give anything in exchange, because it is the one that constructed the well. The unproductive class, which stays at a respectful distance, is obliged to buy the water paying for it with its labor...» (Ch. Gide - Ch. Rist : p. 27).

3. Condillac, standing between the physiocrats and the classics, maintained also that the tax should only be on agricultural ownership. (R. Gonnard : *Histoire des Doctrines Economiques*, Paris (edit), 1930, p. 88).

able to alter or transform the goods but not, however, to create them. Thus, under the physiocrats, the first thing stated is that the surplus comes from agricultural production and not from commerce.

"The earth" Quesnay says, "is the only source of goods, which only agriculture multiplies"<sup>1</sup>. Le Trosne declares, "Any labor outside of agriculture is sterile because man is not a creative being and the natural truth that the earth is the source of every good, is so obvious to all that no one can put it in doubt. And here is the difference between productive and sterile"<sup>2</sup>.

Another physiocrat, Baudeau explains<sup>3</sup> : "The forms given by the craftsmen to the raw materials are good and beautiful, but before their work there must have been produced first the raw materials and second the means of preservation. With their labor they have to pay the others who produce them. On the other hand, the cultivators produce everything they use, everything which they consume as well as everything consumed by the others". This is the reason why the net product is the only thing that must be subjected to tax, as the prosperity of man depends in its entirety on the greatest possible quantity of this (Dupont de Nemours). Because only then, by means of this increase, can we have enough population for the intensive cultivation of the land supplying the net product, so that greater wealth will be achieved.

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Quesnay and his followers believed that the population in equilibrium with the level of net product will more intensively cultivate the earth, so that in this situation there is no opposition to an increase of population, and moreover, there will arise through intensive cultivation an increase of the net product<sup>4</sup>. Thus the main slogan for the physiocrats was: wealth-population-wealth.

This viewpoint of the physiocrats concerning population was justified

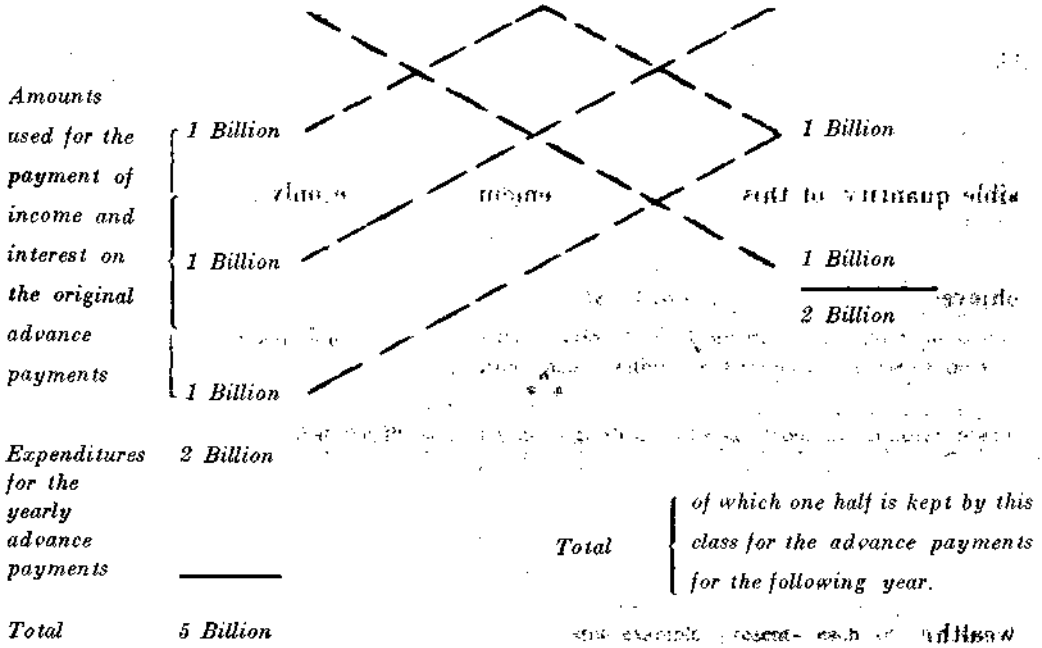
1. A. Oncken : Cited above, p. 46.

