

Anne-Robert-Jacques Turgot (1727-1781)

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Anne-Robert-Jacques Turgot was born on 10 May 1727 in Paris, where he died on 18 March 1781. He was the youngest son of Michel-Étienne Turgot, Marquis of Sousmont, a magistrate and “Prévost des marchands” (Lord Mayor) of Paris. While first destined by his family to an ecclesiastical estate — he studied theology and was admitted to the Maison de Sorbonne — Turgot devoted his career to serving the State. Already during his lifetime he acquired the status of an emblematic figure as the grand reforming civil servant of the Ancien Régime, particularly through two important positions: first as Intendant of the Généralité of Limoges (1761–74), that is, representative of the King in some of the poorest provinces in France (Limousin, Marche and Angoumois); and then as Contrôleur général des Finances (minister of the economy and

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finance, August 1774–May 1776). In this last position, during less than two years, he tried to progressively implement free trade; to put an end to traditional structures limiting the establishment in trades — such as “jurandes” (craft-guilds) — or regulating the labour force; and to abolish hurtful and inefficient obligations like the “corvée royale” (royal chore). He was also aiming at reforming the political regime of France and had a project of transferring some powers held by the King into the hands of a pyramid of elected assemblies — municipal, provincial and national. (On all these points, see the many developments by Gustave Schelle in Turgot 1913–23.)

Turgot had a serious philosophical training. He was a follower of the sensationist approach proposed by John Locke and developed in France by Étienne Bonnot de Condillac (1714–1780) and he approved of Rousseau’s *Contrat social*. He also had an encyclopedic mind like many French *philosophes* of the time. While he published relatively little during his lifetime — some of his writings circulated and were known from various sources — his influence proved to be huge and lasting.

Texts and Themes

Among his youthful works, his two 1750 discourses in Sorbonne — “Les avantages que la religion chrétienne a procurés au genre humain”, and “Tableau philosophique des progrès successifs de l’esprit humain” — are well known. They introduced important themes like a philosophy of history based on a development of societies in three stages, the unbounded perfectibility of the human mind and the notion of progress. A 1749 letter to the abbé de Cicé on paper-money and his “Plan d’un ouvrage sur le commerce, la circulation et l’intérêt de l’argent, la richesse des États” (c. 1753–54) are also indicative of his early interest in money and trade. During this period he also contributed to volumes 6 (1756) and 7 (1757) of Diderot and d’Alembert’s *Encyclopédie ou dictionnaire raisonné des sciences, des arts et des métiers* with the entries “Étymologie”, “Existence”, “Expansibilité”, “Foire” and “Fondation”. He was a member of

the group of young intellectuals gathered around Jacques-Claude-Marie Vincent, Marquis of Gournay (1712–1759), Intendant du commerce, who played an important role in the translation and/or circulation in France of some significant writings by Richard Cantillon, David Hume, Josiah Child, and so on, and in the “acclimatization” of the British “science of trade”. Turgot himself translated two writings by Josiah Tucker, one of which — the 1751 *Reflections on the Expediency...* — was published under the title *Questions importantes sur le commerce...* (1755). Some developments in this literature — for example on the importance of the level of the interest rate, or on money — are to be found later in Turgot’s thought. He wrote his celebrated “Éloge de Vincent de Gournay” (1759) after the death of the Intendant du commerce: he attributed to him however some of his own ideas on free trade, thus distorting the perception that posterity had of Gournay (Tsuda 1983).

