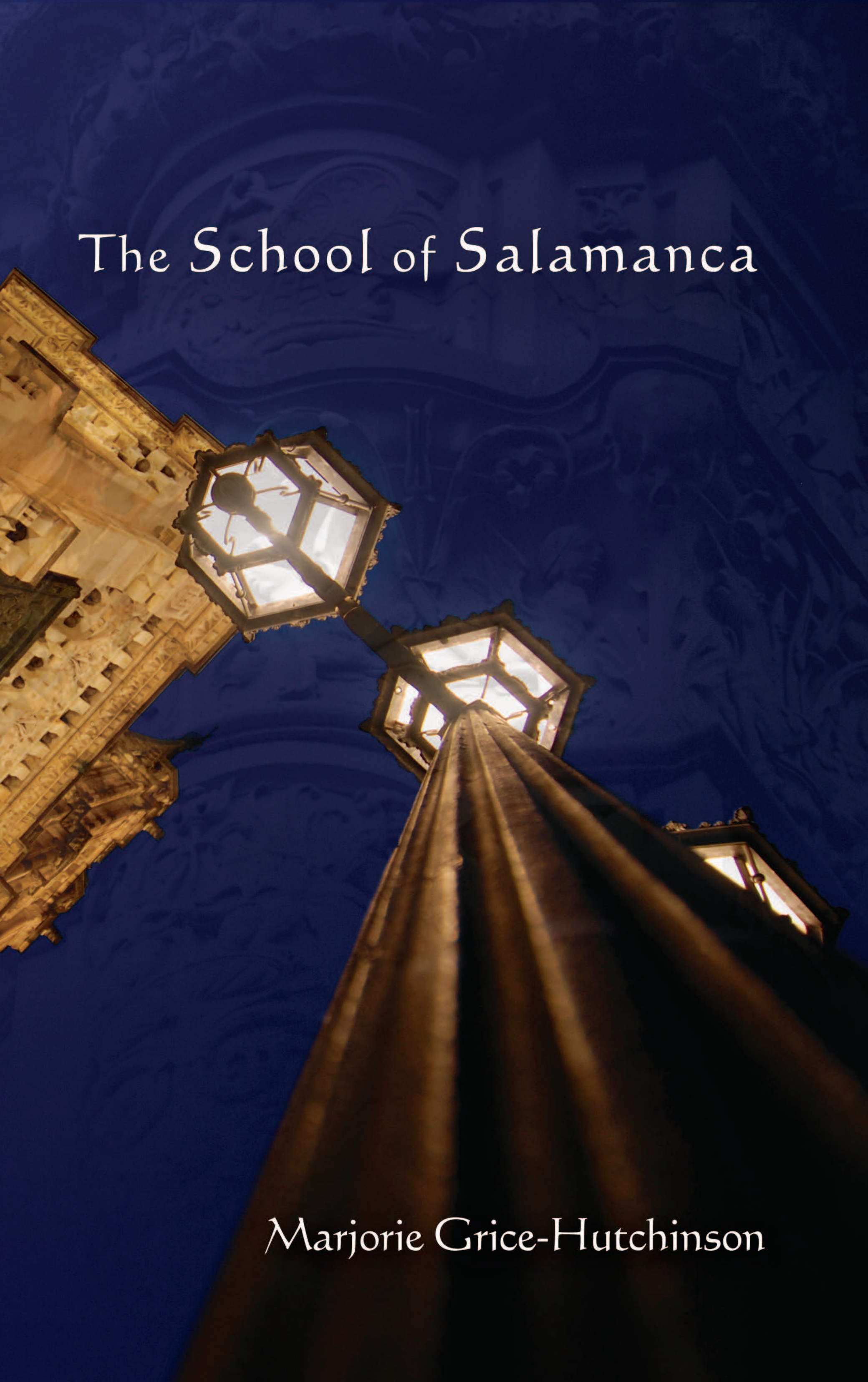
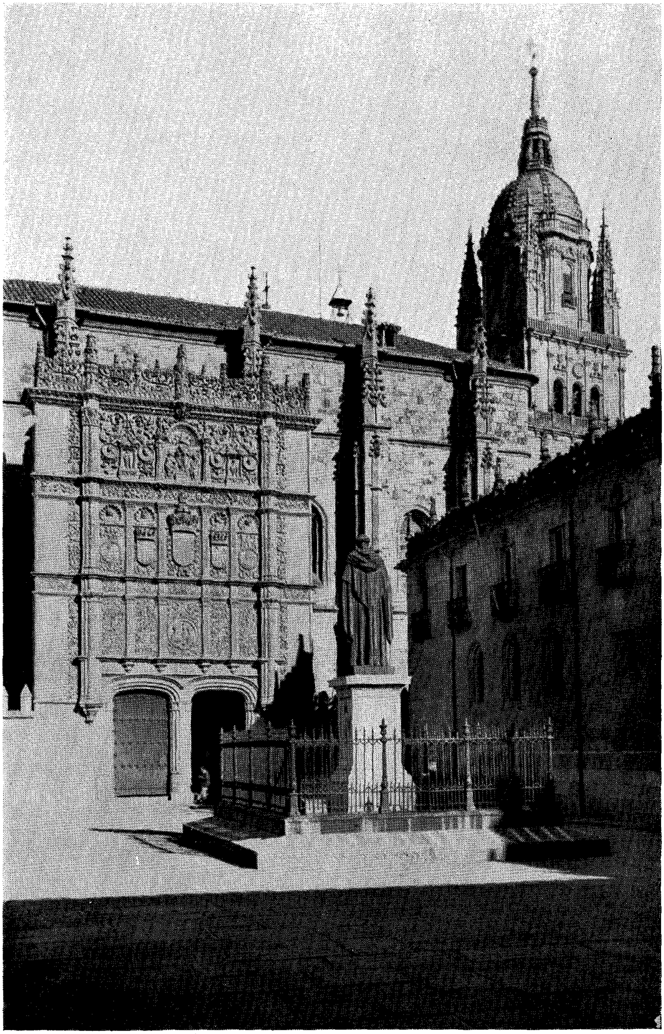
The School of Salamanca



Marjorie Grice-Hutchinson

THE SCHOOL OF SALAMANCA



UNIVERSITY OF SALAMANCA
PATIO DE LAS ESCUELAS

THE SCHOOL OF SALAMANCA

READINGS IN
SPANISH MONETARY THEORY
1544–1605

BY

MARJORIE GRICE-HUTCHINSON
Lecturer in Spanish at Birkbeck College
University of London, 1948 to 1951

OXFORD
AT THE CLARENDON PRESS
1952

Oxford University Press, Amen House, London E.C. 4
GLASGOW NEW YORK TORONTO MELBOURNE WELLINGTON
BOMBAY CALCUTTA MADRAS CAPE TOWN
Geoffrey Cumberlege, Publisher to the University

PRINTED IN GREAT BRITAIN

ACKNOWLEDGEMENTS

I CANNOT, alas, mention by name all those who have helped in the production of this little book. Here, I wish to express my gratitude to Professor Carmelo Viñas y Mey, who first drew my attention to the monetary theory of the School of Salamanca. I am also very greatly indebted to Professor F. A. Hayek and Professor R. S. Sayers for reading my work as it progressed and giving me much valuable help and advice. I have to thank Mr. J. A. Goris for allowing me to quote at length from a document first published by him in full. Finally, I am anxious to draw attention to Professor R. de Roover's recent work on Gresham and foreign exchange, which came to my notice too late for inclusion in the bibliography.

CONTENTS

LIST OF ILLUSTRATIONS

INTRODUCTION

''Tis vain to look for birds in last year's nests,' said Don Quixote. And many economists would feel inclined to agree with him. We have often been warned against the sin of reading our own ideas into the work of older writers—so often, in fact, that earlier economic literature now seems remote from our own ways of thought and no longer holds much interest for us. In any case, the history of doctrine has generally been looked upon as a luxury in this country, and the refinements of modern theory leave less time for it than ever.

Still, there are certain milestones in the history of economic thought which are familiar to most students. We know, for instance, that Saxony was the scene of a famous monetary controversy in the sixteenth century. We know that Italy was the country with 'the best monetary theory and the worst monetary policy' in the seventeenth. We know that the Physiocrats invented an elaborate diagram called the 'Tableau économique'. And we are justly proud of our own Adam Smith and Ricardo.

But there is one important country that has failed to provide us with a single famous name. Perhaps because Spanish is less widely studied than French or Italian, or perhaps because economics and Spanish studies just do not seem to go together, Spain is usually omitted from our list. Yet Spanish economic literature, particularly of the sixteenth, seventeenth, and eighteenth centuries, is so extensive and interesting that it would take a whole series of monographs to do it justice. Let us therefore disregard Don Quixote's advice and look into some of these old nests in Spain. Perhaps, after all, we may still find a bird or two in them.

We will begin by transporting ourselves in imagination to the plains of Castile. It is early autumn, somewhere about the year 1550, and we are travelling northwest from Madrid, towards the Portuguese frontier. This is the time of year when the universities reopen their doors, and we are bound to meet with more than one party of students on their way to Salamanca. They are of all ranks and conditions: young noblemen with their own coaches and retinues of servants, sons of humbler families mounted on horses or mules, and penniless youths who travel in the train of the richer students or beg their way on foot. There are many friars, notably of the Dominican and Augustinian Orders, and there are English and Irish seminarists on their way to the newly established Irish College. The students come from every part of Spain, and there are a fair number from France and Italy.

At the inn, when the long day's journey is done, the talk will be of Salamanca. The students, I fear, will waste few words in praise of the exquisite Plateresque façade of the University with its proud motto: 'Kings for universities, universities for kings.' They will be more likely to describe the traditional evening ritual of the Plaza Mayor, where at twilight the whole population turns out for a stroll round the colonnade, the men revolving in one direction and the women in the other, while the two processions exchange critical glances and the great square reverberates with a thousand voices, like a gigantic sounding-board. Or they will dilate upon the splendid fishing they hope to enjoy from the willow-clad banks of the Tormes, not to mention the array of less innocent pleasures the town has to offer. The professors, too, come in for their share of comment. The Spanish universities are at the height of their glory, and Salamanca is queen among them all. The seventy chairs of the University are filled by the best scholars of the age and provide instruction not only in the usual subjects of a curriculum inherited from the Middle Ages—theology, canon and civil law, grammar, rhetoric, philosophy, and medicine—but also in more out-of-the-way branches of knowledge such as herbal lore, navigation, and Chaldee. Francisco de Vitoria, to whose reforms the University owes much of its fame, is now only a memory, but his colleagues and pupils have brought his work to maturity. The members of this group—the School of Salamanca, as it is generally called—are celebrated chiefly for their work in the field of natural law. Their contribution to the Law of Nations is of particular interest to their audiences, since it has fallen to the theologians and jurists of Salamanca to adjust in the light of Christian doctrine the confused relationship that has arisen between the Spanish Crown and the newly conquered peoples of America. The rights and wrongs of the difficult problems involved and the conflicting opinions of the various lecturers may well be touched upon by the students as they sit chatting together after supper at the inn.

Sitting a little apart from the noisy group of young people is a party of older men. They are merchants on their way to the autumn fair of Medina del Campo. Their conversation is of a very different order from that of the students. The long overdue arrival of the treasure fleet from the New World, the high price of wool and linen, the losses occasioned by the failure of some Seville banker, and, above all, the unaccountable reluctance of the Church to relax her outworn prohibition of usury, are the topics that form the thread of their discourse.

The students will be well advised to listen in a little to the merchants' conversation, for when they get to Salamanca they will hear these very subjects discussed in the lecture-room. The problems of commercial morality that have sprung up in the wake of American gold and silver are receiving nearly as much attention as those of international justice occasioned by the conquest itself. The traditional doctrine of usury is in process of modification. In particular, considerable progress is being made in monetary theory, and it is rumoured that this may soon lead to the lifting of the Church's ban on certain types of exchange transactions. Merchants and students, therefore, have more to learn from each other than is apparent at first sight. Let us see if we can persuade the merchants to tell us something about their business so that we may be better prepared for the sort of problems we shall be asked to consider when we enter the University of Salamanca.

I

THE MONEY-MARKET

AMERICAN TREASURE AND THE PRICE-LEVEL

IF there was one economic lesson which the whole Spanish nation had learned by the middle of the sixteenth century, it was that the value of money is fickle and that gold and silver are not synonymous with wealth, a lesson made all the more bitter by the high hopes that had attended the discovery of the New World a few decades before. The dream of El Dorado had been followed by a harsh awakening.

A rise in the Spanish price-level made itself felt at the very beginning of the sixteenth century. By 1550 prices had more than doubled. The economic literature of the period reflects the general discontent. The labouring classes were probably the chief sufferers from the fall in the purchasing-power of money, since they were already only too well acquainted with poverty and hunger, and there is no reason to suppose that wages kept step with prices. That gaunt army, the beggars, whose battalions never seem to leave the roads of Spain, grew alarmingly; and the middle and upper classes—the country gentleman, the retired officer, the Crown itself in so far as the royal revenues were fixed in terms of money—shared in greater or lesser degree the hardships of the poor.

The monetary theorists of an earlier age, especially in France, had correctly attributed similar rises in the cost of living to debasement of the currency. But this traditional explanation was not applicable to the Spain of Charles V, since it was not until the end of the sixteenth century that the Spanish monarchs resorted to debasement on an extensive scale. The high cost of living had therefore to be accounted for in some other way. It would have been remarkable if Spanish observers had not connected the fall in the purchasing-power of money with the increase in the circulation brought about by the imports of gold and silver from America. Between 1551 and 1555 the influx of American treasure reached its highest level since the beginning of the century, and it was at about this time that the Spanish economists began to attribute the prevailing high prices to a swollen circulation resulting from the import of the precious metals. How far were they right in this interpretation of events?

The monetary theory of the period is based on the assumption that money was more 'abundant' in Spain than elsewhere. But when we come to analyse this 'abundance' we encounter certain difficulties. The most reliable estimate of the quantity of gold and silver imported into Spain is based on the remittances registered at the House of Trade in Seville.[1] Naturally, no account could be taken in this estimate of the contraband and therefore unregistered remittances of bullion that entered Spain, but there is reason to think that they were considerable. And even if we knew the exact amount of bullion imported we still could not be certain as to what proportion of it was actually coined

[1] Earl J. Hamilton, *American Treasure and the Price Revolution in Spain* (Harvard Economic Studies), Cambridge, 1934, pp. 11–45.

and put into circulation. Some part of the treasure, no doubt, was melted down for plate and ornaments. Immense sums, too, were sent to Flanders, Germany, and Italy, some through the fair of Medina but others directly, in payment of the loans advanced to Charles V by foreign bankers.[1] In the present state of our knowledge, therefore, no exact correlation between treasure imports and prices is possible.

To the ordinary citizen money seemed anything but 'abundant'. On the contrary, there was an acute shortage of specie which provoked bitter complaints from merchants and economists alike.[2] The May fair of Medina del Campo had to be postponed on this account in 1543, 1553, and 1554. Thomas Gresham, who visited Spain in 1554 with the object of cashing bills of exchange to the value of 320,000 ducats drawn in Antwerp and payable at the Spanish fairs, was unable to bring away more than 200,000 ducats, and expresses astonishment at the shortage of specie in Spain.

Besides the influx of treasure, there were other causes of the rise in prices. Bad harvests, the decay of industry, and the increasing demands of the Indies, all doubtless helped to raise prices by creating a shortage of goods. But it is probable that these were secondary factors. The curve of treasure imports, though it cannot yet be

[1] Ramon Carande, *Carlos V y sus banqueros*, vol. i, *La vida económica en España en una fase de su hegemonía*, Madrid, 1943, p. 155.

[2] Complaints of a 'scarcity of money' are common in the mercantilist literature of all countries. For a discussion as to what was meant by the phrase see E. Heckscher, *Mercantilism*, London, 1935 (English translation of *Merkantilismen*, Stockholm, 1931), vol. ii, pp. 221–4, and J. Viner, *Studies in the Theory of International Trade*, London, 1937, pp. 87–90.

traced with precision, broadly corresponds to that of prices. The rise in prices began in Seville, the home port of the treasure fleet, spreading thence to other parts of Spain and later to the rest of Europe. Finally, the fact that the exchanges turned against Spain, and, within Spain itself, against Seville, supports the picture of Spain as a country with a relatively large circulation and high price-level brought about by the import of gold and silver from the New World.

MERCHANTS, MONEY-CHANGERS, AND BANKERS

From about 1540 onwards there appeared a whole crop of handbooks, written mostly by learned friars, which paint a vivid picture of the business life of the times.[1] Their authors vie with one another in offering the merchant the perfect guide for the salvation of his soul, though one writer's injunction to his readers that they were 'not to twist a rule of iron into one of lead' suggests that their teaching was often followed in the letter rather than the spirit. These little books reflect, in a simplified form comprehensible to the layman, the more elaborate body of doctrine that was in process of evolution at the universities.

The shrewdest and at the same time the most entertaining of this group of writers is the Dominican friar

[1] Cristobal de Villalón, *Provechoso tratado de cambios y contrataciones de mercaderes y reprovación de usuras*, Valladolid, 1542. Luís de Alcalá, *Tratado de los préstamos que passan entre mercaderes y tractantes*, Toledo, 1543. Luís Saravia de la Calle, *Instrucción de mercaderes muy provechosa*, Medina del Campo, 1544. Tomás de Mercado, *Tratos y contratos de mercaderes*, Salamanca, 1569 (of which a revised edition entitled *Summa de tratos y contratos* was published at Seville in 1571 and an Italian translation at Brescia in 1590).

from Mexico, Tomás de Mercado, who journeyed to Spain and lived for some years in Seville and Salamanca. Little is known of his life, except that he wrote several learned commentaries on Aristotle besides the popular and widely read handbook on commercial morality that concerns us here. Mercado died in 1585 on board the ship that was taking him home to his native Mexico. His homilies are much enlivened by his pithy style, sardonic humour, and colourful way of describing the iniquities of merchants.

