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Introductory Reflections on Scholastic Economic Thought. From the Thomistic Approach to the Franciscans

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Abstract. This essay provides a general overview of the development of economic theories in 13th and 14th centuries in the light of the latest studies and offers new perspectives for future investigations. Scholasticism is a milestone in the history of Western philosophy as well as its contribution to scientific method and innovation. At the end of the Middle Ages, the ideal of shared norms and values clashes with the tensions of commercial transformation. In this historical framework – characterized not only by an unprecedented international trade and new financial institutions but also by a sort of proto-empiricism – the philosophical speculation tries to find a unitary "way of knowledge" between the legitimacy of individual interests and the primacy of general principles. This interdisciplinary effort is based on the innovative interpretation of theology, (natural) philosophy, Roman and Canon law such as local customary rules applied to the emergent economic issues.

Keywords: History of Pre-Classical Economic Thought; Economic History, Philosophy of Economics, History of Medieval Philosophy,

History of European Law

JEL Codes: A120, N0, B2, B110, B4, B40

[es] Reflexiones introductorias sobre el pensamiento económico escolástico. Del enfoque tomista a los franciscanos

Resumen. Este ensayo ofrece una visión general del desarrollo de las teorías económicas en los siglos XIII y XIV a la luz de los últimos estudios y ofrece nuevas perspectivas para futuras investigaciones. La escolástica, así como su contribución al método científico y la innovación, es un hito en la historia de la filosofía occidental. A finales de la Edad Media, el ideal de normas y valores compartidos choca con las tensiones de la transformación comercial. En este marco histórico, caracterizado no sólo por un comercio internacional sin precedentes y nuevas instituciones financieras, sino también por una especie de proto-empirismo, la especulación filosófica trata de encontrar un "camino del conocimiento" unitario entre la legitimidad de los intereses individuales y la primacía de principios generales. Este esfuerzo interdisciplinario se basa en la interpretación innovadora de la teología, la filosofía (natural) y el derecho romano y canónico, así como las reglas consuetudinarias locales aplicadas a los problemas económicos emergentes.

Palabras clave: Historia del pensamiento económico preclásico; Historia Económica, Filosofía de la Economía, Historia de la Filosofía Medieval, Historia del Derecho Europeo

Códigos JEL: A120, N0, B2, B110, B4, B40

Sumario: Introduction. Scholastic thought and social dynamics. Culture and society. Reflections on need and prices. Usury, interest, and theory of loans. Conclusions. Bibliography for further research.

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Introduction

Firstly, it is necessary to point out that the Scholastic economic thought should be considered as an integrated part of ethics, where the splintering, that characterizes the evolution of later economic reasoning and its own autonomous field, has not yet happened. In fact, ethical and economic rationality are put at the service of the common goal of *stabilitas ordinis*. This comprehensive union considered primary the optimization of action (economics) in a

context of universal responsibility (ethics) (Totaro, 1988, p. 87).

Secondly, during the 13th and 14th centuries, one begins to feel a new tension arise between the autonomy of economic facts and the still strong attachment to a theological foundation. Before the two parallel paths of ethics and economics are formed, with their apparently distant languages, we witness the formation of a "proto-empiricism" between the legitimacy of individual interests and the primacy of general principles.

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Thirdly, a sound unity of knowledge is the cornerstone of all philosophical construction in an interactive relation. Such an organic unity is not an impediment to the exercise of rationality but involves a transcendent openness which is not limited to the pure material dimension of the economic act. The contemporary abstraction of *homo oeconomicus* is diametrically opposed to an anthropological conception based on transcendence².

Scholastic thought and social dynamics

The Scholastic philosophy presents a series of original ideas that underlie the subsequent evolution of economic and social thought. Joseph Alois Schumpeter was justly convinced that, at the end of the Middle Ages and within the cultural dynamism of the first European universities, we can locate the first concrete evidence of the economy being conceived as an independent subject³. This "emancipation", however, takes place within the defined spheres of moral theology and jurisprudence. Furthermore, it is necessary to bear in mind that this philosophical system rests on the general acceptance of common participation in the *eternal law* and bases its characterization on the fruitful encounter between the message of the Gospel and the tensions that arise within society.

In this frame, sculpted in a sublime way by the work of Thomas Aquinas (1225-1274), *reason* assumes a role of first order in the interpretation of natural law, which flows from the eternal law. This faculty of reason makes use of an analytical and normative approach that is indispensable for the proper representation and understanding of the social order (Chafuén 2003, p. 20). In a period of political transition and national demands, even the legal and economic concepts – in the light of the *Franciscan School* and the doctrines of Marsilius of Padua (1275-1342) – evolves in a completely original way.

An innovative contribution comes – not surprisingly – from the jurisprudence where the schools active in Italy —especially Bologna and Perugia— and southern France are memorable. They translate the legal needs, emerging from the craft guilds, the Maritime Republics, and the merchants, into customary rules. The criterion of speed and effectiveness is the *Leitmotiv* of the *Lex Mercatoria* (Merchants Law) in which the repetitiveness of a behaviour (*diuturnitas*) was promptly answered with a binding opinion (*opinio iuris ac necessitatis*).

In this context, the *Book of the Consulate of the Sea*, published in Catalan around 1330, and the *Statutes of the Sea*, published in Ancona around 1380, deserve, therefore, to be briefly remembered. They are legal codes – which inspired by the Byzantine

tradition and previous canons such as the Trani's *Ordinances and Custom of the Sea* (1063), the *Amalfi Laws* and the Ragusa's *Liber Statutorum* (1272) – that have systematized naval legislation, creating a model for international mercantile law.

The theory of law that flows from this epochal movement is directed towards the idea that the judgment of human reason is the only presupposition of any contingent political decision. According to this rational principle, the power of the state must be limited essentially to the defense of the common good, to the resolution of internal conflicts and the maintenance of peace. For the reasons mentioned above, a study on the evolution of Scholastic economic thought cannot dispense with an interdisciplinary and comparative perspective that can offer an organic and un-ideological way to see the evolution of ideas. The need for interdisciplinarity becomes a necessary and required step for understanding social relations because it meets scientific research criteria and can give a proper hearing to different perspectives.

The epochal influence of the so-called medieval "physical-mathematical revolution" – which began at Merton College in Oxford and continued robustly in Continental Europe – added a significant scientific nuance to the traditional theological, historical, legal, and political factors. The *School of Paris*, as it was deeply influenced by Ockhamism, will complete this pre-existing research model with a pure rationality that strives to offer defined parameters of universal and transtemporal validity (Gilson 1997, p. 766).

In addition, it is precisely in these years that some problems of natural philosophy, inherited in part from the Greco-Roman tradition, are taken into consideration in the light of contemporary methodological innovations. In this interesting epistemological setting, the relationship between languages and different forms of knowledge is not hermetically closed or opposed but is structured harmonically to achieve a more complete understanding that does not deny the cognitive value of Faith. The natural process of knowledge and its intimate dynamism – enriched by the collection of data and the management of multiple factors – becomes without a doubt more and more concentric.