2,3. Ch. Gide-Ch. Rist : p. 14,

4, 5. F. Quesnay : Grains, edited 1969, pp. 179, A. Landry : Les Idées de Quesnay sur la Population, Paris, 1958 and B.F. Hoselitz : Theories of Economic Growth, with an article by J. Spen-gler : Mercantilist and Physiocratic Growth Theory, p. 56.

TOTAL REPRODUCTION : 5 Billion

<p><b>ADVANCE PAYMENTS</b></p> <p><i>Yearly by the production class</i></p> <p><b>2 Billion</b></p>	<p><b>INCOME</b></p> <p><i>for the landowner</i></p> <p><b>2 Billion</b></p>	<p><b>ADVANCE PAYMENTS</b></p> <p><i>of the sterile class</i></p> <p><b>1 Billion</b></p>
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by the decrease, of the population of France, which went from 24 million in 1660 to 16 million in 1760. Moreover, this was the reason why the physiocrats were not concerned by the poor output of the earth, as were the English classicists<sup>5</sup>.

Anyway, the physiocrats accepted the tendency of population to increase beyond the means of nourishment which is the reason why Quesnay suggested that in the case of overpopulation the population surplus be poured into the colonies<sup>1</sup>.

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The distribution of the net product among the various classes Quesnay formulated in a graphic presentation, (p. 440) called "Tableau Économique"<sup>2</sup>. The capital Quesnay calculated at 10 billion frs, the circulating at two billion. This is indispensable for the preservation of the productive class and for the reproduction of agricultural products. The total amount of produced goods from the circulating capital has a value of five billion. From this, 2 billion reaches the land-owners in the form of land income, while the other three goes to the farmers. The land-owning class buys with one billion of this the agricultural products from the farmers and the other various goods from the non-productive class. Again this class buys through this billion its necessary comestibles. Of the three billion the two remain with the farmers as circulating capital, with the third the agricultural class buys industrial products. The non-productive class again buys through this billion raw materials from the farmers. In this way the land-owner and the farmers have the original five billion. Thus the physiocrats through Quesnay—Granger says—tried to make economics a wide range logistics by natural laws according to the image of the natural world<sup>3</sup>.

Quesnay and the other physiocrats sought the increase of the net product through various measures in favor of farming, through the applica-

1. A. Labrousse : *Les Idées Coloniales des Physiocrates*, Paris, 1924.

2. The manuscript design of the Tableau Économique was lost and only Mirabeau presented this one on a copperplate probably by Quesnay. The zig-zag of the Tableau Économique, Buffandeau says, plays the role of the multiplier and the accelerator. (P. Buffandeau : *Le Tableau Économique dans l'Histoire de la Pensée Économique* in «Revue d'Histoire Économique et Sociale» p. 399).

3. Giller—Gaston—Granger: *Méthodologie Économique*, PUR Paris, 1958, pi

tion of technological progress, the prevention of the state from intervening to hinder trade, the non-granting of various privileges and the non-monopolistic organization of the market. Through these ideas they also conceived economic development.

Though the physiocrats gave the appropriate significance to the level of interest, tax and the moral factors, they basically advocated investment which was the fundamental starting point of development. This<sup>1</sup>, however, does not mean that they ignored the contribution of the landowner-businessman to the movement of economic forces, as well as consumption, which relates to the expenditure of the produced income, as consumption is the indispensable condition for the flow of the economic procedure. The income of every class, according to them, is the expenditure for the other, in a manner in which the increase of income will establish the increase of expenditure which in its turn will have an influence on the increase of income. Certainly the *Tableau Économique* relates to a static economy, as Quesnay defers economic development as augmentation of capital, the meaning of which he was the first to elucidate systematically, viewing it under the form of goods and services. So that the economy, according to him, is changed for the better, provided that people are adjusted to natural order and will exploit in a better way the natural forces of the earth, or for the worse if they distance themselves from the natural order. Anyway, the increase of the net profit through which natural order in the economy is expressed, increases the consumption expenditures and thus strengthens the economic mechanism to a higher level of equilibrium<sup>1</sup>. If, however, the landowners do not spend half of their income on the purchase of agricultural or industrial goods then a gap arises between income and expenditure which gives rise to disequilibrium.