Mercado distinguishes three main classes of business men: merchants, money-changers, and bankers. The Seville merchant was an imposing figure, having in his hands 'the greatest trade in Christendom, and even in Barbary'. To Flanders he sent wool, oil, and wines in exchange for cloth, carpets, and books, and to Florence cochineal and leather against gold brocade and silks. He imported linen from Flanders and Italy and had a hand in the lucrative slave-trade of Cape Verde. So great were the mixed cargoes he sent to all parts of the Indies in exchange for gold, silver, pearls, cochineal, and leather that 'not Seville nor twenty Sevilles' would suffice to insure them, and he had to call upon the resources of Lyons, Burgos, Lisbon, and Flanders for the purpose. The Seville merchant kept in close touch with his Italian counterpart and had his factors in every corner of the globe.

Close upon the merchant's heels followed the money-changer 'travelling from fair to fair and from place to place with his table and boxes and books'.[1] In theory

[1] Saravia de la Calle, op. cit., p. xciv (verso).

he was a public official whose business it was to deal in *cambium minutum* or the changing of gold coins into silver or other money in return for a small fee. A series of royal pragmatics issued in 1550, 1551, and 1552 prescribe the proper table of equivalences for *cambium minutum*[1] and provide that any money-changer who failed to give the legal rate should be fined for a first offence, flogged for a second, and banished for a third. The broker who arranged the deal was to suffer the same punishment. Money-changers were to keep proper books 'and not leave blank sheets between the pages already used', and only persons appointed by the cities, *villas*, and *lugares* might act as brokers.

Sharing the common fate of laws in Spain, these drastic measures were effective only on paper. In practice, many money-changers no longer stooped to deal in *cambium minutum* at all. 'Go up to their tables if you dare', writes one observer, 'and ask them to give you small change for a *real* or a ducat. You will soon see how angry they get and with what a peevish, grave face they complain that you are affronting them, for they do not deal in such low trade.'[2] Nor did the more enterprising money-changers deal in genuine bills of exchange, though this was another important part of their official activities. They had, in fact, ceased to be money-changers at all in the traditional sense of the term and were simply fair-bankers. As soon as they

[1] As follows:

Doblón	750	*maravedís*
Ducado sencillo	375	,,
Castellano	485	,,
Corona	350	,,

[2] Saravia de la Calle, op. cit., p. xciv (verso).

got to the fair they made their way to a part of the Rua or high street that was marked off for their accommodation by means of heavy chains thrown across the road. There they proceeded to set up their tables and rake into their coffers all the loose cash the newly arrived merchants would deposit with them, paying their customers 6 *maravedís* for every 1,000 deposited.[1] The whole business of the fair was then conducted through the fair-bankers, and cash transactions were reduced to a minimum by the cancelling-out of book entries.[2] If a merchant wanted to be paid in cash for his goods before the official settling-day he was required to pay a commission to the fair-banker. The rate was in theory the same as the rate paid by the bankers to the merchants, namely, six to the thousand, but in practice it was much higher. In 1542 it is said to have reached 25 and 30 per thousand at the fairs of Rioseco and Medina del Campo.[3] Mercado complains that 'the money-changers sweep all the money into their own houses, and when a month later the merchants are short of cash they give them back their own money at an exorbitant rate'.[4] In this and other ways the money-changers made big profits, and it is for them that the severest strictures of the theologians are reserved.

The banker proper was a much more dignified personage. 'The Seville bankers', writes Mercado, 'are in substance the treasurers and depositaries of the

[1] Ibid., p. xcv (verso).

[2] Usher, *Early History of Deposit Banking in Mediterranean Europe* (Harvard Economic Studies), Cambridge, 1943, p. 128.

[3] Saravia de la Calle, op. cit., pp. xcv (verso)–xcvi.

[4] Op. cit., p. 87.

merchants. When the fleet comes in, every merchant puts into the bank all the treasure that is brought to him from the Indies, the bankers having first given a pledge to the city authorities that they will render good account to the owners.'[1] The bankers served their depositors free of charge and used the money deposited with them to finance their own operations. Most of the gold and silver brought in by the fleet passed in this way through the hands of the bankers and served as a basis for the creation of credit. 'In Spain', concludes Mercado, 'a banker bestrides a whole world and embraces more than the Ocean, though sometimes he does not hold tight enough and all comes crashing to the ground.'[2] We know the names of some at least of the Seville bankers who were operating in the second half of the sixteenth century: Alonso and Pedro de Espinosa, Juan Iñiguez in partnership with Octaviano de Negrón, Domingo de Lizarrazas, and Pedro de Morga.[3]

The customers of the Seville banks were important rather than numerous. Besides the merchants they included buyers of gold and silver at the auctions held at the House of Trade, dealers in precious stones, shippers, slave-traders, and holders of *juros* or bonds conveying the right to draw on the royal or municipal revenues. The banks themselves held *juros* in large quantities. Another class of customers was that of the farmers who borrowed from the bank and paid a certain quantity of wheat by way of interest, reserving the right to redeem the *censo* (as this type of bond was called) by

[1] Op. cit., p. 89 (verso). [2] Ibid.
[3] Carande, op. cit., pp. 196–204.

repaying the sum borrowed. These *censos* and *juros*, which in some respects corresponded to our modern stocks and shares, circulated in great profusion, since the banks were always anxious to sell them for cash.

THE FAIRS AND THE FOREIGN EXCHANGES[1]

To the Spanish fairs came 'men of all nations, from Seville, Lisbon, Burgos, Barcelona, Flanders, and Florence'.[2] Many of them were rich and powerful—great noblemen, ecclesiastical dignitaries, and officers of the Crown. Needs felt in Milan, Antwerp, or the Indies were met at Medina, Villalón, and Rioseco, and every commodity was dealt in, from humble articles of daily use to supplies for the armies and navies of princes.

In the great melting-pot of the fairs the activities of merchants, money-changers, and bankers were fused into one. Gone was the old medieval principle of every Jack to his trade. Merchants were less than ever content

[1] The fairs and Bourse of Antwerp are described by R. Ehrenberg, *Zeitalter der Fugger*, Jena, 1896 (English translation under the title of *Capital and Finance in the Age of the Renaissance*, London, 1928). An account of the life of the Spanish merchants in Antwerp is given by J. A. Goris, *Études sur les colonies marchandes méridionales à Anvers de 1488 à 1567*, Louvain, 1925.

Much the best description of the Spanish fairs remains that of C. Espejo and J. Paz, *Las antiguas ferias de Medina del Campo*, Valladolid, 1912. A shorter account is given by Carande, op. cit., pp. 211–34.

For a clear description of the origin and development of the bill of exchange on the Continent as well as in England, and a useful bibliography of the subject, see Sir William Holdsworth, *A History of English Law*, 1925, vol. viii, pp. 126–70. Two contemporary English sources which are easily accessible are Thomas Wilson's *Discourse on Usury*, 1572, reprinted with an important introduction by R. H. Tawney, 1925, and Gerard Malynes, *Lex Mercatoria*, 1622, the third part of which is devoted to the exchanges.

[2] Mercado, op. cit., p. 89.

to serve the community by supplying it with goods in return for a modest living, and were tending to engage more and more in purely financial business, thereby (in the eyes of theologians) impoverishing their fellow men and imperilling their own souls. As early as 1526 the Venetian ambassador had observed that although goods were abundant at the fair of Medina del Campo the most important business was done in exchange transactions. All the evidence points to an accentuation of this tendency during the succeeding decades. The fairs lost the last traces of their old local character and became great national, and indeed international, clearing centres, 'the beginning and end of all payments'. They were by this time 'mainly places for settling accounts, not for true buying and selling', though of such there was still 'a good share'.[1]

When we come to examine more closely the methods by which money was remitted from country to country and from fair to fair we shall readily understand the attraction of the exchanges for merchants and bankers alike, and we may perhaps feel some surprise that merchants ever dealt in goods at all when financial business was apparently so profitable.

As early as the twelfth century the merchants of all countries had begun to use the expedient of regulating their business relations by means of bills of exchange payable at the same fair. Suppose, for example, that a merchant in Genoa was owed a hundred *livres* by his London correspondent. The latter might promise to repay the money at the fair of Bar, for instance. He

[1] Mercado, op. cit., pp. 88–89.

would then authorize a money-changer at Bar to pay the debt in his name to an agent nominated by his Genoese creditor. Since many places would be represented at Bar, it fell to the money-changers to adjust accounts between the different countries, and in this way the fairs gradually became clearing-houses for the whole of Western Europe. Another consequence of this practice of making bills payable at certain recognized fairs was that the periods when the fairs were held came to be treated as quarter-days. A Spanish merchant, for instance, would agree to pay a debt 'at the May fair of Medina del Campo' even if he did not go to the fair in person. Debts were set off against one another at the end of the fairs, and in this way the merchants of every country united to overcome the general shortage of ready cash. The practice of making a bill of exchange 'payable at the next fair' seems to have been retained in Spain after it had died out elsewhere. If we may believe Malynes, it was still in force there in 1622, whereas in other countries bills were by that time customarily payable after a certain specified period, generally two or three months.

In the sixteenth century, the Spanish and Flemish fairs were held in conjunction with one another and together formed one of the main arteries through which American treasure flowed from Seville across the Pyrenees. A good description of the methods of payment in force at the end of the reign of Charles V is given by the latter's confessor and representative at the Council of Trent, the theologian Domingo de Soto.[1] After

[1] *De justitia et jure*, Salamanca, 1553, p. 595.

observing that 'an author who seeks to reprehend the customs of the exchanges must note the practice of merchants with his own eyes', Soto tells us that four fairs were held every year in Spain and the same number in Flanders. The first was the May fair of Medina del Campo, for which payment opened on the 15th of July and closed on the 10th of August. This fair corresponded to the September fair in Flanders, for which payment opened on the 10th of November and closed at the end of that month. The second fair was at Rioseco, for which payment opened on the 15th of September and closed on the 10th of October, corresponding to the Christmas fair in Flanders. The third was held at Medina del Campo, corresponding to the Easter fair in Flanders, and the fourth at Villalón, corresponding to the June fair in Flanders. As had been the practice since medieval times, accounts between merchants were settled by order of transfer in bank while the fairs were in progress. During the period allotted for payment, any balances outstanding were remitted by bill of exchange, which was customarily drawn on the fair that immediately followed.

It is the custom of the exchanges [continues Soto] for money to be repaid in Flanders three months after it has been received at Medina. The fair-banker who pays out money at the beginning of August for the May fair at Medina is repaid at the September fair in Flanders, where, as we have shown, payment is made in November. Similarly, the banker who pays out money at Rioseco at the beginning of October is repaid in Flanders in February for the Christmas fair. And so on with the other fairs. For it is said that this period is bound to elapse before the bill can conveniently reach its destination and the money be collected.

Having thus described the system of payment in force at the fairs, Soto goes on to explain how it gave rise to a rate of exchange for money remitted from fair to fair by means of bills. This rate, in the opinion of Soto, fluctuated according to the state of supply and demand.

Whenever [he says] on account of war or other causes, there is a shortage of money in Flanders, a merchant who wants to send money from Spain to Flanders must pay a price for doing so, whereas if he pays out money in Flanders for repayment at Medina he not only pays nothing but actually gains more than he loses when he pays the money in Spain and is repaid in Flanders.

According to Soto, money was so scarce in Flanders that small coins were there worth as much as coins of large denominations in Spain, just as a measure of wheat in a place where wheat is scarce is worth two measures in a place where it is plentiful. For this reason a merchant who paid 410 *maravedís* to another merchant or fair-banker in Spain was repaid only 360 *maravedís* in Flanders, thus suffering an apparent loss of 50 *maravedís*.

Similarly [adds Soto], if a merchant pays out 300 *maravedís* in Flanders he is repaid 375 in Spain, so that he gains more by sending money to Spain than he loses by sending it to Flanders. The same thing is happening now between Spain and Rome, because money is generally scarcer in Rome.

Like other apologists of exchange transactions, Soto is careful to minimize the importance of the time element in the deal, since interest paid simply for the use of money during a certain period of time was universally condemned as usurious. Nevertheless, it is clear that the *cambium* was partly a loan, partly a true exchange transaction. The price of a bill depended, as Soto observes, largely on the supply of money and bills of exchange and on the demand for them in the different markets. But it also included the banker's charges and a certain proportion of interest concealed under one pretext or another.

If we may accept the widely divergent figures given in books published within a year or so of one another, the rates at which money could be sent by bill of exchange between Spain and other countries fluctuated violently.[1] Such fluctuations are to be expected in the relatively narrow and inflexible money-market of the period. The figures show that the exchanges turned consistently against Spain, and, within Spain itself, against Seville, the home port of the treasure fleet.[2] Soto has already given us the rate at which money could be sent from Medina to Antwerp and back again from Antwerp to Medina in 1553. In 1569 money could be sent from Medina to Lisbon at par or at 1 per cent. premium and from Lisbon to Medina at a premium of 5, 6, or 7 per cent., from Seville to Flanders at a discount of 5 or 6 per cent. and from Flanders to Seville

[1] I know of no comprehensive modern study of the rates of exchange for money sent to and from Spain at this period. See, however, A. Sayous, 'Les Changes de l'Espagne sur l'Amérique au XVIe siècle', in *Revue d'économie politique*, 1927, pp. 1417 et seq., and the same author's 'Observations d'écrivains du XVIe siècle sur les changes', in *Revue économique internationale* (Nov. 1928).

[2] 'On Seville (except from the Indies) a profit is always made, and, on the other hand, from Seville to any place abroad money is sent at a loss. For Seville exceeds all other cities in money and riches.' Mercado, op. cit., p. 88.

at a premium of 8 or 9 per cent., from Seville to Rome at a discount of 8 or 10 per cent., and from Rome to Seville at a premium of as much as 15 or 20 per cent.[1]

The double transaction (for example, Medina–Antwerp–Medina) constituted the classic operation of the 'exchange and rechange', which dated back to medieval times.[2] A profit was often made on both the exchange and the rechange, as, for example, in 1583, when the rate was 360 *maravedís* in Medina to 410 in Antwerp and 360 in Antwerp to 435 in Medina.[3] Sometimes a profit was made on either the exchange or the rechange which more than compensated for any loss incurred on the other half of the deal. Rarely was the whole operation effected at a loss.

Simple exchange transactions performed by means of bills drawn in Spain and payable abroad, or drawn in a foreign town and payable at one of the Spanish fairs, were lawful, and it was generally agreed that the merchant who paid out money in one place and recouped himself in another was entitled to make a reasonable charge for his services. To charge a similar fee for bills transferring money from one Spanish fair to another was forbidden by a pragmatic of 1551, a measure which dislocated the whole business of the fairs and evoked a chorus of protests from the merchants.

The double transaction of the exchange and rechange was frowned upon by the Church. A purely financial

[1] Mercado, op. cit., p. 88.

[2] For an exceptionally lucid contemporary account of the exchange and rechange see Appendix 1.

[3] Francisco García, *Tratado utilísimo y muy general de todos los contractos quantos en los negocios humanos se suelen ofrecer*, Valencia, 1583.

operation, it was condemned as a device of the Devil to ensnare men in their own unbridled lust for gain. And it came perilously near to 'dry exchange', a term loosely applied to any unlawful form of exchange operation. Used in a narrower sense, the term 'dry exchange' referred to a fictitious operation devised to evade the usury laws, which we first meet in Florence in the later Middle Ages. Dry exchange in this narrower sense was redefined and condemned by a Papal Bull of 1566 and again by a Spanish pragmatic of 1598, and was stigmatized as a 'manifest cankered usury' by our own Thomas Wilson in 1572. It was, in fact, nothing but a loan camouflaged as an exchange deal. The borrower drew a bill of exchange in favour of the lender on some man of straw nominated by the latter, and this nominee protested the bill on its arrival. The borrower was then legally obliged to compensate the lender for the pretended loss sustained on both the exchange and the rechange. In legitimate exchange business it was usual for a merchant who drew a bill on some person in another city to give a guarantee against the bill's being protested by binding himself in such case to refund the principal, interest, and costs of the double transaction. He might also deposit jewels or other valuables as a pledge.[1] No doubt the same practice was followed in dry exchange, but in this case the 'pledge' was intended to be forfeited. Merchants in all countries long continued to resort to

[1] A specimen document of this type is included by Diaz de Valdepeñas in his *Summa de notas copiosas*, Valladolid, 1553, a collection of model contracts for the guidance of public scriveners.

this way of raising money by fictitious exchange transactions. Even in the late eighteenth century we find somewhat similar practices described by Jeremy Bentham[1] and Adam Smith[2] under the name of 'drawing and re-drawing'.

The distinction between 'real' or lawful and 'dry' or unlawful exchange was thus a very fine one. We may well pity the simple priest who was called upon to direct his penitents on the conduct of their exchange business.

We are now in a position to survey the whole network of the fairs, and we can visualize the money flying back and forth between them by the shuttle-system of the exchange and rechange. A merchant who laid out part of his capital in exchange business could, according to one critic[3] expect to make about 12 per cent. per annum on his money. Not such a very exorbitant return by modern standards, though it filled the writer in question with horror and dismay. Yet it was enough to tempt many merchants away from their usual pursuits and into that dim borderland of finance that the Church could neither approve nor altogether condemn. Fortunes were made overnight and bankruptcies were frequent. Speculators borrowed all they could in markets where money was plentiful and sent it post-haste to places where it was scarce. 'Then, when the time of the fair comes, not a farthing being visible on earth, the rates soar up to the skies. And opening the exchanges

[1] *A Defence of Usury*, 1787, pp. 73–77.

[2] *Wealth of Nations*, Bk. 2, ch. 2.

[3] Cristobal de Villalón, op. cit., ch. 7. A little farther on he estimates an average annual return of only 5 per cent.

they lend at 20% and 25% for Seville and Lisbon.'[1] The unhappy merchants 'bounced from fair to fair like balls'.[2] In a desperate attempt to stave off their creditors they took to 'straddling the fairs'. Instead of making their bills payable 'at the next fair', which was the usual and lawful practice, they borrowed for a period of several fairs ahead at a high rate of interest. As the high premium was clearly meant to compensate the lender for the exceptionally long period that would elapse before the bill fell due, this practice of straddling the fairs provoked fresh fulminations from both Church and Crown.[3]

Faced with this highly unsatisfactory state of affairs, the theologians went patiently to work. The new situation demanded a new commercial morality, and yet there must be no sacrifice of Christian principles. For many writers the core of the problem lay in the nature of money itself. Monetary theorists are born in all ages and they were not lacking in sixteenth-century Spain, which was indeed the happiest of playgrounds for theologians whose tastes lay in what would now be called economics.