In fact, the very nature of historical events influences and stimulates social reflection, often to pacify discord or restore civic harmony when they have been interrupted by natural disasters or human greed. The main characteristic of these works is in the investigating concretely the contingent facts by offering a long series of special cases based on evidence. This meticulous and detailed reasoning about human nature, the evolution of commercial practices as well as the influence of the individual and collective sphere in the political decisions, is based more and more

[&]quot;Recognize that homo oeconomicus has its own limits as useful abstraction. We can only load the construction with so much, and we stand in danger of having our whole "science" collapse in an absurd heap if we push beyond the useful limits. The fact that the whole set of 'non-economic' motivations are more difficult to model than the 'economic' should not lead us to deny their existence." (Buchanan and Brennan, 1987, p. 55).

³ "the skeleton of Smith's analysis hails from the scholastics and natural-law philosophers" (Schumpeter, 1954, p. 182).

upon a rich process of nuances and degrees to open to new formulations and conjectures.

The intense research activity is not limited to the observation of events, but it enumerates, in an original and in-depth way, the causes and consequences to avoid a similar repetition of the errors of the past. This approach is, at the same time, historical and praxeological since it associates the analysis of individual behavior with the eventual effects in the collective sphere. The relationship between cause and effect assumes an axiomatic value and becomes the unavoidable starting point of any investigation. It is in this process of analyzing society that Scholasticism shows one of its peculiar features: the observation of humanity becomes introspection, thus opening the doors of future social psychology.

Despite being by its nature limited and burdened by original sin, humanity tends to improve its spiritual and material condition in a teleological perspective and that is the basis of all real intervention. In this context, the precise knowledge of the means and tools implies a logical as well as sound rationality. Therefore, we are faced with a real methodology in which the analysis of social events is articulated in a structured way so that it is strictly expressed in accordance with the obligatory passages of description, definition, hypothesis, and the proposal of possible solutions. Here a basic logic is developed that assumes both the deductive and inductive method. According to precise categories, what is observed is described in detail and, from that starting point, the fundamental postulates will be established or modified

Culture and society

Between the 13th and 14th centuries, the growing importance of transnational trade contributes to a major social shift. This draws the attention of commentators and scholars about a multitude of new cases and problems. The evolution of commercial contracts will also profoundly change not only the legal tradition but also the common mindset. In addition, the renewed centrality of Roman law, the evolution of Canon law, the dissemination through Arabic translations of the *Nicomachean Ethics*, the *Politics* and other Aristotelian texts substantially change the vision of society and economic activities. This cultural and legal renewal is a fundamental passage in the history of Western civilization (Cunningham 1902, p. 2-3).

The widespread presence of the Ecclesiastical courts has the character of an additional centripetal force that harmonizes the diverse legal pretensions around the minimum common divider of the canon-

ical legislation. The doctrines of the canonists assume, in this way, a fundamental role in the evolution of social thought, and the *Decree of Gratian* (1130-1140) appears as the central and unifying element of education and legal training in the universities. The system of canon law, adapting to the new times, is also interested in topics such as social issues, financial transactions, business, and commercial ethics, so that the *Corpus Juris Canonici* can be considered a primary source for the development of economic theory⁴.

Although specific requests and disputes come from the courts, the reflection on poverty, wealth and legal possession of property reaches the desks of the theological faculties. This climate of passionate reflection on social issues leads some scholars, directly influenced by Aristotle and Cicero, to affirm that private property is a natural right for all rational human beings. However, its use must not be excessive, but refers to the real needs of the individual and the community. The excesses of personal ambition are contrary to temperance. Reason, in fact, says Thomas Aquinas, "orders things to their end" and in this order consists the good of reason itself.

To this general conception, a psychological interpretation is added, according to which a person has more care and attention for an individual property than for the common one. However, a strong moral link binds the property owner with the community to which he belongs and to whom he must account for his behavior. This organic conception of society is the *leitmotiv* of medieval social speculation. In the *Summa Theologiae*, in fact, we read that "things referable to oneself are referable to another, especially in regard to the common good" (Thomas Aquinas, II-II, q. 58, a. 5).

This reading makes use of the Aristotelian teaching, inserted in the Christian tradition, of a natural hierarchy inscribed in the magnificent plan of Creation. The objective of the rational man is to act and govern for the good of the whole society. In a spiritual framework, any behavior or decision makes the individual directly responsible to God and to others. The concept of justice, taken from the Romanist tradition and enriched by theological speculation, is applied to every human relationship. This precious union of the legal teaching of Antiquity with the Judeo-Christian tradition is at the very basis of the European culture. The precepts of the Decalogue are the first principles of the law, which natural reason accepts immediately because they are very evident⁶.

On a purely practical level, for an honest transaction it is necessary to harmonize *distributive justice* with *commutative justice* since the first regulates the divisions and the second rules the exchanges that can be made between two individuals⁷. The organic and

⁴ See Clair of Florence, Casus conscientiae (XIII. Century) and Astesanus of Asti, Summa de casibus conscientiae (around 1317).

⁵ Thomas Aquinas, Summa Theologiae, II -II, q.141 a. 5.

⁶ Thomas Aquinas, Summa Theologiae, II-II, q. 122 a. 2.

Thomas Aquinas, Summa Theologiae, II-II, q.61, a.3.

holistic conception of justice obviously echoes the counsel Aristotle gives in the *Nicomachean Ethics* in which the ultimate *telos* is to protect and promote the happiness of the community. Although the Stagirite specifically referred to three different types of justice, *distributive, corrective and reciprocal*, St. Thomas Aquinas after St. Albert the Great groups the last two with the name of "commutative justice" (Tarabocchia Canavero 1992, pp. 608-631).

Since "commutative justice consists in rendering something to one person, while distributive justice consists in giving something to many"8, it is evident that both belong to the same kind of justice. Their union thus becomes the *ipso facto* pre-representation of that common good which exceeds the priorities of the individual for the realization of a universal purpose. At this point, a precision is needed: there is a double division for the use of goods. In the first place, one cannot think about substituting the nature, which is not subject to the power of man, but only to God. Secondly, the manner of use. Under this aspect, man has a natural control over things: because he can use them for his benefit through intellect, freedom and will, considering them as made for himself⁹. There are two faculties of man with respect to external goods. The first is to procure and administer them. And from this perspective it is licit for a man to possess his own goods. In fact, this is even necessary for human life, for three reasons:

First because every man is more careful to procure what is for himself alone than that which is common to many or to all: since each one would shirk the labor and leave to another that which concerns the community, as happens where there is a great number of servants. Secondly, because human affairs are conducted in more orderly fashion if each man is charged with taking care of something himself, whereas there would be confusion if everyone had to look after any one thing indeterminately. Thirdly, because a more peaceful state is ensured to man if each one is contented with his own.

(Thomas Aquinas, *Summa Theologiae*, II-II, q. 66, a. 2.)

In fact, a hierarchy is presented in the natural law that establishes a formal distinction between the so-called *natural law of first instance* and the *natural law of second instance* or *law of the peoples*. The power to dispose and administer the goods of the Earth is conceived, ultimately, as an aspect of the providential fulfillment of the divine plan. The *potestas procurandi et dispensandi* makes the persons involved responsible firstly before God, who is considered the first guarantor of the community itself. We should not assume that this conception is a brake on philosophical-theological speculation in social matters. On the other hand, the opposite happens: it is

enriched – given the premises and the flowering of commerce – with more innovative theories.