Having made the acquaintance of Quesnay, Turgot adopted some of his views. This is probably the reason why his approach was for a long time either confused with physiocracy or seen as a “dissenting” view of it. He developed in fact a powerful approach of his own which can be termed “sensationist political economy” (Faccarello 1992, 2006). His theoretical principles are presented in five fundamental texts: (1) a short treatise, *Réflexions sur la formation et la distribution des richesses*, written c. 1766 and published by instalments in 1769–70 by Pierre Samuel Dupont (1739–1817) in *Éphémérides du citoyen*; (2) his 1767 comments on two memoirs on indirect taxation respectively written by Jean-Joseph-Louis Graslin and Guérineau de Saint-Péravy; (3) the uncompleted entry “Valeurs et monnaies” (c. 1769) intended for André Morellet’s *Dictionnaire du commerce*; (4) *Mémoire sur les prêts d’argent* (c. 1770) against the Scholastic doctrine of usury; and (5) “Lettres au Contrôleur général sur le commerce des grains” (1770) reassessing the necessity of a free grain trade — which forms also an implicit critique of Ferdinando Galiani’s 1770 *Dialogues sur le commerce des blés* (Faccarello 1998). Important aspects of his theories are also to be found in his correspondence and in other writings.

Shortly after Turgot's death, both Dupont and M.J.A.N. Caritat de Condorcet (1743–1794) — his most outstanding disciple — published a life of Turgot (Dupont 1782; Condorcet 1786). Condorcet's *Vie de M. Turgot* greatly contributed to maintain and develop Turgot's legend in France and abroad. It was translated into English as early as 1787 and appreciated by British reformers. In his *Autobiography* John Stuart Mill noted how Condorcet's book — which he compared to Plutarch's *Lives* — deeply impressed him and induced him to abandon all sectarian attitude and spirit (Mill 1873: 115–17).

It is important to keep in mind the peculiar status of Turgot's texts. First, the greatest part of his writings are just first — and sometimes incomplete — drafts. This is even the case for the 1766 *Réflexions*. This treatise was published in the *Éphémérides* on the insistence of Dupont, but Turgot had the intention to use a special offprint to thoroughly revise and expand the piece — yet he did not find the time for this revision. This probably explains some fluctuations in the vocabulary and in the presentation of some themes, for example the rate of return on capital. Secondly, Dupont modified some texts to make them match better with the physiocratic doctrine. This is the case for the *Réflexions*: Turgot had to demand him to print a separate edition of the original manuscript. Thirdly, a great number of Turgot's writings were published after his death, from sometimes undated manuscripts — their dating is thus occasionally uncertain.

A first edition of Turgot's work, by Dupont, was published in 1808–10 but this edition is unfaithful because of the changes made by the editor — in particular he reprinted his faulty version of the *Réflexions*. Three decades later two volumes of the “Collection des principaux économistes”, published in 1844 with Guillaumin and edited by Eugène Daire and Hippolyte Dussard, are also devoted to Turgot's writings and correspondence, but they mainly reproduce Dupont's versions (Schelle, in Turgot 1913–23, I: 3–4). The most comprehensive edition is, to date, the one prepared by Gustave Schelle (Turgot 1913–23) — all the references hereafter refer to this edition. Whenever it was possible, the texts were based on

the manuscripts or some reliable documents — but some manuscripts having disappeared, Dupont’s version remained occasionally the only source. Yet even Schelle’s edition is not totally reliable (see, for example, Meek 1973: 3–4; van den Berg 2014). A new edition of Turgot’s works and correspondence is certainly needed, which at long last is possible since the French Ministry of Culture bought Turgot’s manuscripts in February 2015 (the previous owners had denied access to them).

Turgot’s contribution to political economy is decisive. He powerfully developed Boisguilbert’s free-trade approach, reinforcing at the same time its foundations. Elaborating upon the hitherto common — but rather vague — supply and demand framework, he developed, on the supply side, a systematic approach in terms of capital competition and, on the demand side, a subjective theory of value and prices — what allowed him also to reconsider the doctrine of usury and propose the first economic theory of the rate of interest. He also proposed some views on the successive stages of development of societies and on the origin and effect of the division of labour (Meek 1971, 1973); he put forward the main themes of what was to be called public economics, based on market failures and on the *quid pro quo* approach (Faccarello 2006); and he engaged in a polemic with Galiani on how to efficiently reform a society and implement a transition from a regulated to a free-trade economy (Faccarello 1998). The secondary literature is abundant. For the above-quoted and other aspects of his work and some divergent interpretations, see, for example, Groenewegen (1970, 1971, 1983), Brewer (1987), Faccarello (1991, 1992), Ravix and Romani (1997). In this entry, the focus will be on competition, value and the rate of interest.