Let us now take a brief glance at earlier monetary theory and see what sort of instrument our Spanish economists inherited from their predecessors, the philosophers and jurists of Greece and Rome and the schoolmen of the Middle Ages.

[1] Mercado, op. cit., p. 87.
[2] Ibid., p. 86.
[3] See Appendix 2.

II

SOME PREDECESSORS OF THE SCHOOL OF SALAMANCA

ENGLISH books on medieval monetary theory being few and far between, the following outline of the subject is intended to help students who do not read French or German easily. It need hardly be said that many of the ideas noted here as 'medieval' must, in fact, be even older, and others have far outlived the Middle Ages. Some particularly persistent doctrines appear to have been handed down intact from writer to writer until our own day and still leave their mark in our text-books. Others seem to have died down for a season, and then to have sprung up again in all their original seductiveness. But despite the distortion produced by the presentation of theory in a series of artificially separated historical layers, I have thought it best to give 'medieval' doctrines a short section to themselves, so as to throw into clearer relief the actual contribution made by our Spanish writers to the science of monetary theory.

THE ORIGIN AND FUNCTIONS OF MONEY

Medieval ideas about the origin and functions of money are largely based on a few short passages in Aristotle's *Politics* and *Nicomachean Ethics*. The former contains Aristotle's famous account of the transition of society from a barter to a monetary economy, a development he assumes to have taken place at some remote period in the history of mankind.[1] Aristotle goes on to note the most obvious function of money, its use as a medium for the exchange of goods. Money was first invented, he explains, to overcome the difficulties of transport that are bound to arise in a barter economy. Iron, silver, or some similar material, was adopted as being valuable in itself and yet easy to convey, and in course of time this metal came to be publicly stamped to save the trouble of weighing.

In the *Nicomachean Ethics* Aristotle mentions two other functions of money. In the first place, money is a 'measure of all things'.[2] Aristotle does not appear to mean by this simply that money measures the value of goods, but rather that it serves as a sort of common denominator which brings into line with each other things diverse in nature: 'money, like a measure, by making all things commensurable, equalises them'.[3] Secondly, Aristotle observes that money may constitute a store of value. It is 'a kind of security to us in respect of exchange at some future time. Suppose that we want nothing now, it ensures that we shall have it when we do, the theory of money being that whenever we offer it we can receive commodities in exchange. Of course, money too is liable to depreciation, for its value is not always the same. Still, it is of a more permanent nature than the commodities it represents.'[4] And Aristotle went deeper than this. The real measure of goods, he says, is demand, 'for if the parties were not in want at all or similarly of one another's wares, there would not

[1] *Polit.* I, 1257a.
[2] *Nic. Ethics*, V, 1133a.
[3] Ibid., 1133b.
[4] Ibid.

be any exchange, or at least not the same. And money has come to be, by general agreement, a representative of Demand; and the account of its Greek name *nomisma* is this, that it is what it is not naturally but by custom or law (*nomos*), and it rests with us to change its value or make it wholly useless.'[1]

There is one other idea of Aristotle's which, while it relates directly to goods, came later to be applied to money also: the doctrine that 'the uses of every possession are two, both dependent upon the thing itself but not in the same way, the one supposing an inseparable connexion with it, the other not; as a shoe, for instance, which may be either worn or exchanged for something else'.[2] This passage was often cited by the authors of the later Middle Ages in justification of foreign exchange transactions.

Aristotle's doctrine was enriched (or, as some would hold, corrupted) by the Roman jurists, who expounded certain concepts proper to their calling. The most influential in the field of monetary theory seems to have been Paulus (*c.* 180–235), who stresses the use of money as a price, draws a sharp distinction between a barter and a monetary transaction, and in one passage sketches out the nominalist position.[3]

[1] Ibid., 1133a.

[2] *Polit.* I, 1257a.

[3] (*a*) 'Buying and selling originated in barter. Once money did not exist, nor was price distinguished from merchandise, but each man exchanged what was useless to him for what was useful, according as the times and the goods made necessary. For it often happened that one man had a surplus of what another lacked.' Quoted by C. Miller, *Studien zur Geschichte der Geldlehre* (Stuttgart, 1925), p. 61.

(*b*) For just as sale is distinguished from purchase, and a buyer from a

With the fall of the Western Empire, some part at least of Aristotle's teaching was preserved by Mohammedan scholars, many of whom worked in Spain. The Cordoban philosopher Averroes (1126–98), whose commentary on the *Ethics* was translated into Latin early in the thirteenth century, follows Aristotle closely as to the origin and functions of money.[1] Translations of Aristotle now began to be made from the original Greek, the most celebrated being that provided by William of Moerbeke for his friend St. Thomas Aquinas (1225–74). This rediscovery of Aristotle, while it gave fresh stimulus to scientific thought in general, did little to modify the particular concepts which we are now considering. Yet these few simple ideas, though they changed so little with the centuries, came to play a very important part in medieval monetary theory. The strongly teleological character of Thomist thought focused attention on what was held to be the true end or purpose of money and on its three principal functions as laid down by Aristotle, more particularly its use as a medium of exchange. Since the loan of money at interest could not be classed under any of these three heads, St. Thomas regards the practice as clearly

seller, so is price distinguished from merchandise. In barter we cannot say who is the buyer and who the seller.' (Miller, op. cit., p. 64.)

(*c*) 'But, since it does not always (or indeed easily) happen that, though you have what I desire, I also have what you are willing to take in exchange, a material was chosen whose public and perpetual value should overcome by equality of quantity the inconvenience of barter. This material was publicly stamped, and its use and power are derived not so much from its substance as from its quantity.' (*Quantity* here means *tale.*) Quoted by Wołowski, *Traictie de la première invention des monnaies* of Nicole Oresme, Paris, 1864, Pt. I (Introduction), p. xxxvii. See also Miller, op. cit., p. 63.

[1] Miller, op. cit., pp. 68–73.

contrary to nature,[1] quite apart from Aristotle's explicit condemnation of usury. St. Thomas also condemns foreign exchange transactions for the same reason.[2] Thus, ideas in themselves sound and reasonable proved in course of time a drag on the progress of theory.

In the later Middle Ages some authors tried to enliven their expositions by adding one or two new 'uses' to the list, such as that of gold and silver for adornment or for medicinal purposes. Oresme (*c.* 1360) after giving a particularly clear and vivid account of the inconveniences of barter, stresses the symbolical nature of money in very modern terms.[3] Buridan (*c.* 1330) and Gabriel Biel (1430?–95), on the other hand, rather emphasize the use of money as a store of value.[4] But on the whole very much the same concepts are handed down from author to author until well into the sixteenth century. Even Charles Desmoulins, who wrote as late as 1546 and who shocked his contemporaries by his bold defence of usury, still clings nervously to the

[1] 'Now money, according to the Philosopher (*Ethics V. Polit.* 1), was invented chiefly for the purpose of exchange: and consequently the proper and principal use of money is its consumption or alienation whereby it is sunk in exchange. Hence it is by its very nature unlawful to take payment for the use of money lent, which payment is known as usury.' (St. Thomas Aquinas, *Summa Theologica* 2, ii, Quest. 78, Art. 1.)

[2] 'Likewise the art of money or acquisition is natural to all men for the purpose of procuring food, or money with which to buy food, out of natural things such as fruits or animals. But when money is acquired not by means of natural things but out of money itself, this is against nature.' (*Com. Arist. Pol.* 1, lvii, quoted by E. Schreiber, *Die Volkswirtschaftlichen Anschauungen der Scholastik*, Jena, 1913, p. 29.) St. Thomas is here specifically referring to the *ars campsoria*, or business of money-changing.

[3] *Traictie de la première invention des monnaies*, Ed. Wołowski, Pt. I (Text), p. ix.

[4] A. E. Monroe, *Monetary Theory before Adam Smith*, Harvard Economic Studies, Cambridge, 1923, p. 22.

hands of Aristotle and Paulus when he comes to consider the origin and functions of money.[1]

THEORY OF VALUE

The search for a general theory of value applicable to both goods and money is not altogether peculiar to modern economics. Efforts to find such a theory have been made since early times, although many authors have assumed as a matter of course that the value of goods and of money are governed by different laws. As we shall see later, one of the more successful of these attempts to bring goods and money within the scope of a single theory of value was made by our Spanish writers. They based their doctrine on certain elements which they found in the work of their medieval predecessors, and in order to show the evolution of their ideas we shall have to consider medieval theories of value firstly as applied to goods, and secondly as applied to money.

The value of goods. Early theories of value, in so far as they concern goods, usually centre round the concept of the 'just price'. The general idea of the just price has

[1] 'Money, in so far as it is money, is not merchandise . . . but measures the value of all things, as Aristotle says in Ethics V. . . . This is proved by the origin and institution of money. According to Aristotle . . . men created money by common agreement, to supply and represent necessary things, and that is why it is called *numisma,* because it is the product of law, not of nature, and we have the power to alter its value or to make it useless. The Jurisconsult is of the same opinion, and says . . . that [the value of money] resides not so much in its substance as in its quantity: that is, in the public price set upon it, which has recently come to be called its public and perpetual estimation.' *De mutatione monetae tractatus,* reprinted by Budelius in his *De monetis et re numaria,* Cologne, 1591, p. 485.

been traced to Plato,[1] who prescribes that the tradesman must name only one price, and, if he cannot obtain it, return home with his wares. Aristotle makes quite an elaborate attempt to analyse the principle of justice in exchange, and both the objective and the subjective aspects of value are reflected in his work. His famous little diagram showing how the builder and the cobbler may justly exchange the products of their skill[2] would seem to support a labour theory of value. On the other hand, his assertion that want, or demand, is the true basis of exchange[3] was one of the chief sources of medieval subjectivism. Another forerunner of subjectivism was St. Augustine. In a very celebrated passage, which was quoted over and over again throughout the Middle Ages, St. Augustine says that according to the order of nature animate things are ranked above inanimate, and, among the living, the intelligent above those that have not intelligence. And he goes on to note the discrepancy that exists between this 'natural' scale of values and man's valuation as reflected in the price-structure, the latter scale being based on utility.[4]

[1] Schreiber, op. cit., p. 5.

[2] *Nic. Ethics*, v, 1133a.

[3] Ibid.

[4] '*Of the different degrees of creatures, wherein profitable use and reason's order do differ.*

'Now the esteem [of things] is as peculiar and different, as are their divers uses: whereby some senseless things are preferred before some sensitive, so far, that if we had power, we would root the latter out of nature, or (whether we know or know not what place therein they have) subordinate them to our profit. For who had not rather have his pantry full of meat than mice, or possess pence than fleas? No marvel: for man's valuation (whose nature is so worthy) will give more oftentimes for a horse than for a servant, for a ring than a maid. So that in choice the judgment of him that respects the worth is different from that of him that respects his own need or pleasure: the former estimating all things

When we come into the great flowering-time of scholastic thought, the thirteenth century, we find the objective and subjective theories of value running side by side, very much as in Aristotle. Albertus Magnus (1206?–80) bases justice in exchange on equality of labour and 'expenses', and, at the same time, maintains that the primary object of exchange is the satisfaction of human wants.[1] St. Thomas Aquinas (1227–74) in his commentary on the *Nicomachean Ethics* observes: 'The arts will be destroyed if the workman who has made some article does not receive for it another article similar in quantity and quality. One man's labour must be compared with another's if the exchange is to be just.'[2] And again: 'Justice will be served if as many shoes be given in exchange for a house or for food as the builder or the farmer exceeds the cobbler in labour and costs.'[3] Yet St. Thomas endorses Aristotle's dictum that want is the real measure of value and makes Augustine's doctrine of value his own.[4] According to St. Thomas, supply and demand play their part in determining price. The price of bread rises in time of famine, gold is valuable because it is rare, and the price of wheat is

by their place in nature, the latter by the degree to which they satisfy his needs; the one valuing them by the light of the mind, the other by the pleasure or use of the sense.' (St. Augustine, *City of God*, xi, 16, Healey's translation.)

[1] Schreiber, op. cit., pp. 49–52.

[2] *Com. Arist. Eth.* v. 1, vii, e, quoted by Schreiber, op. cit., p. 35.

[3] Ibid. 1, viii, h, quoted by Schreiber, op. cit., p. 39.

[4] 'The one thing which measures all else is in truth demand, which includes all commodities in so far as things are related to human wants. For they are not priced according to the dignity of their nature (else would a mouse, which is a sensitive being, fetch more than a pearl, which is inanimate), but according to men's need of them for their use.' *Com. Arist. Eth.* 1, c, quoted by Schreiber, op. cit., p. 43.

likely to fall when fresh supplies are expected to come on to the market.[1] It follows that slight fluctuations in the just price were permissible, and later writers insist on this point.

There is some evidence to show that, as time went on, greater emphasis came to be laid on the subjective aspect of value. There was a moral reason for this. Medieval writers viewed the poor man as consumer rather than producer. A cost-of-production theory would have given merchants an excuse for over-charging on the pretext of covering their expenses, and it was thought fairer to rely on the impersonal forces of the market which reflected the judgement of the whole community, or, to use the medieval phrase, the 'common estimation'. At any rate, it would seem that the phenomena of exchange came increasingly to be explained in psychological terms.[2]

Buridan (1300–58) says that 'the value of goods is estimated by human want . . . and therefore the satisfaction of want is the real measure of saleable goods. But it would seem that this satisfaction is measured by want itself; for the satisfaction is greater when the want satisfied is great . . . as is shown by the fact that wine is dearer when it is scarce, because we need it more.'[3] Like other medieval writers, Buridan insists that value is not measured by the need of the individual, but by

[1] Schreiber, op. cit., pp. 57–58.

[2] Notably by Henry of Ghent (1217–93) and Richard of Mediavilla (1307), for a discussion of whose doctrines see Schreiber, op. cit., pp. 131–46, 227.

[3] G. O'Brien, *An Essay on Medieval Economic Teaching*, London, 1920, pp. 109–10.

'the common need of those who trade with one another'.[1] Otherwise, a rich man could buy his bread cheaper than a poor man, since his need is less.

The Viennese scholar, Henry of Langenstein (1325–83), whose treatise on contracts long remained the standard work on the subject, advocates a strict system of price-control but advises the prince to fix prices in accordance with the 'customary price', the latter being determined by the 'degree of human want'. Langenstein goes on to analyse the whole subject of 'want' in a most subtle manner and draws a distinction between 'extensive' and 'intensive' demand, the former depending on the number of prospective purchasers, and the latter on the scarcity of the merchandise. Men feel only a slight degree of want for things that are abundant, but those which are scarce are highly valued. Thus, according to Langenstein, the just price is objective in the sense that it should be fixed by some authority standing outside the market, and yet subjective as being the product of subjective factors.[2] Yet even Langenstein, in another passage, states that each man can reckon for himself the price of his wares by calculating how much money he needs to support himself according to his status.[3]

To sum up, it would seem that supply-and-demand, utility, cost of production (including the remuneration of labour), and other factors such as the cost of transport and risk, were all to be taken into account in determining value. These apparent contradictions

[1] Schreiber, op. cit., pp. 177–91.

[2] Ibid., pp. 196–202.

[3] O'Brien, op. cit., p. 111.

cannot be attributed to mere carelessness on the part of such skilled reasoners as the schoolmen. They rather imply a realistic acknowledgement of the dual aspect of price, and an anticipation of the intertwining of subjective and objective factors in modern theory.

If we are right in thinking that towards the end of the Middle Ages subjective factors came to be assigned an increasingly important role in the determination of value, then the extreme subjectivism of Saravia de la Calle (*c.* 1540), one of our earlier Spanish writers, may be regarded as the culmination of a gradual movement. Now, one of the most interesting things about the work of our Salamancans is the methodical way in which they set about applying the above well-established principles to the determination of the value of money as well as goods, laying special stress on the influence of supply and demand. Such a procedure is clearly likely to lead to some form of quantity theory, and, in fact, that is the very type of theory which our writers adopted. Before we can claim that their doctrine constituted a novelty, however, we must see whether any of their predecessors had worked along similar lines. The next section has been written with this object in view.

The value of money. Here we are on rather more treacherous ground. For the sake of convenience we may classify medieval theories into three main groups, holding respectively that money derives its value (*a*) from the proper fulfilment of its functions, (*b*) from the tale set upon it by the prince, and (*c*) from the market-value of its metal content. But often we find all three theories jumbled together in the work of a single author, and we may as well abandon at the outset any attempt to group writers into 'schools' and dub them nominalist, metallist, and so on, even though we are obliged thus to disentangle the doctrines themselves or we should not be able to describe them at all.

The first of our three theories—the idea that money derives its value from the proper fulfilment of its functions—makes only a slight advance on the teaching of Aristotle already considered, and it seems to have been quite widely held among the great schoolmen of the thirteenth century. Albertus Magnus says that the value of money consists in its use as a measure of goods,[1] and St. Thomas that 'the virtue of money lies in the fact that a man may exchange it for whatever he needs', adding that 'since money resembles a measure, its value must be stable'.[2] With this sort of statement we may link up the fairly common notion that the use of money as a medium of exchange raises its value above the market-price of its metal content, money as money being valuable only within its area of circulation. Thus, Innocent IV declares that a prince may be allowed to make a small profit over the coinage 'because of jurisdiction, and the authority and communal nature that money receives from the royal person or character'.[3] Henry of Ghent, too, says that 'money was made . . . to be a price; and, even if it has in itself substance in weight and tale, it also, in so far as it is money with its own circulation, has a value not derived from substance'.[4]

[1] Miller, op. cit., p. 81.
[2] Ibid., pp. 85–87.
[3] R. Gonnard, *Histoire des doctrines monétaires*, Paris, 1935, p. 117.
[4] Miller, op. cit., p. 91; Schreiber, op. cit., p. 133.

This brings us to the second of our theories, nominalism. The turn of the thirteenth century saw the first of a long series of debasements of the currency (notably in France), which provided abundant material for discussion. The argument centred round the legal aspect of debasement: whether a prince has the right to debase the currency, whether he ought to make a profit over the coinage, whether debts should be reckoned in terms of the metal content of a given money, or in terms of its legal tale, and so forth. The legal right of the prince to alter the value of the currency, either by reducing the metal content of the coins or by raising their tale, was at first seldom questioned, although it was generally agreed that such a step should be taken only in case of extreme necessity.