In fact, a renewed interest in trades, sales, and purchases arises where Thomist doctrines of *commutative justice* and *distributive justice* act as a bridge for a revolution in economic thought. From the first doctrine, a rudimentary theory of exchange is developed and, from the second one, the theories of the distribution of goods. According to the latter, price is calculated based on the benefits it generates, as well as on any shortage; in the case of exchange, a fixed unit of account is commonly accepted. On this base, the real trade of the goods and the necessary expenses for their purchase can be subsequently calculated.

In the concept of distributive justice, the idea of merit is at the center: an idea that could lead contemporary man to an error of evaluation. It is not, as it could be misinterpreted, an attempt at self-improvement based on private pleasure. On the contrary, it is an implicit effort in personal action to contribute to general happiness, and therefore actively contribute to public utility. In the medieval vision of the interpersonal relationship, *tranquilitas ordinis (tranquility of order)* – of Augustinian memory – is not in a second place in relation to the exchange of goods. If distributive justice shows its exquisitely ethical character, commutative justice opens the door to a pragmatic reflection on the types and kinds of transactions and methods of commercial practice.

In the epistemological reflection on the nature of goods, however, some necessary considerations must be made regarding the origin, the possible time of deterioration, and the transportation and its relative risks. The appropriate calculation of these factors is assuming an increasing value so that the relation between the goods is expressed as a function of these intrinsic and extrinsic characteristics. In this framework, the theories of marginal utility are clear. Classical is the definition according to which things are not evaluated due to their ontological nature, because a mouse, which is a feeling animal, would have a price higher than that of a pearl, as an inanimate being. On the other hand, prices attributed to things have as criteria of evaluation the need that man must dispose of them¹⁰.

Reflections on need and prices

As a result, the need really constitutes the measure of everything, and money is the outcome of a negotiation between men. Money, therefore, is a convention that they have stipulated among themselves, due to the need to exchange their goods: it is a simple means. Currency, however, is not alien to the laws that regulate the supply and demand of other commodities, although it must be defended from the fre-

⁸ Thomas Aquinas, Summa Theologiae, II-II, q. 61, a. 1,5.

⁹ Thomas Aquinas, Summa Theologiae, II-II, q. 66, a. 1.

Thomas Aquinas, In Decem Libros Ethicorum Aristotelis ad Nicomachum Expositio, V, 9.

quent changes that will alter its value, generating inflation, deflation, and stagflation.

Returning to the concept of necessity, this must be considered, not in reductionist terms as what is sufficient for mere survival, but as to what is right and appropriate to lead a decorous and virtuous life. The constant reference to the satisfaction of needs, individual freedom, and the utility of the goods leads to a reflection on the determination of a *just price*. A just price should express the correct equivalence that exists between the actors of the sale, according to an equitable evaluation of the good. Undoubtedly, the legacy of Roman law in the field of contracts is evident, but we are witnessing a new formulation with the description of cases that testify to the vitality of the economy. The emphasis on quantity, the excess of price in comparison with the latter, as well as in relation to quality, highlight some hypothetical situations of unfair or illegitimate exchange. Regarding this aspect, Thomas Aquinas formulates that:

If someone would be greatly helped by something belonging to someone else, and the seller not similarly harmed by losing it, the seller must not sell for a higher price: because the usefulness that goes to the buyer comes not from the seller, but from the buyer's needy condition.

(Thomas Aquinas, *Summa Theologiae*, II-II q. 77, a. 1)

Distribution and exchange are analyzed as intimately inseparable or as parts of the same mechanism, whose goal is the realization of social harmony. Any change in the price or production's indexes, therefore, causes a negative or positive influence on the social structure. Virtuous or dishonest individual behavior affects each transaction and the progress of public life:

The measures of salable commodities must needs be different in different places, on account of the difference of supply: because where there is greater abundance, the measures are wont to be larger. However, in each place those who govern the state must determine the just measures of things salable, with due consideration for the conditions of place and time. Hence it is not lawful to disregard such measures as are established by public authority or custom.

(Thomas Aquinas, *Summa Theologiae*, II-II q. 77, a. 2)

Analyzing more in depth the economic transaction, Scholastic thinkers realize the impossibility of having perfect information about the goods for sale and this point seriously affects the formation of a just price. To better understand this fact, they use a classic example according to which a man pays only a few cents for a precious book because of the ignorance of the seller about the good he possesses. This also shows that the common desire to buy a good below

the correct price "is not based on nature but on vice" (Thomas Aquinas, *Summa Theologiae*, II-II q. 77 ad. 2).

This reflection makes explicit the importance of detailed information on the quality of goods for a reasonable approximation of the price. Anyway, this "impure" mechanism of market regulation, taking advantage of the margins of a possible manipulation of information, would compensate – in its own way - "the same vicious character of individual behavior and the ineffectiveness of legal controls" (Béraud and Faccarello 2000, p. 36). Undoubtedly, we are indebted to the Scholastic economic thought for the formulation of price determination under the joint effect of supply and demand in which the market price is situated approximately around the natural price (De Roover 1958, pp. 421-437). No less important are some indications about the determination of price in function of time, in which D. Barath sees the first definition of the distinction between the long and short-term price (Barath 1960, p. 34).

Duns Scotus and the subjective utility

The irruption of Scotism in the Thomistic organic complex causes first a change of course: social analysis begins to take more into account the aspect of individual choices. In his commentary on the Sentences of Peter Lombard, John Duns Scotus (1266-1308), a Scottish Franciscan friar, insists on the subjective utility of a commodity as the main source of its intrinsic value and places at the center of the question the inalienable right of a fair profit. To avoid any misunderstanding, the thought of Scotus does not totally break with Christian tradition. His innovative contractualism does not reject the traditional conception of justice. The individual remains inferior to the community in the social hierarchy. His analytical perspective can be summarized in this distinctive feature of his social thought:

Beyond the rules given here on what is right and what is not, I would issue two more. The first is that the exchange is useful for the community, and the second is that a person receives a reward in exchange for her commitment, her prudence, her eagerness, and the risk incurred. [...] This second rule comes from the fact that every man, who serves the community in an honest way, must be able to live of his work.

(John Duns Scotus, *Quaestiones quod libetales ex quattuor Sententiarum*, d. 15, q. 2.22.)

The absolute novelty of the Scotist theses, considered within the Franciscan framework, lies in the consideration of a more complex series of factors and variables —such as material, psychological, individual—that directly determine the price and value. The development of this theory is inextricably linked to his *principle of individuation*, according to which in-

dividuality is an essential property and "individual is a transcendent term" (Vos, 2018, p. 168). This aspect is historically revolutionary and precludes the rational justification of a responsible independence in the frame of the moral law¹¹.