However, the significance of investment, Quesnay examines only as it relates to agriculture, believing that as it progresses the secondary and tertiary sectors develop at the same time.

The *Tableau Économique*, after the enthusiasm of the adherents of the teacher, sank into oblivion and only in Marx<sup>2</sup> do we find an extended

1. F. Quesnay : *Grains* (Preface by M. Lutfalla), Paris, 1969, p. 217.

2. K. Marx : *Theories über Mehrwert* (Volume of *Das Kapital* published between 1904-1910 by Karl Kautsky). See the French trans. by J. Molitor : *Histoire des Doctrines Économiques*, Paris, 1924, Vol. I and *Theories of Surplus Value* (Progress Publishers) Moscow 1969 Part I).

analysis of the *Tableau Economique*, due of course to the placement of the structure of the social classes, in combination with the production and the distribution of wealth. But outside the publications of Daire, the lectures of Higgs and the works of Woog, Oncken, Weulersse, Meek, Finzi, Beer, the number of works on Quesnay were practically very few to our time<sup>1</sup>. Nevertheless, some monographs and researches as of S. Tsuru, Spengler, Meek, Phillips always contribute to the comparison also of the model of François Quesnay with these of Marx and Keynes<sup>2</sup> and remains us again of the physiocratic theory.

If Quesnay gave us the first static equilibrium and Walras its artful perfection the modern Leontief is the one that leads us through his system of input-output to value even more the work of Quesnay<sup>3</sup>.

A central axis around which physiocratic economic theory turns is the net product and the increase of this achieved through free trade since through this the best price of the product arises<sup>4</sup>. A part of the product flows outside of the country for the purchase of various items. And so that free trade does not operate to the detriment of those making the exchanges, the products of the countries demand a detailed account of the yearly reproduction and the exchange value, so that the exchanges will not give rise to profit or loss. In addition, the expenditures of transportation must be as low as possible and the State freed of feudalistic and parasitic bureaucratic vehicles.

For the promotion of the economy, as we saw, it is necessary for there to be a single tax (*impôt unique*) on the net product, because otherwise imposed on the goods it would cause a loss of trade<sup>5</sup>. This tax cannot lessen the national income as long as the tendency to spend money on agricultural products and on those of the craftsman is as great on the part of the govern-

1. Besides the already mentioned contemporary bibliography I would also like to refer here to the publication Quesnay's *Tableau Economique* published by the Royal Economic Society and the American Economic Association by A. M. Kelley and MacMillan with explanatory notes by Marguerite Kasynski and Ronald L. Meek.

2. Shigeto Tsuru : *Sugli Schemi di Riproduzione* published as Section A in P. Sweezy : *La Teoria dello Sviluppo Capitalistico*, Italian trans, edit, Einaudi, Roma, 1951.

3. F. Quesnay : *Tableau Économique* (Preface M. Lutfalla) Paris, 1969 edit, pp. 67 and 112ff.

4. *Ibid.*

5. A Phillips : *The Tableau Economique as a simple Leontief Model* in «*Quarterly Journal of Economics*», 1955, Vol. LXIXI.

ment as it is on the part of the landowners. Thus the single tax will not alter multiple expenditure or consequently the aggregate expenditure for the economy<sup>1</sup>. Also significance must be given to these expenditures which are productive and not sterile, which are imperative for a nation which has extended to the cultivation of land, which strengthens agriculture, an indication to the government that agriculture is the only source of wealth. This is the reason why the farmers must be left free to cultivate, according to their interests, abilities and the nature of the earth, those products which have a greater yield. It is also necessary to promote cattle-raising as an indispensable complement to agriculture, which through the multiplication of the animals gives more manure for cultivation and thus a richer harvest. These crops mean a net profit which must not be hoarded in sterile saving.