Our third theory, metallism, crystallized in the course of this discussion, and was predominant towards the end of the Middle Ages. The effect of debasement on prices had by now been realized. Already in 1308 the jurist Pierre Dubois had complained to the king that prices were much higher as a result of debasement, since foreigners considered only the metal content of the coins.[1] The 'intrinsic goodness' of money came to be given more weight in the discussions of philosophers and jurisconsults. It was argued that the true value of money was the value of its metal content, and that prices would tend to rise as this content was reduced, or as the tale of the coins was raised while their metal content remained unchanged, a view that was still being vigorously defended in 1530 by the anonymous

[1] Monroe, op. cit., p. 25.

supporter of Albertine policy in the Saxon coinage controversy.[1] Another strong opponent of the policy of debasement was Buridan, who bases the legal value of money on its metal content, which he says must be clearly reflected in the tale. Money should be made of 'noble and easily transportable material' and should include coins of several denominations. At the same time, Buridan held that the real value of money lay in the proper fulfilment of its primary function as a medium of exchange, so that 'money is not a sure measure of commodities except in the sense that both money and commodities are related to human want'.[2] Thus, we find a certain parallelism between the subjective and objective aspects of value, in monetary theory as in the more general medieval theory of value.

These three theories seek to account for the origin of the value of money. The quantity theory explains fluctuations in its value. As M. Gonnard has shown,[3] the quantity theory is not incompatible with either nominalism or metallism, nor would it appear to conflict with the idea that money derives its value from the fulfilment of its functions. What traces of quantity theory, or at least of a simple supply-and-demand theory of the value of money, can we find in classical and medieval writers? We have seen that the influence of supply and demand on the value of goods was clearly understood. Were the same forces held to affect the value of money also?

[1] A French translation of this treatise is included in J.-Y. Le Branchu, *Écrits notables sur la monnaie*, Paris, 1935, vol. i, pp. 30–46.

[2] Miller, op. cit., p. 113.

[3] Gonnard, op. cit., pp. 11–12.

Considered as commodities and not as money, the precious metals were of course included in the general medieval theory of value. Already in ancient Greece Xenophon had counselled more efficient use of the Greek silver-mines because, while the price of commodities rises and falls with their increasing scarcity or abundance, the demand for silver is insatiable owing to the manifold uses to which it may be put as money. Xenophon continues: 'If it be objected that gold is as useful as silver, I will not dispute it; but I am sure that abundance of gold always lowered its value and advanced the price of silver.'[1] It must be remembered that the currency of the period was based on silver, not gold. Xenophon thus seems to have held a supply-and-demand theory of the value of goods but hardly of money, since he thought that the quantity of money might be increased indefinitely without diminishing its value. St. Thomas says that 'a very small quantity of the precious metals, on account of their rarity, is worth a great quantity of other things'.[2] Oresme develops the same idea more elaborately and applies it to the value of gold and silver used as money: 'For just as gold is by nature nobler, more precious, and better than silver, and more difficult to find and obtain, it is very reasonable that a certain weight of gold should be more valuable and more highly estimated than silver—for example, in the proportion of twenty to one.' The ratio might vary 'if, for instance, less gold were to be found

[1] *Discourse upon improving the Revenue of the State of Athens*, tr. Cooper, London, 1832, p. 685.

[2] *Expos. in viii lib. Polit.* i, 7, quoted Monroe, op. cit., p. 26 (note).

than before the institution of money, and in this case it ought to be dearer in comparison with silver, and its price and value might properly be changed'.[1]

According to Schreiber,[2] Henry of Ghent and Duns Scotus taught that the value of money was determined by the same factors as that of goods, but the passages which he quotes in support of this assertion are not quite as convincing as usual. Copernicus (1526) in his treatise on debasement notes that 'money usually depreciates when it becomes too abundant—for instance, when so much silver has been turned into money that there is more demand for bars than for coins'.[3] But, apart from this brief statement, Copernicus bases the value of money on that of its metal content, and says that 'prices fluctuate according to the quality of the money' and that the high cost of living is caused by debasement.[4]

There was, then, a vague notion that the 'estimation' of money depended on its rarity; but, although the effect of debasement on prices was universally recognized, that of an alteration in the whole quantity of money in circulation was scarcely considered at all.

Many historians consider that the first author to state the essentials of the quantity theory was Jean Bodin in 1568.[5] But this claim to originality, which Bodin him-

[1] *Traictie de la première invention des monnoies*, ed. Wołowski, Pt. I (Text), pp. xxx–xxxi. [2] Schreiber, op. cit., pp. 133–4, 153–4.

[3] French translation, 'Discours sur la Frappe des Monnaies', in Le Branchu, op. cit., vol. i, pp. 5–27. Quotation from p. 7.

[4] Ibid., p. 13.

[5] Jean Bodin, *Réponse à M. de Malestroit*, ed. Henri Hauser, Paris, 1932, pp. 9, 10. In his introduction to this edition (pp. xliii, lxxv, lxxvi) Hauser says: 'Voilà le grand mot lâché. Bodin pose en principe qu'il y

self advanced, was, in fact, mistaken: as we shall see, our Spanish writers forestalled him by about twelve years.

THEORY OF FOREIGN EXCHANGE

Aristotle makes no mention of the art of the money-changer. St. Thomas distinguishes between the 'natural and necessary exchange whereby one commodity is exchanged for another, or money taken in exchange for a commodity, in order to satisfy the needs of life', and 'the exchange of money for money, or of any commodity for money, not on account of the necessities of life, but for profit, . . .'.[1] The former is commendable because it satisfies a natural need. The latter is justly deserving of blame, because, considered in itself, 'it satisfies the greed for gain, which knows no limit and tends to infinity'. Nevertheless, gain is not in itself sinful 'if it is directed to some necessary and virtuous end, such as the upkeep of the trader's household, or the assistance of the needy'. Thus, St. Thomas in the *Summa Theologica* seems to give modified approval to the business of the money-changer so long as it is undertaken for some

a un rapport nécessaire entre la quantité d'or et d'argent en circulation et le prix des choses.... C'est bien à lui, non à d'autres, (sauf à Copernic), que la pensée économique moderne est redevable de cet axiome, exact ou non, discutable peut-être; les prix, toutes choses égales d'ailleurs, varient en raison inverse de la quantité des moyens de paiement.'

J.-Y. Le Branchu, op. cit., p. li, says: 'Le grand mérite de notre auteur [Bodin] est d'avoir, le premier, justement attribué le hausse des prix à l'afflux d'or et d'argent en provenance d'Amérique.' Erich Roll, *A History of Economic Thought*, 1945, p. 61, agrees that '[Bodin's] statement that "the principal reason which raises the price of everything, wherever one may be, is the abundance of that which governs the appraisal and price of things" is the first clear statement of a quantity theory of money'. And it would be easy to cite many similar utterances.

[1] *Summa Theol.* Q. 77, Art. 4.

worthy purpose, but we have seen that in his 'Commentary on the *Politics* of Aristotle' he condemns exchange transactions as contrary to nature.

Henry of Ghent says that money must be exchanged for other money 'according to equality of price'. He gives an ingenious explanation of the rate of exchange, based on the idea already current that money was more valuable within its own area of circulation. A coin may be bought outside this area at the market-value of its metal content, and the purchaser may then bring it into its own area of circulation and 'put it into use' at a higher value, the resulting profit being a reward for his labour.[1]

Aegidius Lessinius, a follower of Aquinas, agrees that a money-changer deserves some reward for his labour, adding that the benefit enjoyed by the customer is greater than that which the money-changer himself derives from the transaction.[2] This view is repeated by the unknown author of the *Summa Artesana* (*c.* 1317), who mentions that the money-changer's profit depends on the fact that money has a dual value, 'according to the material of which it is made', and 'according to positive law'.[3] Buridan regards the money-changer's 'profit' as compensation for the labour and expenses he has incurred.[4] We have already discussed Oresme's explanation of the agio between the price of gold and silver.

This brings us into the fifteenth century, an age which saw a considerable advance in the theory of foreign

[1] Schreiber, op. cit., p. 134.
[2] Ibid., p. 164.
[3] Ibid., pp. 171–2.
[4] Ibid., p. 187.

exchange. In particular, the Italian schoolmen of the period were worthy masters of the great Italian economists of the seventeenth and eighteenth centuries —Davanzati, Serra, Montanari, and Galiani—whose work owes much to their writings. The theory of foreign exchange elaborated by the School of Salamanca was a development of the doctrine of two Florentine theologians, Laurentius de Rodolphis (whose treatise on usury was written in 1403), and St. Antonino of Florence (1389–1459).

In Laurentius we find the traditional classification of exchange transactions into *cambium minutum*, *cambium per litteras*, and 'real' and 'dry' exchange[1] with which our brief glance at the commercial practice of the sixteenth century has made us familiar. This classification was retained for over 400 years, since it continued to be presented as current doctrine in Roman Catholic manuals of theology until the end of the eighteenth century.

In the work of Laurentius and a few of his contemporaries we begin to find references to the 'sale' and 'purchase' of money, an idea that clashed (or at any rate was thought to clash) with the teaching of Aristotle. Laurentius mentions, as factors that helped to determine the price of money, the situation of the money in question (whether inside or outside its own area of circulation), the purity, weight, and market-value of its metal content, and the conditions of supply and demand 'according to whether gold is worth more at one time than another, or florins are more sought after than

[1] Ibid., pp. 211–13.

ducats or vice-versa'. We find here a hint of a subjective or utility theory of money and of the concept of 'estimation' which was to play an important part in the theory of our Spanish writers.

St. Antonino[1] adopts the teaching of Laurentius with some minor elaborations. He contributed no very novel ideas to the theory of foreign exchange, but his delightful personality, wide learning, and clear style brought him many followers, and he remained one of the standard authorities on the subject until far into the Renaissance.

The sixteenth century saw a great revival of commercial activity all over Europe, and, with it, a corresponding increase in the number of foreign exchange transactions. As the century advanced the conflict between theory and practice grew more and more acute. At last, in 1532, the Spanish merchants of Antwerp sent their confessor to Paris to get a ruling on the legitimacy of exchange transactions from the learned doctors of the University. He took with him a Report on the merchants' activities in which their case is cogently presented, but the same can scarcely be said for the Reply of the fifteen eminent experts who put their names to the document.[2] They were too alarmed by the events of their time to utter more than a forthright condemnation of all exchange business, and they failed to think out the fundamental principles involved. There is, however, one point of interest in the Reply: the

[1] C. Ilgner, *Die volkswirtschaftlichen Anschauungen Antonins von Florenz*, Paderborn, 1904, pp. 139–50.

[2] An extract from the Report and part of the Reply are reprinted in an Appendix to this study.

assertion that the rate of exchange fluctuates according to the state of supply and demand and is not derived from the labour and costs incurred by the person in whose favour the bill is drawn. The Reply includes an opinion written at Salamanca by Francisco de Vitoria, the founder of the School of Salamanca. Vitoria dissents in certain respects from the opinion of the doctors of Paris, but he confesses that he is bewildered and dismayed by the complexity of the whole problem of commercial morality, and he makes no important contribution to the discussion.

The time has come at last for us to enter the University of Salamanca. Let us therefore follow Vitoria up the carved stone staircase, through the cloister, and into the lecture-hall of theology, which remains today just as it was in Vitoria's time, with its little window high up in the white-washed wall, its dark gallery, its rostrum where the master commented upon the book that was read out by an assistant seated at his feet, and its rough oaken benches on which innumerable girls' names have been carved by many generations of students.

III

THE SCHOOL OF SALAMANCA

THE MEN

IF in most parts of Europe the old scholastic tradition had nearly died away by the middle of the sixteenth century, in Spain it was not until this time that it bore its finest fruits. The work of the theologians and jurists who brought fame to the Spanish universities is thoroughly scholastic in form. The full panoply of Questions, Articles, Objections, Distinctions, Solutions, and Conclusions is unsparingly displayed. Every utterance is checked against Aristotle and St. Thomas, and every page encrusted with quotations from their works. Too rigid a strait-jacket, it might be supposed, to contain the great expanding world of the sixteenth century. Yet the writings of the Spanish theologians convey no sense of restraint. For all their stiff, unbending style, our writers were flexible of mind, attentive to new facts and doctrines, and respectful of the honestly held opinions of the ordinary man.

At Salamanca, Vitoria and his followers devoted a large share of their efforts to reshaping the old *ius gentium* in order to regulate the relationship that had recently arisen between the conquered peoples of America and the Spanish Crown.[1] But they also spared

[1] As early as 1730 the importance of the Spanish contribution to the science of natural law was recognized by Hermann Conring (*Examen rerum publicarum potiorum totius orbis*, ch. 1, in *Opera*, Brunswick, 1730) who stresses the influence exerted by Vitoria, Vasquez, and Covarrubias on Grotius. The best modern studies of the subject are E. Nys, *Le Droit des*

time for political, social, and economic theory, to which the discovery of the New World gave powerful impetus. They engaged, for example, in a lively philosophical debate on the advantages and disadvantages of private property, inspired by reports of the primitive American communities, especially the collectivist society of Peru, which were seized upon as survivals of a lost Golden Age when all things were held in common.[1] And the practical problems of business life were growing daily more pressing. The inflationary economy of the period offered unprecedented opportunities for enrichment, and the Church's solemn warnings against undue love of gain passed all too often unheeded. Lip-service was paid to the prohibition of usury, but, since theologians themselves differed as to the definition of the term, laymen could scarcely be blamed if they lapsed into 'error'. The most blatant forms of usury were universally practised, though generally under cover of some device invented to conceal the true nature of the transaction. In Spain, the great stronghold of religious authoritarianism, such a situation could not idly be tolerated. Some reconciliation of Thomist doctrine with the new economic order was urgently demanded. The Spanish theologians tackled this difficult task with zeal, and, what is perhaps more remarkable, with a fair measure of success. Here we shall not be primarily concerned with their moral teaching, or even with their economic

gens et les anciens jurisconsultes espagnols, 1914, and J. B. Brown Scott, *The Spanish Origin of International Law*, 1932, and *The Spanish Conception of International Law and of Sanctions*, Washington, 1934.

[1] *Doctrinas de los tratadistas españoles de los siglos XVI y XVII sobre el comunismo*, ed. Carmelo Viñas Mey, Madrid, 1945.

theory as a whole, but only with one small fraction of their work, their analysis of money. Though they wrote as moralists, they were at pains to study the nature of money objectively, and they were not content merely to approve or condemn the monetary system as it functioned in their day, but tried to go deeper and explain it scientifically.[1]

In October, 1534, four years after replying to the merchants of Antwerp, Vitoria began to deliver a course of lectures on the *Secunda Secundae* or moral system of St. Thomas. Vitoria was now at the height of his powers, and his eloquence, simplicity, and great personal charm made his lecture-room at Salamanca a meeting-place for all who were perplexed by the manifold legal and ethical problems that arose in the government of the far-flung Spanish Empire. To Vitoria had fallen the task of reconciling historical reality with Thomist doctrine, of modifying each in the light of the other, and of passing on the traditional ideas he had imbibed during his period of apprenticeship in Paris, remoulded to fit the circumstances of his time. In March and April of 1535 Vitoria was engaged in explaining St. Thomas's doctrine of usury. His words were carefully noted down by one of his pupils, whose manuscript may

[1] The credit for the discovery of the School of Salamanca, so far as monetary theory is concerned, has been generally accorded by Spanish scholars to J. Larraz, who, in his *Época del mercantilismo en Castilla*, Madrid, 1943, pointed out the similarity of ideas that unites the various members of the School. But Larraz had predecessors. A. E. Sayous, in his 'Observations d'écrivains du 16me siécle sur les changes' (*Revue économique internationale*, November 1928), drew attention to the work of Tomás de Mercado, while the monetary theory of Azpilcueta Navarro has been excellently analysed by Alberto Ullastres Calvo (*Anales de economía*, Nos. 4–5, 1942).

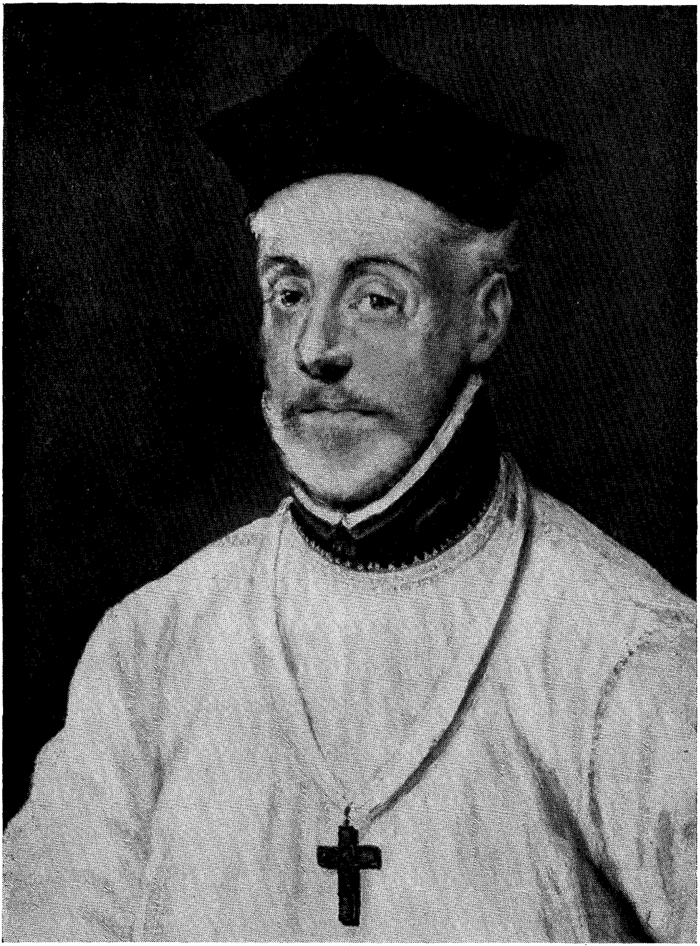
still be read in the library at Salamanca.[1] Vitoria had evidently given a good deal of thought to the current problems of commercial morality since replying to the merchants of Antwerp four years before. Yet even this maturer work, though interesting for the first-hand picture it gives of the business world of Spain and Flanders, makes no great advance on medieval economic theory. Later writers associate Vitoria with some of the more advanced doctrines of the School of Salamanca, and it is possible that his best work in this field has not come down to us. However this may be, Vitoria's interest in the problems of commercial ethics certainly seems to have stimulated those around him, for a number of his colleagues and pupils blossomed forth as capable economists during the next few years.