With Nominalism, moreover, there is a formal division in the representation of social uniqueness. Society is analyzed according to differentiated categories in a more marked way but still always mutually necessary and interdependent. The doctrine of Ockham (1285-1347) breaks, therefore, the traditional banks: the community is no longer an organic entity tending to a single goal, but a "polymorphous set of individuals gathered in their actions by a common will, namely, the administration of public affairs" (Dupuy 1989, p. 35). Man, his personal behavior, and his inter-individual conduct become the new object of the social sciences. A passage of time occurs in the very content of social research: from the general definition of ethical standards to the description of concrete phenomena, their causes, and their consequent influences. The reflection becomes more intensified and subtle; the cases multiply, and the analyses are meticulously detailed with pragmatic examples¹².

At the beginning of the 14th century, John Buridan (1300-1358) offers an example of this newfound effort. In a famous question of his commentary on the Nicomachean Ethics, Buridan starts from the Aristotelian thesis that human need is a measure of exchange and soon arrives at an acute criticism of it. The objection is since, if the need is a price measure, "the poor should buy the grain at a higher price than the rich because they have a greater need" (Buridan, Quaestiones in Decem Libros Ethicorum ad Nichomachum, lib. V, q. 16, d. 1.). Buridan tries this way to solve the old question about the uniformity of the price and the disparity in the needs. In the case of the previous example, differences depend mainly on the very nature of the transaction that would avoid an equivalent counterpart for an abundant good among the rich and that is lacking among the poor. Upon realizing this discrepancy, Buridan approaches an approximate definition of the relationship between production and labour:

The poor in relation to the things that are for him abundant purchases at a price much higher than the rich in relation of the things that he is deprived. In fact, the poor would bring more bodywork for a sester of grain than the rich man for twenty; but he would no longer bring more money, of which he is devoid, in front of the rich.

(Buridan, Quaestiones in Decem Libros Ethicorum ad Nichomachum, L. V, q. 1)

Although he does not answer the original question about price uniformity, this argument highlights the relationship between time, cost, and production and offers a first idea of purchasing power in relation to working time. Indeed, thanks to this speculative spirit, these thinkers try to determine the prices of goods with reference not only to the relation between the cost of production and scarcity, but also to the value of individual consumption. This harmonization of *Herstellungskosten* (production costs) and *Gebrauchswerte* (use value) is one of the most important aspects of the Scholastic economy, according to K. Knies (1930, p. 116).

In his reflections on exchange, Buridan explains that value is not determined by the intrinsic excellence of the thing nor by the mere utility that allows the satisfaction of material needs, because in this case wheat would be much more expensive than precious stones. Buridan also offers us a singular interpretation within what we might consider "social nominalism": the concept of "indigence" or extreme poverty, should not be restrictive, but should be extended to needs. It is a psychological phenomenon dependent on the external conditions and the disposition of character¹³

Enriching these doctrines, Antoninus of Florence (1389-1459), a Dominican friar, identifies virtuositas, raritas and placibilitas as the main factors that determine value¹⁴. Desire and personal choice become a determining issue in establishing the price of a good. At this point, the discussion is enriched with some interesting elements. The great demand for quality manufacturing adds to the traditional components of work a renewed concept of "peritia" (expertise) so much that the Franciscan Gerald Odonis (1285-1349) speaks of the greater importance of certain professions due to the difficulty of finding people with specific skills (Langholm, 1987, p. 123). This leads to the idea that remuneration is not only related exclusively to hours of work, since this also depends on practical knowledge and the shortage of skilled labour.

Usury, interest, and theory of loans

The reflection on the just price and the correct payment, the availability or rarity of the goods, the cost of production and work, and time and obsolescence affect both theologians and jurists (Bazzichi 1985, pp. 1055-1086). Theologians, driven by a moral investiture, are dedicated to the construction of a social harmony, while jurists are called to judge the various cases that are presented in court. At the forefront of academic disputes is the critical analysis of usury and interest.

¹¹ Gracia (1994), pp. 271-298.

¹² Chaplygina – Lapidus (2016), pp. 20-42.

John Buridan, Quaestiones in Decem Libros Ethicorum ad Nichomachum, V, q. 14 and 16.

¹⁴ Antoninus of Florence, Summa, II 1,16.

In this period, the decisions of Popes Gregory IX and Boniface VIII express a clear condemnation of usury. In the *Constitutions*, which Pope Clement V promulgated at the Council of Vienne in 1311, it is stated that those who would have argued that usury was not sin, must be exiled from the Christian communities under charges of heresy. However, that does not block a flourishing literature that develops both from a purely theological and legal point of view. The analysis of usury becomes detailed and meticulous.

At this point, some clarification is necessary: usury is initially conceived as a sin of intention. In the Summa Aurea, William of Auxerre (1150-1231) defined it as "that intention to receive something more than the capital borrowed on a given loan" (William of Auxerre, Summa Aurea, t. 48, c. 1, q. 1.). The theological reflection joins the legal reflection to regularize the practice of the loan of money. If the regulatory requirement lies between the real existence of a cost of risk associated with the borrowed capital and the clear superiority of the holder of the capital in the negotiation, it is commonly accepted as the classic "negative relationship" according to which "to take usury for money lent is unjust in itself, because this is to sell what does not exist, and this evidently leads to inequality which is contrary to justice" (Thomas Aguinas, Summa Theologiae, II-II, q. 78 a. 1.).

For late Scholastic thinkers, however, it seems clear that an *opportunity cost* caused by a possible loss of capital would justify the legality of the interest in *non-usurious terms*. One of the greatest difficulties in thinking about usury is the real calculation of an intertemporal transaction. The estimation of a future good and the definition of risk clash with this principle that limits the creditor to the simple collection of the loan. In those years, the Scholastic literature is enriched by new interpretations, such as that of Giles of Lessines (1230-1304), according to which certain price variations in some transactions should not be considered usury because:

Time may be linked to certain transactions of goods, as it adds or, on the contrary, undermines the value of those goods. In that case, if someone, by virtue of time, sells above or below the just price, a contract is not usurious. Because a measure of grain is, rightly, more valued in summer than in autumn.

(Giles of Lessines, De Usuris, c. 9)

Undoubtedly, a nascent form of the concept of actualization can be found there, but it is in the calculation of the "future" estimations and of the probable costs that there are hesitations and setbacks. Therefore, despite the problems of valuation, it is good to note here a further differentiation: an essential distinction is developed in the contract of "mutuum" (loan) between *fungibiles res* (things that are con-

sumed in current use) and *non-fungibiles*. Using this legal terminology, the loan of a "fungible thing" is not a loan, but a sale for the simple reason that possession of its use passes from one owner to another. Here the *fair sale* takes place based on the *aequalitas* (equity) between the seller and the buyer. But the argument becomes more articulated when the mere currency is at the center of the transaction because "it is lawful to receive interest for money entrusted to a merchant or craftsman. Therefore, it is also lawful to receive interest for money lent" (Thomas Aquinas, *Summa Theologiae*, II-II, q. 78 a. 2).

Money, therefore, is neither harmful nor completely sterile. The concept of the sterility of money, in fact, is valid if work and intelligence have not been applied to it. The currency is not a "negative good", but it assumes a value strictly dependent on the proper or inappropriate use of its owner. Antoninus of Florence affirms in this regard that "money is not profitable in itself, nor can it multiply, but it can be profitable through its use by merchants" (Brants 1895, p. 134).