The crops under large cultivation allow taxation easily without the creation of burdens on the net profit, as happens with small cultivation, the expenditures for which are increased according to produced unit and the yearly expenditures are excessive in relation to the net product<sup>2</sup>.

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These were the ideas of the leader of the Physiocratic School and his followers, which combined economic development with the only source of wealth, according to them, agriculture in a free market. From this point of view Quesnay exercised his influence on Adam Smith, while the naturalists ideas of Cantillon had impacted on Stuart, Mirabeau and Smith. Quesnay and his followers conceived a natural economic order with its automatic reproduction, through the application of positive laws to the natural laws. They were the first to have a single general viewpoint for the whole of the economy, certifying also that its phenomena were united under obligatory relations and that individuals and governments had to recognise them, so that they could adopt their policy towards them, for the sake of economic progress.

Quesnay also gave basic significance to capital as a factor of production and of circulation in the inner-dependence between income and expen-

1. R.V. Early : cited above p. 82.

2. F. Quesnay : Grains (in the 1969 edition), p. 179.

diture. And this particular facet explains the great admiration Marx had for him.

Quesnay and his followers distinguished capital into circulation, which is formed on the one hand from the reserve for the payment of wages and raw materials, and on the other, from fixed capital, which is constituted from the means of production, which constitutes the setting off toward the circulation of wealth which he studied in a static equilibrium micro-economically. In this, under the zig-zag lines of the *Tableau Économique* the view of the dynamic economy and the economy of development is inferred.

Despite the endeavors and proposals of the physiocrats, as they advised on the appropriate economic policy France benefitted very little from them.

The conceptions which are contained within the physiocratic formulations of natural order are conservative and were not unrelated to the influence on them from China; the enlightenment particularly influenced the thought of France and Italy from 1600<sup>1</sup>. Conservatism characterized the physiocrats the preservation of the monarchy and the fear of change, while France needed the reorganization of its economic or radical bases<sup>9</sup>. Moreover, the French Court was not disposed to adopt the commercial and tax principles of physiocracy. Anyway, certain ideas of the physiocrats

1. For the Chinese, the perfect kingdom is found in heaven where the King of Heaven and Earth rules. Transferring their conception concerning the world into reality, the Chinese accepted that the Emperor was the representative of the King of Heaven protecting the cultivators and the fertilizing by the rivers of rich soils and recognizing through his laws the manner in which his subjects must live and act economically. (E. Schorer : *L' Influence de la Chine sur la Genèse et le Développement de la Doctrine Physiocratique*, Paris, 1969).

2. It could be said that Turgot took during his Ministry measures which were subsequently put into the framework of the French regime of the times. The Court, however, as usually happens did not appreciate his efforts and with Louis finally agreeing Turgot was put into the Bastille. More about this in L.Th. Houmanidis : *Mathimata Historia Ekonomikou Viou*, p. 449ff. K. Marx Says : «Turgot himself was the redicapurgeois ministre he presented the may for the French Revolution. For all their feudel pretences the Physiaocrates were working hand in hand with the Encyclopaedists» (K. Marx : *Theories of Surplus Value Vol. IV of Capital, Part I*, Moscow seconded. 1969 p. 66) and in «Selected Works (K. Marx-F. Engels) Vol I p. 319 where is mentioned : «Turgot with his direct influenced was one of the fathers of the French Revolution» See also Anikine : *La jeunesse d' une Science, la Pensée Économique avant Marx*, Moscow 1975 Fr. tr. 224.

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in the ripe environment of change which arose with the Revolution of 1789 made an impression not on the French Court but on the intellectuals and through them on the people<sup>1</sup>.

1. Schumpeter, basing himself on the environment of the physiocrats, characterizes their influence as a Succès de Salon with ideas concerning freedom even if conservative, with a validity in a small circle of nobility, as a unit, rather than as a movement having an influence on the people. (J. Schumpeter : History of Economic Analysis, p. 230).