Competition, Capital and Profit

Turgot shared many views with Quesnay, notably the belief in the efficiency of free trade, the hypothesis of the exclusive productivity of agriculture and the fundamental importance of the “*avances*” (capital) in production and trade. However by systematically referring to the con-

cepts of competition, he distanced himself from the “sect”. As he wrote to Dupont, criticizing the Physiocrats: “I find that . . . you do not make sufficient use of this less abstract principle, but . . . more enlightening, more fruitful or at least forceful for its simplicity and without exception because of its generality: the principle of competition and of free trade” (Turgot 1913–23, II: 507). In this respect the 1766 *Réflexions* marked a watershed. The most important paragraphs are those concerned with capital, its definition, forms, origin and logic.

While insisting there, like Quesnay, on the need to invest large sums of capital in agriculture, Turgot generalizes this idea and applies it to all kinds of activities. He focuses on the word “capital” — defined as a quantity of value which can be embodied in all sorts of objects and adopt any form. This is a first polemical position against the Physiocrats since it establishes an equivalence between all sorts of “accumulated value”: land ownership is only one of many forms of capital, and the landowner a capitalist.

Quesnay and his disciples struggled with the question of the origin of capital. While restating the usual Physiocratic arguments — savings by the landowners, lack of competition which allows entrepreneurs to appropriate part of the “produit net” — Turgot, more importantly, emphasizes an alternative explanation. Breaking with the prevailing approach which, from Boisguilbert to Quesnay, put a stress on the necessity of “expense” to maintain prosperity, he develops a vibrant apology of savings and the “esprit d’économie” as the main source of the accumulation of capital and wealth (see also his comments on Saint-Pérvay, Turgot 1913–23, II: 649 ff.). He insists on the fact that savings in no way cause a decrease in global demand: while they are not a simple “expense” — that is, a purchase of final goods for consumption — they are no hoarding either but a formation of capital. Whether they are spent directly or indirectly on the means of production, this produces beneficial effects for growth, productivity and employment. Furthermore, Turgot claims, savings are made by entrepreneurs themselves, out of their profits, and profits are earned in all activities.

The motive for investment and capital accumulation is “income or annual profit”. Why would an individual invest in agricultural, industrial or commercial enterprises if he did not in return receive his expenses and the amortization of fixed capital, a compensation for his effort and the risks incurred, and — Turgot insists — a surplus equivalent to that which he would have received, without work and risk, had his capital been used to buy land? The logic of the argument is clear. The particular branch of production is of little importance: individuals invest in it if the return is not less than the minimal expected remuneration. If this return is higher elsewhere, movements of capital take place: capital leaves trades in which the rate of return is relatively low towards those activities where it is more attractive. The mobility of capital, through its action on relative supplies and demands, modifies relative prices and the rates of return tend to be equalized throughout the economy, all things being equal: “the products of the different employments limit themselves each other, and are maintained . . . in a kind of equilibrium” (Turgot 1913–23, II: 591).

[A]s soon as profits which result from any employment of money, increase or decrease, capitals are withdrawn from other employments and directed to it — or withdrawn from it and directed to the other employments — what necessarily changes, in each employment, the ratio between the capital and the annual product . . . [B]ut regardless of how money is employed, its return cannot increase or decrease without all the other employments experiencing a proportionate increase or decrease. (ibid.: 592)

A situation of equilibrium is thus defined by this equalization of the rates of return, or, more precisely, by a stable hierarchy of global rates of return, if we take into account the elements of risk proper of each activity, and the contribution of the entrepreneur. The lowest rate is the rate on land that is, the rent rate calculated on the value of the land — Turgot evidently thought that he could thereby eliminate differences in land quality because the best pieces of land are more expensive. The

highest rates are the profit rates for agricultural, industrial and commercial enterprises. The rate of interest lies in between: as a result of the risk incurred by the lender, it is higher than the rent rate; but it is lower than the rates related to employments which, apart from risk, also include work. It is important to note here that the hierarchy and levels of the rates of return is established at equilibrium — contrary to what Eugen von Böhm-Bawerk asserts (1884: ch. 3), this is not an explanation of the rent and profit rates through the interest rate and Turgot's explanation is not “an explanation in a circle” (ibid.: 65).