This interpretation shows that the development of trades had completely revalued the role of money as an economic engine in a productive function. This shows a change of perspective in the definition of money supply and credit, so much so that the Franciscan friar Peter of John Olivi (1248-1298) in his *Tractatus de emptione et venditione, de usuriis et restitutionibus* had already made a clear distinction between a "pure" loan and a *loan integrated into production*. In the first case, the condemnation of usury is clear; in the second case, the lender, taking the risk in the investment, is entitled to a sufficient reward for any damage¹⁵.

Another Franciscan – who became at the end of his life the 15th Minister General of the Order of Minor Friars – deserved to be quoted: Alexander Bonini of Alessandria (1268-1314). His criticism of Aristotelianism is directed not only against the concept of *sterility of money*, but above all in opposition to the theoretical prejudices that prevent *a priori* a general comprehension of established economic practices and commercial activities. In his treatise *De Usuris*, several cases with subtle differences between classic usury and credit fraud are mentioned. A variety of "forms of money" are also introduced. His treatise has not yet been translated into a modern language and has not been thoroughly investigated.

The same fate belongs to other thinkers – especially Franciscans of the Scotist matrix – that, while remaining faithful to the rule of poverty, begin to draw a series of demarcation lines about the licitness and legitimacy of economic practices with the meticulous study of a probable series of natural, environmental, and psychological variables¹⁶. Among the authors – who would deserve more attention – stand

¹⁵ See Langholm (2009), pp. 131-141.

¹⁶ Schüssler (2019), pp. 31-72.

out Francesco of Empoli (XIV. Century)¹⁷ and the already mentioned Gerald Odonis (1285-1349). The circulation of their ideas is also a driving force for an economic literature in vernacular languages as in the case of Francesc Eiximenis (1330-1409), with his consistent production in Catalan.

In Tuscany, Bernardine of Siena (1380-1444) confirms this approach by stating that currency does not simply have the character of money, but also has a productive character, which is commonly called *capital* (de Roover, 1967, p. 29). The characteristics of the *money loan* change in an evolving society. The concept of ownership over a sum of money expands and connects directly to the right to a justified future income. Even if the private use of money or goods should not be in contradiction with the community, it seems that there has been a metamorphosis of thought in this justification of personal benefit.

The compensation for any damage suffered by the lender entered the mortgage contract. The extent of the damage, in general, is the difference between the initial conditions before the loan and at the time of the refund. In the legal field, this damage is justified by the presence in the contract of the poena conventionalis (conventional penalty) according to which it was legitimate to add in the initial contract a penalty in case of non-payment within the deadline. This convention is divided into two distinct parts: damnum emergens (emerging damn) and lucrum cessans (loss of profit). The damnum emergens happens because "sometimes a man suffers loss through lending money. Therefore, he may lawfully ask for or even exact something else besides the money lent" (Thomas Aquinas, Summa Theologiae, II-II, q. 78 a. 2). The lucrum cessans occurs when the borrower incurs a loss after entering the loan.

This is the origin of another subtle additional distinction that is expressed in the differentiation between the *damnum* and the *mere interest*. It is particularly interesting how this question of capital productivity and *capitalization risks* was common in medieval economic reflection. E. Böhm-Bawerk argues that the theme was obvious to the late-medieval mentality by which it was universally accepted to receive an income from a *financial transaction* that did not involve only manual labor (Böhm-Bawerk 1990, p. 39).

Conclusions

Despite some epistemological difficulties, in these years there is a formidable attempt to deeply analyze and harmonize commercial activities considering ethical norms, in tune with the rapid development of transnational trade and the consequent political and social changes. The philosophical-theological speculation – centered on methods, analysis, and the inherent logical rationality of human actions – is supported by legal schools with the considerable production of their glossators. Furthermore, it is not accidental the in-depth reflection on the intrinsic dangers of the monetary alterations, made by the sovereigns through an aggressive policy of seigniorage as Nicholas Oresme (1320-1382) explains in his treatise *De origine, natura, jure et mutationibus monetarum*. In that same work he illustrates the so-called *Gresham's Law* according to which people save and set apart the good currency and use only the bad, destroying the entire economic system.

Another consequence, shortly thereafter, is the creation of the Mounts of Piety (*charitable pawnbrokers*) – by Barnabas of Terni (d. 1474 or 1477) and according to the juridical systematization of Fortunato Coppoli (1430-1477) – to provide loans of limited size at favourable conditions and moderate interest in exchange of a pledge. All this hermeneutical richness evolves in the European universities, where the tensions and demands of the international commercial and financial companies were gradually transforming the cultural substratum.

In such an interconnected world of travels, discoveries and business, an integrated system of banks – with a dense network of agencies and branches in Europe and the Near East – not only arise and expands but also emits *promissory notes*, leading to a new form of financial transactions. In this framework the *abacus schools* are fundamental in the formation of new commercial techniques and in the development of double entry bookkeeping as well as a modern accounting method, which would be later systematized by Luca Pacioli (1447-1517) in his *Summa de arithmetica, geometria, proportioni et proportionalita* (1494).

The authority of these scholars – with their interpretations of the common good as well as of public and individual utility – remains for centuries at the center of academic courses and is the basis of national legal and administrative structures, where the interconnection between Roman law, customary law and Canon law still plays a predominant role. This approach of analyzing, propagating, and implementing general codes of conduct was extremely significant in the Ibero-American colonies, where the presence of a normative literature - the so-called *Pragmatici* - is particularly widespread through small compendia for confessors, catechisms, and popular summaries of greater moral theological works with specific juridical argumentations¹⁸. Their legacy is undoubtedly an important step towards modern political and economic theories.

¹⁷ See Franciscus de Empoli, *Quaestio de Monte*.

See Duve Thomas and Danwerth Otto (eds.), Knowledge of the Pragmatici. Legal and Moral Theological Literature and the Formation of Early Modern Ibero-America, Max Planck Studies in Global Legal History of the Iberian Worlds, Leiden: Brill

Bibliography for further research

Primary Sources

Antoninus of Florence, Summa, in Opera omnia: ad autographorum fidem nunc primum exacta, vita illius, variis dissertationibus et adnotationibus aucta, Firenze: Pietro Gaetano Viviani, 1741.

Alexander Bonini of Alessandria, *Un traité de morale économique au XIVe siècle. Le Tractatus de usuris de maître Alexandre d'Alexandrie*, (éd. A.-M. Hamelin), Louvain: Éditions Nauwelaerts, 1962.

Alexander Bonini of Alexandria, *Tractatus de usuris et de restitutionibus*, 129 (lat. 152), Bologna: Biblioteca Universitaria

Astesanus of Asti, Summa de casibus conscientiae, Strasbourg: Johann Mentelin, (around) 1469.

Bernardino de Bustis, *Defensorium Montis pietatis contra figmenta omnia aemulae falsitati*, Milano: Scinzenzeler, 1497. Bernardine of Siena, *Sermones de evangelio eterno*, Basel: Johann Amerbach, 1489.