Among the first generation of the School, contemporary with Vitoria, two of the best writers on economic matters were the Dominicans, Domingo de Soto and Martín de Azpilcueta Navarro (often called simply Navarrus). Soto, who was born in 1495, was of humble origin. He studied first at Alcalá de Henares and later in Paris, coming under the influence of Vitoria, who was then teaching at the Sorbonne. In 1532 Soto was appointed to a chair of theology at Salamanca. The terrible famine that ravaged Spain in 1540 led him to write his well-known treatise on poor relief, in which he upheld the poor man's right to liberty of person and of action, arguing against his colleague, Juan de

[1] Reprinted with an introduction by R.P. Vicente Beltrán de Heredia, O.P. under the title of *Comentarios de la Secunda Secundae* in the *Biblioteca de teólogos españoles*.

Medina, who maintained that the problem of vagabondage could only be solved by the strict and centralized control of the movements of poor persons. In 1545 the Emperor appointed Soto, by now regarded as the most eminent of the Spanish theologians after Vitoria (who was in failing health), as his representative on the Council of Trent. In 1548 Soto became confessor to the Emperor, but two years later he caused general surprise by relinquishing this influential post and returning to the University of Salamanca, where he continued to teach until his death in 1560. Soto's monetary theory is expounded in his treatise *De justitia et jure*, an extensive work on the philosophy of law which was published in 1553 and is said to have been based on a series of lectures given at Salamanca in 1540–1 and repeated in 1552–3.[1] In this important treatise, which was reprinted no less than twenty-seven times before 1600 and which continued to be read and quoted by jurists and moralists for some 200 years after its original publication, Soto begins by explaining the general nature and functions of Law. He then turns to the moral problems created by the contemporary expansion of commerce, a subject which (as he tells us) was so peculiarly interesting to him that it alone had led him to take up the burden of writing his great treatise. Long chapters are devoted to the problems of usury, the general position of commerce within the State, the fixing of the just price, the fluctuations of that price and their cause, the purchase of rent-charges, the formation of commercial com-

[1] R.P. Venancio Carro, O.P., *Domingo de Soto y su doctrina jurídica*, Madrid, 1943.



DIEGO DE COVARRUBIAS Y LEIVA
From a portrait by El Greco in the Greco Museum, Toledo

panies and the propriety of investment in such companies by Christian men, and the character of shipping and life insurance. Each of these chapters would repay detailed study. Besides providing a mass of factual information, they conceal beneath their theological dress many general concepts that deserve a place in the history of economic doctrine.

Another distinguished figure at Salamanca was Martín de Azpilcueta Navarro. A scholar famed for his saintly life and vast learning, he had taught canon law at Toulouse and Cahors before coming to Salamanca, and he was chosen by Charles V as rector of the newly established University of Coimbra. He spent the last years of his life in Rome. Azpilcueta's monetary theory is developed in his *Comentarios de usura*, which were published in 1556 as an appendix to a manual of moral theology dedicated to his friend and protectress the Princess Juana, sister of Philip II. The manual and commentaries were translated into Latin and Italian, and they continued to be followed by Roman Catholic writers for many years.

Another leading member of the School of Salamanca was Diego de Covarrubias, a pupil of Azpilcueta. Born in 1512, he became Bishop of Ciudad Rodrigo and later President of the Council of Castile. He was one of the greatest experts of his day on Roman law and was called 'the Spanish Bartolus' by his contemporaries. For some reason he seems to have been particularly widely read in Italy. His work is often cited by Davanzati, and at least once by Galiani, writing as late as 1750.[1]

[1] *Della Moneta*, 1750, ch. 2.

The fame of these and other scholars who taught at Salamanca greatly enhanced the prestige which the University had acquired under Vitoria, and the doctrines evolved there soon spread to other parts of Spain. In the 1570s an interesting group of economists sprang up in Valencia, who based their ideas on those of the theologians of Salamanca. The best-known members of this little satellite school are Miguel Salón, Bartolomé de Albornoz, and one very gifted economist, Francisco García.

At the end of the sixteenth century the monetary theory taught at Salamanca received further development at the hands of two important theologians, the Dominican, Bañez, and the Jesuit, Luís de Molina. Domingo de Bañez, who held a chair of theology at Salamanca for some years, is remembered as the friend and confessor of St. Teresa. His chief contribution to theology was his doctrine of grace, in which he was strongly opposed by Molina, the upholder of free will, according to whom the grace of God could only become efficient by the consent of man. The ensuing polemic troubled the whole cultural and religious life of Spain during the last years of the sixteenth century. Though the Pope finally imposed silence on the contending parties, the writings of Bañez and Molina, passing into Belgium and France, were to prove one of the main sources of the Jansenist controversy. With these two writers the monetary theory of the School of Salamanca may be regarded as having travelled so far beyond the limits of its original home as no longer to be specifically 'Salamancan'.

Enough has been said of our Spanish economists to show that we are not dealing with a group of obscure writers whose work was no sooner published than forgotten. On the contrary, our doctors of Salamanca were heard with respect by the whole world of learning. They lectured to successive generations of students of every nationality, and their books continued to be translated and reprinted for many years after they themselves had passed away.

THE DOCTRINES

While adhering closely to traditional doctrine, our Spanish writers gave a novel twist to the teaching of their medieval predecessors, and, discarding some of the older ideas and emphasizing others, wove a solid, coherent, and characteristic body of theory of their own.

The Aristotelian and scholastic ideas about the nature, origin, and functions of money were handed on unchanged except for a few elaborations of minor importance. Even today these traditional concepts of money as a medium of exchange and a measure and store of value, together with the customary 'historical' account of the inconveniences attendant upon a barter economy, are still reflected in our text-books. The School of Salamanca is simply a link in the long chain of writers who have helped to pass on these ideas. The School's original contribution to monetary theory consists, in my opinion, in its formulation of a psychological theory of value applied to both goods and money, of the quantity theory, and of a theory of foreign exchange that closely resembles the modern purchasing-power parity theory.

Theory of Value. The markedly subjective theory of value adopted by our writers appears in an extreme form in the work of Saravia de la Calle (Text I). Saravia denies with considerable vehemence that cost-of-production can play any part at all in the determination of price. Viewing the poor man not as producer but as consumer, he clearly fears that the least relaxation of his doctrine will give merchants an excuse for raising prices on the pretext of recouping their expenses. Another extreme subjectivist was Diego de Covarrubias. 'The value of an article', he says, 'does not depend on its essential nature but on the estimation of men, even if that estimation be foolish. Thus, in the Indies wheat is dearer than in Spain because men esteem it more highly, though the nature of the wheat is the same in both places.' In assessing the just price, Covarrubias continues, we are not to consider how much the article originally cost, nor the labour its acquisition cost the vendor, but only its common market-value in the place where it is sold. Prices fall when buyers are few and goods and vendors many, and rise when the contrary conditions prevail.[1]

Most members of the School, however, do not go quite so far. As a rule they concede, though sometimes rather grudgingly, that cost-of-production, including the remuneration of labour, may help to determine price. But they all agree that the most important deter-

[1] *Variarum ex pontificio, regio et caesareo jure resolutionum*, libri 4, 1554, vol. ii, lib. 2, ch. 3.

minant of the 'natural' or uncontrolled price of an article is the estimation in which that article is held, such estimation being in its turn determined primarily by the forces of supply and demand, utility, rarity, and so on. From the tone of our writers it is evident that the subjective theory of value enjoyed their moral approval while the labour theory smacked of brimstone as the favourite tenet of the contemporary 'selfish business man'. This subjectivist tendency led to some interesting attempts to analyse the psychological springs of economic activity. For some authors, such as Francisco García, value in exchange expressed the subjective estimates of utility, a view which he develops in workmanlike style (Text V). Others regard scarcity as the chief determinant of price. Bartolomé de Albornoz, for example, develops this concept at length, and relates the story of King Tarquin and the Sibylline books to illustrate the principle that price, as the reflection of estimation, increases with rarity.[1] All these ideas lend a remarkably modern air to the discussions of our authors.

When they turned from theory to practice, most of the Spanish economists agreed that the price of necessary articles such as bread and meat ought to be fixed by the State, while that of luxury goods might well be left to find its 'natural' level in accordance with market conditions (Text II). The question then arose: on what principles should the *tasa* or controlled price of necessities be fixed? Many authors seem to think that the legal price of an article ought to correspond to its

[1] *Arte de los contractos*, Valencia, 1573, p. 64.

'natural' price and be roughly equivalent to whatever sum the article might reasonably be expected to fetch in a free market. The difficulty of estimating the 'natural' price of an article whose price is, in fact, controlled does not seem to have struck them at all forcibly. At least one writer, however, though of a rather later date, realized that this position was unsatisfactory and concluded that the price of corn, the first necessity of life, ought to be measured by the amount of labour spent in an average working day (Text VIII). In support of this view he uses very much the same argument as did Adam Smith in 1776 when he advanced his more generalized form of labour theory: namely, that money and other objects are useless as measures of value, since their own value is subject to continual fluctuation.[1] Thus it would be untrue to say that the labour theory, which in the Middle Ages had run side by side with the subjective theory, disappeared entirely in the work of the School of Salamanca. But it was temporarily submerged and seems to have occupied a secondary place in the minds of most of the Spanish economists.

The emphasis laid on the subjective factors that go to determine the price of goods was extended also to the value of money. Our writers thus brought both goods and money within the scope of a single theory of value, and in doing so made a great advance on the work of their medieval predecessors. By about 1560 the old contrast between the 'intrinsic' and 'extrinsic' value

[1] 'Labour alone, never varying in its own value, is alone the ultimate and real standard by which the value of all commodities can at all times and places be estimated.' Adam Smith, *Wealth of Nations*, Bk. I, ch. v.

of money, the former being derived from the metal content of the coin and the latter from its tale, had faded away and been replaced by a new antithesis—that of the metal content and tale on the one hand, called simply *valor*, and that of *estimación* or subjective value on the other. The definition of these terms, and the careful distinction that was made between them (Text IV, p. 98), paved the way for some very neat and lucid theorizing. The exchange-value of money, according to the School of Salamanca, depends largely on the estimation in which the money is held, and the estimation of money, like that of goods, fluctuates with variations in supply and demand, utility, the safety of the money in question, its presence or absence, and so on. Monetary theory was thus rendered a very flexible instrument which could be applied successfully to the most varied circumstances. We shall see presently how it was capable of bringing order even into the seemingly hopeless chaos of foreign exchange business. But before passing on to this subject I should like to say a little about our writers' formulation of the quantity theory of money.

Quantity Theory. To account for the fall in the value of money, and to study the moral and legal problems it entailed, was perhaps the most pressing task that awaited our Spanish monetary theorists. In 1550 Diego de Covarrubias published a celebrated treatise[1] in which he traced the chequered history of the *maravedí* and showed how sharply its value had fallen even within living memory. The treatise bristles with statistics but is little concerned with theory and attributes the

[1] *Veterum numismatum collatio,* 1550.

contemporary rise in prices chiefly to debasement. Nevertheless, the book was of great value in its day, since it provided the theorists for the first time with definite information on which to build.

The history of the quantity theory has frequently been studied and wide credence accorded to the claim made by Jean Bodin in 1568 that he was the first to connect the contemporary rise in prices with the increase in the quantity of money in circulation, an increase which he attributes to the influx of American gold and silver, among other causes.[1] Yet the basic principles of the quantity theory had certainly been glimpsed by medieval writers, while the effect of American treasure on the European price-level was first noted, as we might naturally expect, in Spain, the country where it was first felt. We have seen that both prices and the imports of bullion reached a new high-level in the sixth decade of the century. In 1556 Azpilcueta Navarro produced the first clear statement that the high cost of living was a result of the import of treasure (Text III, p. 95). He thus preceded Bodin by twelve years. In England it was not until 1581 that the same observation was made,[2] and it is interesting to see how American treasure in its passage across Europe called up the quantity theory in Spain, France, and England successively.

The purchasing-power parity theory of exchange. The most noteworthy achievement of our Spanish writers, and

[1] See p. 34 (note 5).

[2] By John Hales in his *Compendious or brief examination of certain ordinary complaints, &c.* (1581 edition).

the most original, was their formulation of the basic principles of the purchasing-power parity theory of exchange,[1] a doctrine not usually associated with the sixteenth century. We have seen that when the doctors of Paris were consulted in 1530 as to the legitimacy of exchange transactions they seem to have grasped, though not perhaps very clearly, the fact that the rates of exchange fluctuated in accordance with the state of supply and demand (Appendix, p. 126). Vitoria, in the lectures he delivered in the spring of 1535, preferred to regard the 'profit' made on a bill of exchange as compensation for the labour and risk entailed in sending the money abroad, and as a reward paid by the party who wished to make the transfer in return for the benefit he received. Vitoria mentions, however, that 'when the Emperor was in Germany and money was very scarce there, if the Duke of Alba paid a thousand ducats in Medina he would receive less in Germany, and rightly so', a statement that takes supply and demand into account. Vitoria condemns as usurious any profit made in the transfer of money by bill of exchange over short

[1] By the purchasing-power parity theory I shall mean in this essay the doctrine summarized in the following passage in the Bullion Report of 1810: 'In the event of the prices of commodities being raised in one country by an augmentation of its circulating medium, while no similar augmentation in the circulating medium of the neighbouring countries has led to a similar rise in prices, the currencies of the two countries will no longer continue to bear the same relative value to each other as before. The exchange will be computed between these two countries to the disadvantage of the former.' Quoted as an early example of the theory by G. Halm, *Monetary Theory*, Philadelphia, 1942, p. 222. For the history of the purchasing-power parity theory in the nineteenth century see J. W. Angell, *Theory of International Prices*, Cambridge, 1926, ch. III, sec. 4.

distances, but considers that similar transfers effected between different countries fulfil a real need, since they 'avoid the inconvenience of transporting specie, and also because the export of specie is forbidden by law'.

The decisive factor in the evolution of our theory was the turning of the exchanges against Spain, or, at least, the general realization that they were unfavourable. We have no good study of the actual course of the exchanges, and have to rely on the information dropped by our Spanish economists. This much is clear: when money was sent from foreign countries to Spain a considerably larger sum was usually repaid in Spain than had been delivered abroad, but when money was sent in the opposite direction, from Spain to places abroad, only a slightly larger sum, and sometimes even a smaller one, was repaid abroad than had been delivered in Spain. This discrepancy had nothing to do with the quality of the actual coins delivered and repaid. It existed even when the transaction was confined to one particular kind of money, such as the Spanish *escudo*, and therefore the question of weight, fineness, tale, &c. could not enter into the matter. Moreover, the same amount of labour and risk were involved in sending money from Spain to places abroad as in the other direction. Monetary theorists were called upon to explain this apparent anomaly. And here their subjective theory of value, already applied in the case of goods, came to their rescue. Since the agio could not be explained by objective factors, it must presumably be derived from a variation in the subjective value of money in the different countries. Estimation, declared our authors, was the real measure of the value of money as of goods, and estimation was determined by supply and demand, and by utility. Obviously, the relative abundance of money in Spain must be the thing that lowered its estimation and hence its exchange value.

This view was propounded a little timidly by Juan de Medina in 1550,[1] and in authoritative style by Domingo de Soto in 1553.[2] After examining in exhaustive detail the traditional objections to exchange transactions, and carefully refuting each of them in turn, Soto remarks that 'the more plentiful money is in Medina the more unfavourable are the terms of exchange, and the higher the price that must be paid by whoever wishes to send money from Spain to Flanders, since the demand for money is smaller in Spain than in Flanders. And the scarcer money is in Medina the less he need pay there, because more people want money in Medina than are sending it to Flanders.' Just as one measure of wheat delivered where the price of wheat is high may lawfully be exchanged for two measures where the price is low, so will it be with money. 'It is lawful', Soto concludes, 'to exchange money in one place for money in another having regard to its scarcity in the one and abundance in the other, and to receive a smaller sum in a place where money is scarce in exchange for a larger where it is abundant.' When the two sums are exchanged by reason of a divergence in place, not time, the transaction is not a loan but 'the

[1] *De restitutione et contractibus tractatus*, 1550.

[2] *De Justitia et Jure*, Lib. 7, Q. V, Art. 2.

true exchange of two things present which are of equal value'. Some such doctrine had been current in the market-place long before it was echoed in the august precincts of the University of Salamanca. But the emphasis laid on it by Soto was new in a spokesman of the Church.

The next step in the evolution of the purchasing-power parity theory was taken by Azpilcueta Navarro in 1556. He had, he tells us, at one time rejected the view that abundance or scarcity of money was the factor that determined the course of the exchanges, but he had been led to alter his opinion by the 'new arguments and considerations advanced' (namely, by Soto). As Azpilcueta had spent a long life in the perusal of scholastic treatises, his designation of our theory as 'new' helps to confirm our version of its early history—more especially since Azpilcueta himself makes no claim to its discovery! Let us again turn to the passage that has already been presented as an important document in the history of the quantity theory (Text III). When we come to examine it more carefully we shall see that it was written to account for the behaviour of the international exchanges, not merely to explain fluctuations in the value of money within a single country. Azpilcueta introduces the factor of the price-level and replaces the concept of 'estimation' by that of purchasing-power. In doing so he brings Soto's doctrine into line with modern theory, and anticipates not only Bodin but very much later economists.

Sanctioned by the authority of Soto and Azpilcueta, our theory was now ripe for diffusion. The work of vulgarization was begun by Azpilcueta himself, since his manual was written in Spanish instead of Latin and was meant for the guidance of simple priests as well as theologians. The theory was brought to the attention of laymen by our old friend Tomás de Mercado (Text IV, pp. 98–103), who dedicates his book to the merchants of Seville and explains that his teaching is based on the doctrine of the theologians of Salamanca. The merchants thus received back their own theory in a form that made it intellectually and morally acceptable.