This approach will later form the core of classical political economy. But it also seemingly undermines physiocratic theory: the emphasis on the existence of profits in all activities poses the problem of the compatibility of this perspective with the dogma of the exclusive productivity of agriculture and the assertion that all the “produit net” is appropriated by the landowners. Turgot seems to be aware of the problem but his texts do not present a clear solution. The answer to this question however appears clearly in the work of one of his followers, Pierre-Louis Røederer (1754–1835), in 1787, and is developed in Røederer's subsequent writings (Faccarello 1991). Røederer (1787: 14–26) explains that the net product of the economy, while generated in agriculture, has to be distributed equitably among all the amounts of capital in the economy, whatever form they take and in proportion to the amounts invested. This is what he calls “le droit des capitaux” or “la loi du niveau” — “the rights of capitals” and “the law of the level”. The general profit rate is thus given at the aggregate level by the value of the “produit net” divided by the total value of the capital invested in all activities, including land. It is striking that Marx later adopted a similar approach in book III of *Capital* for resolving the problem of the transformation of values into production prices.

Some significant consequences are to be drawn from this analysis. A first consequence is the modification of the class structure of the economy. While Turgot first started from the physiocratic triad of a land-owning class, a productive class and a sterile class, he ended with another

threefold division based on the ownership of land, capital and labour — because, while the land-owning class is homogeneous, the productive and sterile classes are not: each of them is divided “in two categories of men, that of the entrepreneurs or capitalists who make all the advances, and that of the simple wage-earning workers” (Turgot 1913–23, II: 572). As Turgot insists in his comments on Graslin: “These are . . . two very different categories of men who contribute in a very different way to the grand work of the annual reproduction of wealth” (ibid.: 633). It could be asserted, however, that Turgot could also have ended with only two classes, the landowners being only, in his view, a sub-group among the owners of capital. J.C.L. Simonde de Sismondi was later to draw this consequence.

A second consequence is the determination of a sort of minimal price for each commodity — a cost of production *lato sensu* — beneath which the agents decrease their production or stop producing altogether. In his comments on Saint-Péray (Turgot 1913–23, II: 655–6) and in a letter to David Hume (25 March 1767; ibid.: 663) Turgot calls it “prix fondamental” (fundamental price). Under the effect of the action of competition and the migrations of capital, the “prix courant” or market price, directly determined by supply and demand, tends towards this fundamental price — in the above-mentioned letter to Hume, Turgot extends this analysis to the labour market (Turgot 1913–23, II: 663–4). This theme was to be developed later in classical economics as the gravitation of market prices around natural prices (for an interpretation of Turgot as a classical economist, see Brewer 1987; Ravix and Romani 1997). However, Turgot’s interest is almost exclusively directed to the determination of “prix courant” which only exist in trade (Turgot 1913–23, III: 176). Moreover, the elements of the “prix fondamental” are themselves determined by supply and demand.

Another consequence was to be clearly stated by Condorcet and Røederer: the theory of capital helps explaining the hierarchy of wages. The minimum wage is what is necessary to sustain the worker and his

family. Any additional amount is just the remuneration of the capital invested in the person, through education, training, and so on.

Note finally that, in addition to this path-breaking approach, Turgot's texts include other innovative aspects. For example, in his 1767 comments on a memoir by Saint-Pérvy, and in searching for the optimal quantity of "avances" — the number of units of labour — to be employed with a given quantity of a fixed factor in agriculture — a certain quantity of seed employed on a given piece of land — Turgot clearly states the law of non-proportional returns: the physical marginal product of the variable factor is first increasing and then diminishing. He clearly distinguishes between intensive and extensive diminishing returns and also points out the fact that it is always advantageous, in physical terms, to go beyond the point of maximal average product till the marginal product becomes nil (Turgot 1913–23, II: 643–5).