Boureau, A. (ed. trad.), Chiaro de Florence, «Le Livre des cas». Manfredo de Tortona, «Traité des restitutions et de la diversité des contrats», Paris: Les Belles Lettres (Bibliothèque scolastique. 13), 2017.

Clair of Florence, Casus conscientiae, 4 (olim C. 1), ff. 40r-64v, Firenze: Biblioteca Provinciale dei Frati Minori.

Corpus juris canonici emendatum et notis illustratum. (Gregorii XIII. pont. max. iussu editum: 3 parts in 4 volumes), Roma: In aedibus Populi Romani, 1582.

Fortunato Coppoli, Consilium Montis Pietatis, Venice: Pietro Quarengi, 1498.

Franciscus de Empoli, Quaestio de Monte, Vat. lat. 4272, Città del Vaticano: Biblioteca Apostolica Vaticana.

Gilles of Lessines, De usuris in communi et de usurarum contractibus, ff. 338ra-348vb, Autun: Bibliothèque Municipale.

Johannes Buridanus, Quaestiones in Decem Libros Ethicorum ad Nichomachum, Paris: Le Preux, 1513.

Johannes Duns Scotus, Questiones quodlibetales ex quattuor Sententiarum, Lyon: Iacobum Myt, 1520.

Johnson C. (ed.), *The De Moneta of Nicholas Oresme and English Mint Documents*, London: Thomas Nelson & Sons, 1956.

Nicole Oresme, *Tractatus de origine, natura, jure et mutationibus monetarum*, (R.P.D. Nicolai Oresmii, Lexoviensis episcopi et praeceptoris Caroli V cognomoento sapientis regis Christ.), Düsseldorf: Verlag Wirtschaft und Finanzen, 1995 Luca Pacioli, *Summa de arithmetica, geometria, proportioni et proportionalità*, Venezia: Paganino Paganini, 1494.

— *Summa de arithmetica, geometria, proportioni et proportionalita*. An original translation of the *Distinctio nona*. Tractatus IX «De computis et scripturis» (by P. Crivelli), London: The Institute of Bookkeepers, 1924 (Reprinted in Rome: RIREA, 2016).

Pedro de João Olivi, *Tratado sobre os contratos seguido de Sobre como devem ser folheados os livros dos filósofos*, (Edição bilingue latim-português, Edição do texto latino: S. Piron; Introdução e notas: L. A. De Boni; Tradução: L. A. De Boni – J. B. da Costa), Porto: Edições Afrontamento, 2016.

- *Tratados sobre los contratos*, (Traducción por G. Patriarca y M.E. Segura Novoa), Penbroke Pines, USA: Editorial Fe y Libertad, 2019.
- *Tractatus de emptione et venditione, de usuriis et restitutionibus*, ff. 214r-245v, Napoli: Biblioteca Nazionale "Vittorio Emanuele III".
- *A Treatise on Contracts*, (Critical Edition and Commentary by S. Piron; Translated from the Latin by R. Thornton and from the French by M. Cusato, OFM), Saint Bonaventure, N.Y.: Franciscan Institute Publications, 2016.
- *Tratado de los contratos*, (Estudio preliminar de R. Ramis Barceló -Traducción y notas de P. Ramis Serra y R. Ramis Barceló), Madrid: Editorial Dykinson, 2017.
- *Tractatus de contractibus / Traité des contrats*, (ed. trad. et comment par S. Piron). Paris: Les Belles-Lettres (Bibliothèque Scolastique, 5), 2012.
- Usure, Compere e Vendite. La scienza economica del XIII secolo, (a cura di A. Spicciani, P. Vian, G. Andenna), Milano: Europia-Jaka Book, 1998.
- Sbaraglia, G.C., Supplementum et castigatio ad scriptores trium Ordinum s. Francisci a Waddingo aliisve descriptos, cum adnotationibus ad syllabum martyrum eorundem Ordinum. Opus posthumum. Editio nova variis additamentis et indice scriptorum chronologico locupletata 3 vols., Roma: Bibliotheca historico-bibliographica, 1908-1936 [rist. anast. Sala Bolognese (Bologna): Arnaldo Forni, 1978].

Thomas Aquinas, *Summa Theologiæ*, (Literally translated by Fathers of the English Dominican Province), Cincinnati: Benziger Bros.1947

William of Auxerre, Summa Aurea, (ed. J. Ribaillier), Grottaferrata (Roma): Frati Editori Quaracchi, 1980-1987.

References

Alliney, Guido (2019), "Quando Duns Scoto ha cambiato idea sulla volontà? La causa del volere secondo la *quaestio* 6 delle *Collationes parisienses*", *Quaderni di Noctua*, Vol. 5 (2019), pp. 604-640.

Armstrong, Lawrin (1999), "The Politics of Usury in Trecento Florence: The Questio de monte of Francesco da Empoli", *Medieval Studies*, vol. 61 (1999), pp. 1-44.

Ascheri, Mario (2000), I diritti nel medioevo italiano. Secoli XI-XIV, Roma: Carocci.

Aubenque, Pierre (1993), La Prudence chez Aristote, Paris: PUF.

Aznar Vallejo, Eduardo (1994), Viajes y descubrimientos en la Edad Media, Madrid: Editorial Síntesis.

Baldwin, John W. (1959), *The medieval theories of the just price. Romanists, canonists, and theologians in the Twelfth and Thirteenth centuries*, Philadelphia: Transaction of the American Philosophical Society.

Barath, Désiré (1960), "The Just Price and Costs of Production according to Thomas Aquinas", New Scholasticism, 34.

Bazzichi, Oreste (1985), "Valore economico e giusto prezzo nella teologia medievale", *Rivista di politica economica*, 10/1985, pp. 1055-86.

Bellomo, Manlio (1996), Saggio sull'università nell'età del diritto comune, Roma : Il Cigno-Galileo Galilei Edizioni.

Béraud, Alain - Faccarello, Gilbert (2000), Nouvelle histoire de la pensée économique, Paris: La Découverte.

N. Bériou - J. Chiffoleau (eds.) (2009), *Economie et religion. L'expérience des ordres mendiants (XIVe – XVe siècle)*, Lyon: Presses Universitaires de Lyon.

Böhm-Bawerk, Eugen (1990), Capital and Interest, London: McMillan and Co.

Boureau, Alain - Piron, Sylvain (eds.) (1999), *Pierre de Jean Olivi (1248-1298)*. *Pensée scolastique, dissidence spirituelle et société*, Actes du Colloque de Narbonne, Paris: Vrin.

Bousquet, Georges-Henri (1960), Esquisse d'une histoire de la science économique en Italie des origines à Francesco Ferrara, Paris: Rivière.

Brants Victor (1895), L'économie politique au Moyen-Age, esquisse des théories économiques professées par les écrivains des XIIIe et XIVe siècles, Louvain: C. Peeters.