A few years later quite a sharp controversy broke out in Valencia over the purchasing-power parity theory. Francisco García, who had read Saravia, Mercado, Soto, and Azpilcueta, closely follows Mercado in his theory of foreign exchange, and studies at great length the effect of any variation in supply and demand on the estimation of money. But Bartolomé de Albornoz, while agreeing that an increase in the circulating medium tends to raise prices, maintains that the relative purchasing-power of money in different countries cannot justly be taken into account in determining rates of exchange.[1] But Albornoz fought a losing battle. Domingo de Bañez, in a comprehensive discussion of the purchasing-power parity theory, concludes that

in places where money is scarce, goods will be cheaper than in those where the whole mass of money is bigger, and therefore it is lawful to exchange a smaller sum in one country for a larger sum in another. Since the primary end for which money was ordained is the purchase of goods, it follows that wherever money is more highly esteemed for

[1] Op. cit., pp. 131–2.

this purpose it may be exchanged for a larger sum than where it is less so. . . . We admit that one party may lawfully agree to repay a larger sum to another, corresponding to the amount required to buy the same parcel of goods that the latter might have bought if he had not delivered his money in exchange.[1]

And Luís de Molina, the great opponent of Bañez in other controversies, fully endorses the latter's theory of foreign exchange (Text VII). This early version of the purchasing-power parity theory was of considerable practical importance in its day. It removed the taint of usury that had formerly accompanied even the most genuine exchange transaction, and it also provided for the first time a satisfactory explanation of the movements of the exchanges.

It is evident, then, that in their analysis of the subjective factors that go to determine price, and in their formulation of the quantity theory of money and the purchasing-power parity theory of exchange, our Spanish writers made an original and useful contribution to monetary theory. Now, the type of doctrine they favoured is very much alive today. And, since the work of the School of Salamanca long continued to endure in other branches of law and theology, it seems at least possible that their monetary theory was also read and that it has played its part in the shaping of modern doctrine. We have already tried to show something of the debt owed by our writers to their medieval predecessors. It remains for us to see what influence, if any, they exerted on later generations.

[1] *De Justitia et Jure*, 1594, Q. LXXVIII, *De cambiis*, Art. IV.

IV

AND SOME SUCCESSORS

THE work of the Spanish School in the second half of the sixteenth century marked the St. Martin's summer of scholasticism. Henceforth the medieval conception of learning as a small group of arts and sciences with theology at their head was to be discarded for ever. Knowledge branched out into innumerable disciplines which came to be more and more clearly separated and defined. The process was a slow one, and for a long time there was confusion and overlapping. From the beginning of the seventeenth century onwards we have to hunt down our monetary theory through many different branches of literature—in books on theology, law, and political and moral philosophy, as well as in the mass of books and pamphlets on practical questions that express the spirit of mercantilism. Economic thought thus came to be more widely dispersed than at any period since classical times. Not until far into the eighteenth century would these scattered fragments again unite to provide a foundation for the science of economics as we know it today. Yet, though the discussion of economic problems was diffused over so wide a field, there was never any fundamental breach in the continuity of economic theory. Where commercial morality was concerned, even the religious schism hardly troubled the general unity of doctrine. As Professor Tawney remarks, 'differences of social theory did not coincide with differences of religious opinion, and the mark of nearly all this body of teaching, alike in Germany and in England, is its conservatism. Where questions of social morality were involved, men whose names are a symbol of religious revolution stood, with hardly an exception, on the ancient ways, appealed to medieval authorities, and reproduced in popular language the doctrines of the Schoolmen.'[1] This continuity was preserved not only in Germany and England, but also in France, Spain, and Italy. It is most clearly apparent in the various branches of learned literature, since each generation of professional men was especially well grounded in the teaching of its predecessors. But the ideas of jurists, theologians, and philosophers are reflected also in the practical literature of mercantilism, which was written largely by state officials and by business men.

Our discussion of Spanish monetary theory was confined to four branches of doctrine: ideas about the origin and functions of money, the quantity theory, theory of value applied to both goods and money, and the purchasing-power parity theory of exchange. We now have to consider to what extent this body of doctrine was preserved and developed in the seventeenth and eighteenth centuries.

To begin with the group of ideas about the origin and functions of money, it has already been shown that the classic 'historical' account of the transition of society from a barter to a monetary economy, together with the concept of money as a medium of exchange, and as a measure and store of value, were derived from

[1] *Religion and the Rise of Capitalism*, 1926, p. 82.

Aristotle and were universally accepted throughout the Middle Ages and Renaissance. The School of Salamanca merely helped to hand on these ideas, which may be found reproduced with little modification in many monetary treatises of the seventeenth, eighteenth, nineteenth, and indeed twentieth centuries. We need not labour the antiquity of these doctrines but only draw attention in passing to their persistent defiance of the passage of time.

Of greater historical importance is the Spanish contribution to the quantity theory of money. So far as is known, Azpilcueta Navarro was the first writer to note the effect on prices of the influx of treasure from America and thus to give a practical interpretation to a doctrine that had been glimpsed by earlier authors. The relevant passage in Azpilcueta's manual continued to be read and cited for many years after its original publication. But Azpilcueta did not long remain the sole exponent of the quantity theory. The French scholar, Jean Bodin, re-stated the theory independently twelve years after his Spanish predecessor, and his work inspired a number of important economists. In any case the basic principles of the theory spread so quickly that by the beginning of the seventeenth century they were a commonplace of economic literature in many countries.[1] As the quantity theory so soon ceased to be characteristic of Spanish writers alone, and as its later history has frequently been studied, we need not here attempt to trace its development further.

[1] E. F. Heckscher, op. cit., vol. ii, pp. 224–31, and J. Viner, op. cit., p. 41, give numerous quotations from writers of the earlier seventeenth century which present some form of quantity theory.

We now come to a more interesting and difficult problem. Is there any historical connexion between the modern emphasis on utility and rarity as the principal determinants of value and the subjective approach of our Spanish writers? Again, was the old Spanish purchasing-power parity theory handed on continuously until the early nineteenth century, when it reappears in the Bullion Report of 1810, or was it re-stated independently by the English authors of the Report, and yet again towards the end of the First World War by the late Professor Cassel?

Perhaps the most convenient way to deal with these questions will be to work backwards from modern times towards the sixteenth century. Until fairly recently it has been customary to regard the fundamental cleavage in the evolution of nineteenth-century economic thought as having taken place in the 1870s. The English classical economists, it was said, stressed production, supply, and cost: modern theory is mainly concerned with consumption, demand, and utility. But it is now coming to be recognized that a subjectivist theory of value was developed by a number of authors before the concept of marginal utility was formulated by Jevons, Walras, and Menger. While in England the labour theory of value was predominant in the earlier decades of the nineteenth century, on the Continent there was already a tendency to emphasize utility.[1] The leading exponent of this subjective

[1] For a study of the nineteenth-century forerunners of the modern subjective school see M. Bowley, *Nassau Senior and Classical Economics*, London, 1937. Also E. Roll, op. cit., pp. 320–44. The subjective theory of value in the seventeenth and eighteenth centuries is discussed by

or utility theory of value was the French economist, J. B. Say, but some analysis of wants and desires is to be found in the majority of Continental treatises of the period. The subjectivist tradition may be traced back a step farther to the writings of Condillac,[1] Turgot,[2] and Galiani,[3] of whom the latter seems to have been the first eighteenth-century writer to formulate a really consistent and well-developed utility theory.

Condillac and Turgot agree in minimizing the effects of cost-of-production on price, and hold that value is determined primarily by the need felt for the article in question, and by its utility and rarity. The medieval concept of 'common estimation' is echoed in Turgot's doctrine that price is the expression of 'valeur appréciative', which is the 'valeur estimative moyenne' arrived at by comparing the subjective value of the article in the minds of the various individuals that make up the market. Both goods and money are treated from the same subjective standpoint, the foreign exchanges being held to reflect the relative utility of money in the different countries. All this is strongly reminiscent of the teaching of the School of Salamanca.

Condillac and Turgot, like Jevons a century later, seem to have regarded their own emphasis on utility as a novelty. The only predecessor they acknowledge is Galiani, whose brilliant analysis of utility seems at first

R. Zuckerkandl, *Zur Theorie des Preises*, 1899, and by E. Morand, *Theorie psychologique de la valeur jusqu'en 1776*, Bordeaux, 1912.

[1] *Commerce et gouvernement*, 1776, pp. 9–30.

[2] *Valeurs et monnaies*, in *Œuvres*, 1808, vol. iii, pp. 256–93.

[3] *Della Moneta*, 1750, reprinted in *Scrittori classici italiani di economia politica*, 1803, vols. iii and iv.

sight to have sprung fully mature into life: at any rate, Galiani himself gives us no clue to any earlier source. Value, according to Galiani, depends on two factors: utility and rarity. 'It is evident', he says, 'that air and water, which are the elements most useful to human life, have no value because they are not rare. On the other hand, a bag of sand from the shores of Japan might well be rare but would be of no value, since it would have no particular utility.' The whole of Galiani's general theory of value, as it is developed in the second chapter of his great treatise, is simply a witty and elegant elaboration of this fundamental statement.

Now, the overwhelming importance which these eighteenth-century economists attributed to utility and rarity in the determination of value may perhaps have been something of a novelty in their day. But we have seen that the concepts of utility and rarity were placed high in the traditional list of factors determining value which accompanied scholastic discussions of the 'just price'. And we have also seen that our Spanish writers regarded utility and rarity as the primary, though not the sole, determinants of value. We shall have little difficulty in closing the gap of about a hundred and fifty years which separates the last members of the School of Salamanca, Bañez and Molina, from Galiani. It appears, in fact, that both the labour theory of value adopted by the English classical economists and the utility theory that prevailed at the same period on the Continent stemmed from the conventional scholastic list of factors that go to determine price.

The economic theory of the School of Salamanca was developed in treatises on ethics and on jurisprudence, and in manuals of practical theology for the use of confessors. It is in this type of literature, not in monetary treatises as the term is understood today, that the legacy of the Spanish School was most carefully preserved.

The Spanish treatises *de justitia et jure* were closely followed by both Protestant and Catholic writers. We will first deal with the Protestant line of descent. Our Spanish writers had included a chapter on commercial contracts in their writings on the Law of Nations because of the universal character of international trade, which was held to transcend the jurisdiction of particular princes.[1] Many of their Protestant successors followed the same practice and included some discussion of value in their treatises on international law.

A section on contracts was included by Grotius in his most important work on the Law of Nations,[2] which owes much to the writings of the Spanish jurists. In dealing with the problems of commercial justice Grotius continually refers to Azpilcueta Navarro, Covarrubias, Vasquez, and the Belgian theologian Lessius, who, as we shall see, was one of the principal continuators of the Spanish School. Grotius follows Aristotle in holding that want is the natural measure of value. Like many of his Spanish predecessors, Grotius refers to St. Augustine's famous comparison of the 'natural' scale of

[1] As Malynes puts it, 'the Law Merchant is a customary law approved by the authoritie of all Kingdomes and Commonweales, and not a Law established by the Soveraigntie of any Prince, either in the first formation or by continuance of time'.

[2] *De jure belli et pacis*, 1625 (English translation, Oxford, 1925). Grotius's debt to the Spanish jurists is discussed in the Introduction to the English translation, pp. xiii–xiv.

values with the price-scale,[1] the latter depending on utility. But utility, adds Grotius, is not the only measure of value, since the most necessary things are often the cheapest because of their abundance. The common estimation in which an article is held, the labour and expenses of merchants, and the abundance or scarcity of buyers, all affect prices. The value of money similarly varies according to its abundance or scarcity.[2]

This doctrine was taken over and presented in a much more elaborate form by the Lutheran jurist, Samuel Pufendorf (1632–94), whose writings were translated into the principal European languages soon after their publication and remained the standard text-books on natural law until the end of the eighteenth century. Pufendorf's thought closely follows that of Grotius. Pufendorf shows some knowledge of Spanish literature and often draws his illustrations of the conditions of natural law from the writings of the Spanish historians of the Indies. He occasionally mentions Suarez but does not specifically refer to the other Spanish jurists. A precursor of the Enlightenment, Pufendorf was hostile to the spirit of scholasticism. But in considering his aloof attitude towards his Catholic predecessors, we should remember that his work was published in Sweden, a strongly Lutheran country with a strict censorship. Pufendorf was a man of vast learning. It is unlikely that in taking over Grotius's teaching he failed to consult the Spanish authorities to whom Grotius repeatedly refers.

[1] *De jure belli et pacis*, Bk. 2, ch. XII, par. xiv.
[2] Ibid., Bk. 2, ch. XII, par. xvii.

Pufendorf quotes Grotius to the effect that want is the natural measure of value.[1] Things are valuable in so far as they help to preserve human life or to render it more pleasurable, but a thing cannot possess value unless it is rare as well as useful. This is why jewels are dearer than the things that are indispensable to human life, of which nature pours forth a bountiful supply. A thing is commonly estimated at whatever price it will fetch, and this price may justifiably fluctuate within reasonable limits, unless it is fixed by law. In determining the 'common' or uncontrolled price of a thing, we should also consider the labour and expenditure of the merchant, the cost of transport, the mode of sale (whether wholesale, retail, by auction, &c.), and the abundance or scarcity of purchasers, money, and goods. The value of money is derived both from its metal content and from its tale, but 'that increase or decrease which other things undergo because of scarcity or abundance, money itself does not entirely escape, as a coin made of the same material and with the same weight is worth now more and now less, although that variation is not as sudden or as frequent as the variations of value among other things'. All this is very familiar to students of the earlier Spanish treatises.

The work of Grotius and Pufendorf was continued in England by Francis Hutcheson, whose *Introduction*

[1] Pufendorf's most brilliant and comprehensive analysis of value is included in his *De jure naturae et gentium*, 1672 (English translation, Oxford, 1934), Bk. 5, ch. I. But interesting discussions are also to be found in his *Elementorum jurisprudentiae universalis* libri 2, 1660 (English translation, Oxford, 1931), Bk. 2, Def. X, and *De officio hominis et civis juxta legem naturalem*, 1673 (English translation, Oxford, 1927), ch. XIV.

to Moral Philosophy (1747) preserves to a surprisingly large extent the contents and arrangement of the old treatises *de justitia et jure*. In the customary chapter on value, Hutcheson says that 'the ground of all price must be some *fitness* in the things to yield some use or pleasure in life; without this, they can be of no value. But this being presupposed, the prices of things will be in a compound proportion of the *demand* for them, and the *difficulty* in acquiring them'. This 'difficulty', according to Hutcheson, may be occasioned in many ways: if the things are rare, if much labour is required in their production, 'or a more elegant genius in the artist', or if those employed in their manufacture are 'men in high account', accustomed to live 'in a more splendid manner, for the expense of this must be defrayed by the higher profits of their labours'. Some things of the highest utility, such as air and light, yet have no price, or a very small one. This is because nature has provided them in plenty, and we may have them almost without labour.[1]

Hutcheson thus agrees with our Spanish writers, and with Grotius and Pufendorf, in regarding utility as the basis of value, but he lays more emphasis than his predecessors had done on the importance of cost-of-production. In doing so he gave a novel twist to the traditional doctrine of value. Adam Smith follows his teacher Hutcheson in this respect. Indeed, in some parts of his work he seems to regard labour as the sole source of value. Yet in his famous distinction between 'value-in-use' and 'value-in-exchange' he also took account of utility, and stated a paradox that was to

[1] *Introduction to Moral Philosophy*, 1747, pp. 209–10.

provide a starting-point for the discussions of later economists. To many historians, Smith's theory of value appears inexplicably wavering and confused. But if we consider his ideas against the background of the theory of value taught in the earlier literature of natural law, a body of doctrine with which he was thoroughly familiar[1] and whence I believe he drew many of his ideas on value, we shall understand why he saw nothing illogical in holding that both subjective and objective factors play their part in the determination of value. In this he was simply following an established tradition which dated back to medieval times.

If the thought of the School of Salamanca was reflected in the writings of the Protestant jurists, and perhaps in the *Wealth of Nations* itself, its influence on Catholic writers was even deeper and more enduring. Here, the subjective theory of value was preserved side by side with the Spanish purchasing-power parity theory of exchange.

Leonardus Lessius (1554–1623), professor of theology at Louvain, was a Flemish Jesuit who had studied under Suarez and was a friend of Molina and Vasquez. He was the author of a treatise *de justitia et jure* (1605) which ran through nearly forty editions published in Antwerp, Louvain, Lyons, Paris, and Venice. Lessius was especially celebrated for his expert knowledge of commercial practice, and he was often consulted by the merchants of Antwerp on problems of business morality,

[1] Smith's debt to the seventeenth-century writers on natural law is discussed by W. Hasbach, *Untersuchungen über Adam Smith*, Leipzig, 1891, and by G. Morrow, *The Ethical and Economic Theories of Adam Smith*, New York, 1923.

just as their forefathers had appealed to Vitoria and the doctors of Paris some eighty years earlier.[1] Throughout his treatise Lessius continually refers to our Spanish writers and adheres closely to their teaching. On the foreign exchanges he follows Medina, Navarro, and Soto, and applies their doctrine to conditions in Belgium. Money, according to Lessius, has a dual value: the legal or 'intrinsic' value, depending on the metal content and on the tale, which is fixed by law or custom in terms of the other moneys that are current in the same area of circulation, and the fortuitous or 'extrinsic' value, which fluctuates both in terms of goods and in terms of foreign currency. The extrinsic value of money is derived from four things. Firstly, from its abundance or scarcity. Wherever money is more abundant, there will it be less useful for the purpose of buying goods or foreign currency. Secondly, from the demand that exists for bills of exchange. 'Just as many buyers cause the price of goods to rise, so does a heavy demand for bills of exchange raise the price of money in the hands of the brokers, whether the money be present or absent.' Thirdly, from the supply of bills of exchange. Where they are in short supply, their price will tend to rise. Fourthly, from the need that is felt for money. 'For example, if great princes are in urgent need of money for war or other public purposes, or if a large quantity of goods come on to the market; for whenever money is urgently needed for matters of great moment, so is it more highly esteemed in terms of goods.'[2]

[1] See article 'Lessius' in the *Catholic Encyclopaedia*.