Utility, Value and Prices

A person is "merely a bundle of needs", Turgot states in "Plan d'un mémoire sur les impositions" (Turgot 1913–23, II: 293). Satisfying these needs brings about utility; the effort spent on this goal involves a pain (disutility). On the basis of this sensationist approach, Turgot developed a theory of subjective value, which allows him to determine equilibrium prices, which, in the short period, equilibrate supply and demand. This is a remarkable step, which also makes him embark on two genuine tours de force. (1) In the first place, while retaining the whole edifice of the free trade approach developed by Boisguilbert, he gave it a different foundation. Sensationist philosophy now explains the selfish and maximizing behaviour of agents in markets, in place of the theological dogma of the Original Sin and the Fall of Man. (2) In the second place, he showed that the traditional debates about usury were misconceived and that the problem of the nature and the determination of the rate of interest can easily be solved on the basis of his theory of value and price.

The question of value is investigated at some length in the 1766 Reflections but a more extensive analysis is formulated in the c. 1769 uncompleted text “Valeurs et monnaies”. What is value? To answer this question, Turgot, probably on the celebrated model of the statue Condillac developed in his 1754 *Traité des sensations*, first imagines a man alone facing nature. This “savage” has to produce the goods he requires to satisfy his needs, but he must first determine the value each of these goods has for him. This “valeur estimative” or “esteem value” is the subjective “degree of esteem which he attaches to the different objects of his desires” (Turgot 1913–23, II: 87) — the “degree of utility” as Turgot puts it in the 1770 *Mémoire sur les prêts d’argent* (Turgot 1913–23, III: 175). The isolated individual thus establishes a preference-ordering — “order of utility” (ibid.: 86, 97) — on all of the goods, taking into account (1) the ability of each object to satisfy a kind of need, (2) the temporal element generated by foresight, and (3) the scarcity of the desired object. As a result of this calculation, he attributes a certain “esteem value” to each quantity of each object: this reflects the proportion of his “faculties” which he is prepared to devote to obtaining it, all other things being the same. He also distributes all of his faculties in such a way as to procure the different goods “according to their importance for ... his well-being” (1913–23, III: 87), that is, by searching for the greatest possible well-being. It should be noted that Turgot poses the question of the measuring of values, and opts for a purely relative understanding of these. The reason for this is that the unity — the “faculties” — to which the values refer cannot be evaluated. However, the text sometimes presupposes this measurement, that is, cardinality, as it is the case in the determination of the equilibrium price.

Turgot then supposes that there are two agents and two goods, in absence of production. Each agent has an initial endowment of a good and needs part of the quantity of the good owned by the other agent; the situation is thus of a bilateral monopoly in a pure exchange economy. The two agents engage in a bargain under the following assumptions: (1) each agent determines for himself the “esteem values” he attributes to

the different parts of the endowment he wishes to exchange, as well as to the parts of the other agent's endowment which he could receive in exchange; (2) the agents do not reveal their preferences: these values are kept a secret by each individual; (3) on this basis, each agent determines the states of indifference, in other words, the reservation price from which the exchange is possible; (4) each of them follows a maximizing behaviour, that is, is animated by "the interest to keep the largest quantity possible of his own good and to acquire in exchange the largest quantity of the other's good" (Turgot 1913–23, II: 90) — a typical eighteenth-century formulation of the mathematical problem of "maximis et minimis".

In order for a transaction to take place, it is necessary for each agent to attribute to the quantity of the object received a higher "esteem value" (say λ) than that which he assigns to the quantity of the good given in exchange (λ^*): $\lambda > \lambda^*$. As Turgot states: "each would stay as he is unless he finds an interest, a personal profit, to exchange; unless he estimates more what he receives than what he gives" (Turgot 1913–23, II: 91). The gains from exchange are clear: (1) free exchange implies an increase in total utility for both parties; (2) moreover, whenever production is possible, exchanges also allow a division of labour and result in an increase of the quantities of goods available to the agents (ibid.: 93).