Brundage, James A. (2016), "The Practice of Canon Law", in Hartmann Wilfried - Pennington Kenneth, *The History of Courts and Procedure in Medieval Canon Law*, Washington D.C.: The Catholic University of America Press, pp. 63-75

Buchanan, James - Brennan, Geoffrey (1987), "The Normative Purpose of Economic Science: Rediscovery of an Eight-eenth-Century Method" in Buchanan James (ed.), *Economics. Between Predictive Science and Moral Philosophy*, College Station: Texas A&M University Press.

Calasso, Francesco (1957), *I Glossatori e la teoria della sovranità: studio di diritto comune pubblico*, Milano: Le Monnier. Capitani, Ovidio (ed.) (1974), *L'etica economica medievale*, Bologna: Il Mulino.

Canning, Joseph (2017), "The Medieval Roman and Canon Law Origins of International Law", in Bain William (2017), *Medieval Foundations of International Relations*, New York: Routledge.

Carbajo Nuñez, Martín (ed.) (2008), Giovanni Duns Scoto. Studi e Ricerche nel VII Centenario della sua morte, Vol. I-II, Roma: Antonianum.

Ceccarelli, Giovanni - Piron, Sylvain (2009), "Gerald Odonis' Economics Treatise", in Duba William & Schabel Chris, *Gerald Odonis, Doctor Moralis and Franciscan Minister General*, Leiden: Brill.

Ceccarelli, Giovanni (2007), *The Price for Risk-Taking: Marine Insurance and Probability Calculus in the Late Middle Ages*, http://www.jehps.net/Juin2007/ceccarelli_Risk.pdf.

Chafuén, Alejandro (2003), Faith and Liberty. The Economic Thought of the Late Scholastics, Lehnam: Lexington Books. Chaplygina, Irina & Lapidus, André (2016), "Economic thought in scholasticism", in Faccarello Gilbert – Kurz Heinz D., Handbook on the History of Economic Analysis, Volume II, chapter 3, London: Edward Elgar Publishing, pp. 20-42.

Cipolla, Carlo M. (1982), Il fiorino e il quattrino. La politica monetaria a Firenze nel Trecento, Bologna: Il Mulino.

Cleary, Patrick (1914), The Church and the Usury, Dublin: M.H. Gill and Sons.

Cunningham, William (1902), An Essay on Western Civilisation, vol. II, Cambridge: Cambridge University Press.

Dupuy, Claude (1989), Introduction to "Traité des monnaies de Nicolas Oresme et autres écrits monétaires du XIV siècle", Lyon : La Manufacture, Lyon.

De Roover, Raymond (1974), *Business, banking, and economic thought in late medieval and early modern Europe*, ed. J. Kirshner, Chicago: The University of Chicago Press.

— (1958), "The Concept of the Just Price: Theory and Economic Policy", Journal of Economic History, 18/4, p. 421-437.

— (1971), La pensée économique des scolastiques, Paris: Vrin.

— (1967), San Bernardino of Siena and Sant'Antonino of Florence. The two Great Economic Thinkers in the Middle Ages, Cambridge, MA: Harvard University Press.

Dudley Sylla, Edith, *The Oxford Calculators and the Mathematics of Motion 1320-1350: Physics and Measurements by Latitudes*, New York: Garland Publishing, 1991.

Duve, Thomas - Danwerth, Otto (Eds.), Knowledge of the Pragmatici. Legal and Moral Theological Literature and the Formation of Early Modern Ibero-America, Max Planck Studies in Global Legal History of the Iberian Worlds, Leiden: Brill 2020,

Endemann, Wilhelm (1883), Studien in der romanisch-kanonistishen Wirtschafts- und Rechtslehre bis gegen Ende des siebenzehnten Jahrhunderts, Berlin: Guttentag, vol. II.

Erdő, Peter (2006), Die Geschichte der Wissenschaft vom kanonischen Recht: eine Einführung, Berlin: Lit.

Evangelisti, Paolo (2009), "Contract and Theft Two Legal Principles Fundamental to the *civilitas* and *res publica* in the Political Writings of Francesc Eiximenis, Franciscan friar", Franciscan Studies, 67/2009, pp. 405-426.

Fanfani, Amintore (1933), Le origini dello spirito capitalistico in Italia, Milano: Vita & Pensiero.

Fochesato, Mattia (2012), "Francesco da Empoli e Pietro Strozzi : un dibattito su usura e speculazione nella Firenze del Trecento", *Studi francescani*. Vol. 109, Num. 1-2/2012, pp 73-113.

Galgano, Francesco (2001), Lex Mercatoria. Storia del diritto commerciale, Bologna: Il Mulino.

Gilson, Etienne (1997), La Filosofia nel Medioevo, Firenze: La Nuova Italia.

— (1952), Jean Duns Scot. Introduction à ses positions fondamentales, Paris: Vrin.

Gregg, Samuel (2001), Economic Thinking for the Theologically Minded, Lahnam: University Press of America.

Grice-Hutchinson, Marjorie (1978), Early Economic Thought in Spain, 1177-1740, London: Alien & Unwin.

Gracia, Jorge J.E. (1994), *Individuation in Scholasticism: The Later Middle Ages and the Counter-Reformation*, 1150-1650, SUNY Press, New York.

Grossi, Paolo (2011), L'Ordine giuridico medievale, Bari: Laterza.

Henquinet, François-Marie (1939), "Clair de Florence, O.F.M., canoniste et pénitencier pontifical vers le milieu du XIIIe siècle", *Archivum Franciscanum historicum*, 32/1939, pp. 3-48.

Hoeres, Walter (1962), Der Wille als reine Vollkommenheit nach Duns Scotus, München, Verlag Anton Pustet.

Huerta de Soto, Jesús (2016), Dinero, crédito bancario y ciclos económicos, Madrid: Unión Editorial.

Imbert, Jean (2004), Histoire de la vie économique ancienne, médiévale et moderne, Paris: Cujas.

Jourdain, Charles (1869), *Les Commencements de l'Économie Politique au Moyen-Âge*, Paris: Mémoires de l'Académie des Inscriptions et Belles-Lettres.

Kaye, Joel (2014), A History of Balance, 1250–1375: The Emergence of a New Model of Equilibrium and its Impact on Thought, Cambridge, Cambridge University Press, 2014.

Kaye, Joel (1998), Economy and nature in the fourteenth century. Money, market exchange, and the emergence of scientific thought, Cambridge: Cambridge University Press.

Kirshner, Julius - Lo Prete Kimberly (1984), "Peter John Olivi's Treatises on Contracts of Sale, Usury and Restitution: Minorite Economics or Minor Works?", *Quaderni fiorentini per la storia del pensiero giuridico moderno*, 13/1984, pp. 233-286.

Knies, Karl (1930), Die politische Ökonomie vom Standpunkte der geschichtlichen Methode, Leipzig: Buske.

Kristeller, Paul Oscar (1989), Die Ideen als Gedanken der menschlichen und göttlichen Vernunft, Heidelberg: Winter 1989

Kobusch, Theo (2011), *Die Philosophie des Hoch- und Spätmittelalters*, Geschichte der Philosophie- Band V. München: C.H. Beck.

Kulisher, Josef M. (1964), Storia economica del Medioevo e dell'Epoca moderna, vol. I, Firenze: Sansoni.