[2] *De Justitia et Jure*, Louvain, 1605, Lib. 2, ch. 23, Dub. 4.

Similar views are propounded by Juan de Salas, professor of theology at Salamanca, whose treatise on contracts appeared in 1617.[1] In his general discussion of value, Salas remarks that the natural or uncontrolled price of goods depends, as Augustine said, on their utility. The natural price will vary according to the abundance or scarcity of both goods and money, the newness or antiquity of the goods, 'the common utility of the article and the need felt for it', and the manner of sale (whether wholesale, retail, in bulk, by auction, &c.). Salas adds that 'goods sold in the warehouse are cheap, because this mode of sale indicates abundance of goods and scarcity of buyers and money, and suggests that the articles possess only slight utility for the vendor'. Turning to the value of money and the problems of the exchanges, Salas repeats the doctrine of Lessius and his Spanish predecessors more or less word for word.

A very celebrated treatise *de justitia et jure* was that of the Spanish Jesuit, Juan de Lugo, who, after studying law and theology at Salamanca, was called to Rome to teach at the Jesuit College there, and was later created Cardinal.[2] The author of a work on psychology and another on physics, as well as of many theological treatises, Lugo was regarded by St. Alphonsus of Liguori as 'easily the leader after St. Thomas', and has been called by a modern Jesuit scholar[3] 'probably the greatest and most representative of [Jesuit] theologians'. Lugo's

[1] *Comentarii in Secundam Secundae D. Thomae de contractibus*, Lyons, 1617, see especially pp. 9, 11, 32–34, 357, 573–8.

[2] See article 'Lugo' in the *Catholic Encyclopaedia*.

[3] J. Brodrick, *The Economic Morals of the Jesuits*, London, 1934, p. 89.

fame chiefly rests on his treatise *de justitia et jure*, the fruit of his studies at Salamanca and a work of astonishing complexity, which was published in 1642 and reprinted several times during the seventeenth and eighteenth centuries. The last edition appeared as recently as 1893.

In his general remarks on value, Lugo says that earlier authorities, such as Scotus and Major, regarded the just price as derived from labour, expenses, and risk, but that the more recent writers, such as Soto, Medina, Covarrubias, Conrad, and Molina, disagree with this view and hold that price fluctuates

not because of the intrinsic and substantial perfection of the articles—since mice are more perfect than corn, and yet are worth less—but on account of their utility in respect of human need, and then only on account of estimation; for jewels are much less useful than corn in the house, and yet their price is much higher. And we must take into account not only the estimation of prudent men, but also that of the imprudent, if they are sufficiently numerous in a place. This is why our glass trinkets are in Ethiopia justly exchanged for gold, because they are commonly more esteemed there. And among the Japanese, objects made of old tiles and ironwork, which are worth nothing to us, are sold at a high price because of their antiquity. Communal estimation, even if foolish, raises the natural price of goods, since the latter is derived from estimation. The natural price is raised by abundance of buyers and money, and lowered by the contrary factors.[1]

Discussing the value of money, Lugo repeats the venerable doctrine that money has a legal and a natural

[1] *De Justitia et Jure*, Lyons, 1642, Disp. XXVI, sec. iv, par. 41–44.

value. The natural price of money (called by Lessius the 'extrinsic price') is derived from 'the excellence of the metal content,[1] the antiquity of the coins, their degree of utility for commercial purposes, and the readiness of foreigners to accept them'. The old purchasing-power parity theory of exchange appears very clearly in Juan de Lugo's work.[2]

Another influential follower of the Spanish School was the Genoese philosopher and jurisconsult, Sigismundo Scaccia, whose *Tractatus de Commerciis et Cambiis* was published in 1618 and frequently reprinted in Italy, France, and Germany, up to about the middle of the eighteenth century. Scaccia's teaching is based largely on that of the School of Salamanca and on Lessius, although he also often refers to the medieval schoolmen. On the value of goods he quotes Covarrubias and Azpilcueta to the effect that things are worth less when they are abundant and more when they are scarce, an article being 'abundant' when many people offer it for sale, and 'scarce' when more buyers than sellers come forward. In his chapter on the foreign

[1] *Sic.* This factor is included by mistake among those that determine the natural or extrinsic price of money. See the Note that follows.

[2] 'It is to be noted with Lessius, Molina, and Salas, that the excess of this unequal value which money has in different places is not derived only from the higher intrinsic value of money, proceeding from its superior metal content or higher legal tale, but may also be caused by a diversity in its extrinsic value. Thus, in the place to which the money is sent there may be a general scarcity of money, or more people may require it, or there may be better opportunities for doing business with it and making a profit. And, since money will there be more useful for satisfying human needs, more goods will be bought than elsewhere with the same sum of money, and therefore money will rightly be regarded as more valuable in that place.' Op. cit., Disp. XXVIII, sect. vi, par. 40.

exchanges, Scaccia refers his readers to the explanation given by Soto of the premium charged on bills of exchange drawn in Antwerp on Spain, and he applies Soto's doctrine in a very lucid manner to the exchanges between France and Italy.[1]

Thus it is clear that the monetary theory of the School of Salamanca spread through many countries during the earlier decades of the seventeenth century, and that it continued to be developed and freshly applied in a number of the leading treatises on theology and jurisprudence. Although most of the original members of the School were Dominicans, it will be noticed that among the seventeenth-century writers who continued its teaching there were many Jesuits. As practical moralists, the Jesuits were very much to the fore at this time, since a great part of their work lay in the confessional. They produced a vast number of manuals for the use of confessors, in which they often discuss knotty problems of commercial ethics on the lines laid down by the School of Salamanca.[2] It may be assumed that

[1] 'The fact that, by reason of the greater scarcity or abundance of money in different places, a larger or smaller sum may be given or accepted appears in the transactions commonly effected between Italy and France. For when money is scarce in France on account of the civil wars there, and plentiful in Italy, whoever delivers money in France for repayment in Italy will receive more than he gave. On the other hand, a merchant who delivers money in Italy for repayment in France will receive less. Yet this is no usury, for one sum is equal to the other, on account of the relative abundance and scarcity of money.' *Tractatus de Commerciis et Cambiis*, 1618, Bk. 1, Quaest. 7, par. 1, 48.

[2] A typical and popular example was the *Theologiae Moralis* of Antonio de Escobar. This manual, which was published in 1652, was a compendium of twenty-four earlier works on moral theology, mostly by Spanish authors such as Molina, Suarez, and Lugo. Escobar says that the natural price of an article depends on the estimation of men,

their doctrines filtered through to the laity. I do not suggest that these tedious works constituted the favourite reading of the average *honnête homme*, but we have only to turn to Pascal's *Provincial Letters* to realize how great an influence the Jesuit theologians exerted on ordinary life and thought in France at this period. Pascal employs all his accustomed verve and irony in attacking many of the writers whose work we have been considering (he devotes the Eighth Letter to impugning their doctrine of usury), and it is evident that, writing in 1656, he looked upon our Spanish writers and all their works as a force both living and dangerous.

It would seem, then, that a markedly subjectivist theory of value, emphasizing the effect on price of utility, rarity, and the forces of supply and demand, was widely current among theologians and jurists throughout the seventeenth century, and that this theory was largely built up on the work of the School of Salamanca. In Protestant countries this subjective theory was expounded in the literature of natural law, and in Catholic countries in that of theology as well as of jurisprudence. We have here a possible explanation of the isolated references to utility and rarity which are scattered through the practical handbooks of the mercantilists.[1]

taking into account the scarcity or plenty of goods, buyers, sellers, and money, the manner of sale, the utility of the article in question, and the labour and expenses of merchants. Escobar was attacked with particular virulence by Pascal, and his name now figures in French dictionaries as the very symbol of prevarication.

[1] Examples are given in most histories of economic theory. The sort of statement I have in mind is the following by John Law: 'Goods have a value from the Uses they are apply'd to; and their Value is Greater or Lesser, not so much from their more or less valuable, or necessary Uses; as from the greater or lesser Quantity of them in proportion to the

Such utterances are sometimes hailed as isolated flashes of genius, brilliant anticipations of the truths of modern economics. In fact, they are only reflections of a well-established body of doctrine. If in a sense they 'anticipate' modern theory, this is because modern theory has been built up on earlier work of the kind we are here considering.

The most serious objection to the version of events just put forward is the fact that Condillac, Turgot, and Galiani all asserted that their own emphasis on utility and rarity was a novelty. All three writers were noted for their learning, especially in theology and jurisprudence. It is hard to believe that they had not read any of the books referred to above. As eighteenth-century *philosophes* they might perhaps have felt reluctant to acknowledge their debt to the casuists. But any such reluctance could not have extended to Grotius, Pufendorf, or Hutcheson. I can only suppose that Galiani came across the essential elements of his theory of value in the work of some earlier author, and that the wit and grace with which he expressed these old truths made them seem like innovations to his contemporaries. However this may be, the existence of a subjective theory of value in the work of our Spanish writers and their successors may well have paved the way for the favourable reception that was at once accorded to Galiani's great masterpiece.

Demand for them. *Example*. Water is of great use, yet of little Value; because the Quantity of Water is much greater than the Demand for it. Diamonds are of little use, yet of great Value, because the Demand for Diamonds is much greater than the Quantity of them.' *Money and Trade consider'd*, 1705, ch. I.

As regards the later history of the purchasing-power parity theory, we have seen that it was understood and newly applied until about the middle of the seventeenth century. The last traces of the medieval objection to exchange transactions (though not, of course, the dislike of usury itself) seem to have died away towards the end of the seventeenth century. In France, for example, the rule that 'the place where a bill is drawn must be so far distant from the place where it is payable that there may be a possible rate of exchange between the two'—in other words, that a bill must represent a genuine commercial transaction and not merely a loan—began to disappear at about this time.[1] And with the disappearance of this rule, the old purchasing-power parity theory, which had been framed to show that the premium on a bill of exchange was not necessarily a disguised form of interest on a loan, lost its *raison d'être* and presumably died a natural death after performing a useful function for close on 150 years. Another century was to elapse before the theory was re-stated quite independently by the English classical economists, who probably arrived at it through the interesting series of discussions on the mechanics of international trade initiated by Malynes and Mun. Cassel, whose version of the theory is still current, had probably never heard of either of the two earlier forms of purchasing-power parity theory.

It was, then, in their analysis of value that our Spanish writers appear to have made their most enduring contribution to economic theory. But their pioneer

[1] Holdsworth, op. cit., vol. viii, p. 169.

work on the quantity theory and the purchasing-power parity theory of exchange is also of great interest. These achievements should surely entitle our writers to an honourable place in the history of economic science.

Are there any general conclusions to be drawn from our study of the monetary theory of the School of Salamanca? Only, perhaps, that some of the leading ideas of modern theory have a longer history than is often supposed. And I think that no student who has spent a little time in turning over these old treatises can fail to be impressed by the large measure of agreement on the fundamental problems of economic theory that has united men of all countries and periods, living under the most varied religious, social, and economic systems. If we began our study with a quotation from Cervantes, we may well end with one from Marshall. 'The new doctrines', he says, 'have supplemented the old, have extended, developed, and sometimes corrected them, and have often given them a different tone by a new distribution of emphasis, but very seldom have subverted them.'

TEXTS

I

Luís Saravia de la Calle, *Instrucción de mercaderes*, Medina del Campo, 1544

CHAPTER 2

Of the Just Price

pp. xxvii–xxviii

EXCLUDING all deceit and malice, the just price of a thing is the price which it commonly fetches at the time and place of the deal, in cash, and bearing in mind the particular circumstances and manner of the sale, the abundance of goods and money, the number of buyers and sellers, the difficulty of procuring the goods, and the benefit to be enjoyed by their use, according to the judgement of an honest man.

I have said 'in the place', because the mere change from one place to another raises or lowers the price, according to whether the merchandise is abundant or scarce there. Thus we see by experience that in seaports fish is cheaper than elsewhere. Things are cheaper in the places where they are produced than in those to which they have to be sent.

I have said also 'in the place'. For we have to consider the place where the contract is arranged, not where the goods are situated. Merchandise in one place is consigned from another where the contract is drawn up, and ownership is transferred from there. If I buy spices in Genoa being myself in Milan, and I agree on the price and pay for the goods in Milan, the just price is the price current in Milan, as Sylvester observes (*Usura*, 11).

I have said 'at the time', for time alone raises or lowers the price of a thing. Thus it is clear that wheat is commonly worth more in May than in August, solely on account of time.

I have said 'bearing in mind the manner of the sale'. For an eager seller generally sets a lower price on his goods than one who is reluctant. Hence we see that a man who has bought a length of cloth from the merchant's house at its just price will find that in his hands the cloth will be worth less, since he will be inviting merchants and purchasers with it. As the Latin proverb says, *ultronee merces vilescunt*, goods willingly sold are worth less and fall in price.

I have said 'the abundance of merchants and money'. For in truth this is the principal reason why things are cheap or dear, and to this are reduced the three already mentioned: time, place, and manner of sale. The mere abundance or scarcity of goods, merchants, and money raises or lowers the price, as bargainers at fairs know by experience. For if a thing is worth more at one time or place than at another, or sold eagerly or reluctantly, it is because of the abundance or scarcity of goods, merchants, and money. If a great deal of merchandise is brought from many parts to the place where the goods are situated, then the latter will be cheap. This is why eggs are cheaper in a village than a city: because in a village there are more eggs, fewer buyers, and less money. And if in August wheat is cheaper than in May, this is because wheat is more abundant in August than in May. And if goods sold eagerly are worth less, it is because buyers are few. If many people wanted to buy them, they would not be sold for less than the cost price. So that in order to determine the just price we need only consider these three things: abundance or scarcity of goods, merchants, and money—of things which people want to barter and exchange for money. This doctrine is founded on Aristotle's dictum, *precium rei humana indigentia mensurat*, the price of things is measured by human needs. Thus we see that houses and estates are worth much less after wars and pestilences than before, because there are fewer people to buy them, although the property has not in itself deteriorated. Also, at the end of markets and fairs goods are worth less than when they are in full swing, because many buyers have left and the owners are unwilling to wait for others. From this we infer that the reason why a particular individual wishes to sell does not raise or lower the price.

CHAPTER 3

How the Just Price may be known

p. xxx

Those who measure the just price by the labour, costs, and risk incurred by the person who deals in the merchandise or produces it, or by the cost of transport or the expense of travelling to and from the fair, or by what he has to pay the factors for their industry, risk, and labour, are greatly in error, and still more so are those who allow a certain profit of a fifth or a tenth. For the just price arises from the abundance or scarcity of goods, merchants, and money, as has been said, and not from costs, labour, and risk. If we had to consider labour and risk in order to assess the just price, no merchant would ever suffer loss, nor would abundance or scarcity of goods and money enter into the question. Prices are not commonly fixed on the basis of costs. Why should a bale of linen brought overland from Brittany at great expense be worth more than one which is transported cheaply by sea? Or take the cloth which I brought home from the fair on my horse and which cost me more than that which I carried in the cart. I have both bales in my shop and sell them at the same price, and it would be unjust to ask more for one than for the other, when both were woven at the same time and are of the same quality, colour, and so on. . . . Why should a book written out by hand be worth more than one which is printed, when the latter is better though it costs less to produce? Finally, why, when the type of Toulouse is the best, should it be cheaper than the vile type of Paris? The just price is found not by counting the cost but by the common estimation. . . .

The public officials who fix the just price of goods do not consider costs but the scarcity or abundance of goods in the city. This is why first-fruits are dearer, because of their scarcity, not because they cost more to bring to market. Both early and late fruits come from the same orchard and tree.

II

Domingo de Soto, *De Justitia et Jure*, Salamanca, 1553. Lib. VI, Q. 2, Art. III, pp. 546–9

Should prices be determined according to the judgement of the merchants themselves?

SINCE price is the basis of justice in buying and selling, we shall now consider whether prices should be fixed according to the estimation of merchants themselves.

It is argued in the affirmative:

Firstly, that the rule 'A thing is worth whatever it can be sold for', is a celebrated axiom among jurisconsults. Therefore, excluding fraud and malice, we should leave merchants to fix the price of their wares.

Secondly, that in any art we have to take the word of the experts, as Aristotle (*Polit.* 7) and Paulus (l. *in re mandata*) remind us; every man is the best judge of his own business. Now, the business of merchants is to understand merchandise. Therefore, we must defer to their opinion in settling prices.

Thirdly, that a man may do as he likes with his own property. Consequently, he may ask and receive whatever price he can extort for his wares, as happens with jewels and other precious objects.

Against this, there is a law cited by Falcidius which says: 'The price of goods is not determined by the wish or convenience of individuals, but by the community.' That is, by common estimation.

This Question is answered by four Conclusions:

First Conclusion. The price of goods is not determined by their nature but by the measure in which they serve the needs of mankind. There is a natural reason for this Conclusion. Since the world and everything in it was created for the sake of man, goods are valuable in the eyes of the citizens in so far as they are of service to men. Aristotle (*Ethics*, 5, ch. 5) says that *want* is the cause and measure of human commerce. If no one needed the goods or labour of his fellows, men would cease to exchange their products. We have to admit, then, that want is the basis of price. Foodstuffs are especially important for human life; as Augustine says (lib. 2, ch. 16, *City of God*), a man would rather have corn than mice in his house. And a house is generally worth more than a horse, and a horse often more than a slave: for the nature of man confers no special virtue upon his body to raise its value. When, however, we speak of 'want', we understand also that the republic has need of adornment; we include not only such things as are necessary for human life, but also such as render it pleasurable and splendid.

Second Conclusion. In examining the problem of the just price, we have to consider many things, which fall into three classes. We must first take into account the demand which exists for the article, and its abundance or scarcity. Next, we must bear in mind the labour, trouble, and risk which the transaction involves. Finally, we must consider whether the exchange is for better or worse, to the advantage or disadvantage of the vendor, whether buyers are scarce or numerous, and all other things which a prudent man may properly take into account.

Third Conclusion. The just price of an article is two-fold: the legal and the natural price. The legal price is always indivisible; but the natural or discretionary price is, broadly speaking, divisible. The just legal price is that which is fixed by the prince. The discretionary or natural price is that which is current when prices are not legally controlled. This distinction between the natural and the legal price is drawn by Aristotle (*Ethics*, 5, ch. 7).