Turgot assumes that the bargaining process converges towards a price on which both agents agree, in between the reservation prices of the two agents. This equilibrium price — called by Turgot "valeur appréciative" — is unique and is determined simultaneously with the quantities exchanged. The final agreement is defined as a situation in which the difference of the "esteem values" of the quantity of the received good over that of the quantity of the good given in exchange is equal for both parties — which could be symbolized, for two agents i and j : $\lambda_i - \lambda_i^* = \lambda_j - \lambda_j^*$. This is the reason why this equilibrium price is termed "average esteem value".

This solution, however, could not be satisfactory for those who note that there is a priori no unique solution in the case of a bilateral monopoly.

But this approach is nevertheless remarkable for its originality and rigour: it was probably inspired by the celebrated pages on justice and exchange in Aristotle's *Nicomachean Ethics* and finds an interpretation in terms of cooperative games (Dos Santos Ferreira 2002). The explanation given by Turgot remains however questionable: this "valeur appréciative" is necessarily attained because, he notes, should the differences between the "esteem values" of the goods be different between agents, it would be in the interest of one of the two agents to continue the bargaining process. But how could the agents know each other's differences when preferences are not revealed — and moreover utilities are not comparable?

Having established his argument for two contracting parties, Turgot intended to generalize it to a large number of agents and goods. The article "Valeurs et monnaies" unfortunately concludes after taking into consideration a larger number of agents in a two goods context; Turgot assumes that as a result of competitive arbitrages a single price would be established. The general situation (many agents and goods) is only dealt with incidentally in *Mémoire sur les prêts d'argent* and the 1770 "Lettres" to Terray. Turgot simply reaffirms his conviction in the realization of a general equilibrium. Nevertheless, two remarks formulated on these occasions are of interest. First, the process by which equilibrium is achieved is explicitly described in the "Lettres" as a process of "tâtonnement" (Turgot 1913–23, III: 326). It is however a real "tâtonnement" since exchanges are made outside equilibrium: but according to Turgot, no one's interest would really be damaged — at least statistically — since, given that the variations are made by "imperceptible degrees", the "losses" and "gains" would compensate for each other in the end. Secondly, Turgot stresses in the *Mémoire*, while prices are actually determined from a subjective basis, they acquire in the end a misleading "objective" appearance in markets. It is this illusion which has given rise to a belief in the existence of an "intrinsic value", "real value" or "natural price": but nothing of the like exists in reality (ibid.: 175–6).

The Rate of Interest and the Problem of Usury

One important aspect of Turgot's work relates to the rate of interest. In some sections of the *Réflexions* (Turgot 1913–23, II: 577–86) and particularly in the 1770 *Mémoire sur les prêts d'argent* (Turgot 1913–23, III: 154–202) his line of thought is double. On the one hand, taking up traditional arguments for and against usury, he shows the “frivolity” of the latter and the possibly correct, but not truly decisive, aspect of the former. On the other hand, he supplies his own reasons, the most important of which displaces the controversy. The question of usury, he stresses, is traditionally badly posed. Once the terms are correctly defined, it becomes a simple problem of economic theory and more specifically an application of the theory of value (ibid.: 174–80).

One of the traditional arguments in favour of the prohibition of usury was that — founded in Roman law — of the fungible and consumable character of some objects, money included: destroyed by the use which is made of them, they cannot be lent at interest because their transfer to the borrower necessarily involves a transfer of property. This argument, Turgot stresses, supposes that the transaction is about the physical object — for example a quantity of coins, or a given weight of a precious metal — and it cannot but lead to the above-mentioned conclusion. However, the transaction relates instead to a quantity of value and implies the utilities of the contracting parties: “where have our quibblers seen that the only thing to be considered in the loan is the weight of the metal borrowed and returned, and not its value and its utility for the lender and the borrower?” (Turgot 1913–23, III: 177) The interest rate is just a price like any other and its determination falls in the field of the theory of value. Two principles are essential here: (1) an exchange can only be implemented if the utility of the quantity of the commodity received is higher, for each agent, than the utility of the quantity of the commodity given up in exchange; (2) time preference: the depreciation, in terms of “esteem value”, of a good available in the future compared to the same good available now (ibid.).