Lambertini, Roberto (1990), La povertà pensata. Evoluzione storica della definizione dell'identità minoritica da Bonaventura ad Ockham, Modena: Mucchi editore, 1990.

Langholm, Odd (1992), Economics in the medieval schools. Wealth, exchange, value, money and usury according to the Paris theological tradition, 1200-1350, Leiden: Brill.

— (1987), "Scholastics Economics", in Todd S. Lowry, *Pre-classical Economic Thought*, Boston: Kluwer Academic Publishers.

— (2009), "From Olivi to Hutcheson: Tracing an Early Tradition in Value Theory", *Journal of the History of Economic Thought*, vol. 31/2, pp. 131-141.

Laurent, Henri, La loi de Gresham au Moyen-Age, Paris: Sirey, 1938.

Maierù Luigi - Galuzzi Massimo - Santoro Nadia (2012), La tradizione latina, Fibonacci, le scuole d'abaco, il Cinquecento, Roma: Aracne.

Merino, Juan Antonio (1993), Historia de la filosofía franciscana, Madrid: BAC.

Moreno-Riaño Gerson - Nederman Cary J. (2011), A Companion to Marsilius of Padua, Leiden: Brill.

Muzzarelli, Maria Giuseppina (2001), Il denaro e la salvezza. L'invenzione del Monte di Pietà, Bologna, il Mulino.

Niehans, Jürg (1993), "A Reassessment of Scholastic Monetary Theory", *Journal of History of Economic Thought*, Volume 15, Issue 2 -Fall 1993, pp. 229-248

Noonan, John T. Jr. (1957), The scholastic analysis of usury, Harvard University Press: Cambridge, MA.

Novak, Michael (2001), Three in One: Essays on Democratic Capitalism, 1976-2000, Rowman & Littlefield.

Nuccio, Oscar (2008), La storia del pensiero economico italiano: come storia della genesi dello spirito capitalistico, Roma: LUISS.

O'Brien, George (1967), An essay on medieval economic teaching, New York: A.M. Kelley.

Patriarca, Giovanni (2019), "On the Scottish distinctiveness. From Late Scholasticism to the Scottish Enlightenment. A Preliminary Perspective", *Review of Austrian Economics*, 1/2019 (17 May 2019), pp. 1-12.

— (2015), "Die spätscholastische Methodik und die Dialektik der Naturbeherrschung", in Martorana Marco, Pascual Rafael, Regoli Veronica (eds.), *Raccolta di Saggi in Onore di Marco Arosio*, Vol. II, Roma: Ateneo Pontificio Regina Apostolorum, pp. 339-381.

Pellicani, Luciano (2013), Saggio sulla genesi del capitalismo. Alle origini della modernità, Soveria M.: Rubettino.

Pesce, Pier Giuseppe (1966), "La dottrina degli antichi moralisti circa la liceità del contratto di assicurazione" in *Assicurazione*, XXXIII (1966), pp. 42-52.

Pirenne, Henri, (2006), Economic and Social History of Medieval Europe, New York: Routledge, Chapters I-II-III-IV.

Quaglion,i Diego - Todeschini, Giacomo - Varanini, Gian Maria (2005), *Credito e usura fra teologia, diritto e amminis-trazione. Linguaggi a confronto* (sec. XII-XVI), Roma: École Française de Rome.

Radding, Charles M. (1988), *The Origins of Medieval Jurisprudence. Pavia and Bologna 850-1150*, Yale: Yale University Press.

Rothbard, Murray N. (1995), Economic Thought Before Adam Smith: An Austrian Perspective on the History of Economic Thought, vol. II, Cheltenham: Elgar Publishing.

Sangster, Alan - Stoner, Gregory - McCarthy, Patricia (2008), "The Market for Luca Pacioli's *Summa Arithmetica*", *Accounting Historians Journal*, Vol. 35, No. 1 June 2008 - pp. 111-134.

Schumpeter, Joseph Alois (1954), History of Economic Analysis, Oxford: Oxford University Press.

Schüssler, Rudolf (2019), The Debate on Probable Opinion in Scholastic Tradition, Leiden: Brill.

Segura Novoa, Elizabeth - Patriarca Giovanni (2020), "El enfoque franciscano y la ciencia. De la Escolástica Tardía a la vía moderna", *Franciscanum*, Vol. 62 Núm. 173 (2020), pp. 1-21.

Sirico, Robert A. (1998), "The Late-Scholastic and Austrian Link to Modern Catholic Economic Thought", *Journal of Markets & Morality*, 1/2(October 1998), pp. 122-129.

Spicciani, Amleto (1977), La mercatura e la formazione del prezzo nella riflessione teologica medioevale, Roma: Accademia Nazionale dei Lincei.

Tarabocchia Canavero, Alessandra (1992), "La virtù della giustizia da "Habitudo" a "Habitus". A proposito della giustizia "metaphorice dicta" in Alberto Magno e Tommaso d'Aquino", *Rivista di Filosofia Neo-Scolastica*, Vol. 84, No. 4/1992, pp. 608-631.

Tavares Magalhães, Ana Paula, "The medieval university and the ethos of knowledge: Franciscan friars, patristic tradition, and scholastic 'instruments'", *Acta Scientiarum* 3, Vol. 37 (July-Sept 2015): 237-245.

Thomas, Aquinas (1964), *Commentary on the Nichomachean Ethics*, translated by C. I. Litzinger, O.P., Chicago: Henry Regnery Company - 2 volumes.

Todeschini, Giacomo (1994), Il prezzo della salvezza. Lessici medievali del pensiero economico, Roma: Carocci.

— (2009), "Eccezioni e usura nel Duecento. Osservazioni sulla cultura economica medievale come realtà non dottrinaria", Quaderni storici, 131/2, 2009.

— (2002), I mercanti e il Tempio. La società cristiana e il circolo virtuoso della ricchezza fra Medioevo ed Età Moderna, Bologna: Il Mulino.

— (2015), "Il denaro, i mercanti, la Chiesa: Le Goff, la storia economica dell'Occidente cristiano e il Francescanesimo", Nuova rivista storica, Vol. 99, N°. 3, 2015, pp. 977-996.

Todisco, Orlando (2010), La libertà creativa. La modernità del pensare francescano, Padova: Il Messaggero.

Toivanen, Juhana, Perception and the Internal Senses: Peter of John Olivi on the Cognitive Functions of the Sensitive Soul, Leiden: Brill, 2013.

Toneatto, Valentina (2011), "La richesse des Franciscains. Autour du débat sur les rapports entre économie et religion au Moyen Âge", *Médiévales*, 60/2011, pp. 187-202: 198.

Totaro, Francesco (1988), "Razionalità ed etica economica", in Crepaldi Giampaolo - Papini Roberto (eds.), *Etica e democrazia economica*, Genova: Marietti.

Vos Antonie (2006), Philosophy of John Duns Scotus, Edinburgh: Edinburgh University Press.

Wood, Diana (2002), Medieval Economic Thought, Cambridge: Cambridge University Press.

Zamagni, Stefano (2014), Mercato, Torino: Rosenberg & Sellier.