At the time of the transaction the lender compares the utility of the sum of money he owns with a promise of reimbursement in the future. If no interest is stipulated, and as the lender estimates the promise to reimburse tomorrow to be worth less than the identical sum today, an agreement in these conditions is impossible because it would involve a loss of utility for the lender. In order that the transaction takes place, it is therefore necessary that the promise of reimbursement in the future be for a higher amount than the sum which is lent, so that the “esteem value” the lender attributes to it be higher than the value he attributes to the sum in question. If the elements of risk and disutility are reintroduced, then this difference — the interest — measures (1) time preference, (2) the risks incurred and (3) the disutility experienced because of the momentary unavailability of the amount of money. This analysis is obviously novel and path-breaking: the link with the theory of value, in particular, is fundamental. Turgot’s studies at the Sorbonne could have been of some help here, because a similar development had been made, more than a century and a half before, by the Flemish Jesuit Leonard de Leys (Lessius): his “*caentia pecuniae*” already referred to a kind of time preference. However in Lessius’ writings this element was just an empirical fact observed in the market (van Houdt 1998). Turgot instead linked it to his subjective theory of value. It is also to be noted that the reasoning in terms of time preference seems to have been widespread among confessors and casuists during the 17th century because Pope Innocent XI, in 1679, had to condemn the proposition that a present sum of money being “more precious” than the same sum available in the future, “the lender may demand from the debtor something more in addition to the loan, and on that title can be excused from usury” (quoted in Delumeau 1990: 118).

Two last points must be mentioned to conclude. The first regards the interest rate; it is definitely not a monetary variable. While a type of monetary quantitativism prevails — probably a legacy of Cantillon and Hume — the interest rate is subject to the logic of the loanable funds market and, being a price like any other, must be determined

freely between agents. The second point concerns money as a measure of value and a medium of exchange. As noted above, values cannot be expressed as such. In particular the “valeur appreciative” of a commodity is essentially relative. It is thus expressed, in an isolated transaction, by the quantity of the good against which it is exchanged; or in general by each of the quantities of every other commodity against which it can be exchanged. Turgot deduces from this the money form properly speaking: thanks to its intrinsic qualities, related to the requirements of the functions of measure of values and medium of exchange, one commodity detaches itself from the rest, and all the other commodities, by convention, express their value in terms of this good, which therefore becomes the unique form of expression of value, “gage universel” (Turgot 1913–23, II: 554). This analysis is to a great extent taken up and developed by Morellet in his “Digression” on money which he included in his 1769 *Prospectus d’un nouveau dictionnaire de commerce*, and from there probably handed over to Condillac in his 1776 *Le commerce et le gouvernement considérés relativement l’un à l’autre*. Above all, Karl Marx later adopted and developed it in his analysis of the “forms of value” in book I of *Capital*.

See also:

Daniel Bernoulli; Pierre Le Pesant de Boisguilbert; Classical economics; Marie-Jean-Antoine-Nicolas Caritat de Condorcet; French enlightenment; François Quesnay.

Note

Translating Turgot is not an easy task. Modern English translations of some of Turgot’s writings are by Ronald L. Meek (*Precursors of Adam Smith*, London: Dent, 1973, and *Turgot on Progress, Sociology and Economics*, Cambridge: Cambridge University Press, 1973) and Peter Groenewegen (*The Economics of A.R.J. Turgot*, The Hague: Martinus Nijhoff, 1977). Some of them, completed with older translations of other texts, are republished in *The Turgot Collection*

(David Gordon, ed., 2011, Auburn: Ludwig von Mises Institute). In this entry, however, we use our own translations. The references are to the Schelle edition (Turgot 1913–23).

References and further reading

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