To understand this Conclusion and to judge its validity, and to see why it is necessary for prices to be controlled, we must realize that the matter is a primary concern of the republic and its governors, who, in spite of the arguments repeated above, ought really to fix the price of every article. But since they cannot possibly do so in all cases, the task is left to the discretion of buyers and sellers. The price which results is called the natural price because it reflects the nature of the goods, and the utility and convenience which they bring.

When the price is fixed by law (for instance, when a measure of wheat or wine, or a length of cloth, is sold for a certain sum) it is not lawful to increase this price by even a single farthing. If the excess be great, then it is mortal sin and a matter for restitution. A trivial increase, however, only constitutes a venial sin. Now we understand why the legal price is said to be indivisible. . . .

Uncontrolled prices are not indivisible but enjoy a certain latitude within the bounds of justice, of which one extreme is called the 'rigid', the other the 'merciful', and the middle the 'moderate' price. If an article may justly be sold for ten ducats, then it may also be sold for eleven or for nine. . . .

The natural price is not determined by the judgement of the individual merchant, but by the opinion of prudent and fair-minded men. It would be a most fallacious rule if, whenever a merchant bought an article, he added on to its price the value of his labour and risk, and then expected to sell it at this increased value. In fact, if a merchant ignorantly buys some article at more than the proper price, or if he suffers ill fortune (for instance, if the goods he has bought unexpectedly become abundant), he cannot justly extort the costs which he has incurred. On the other hand, another merchant may be more industrious or more fortunate; perhaps he has been able to buy cheaply, or perhaps he has been lucky enough to see the goods come into short supply after he has bought them. Yet it will hardly be lawful for him to sell more dearly on the same day or in the same place, and he certainly may not do so merely because the goods have increased in value. The art of commerce is largely dependent upon chance, and merchants should learn to bow to misfortune and to wait for better times to come. . . .

Finally, the Fourth Conclusion will help us to clarify our idea on this subject. Prices rise when buyers are numerous and fall when they are scarce. Likewise, prices fall when sellers are numerous and rise when they are scarce. Indeed, in places where goods are plentiful, there clearly must be more sellers than buyers.

Solution. If, reader, you are puzzled as to whether prices vary because of the reason and manner of the particular sale, you may extract your answer from what has been said above. The reason why a particular article is sold does not in itself affect the price. It is immaterial whether the vendor is compelled by necessity to sell his wares or merely has a sufficiency of them and does not require them. Similarly, whether the purchaser buys from necessity or for pleasure does not alter the price. Nevertheless, if the vendor is forced by necessity to auction his goods, and if there are few purchasers, then their price will fall. And in time of war, when the spoils of victory are divided, very few goods are sold at all. On the other hand, when merchants publicly await buyers, the value of the goods rises, because then more buyers come forward. For the same reason, prices are higher at the beginning than at the end of the fairs.

This Conclusion shows the iniquity of monopolies, which arise when a merchant buys from his prince the sole right to sell an article; or when two or three merchants, forestalling the rest, combine to buy up stocks, so that the public is driven to deal with them; or when they agree not to sell below a certain price. And a monopoly of buyers who combine to reduce prices is equally unjust. . . .

It remains for us to reply to the affirmative arguments which we mentioned at the beginning of our discussion. First of all, the rule that a thing is worth whatever price it will fetch is plainly not as far-reaching as it sounds. Otherwise we could lawfully sell outside the limits of the just price—perhaps for two or three times as much. . . . The meaning of the dictum is, that a thing is worth whatever it will fetch excluding fraud and malice. . . .

To the second argument we reply that experts are to be believed only when their own interests are not concerned, and that a man is the best judge of his own affairs only when these cannot affect other people. But a vendor is not dealing only with his own property, but with something which belongs jointly to himself and the purchaser. And of this he is not a legitimate judge.

Since jewels and other precious objects were mentioned in the third argument, we ought to distinguish between these and ordinary goods. Such things are least necessary to the republic and may be sold for whatever price a prudent and well-informed purchaser may care to pay. Fine horses, jewels, and falcons fall into this class. We look to such things for the adornment, dignity, and splendour of the nobility: and it is for the magnificence of magnates to esteem them magnificently. But food, clothes, and other things of the sort, are necessary to the republic. Let no fraud or malice creep into their pricing: which means, reader, that you are not to sell such things piecemeal for whatever price you can extort.

MARTÍN DE AZPILCUETA NAVARRO
From a contemporary engraving

III

Martín de Azpilcueta Navarro, *Comentario resolutorio de usuras*, Salamanca, 1556.

The Origin and Functions of Money

pp. 57–58

EXCHANGE, or the barter of things other than money, as the jurisconsult Paulus elegantly shows, is a much more ancient contract than that of sale and purchase, which began after money was invented. Before the invention of money, anyone who wished to exchange his house for another was obliged to seek out some person who had the house he wanted and who was willing to exchange it; while a man who had wine and wool but no wheat or shoes would try to find another who had wheat and shoes and was prepared to make the exchange, as is still done by some of the barbarous peoples with whom the Spaniards trade. Later, however, money was invented. Certainly, in one way it was a very necessary invention; and yet, in another, I doubt whether it is really so today, for it destroys souls through avarice, bodies by war and great dangers upon the seas, and even whole fleets (in which it is transported) by fearful tempests and shipwrecks.

The earliest use of money, then, and the principal reason for its invention, was as a price, so that it might promote the sale and purchase of all things needful for human life, and also serve as a kind of public measure of saleable goods. Later on, money of one metal or tale began to be changed for that of another: for example, coins of larger denominations for those of smaller. Still later, when the money of a particular country came to be worth less there than abroad (as today nearly all the gold and silver of Spain is worth less in Spain than in Flanders and France), there came into being the art of exchange, which is the art of giving and taking one kind of money in exchange for another. In this way money began to pass from places where it was worth less to those where it was worth more. Thus, in our own day many people have greatly increased their fortunes by carrying to Flanders and France ducats of two, four, and ten, some in kegs as though they were olives, others in barrels hidden in the wine, on each of which they make a big profit; and they bring merchandise from abroad which is worth little there, and here much, doing us some good in the one, but a great deal of harm in the other.

Now, Aristotle disapproved of this art of exchange and of trading in money: it seemed to him both unnatural and unprofitable to the republic, and to have no end other than gain, which is an end without end. St. Thomas, too, condemned all business whose main object is gain for gain's sake. But even St. Thomas allows that the merchant's trade is lawful so long as he undertakes it for a moderate profit in order to maintain himself and his family. After all, the art of exchange benefits the republic to some extent. I myself hold it to be lawful, provided it is conducted as it should be, in order to earn a moderate living. Nor is it true that to use money by changing it at a profit is against nature.

Although this is not the first and principal use for which money was invented, it is none the less an important secondary use. To deal in shoes for profit is not the chief use for which they were invented, which is to protect our feet: but this is not to say that to trade in shoes is against nature.

The Value of Money in Exchange

p. 80

The difficulty is to see how a man may change money at a profit while giving the money its just value. To which we reply that this may be done with money as with other goods by paying it over in exchange when or where it is worth less and being repaid when or where it is worth more. As St. Thomas clearly explains, and we have said already, money (even considered purely as money) may justly be exchanged for other money at a profit.

The solution of the problem lies in knowing how and why a given money, which is equal to another according to the common price set upon it by law or custom at the time of its minting, comes to be worth more than the other. We cannot know whether an exchange transaction be just unless we know the value of both moneys; since, as we have seen, the money must be changed at its proper value if the transaction is to be a fair one.

Now, we maintain that the value of the two moneys may diverge for one of eight reasons:

First, because the moneys are of different metals.

Second, because the metal of which they are made is of different fineness.

Third, because the moneys are of different tale or weight.

Fourth, because they are in different countries.

Fifth, because one of them may be repudiated, raised, or lowered.

Sixth, because of diversity in time.

Seventh, because of scarcity and need.

Eighth, because one of the moneys is absent and the other present.

As to the first respect, which is because the moneys are of different metals, sometimes a gold ducat is worth more to its owner than its equivalent in silver or metal, because he can store or transport it more easily. On the other hand, sometimes a ducat of silver or metal will be worth more than one of gold, owing to a scarcity of small change for spending purposes.

As to the second respect, a variation in the metal of the moneys in question, it sometimes happens that of two ducats which are legally estimated at the same value (for example, the ducats of Castile, Portugal, Hungary, and Florence) one may be worth more than another, even if they are in the same country.

As to the third respect, a difference in tale or weight, sometimes one ducat may be worth more than another of the same issue, if, for instance, it weighs a grain too much or is particularly clearly stamped, and if the other weighs a grain too little or is broken, clipped, or otherwise disfigured.

As to the fourth respect, one and the same money may be worth more in one country than in another, as Calderinus admits. This may happen either because the metal of which it is made is more valuable in the one than in the other (gold, for example, is worth more in Spain than in the Indies, and more in France than in Spain), or because the king or the custom of one country sets a higher value upon it than the king or the custom of the other. It happened, for instance, at the time when I was studying in Toulouse, that the King of France greatly raised the tale of his *écus d'or au soleil* and of the Spanish ducat, and it is said that he has since raised it still higher. So far, nearly everyone is in agreement.

As to the fifth respect, which is that a money may be repudiated and its value lowered, or that such a measure is feared, we have seen in recent years that the *tarjas* of 10 were worth less at one time than before. And in other countries, where many lords have the right to mint money, they often forbid the circulation of their neighbours' money in their own territory. Others lower the price of their money, and then its exchange value falls, just as when its circulation is forbidden. Similarly, whenever such repudiation or lowering of the value of money is expected, and the matter is in doubt, the exchange value of the money tends to fall. When, however, there is a possibility of its price being raised, the money begins to exchange for rather more than was formerly the case. . . .

As to the sixth respect, diversity in time, which causes money to rise or fall in value, a hundred gold, silver, or metal ducats, or a hundred absolutely in quantity, may sometimes be worth more and sometimes less than in a year's time. They would be worth more if for one of many possible reasons (for instance, if money has been sent abroad to buy provisions, make war, or help friends who have been at war, &c.) there is a shortage of certain coins or of all of them, and if in a year's time they become abundant, either because provisions or other merchandise of the country have been sold, or because the king has paid his soldiers and servants well, or for other similar reasons. On the other hand, they will be worth less now than in a year's time if they are now abundant and in a year's time become scarce, just as a load of wheat is usually worth less in August, when it is plentiful, than in May, when it is scarce or at any rate scarcer. . . .

As to the seventh respect which causes money to rise or fall in value (namely, whether it is scarce and greatly needed, or abundant), money is worth more when and where it is scarce than where it is abundant, as is maintained by Calderinus, Laurentius de Rodolphis, and Sylvester, with whom Cajetan and Soto agree. The reasons for this opinion are as follows:

First, that this concept is common to all men, good and evil, throughout Christendom, and thus it would seem to be a law of God and Nature.

Second, and of great importance, that all merchandise becomes dearer when it is in great demand and short supply, and that money, in so far as it may be sold, bartered, or exchanged by some other form of contract, is merchandise and therefore also becomes dearer when it is in great demand and short supply.

Third, that (other things being equal) in countries where there is a great scarcity of money all other saleable goods, and even the hands and labour of men, are given for less money than where it is abundant. Thus we see by experience that in France, where money is scarcer than in Spain, bread, wine, cloth, and labour are worth much less. And even in Spain, in times when money was scarcer, saleable goods and labour were given for very much less than after the discovery of the Indies, which flooded the country with gold and silver. The reason for this is that money is worth more where and when it is scarce than where and when it is abundant. What some men say, that a scarcity of money brings down other things, arises from the fact that its excessive rise makes other things seem lower, just as a short man standing beside a very tall one looks shorter than when he is beside a man of his own height.

Fourth, if there is a shortage of gold coins their value may well increase, so that more coins of silver or other metal are given in exchange for them. Thus we now see that because of the great scarcity of gold money some people will give 23, and even 24 and 25 *reales* for a doubloon, which according to the law and price of the kingdom is worth only 22. Similarly, if silver money becomes scarce its value may rise, so that more gold or metal money is given in exchange for it. Thus in Portugal we have been given 106 *maravedís* in *cetis*, at a time when they were abundant, for one *testón*, which was worth only 100. Afterwards, when *cetis* became scarce, only 94 were given to the *testón*. Thus it seems that a general shortage of money produces a general rise in its value.

IV

Tomás de Mercado, *Tratos y contratos de mercaderes*, Salamanca, 1569

Numisma est virtute omnia, estque fideiussor futurae necessitatis. (Aristotle, *Ethics*)

p. 77, reverse

One of the principal requisites for the prosperity and happiness of a kingdom is always to hold within itself a great quantity of money and an abundance of gold and silver, which are in substance all the temporal riches of this life, or, at least, which come to embrace them all. A kingdom which has money in some sense has all things. Few or none will be lacking in such a nation, for the fame of its wealth will attract even the Unicorns and Elephants of Prester John. And the thing which destroys this abundance and causes poverty is the export of money when this is permitted. For no fertility and plenty can be so great that it will not at last be exhausted if it is continually diminished. And it must necessarily be diminished if the money is carried out of the country. Of this the West Indies can bear good witness though they are most fertile and abundant in these metals, which are their own produce and fruit and which they cultivate and export as others do vines and olives. Often, with the constant drainage of gold to Spain, not the smallest jot of silver can be seen for days together. For this reason some countries remedy the evil by raising the price of their money, a most effective, infallible, and easy way of ensuring that it is never exported. A thing that by no other means can be achieved. For when merchants have to pay a certain price for money they cannot and dare not take it to a place where it is worth less, for fear of loss. If a crown costs me 16 *reales* in Seville I shall not take it to Florence where it is only worth 12. This good counsel has been followed, I believe, by Guatemala. Seeing her abundant stock of gold disappearing hour by hour, she managed to check the drainage by raising the price of gold, both minted and in bars. From that time forward very little escaped. The money circulates among the Guatemalans, and if goods are imported from abroad the counterlot is sent in the form of silver, cocoa, or blankets of the country. The Guatemalans have thus dammed up their money. The same thing has been done with the *bajas* and *cuartos* of Sto Domingo, and this is a much better way of keeping the precious metals in the country than to forbid their export, even on pain of death, as in Spain. However many laws are passed, and however strictly we may try to enforce them, foreigners will continue to despoil the country of gold and silver, and stuff their own with them, finding a thousand frauds and deceits for the purpose. So much so that in Spain, the very source and fount of escudos and crowns, scarcely a handful can be scraped together, whereas if you go to Genoa, Rome, Antwerp, or Venice, you will see in the street of the bankers and money-changers, without exaggeration, as many piles of coins minted in Seville as there are piles of melons in San Salvador or in the Arenal. If this manifest sack and robbery had been remedied at the time of the discovery of the Indies (millions having come since then), I'll warrant there would now be as much gold and silver in Spain as in all Jerusalem in the reign of Solomon.

The Justice of the Exchanges

p. 92 verso

The third reason which is regarded as the foundation of the exchanges is the diversity that exists in the estimation of money. And in order to understand it (for it is a very weighty reason) we must realize that the value and price of money are not the same thing as its estimation. A very clear proof of this is that in the Indies money is worth the same as here; that is to say, a *real* is worth 34 *maravedís*. A peso is worth 13 *reales*, and its price is the same in Spain, but although the value and price are the same the estimation is very different in the two places. For money is esteemed much less in the Indies than in Spain. The quality and disposition of the country engender in the hearts of all who enter it so generous a temper that they esteem a dozen *reales* of no greater value than a dozen *maravedís* here. After the Indies, the place where money is least esteemed is Seville, the city that gathers unto herself all good things from the New World, and, after Seville, the other parts of Spain. Money is highly esteemed in Flanders, Rome, Germany, and England. This estimation and appreciation are brought about, in the first place, by the abundance or scarcity of these metals;

since they are found and mined in America, they are there held in little esteem.

Of how the diverse Estimation of Moneys is sufficient to justify the Exchanges

pp. 94–95

There are two points to be investigated and clarified in this chapter. The first is that modern exchange transactions are founded on the diversity in the estimation of money. It is understood that this estimation is to be universal throughout the whole of a kingdom, not peculiar to two or three or five needy persons in a town. Thus we see that in all Flanders and in all Rome money is more highly esteemed than in all Seville, and in Seville more than in the Indies, and in the Indies more than in New Spain, and in New Spain more than in Peru.

What I have said will be clear when we come to examine this sort of commerce. Nowhere is so large an increment charged as in places where it is evident that money is greatly esteemed. The most profitable exchange transactions are those of Flanders and Rome on Spain, where money is clearly worth more than elsewhere [*sic.*]. This is good proof that money-changers take this diversity of estimation into account.

The second point is that from Seville on Medina, Lisbon, and any other place, the thing that causes a rise or fall in the market is the abundance or scarcity of silver. If it is abundant the rate is low, and, if scarce, high. Clearly, then, abundance or scarcity causes money to be little or greatly esteemed. Hence, if in Seville at the present moment money is esteemed more highly than it will be in a month's time, this is simply because in some way the market will have been altered and freshly supplied, and, since money will be more abundant, its estimation will fall. Estimation is and always will be the basis of such transactions.

Indeed, these two considerations seem to me to be evident and effective, and I think that they clearly show how important for this type of business is the fact that money is more highly esteemed in one place than in another. In practice we see that when a money-changer knows that money is going to be very scarce in some province he tries to send large sums there in good time.

Our opinion is rendered very probable and even true by the proof which we have given earlier in this treatise that the profit gained in an exchange transaction does not arise because of any variation in the fineness of the two moneys, or because one is present and the other absent, or as a salary for transporting the money, as many people have thought. It follows that the rate can be founded on no other reason (if it is to have a foundation at all) but the diverse estimation in which money is held from city to city. Thus we see that the money-changers make use of all their shrewdness and ingenuity in arranging to place large sums where money is highly esteemed either always or for a few days; and we also understand the reason for the fluctuations in the rate.

If in spite of all these arguments the reader persists that this is not the foundation of the exchanges, I shall not oppose him very strongly but shall request him to show the true reason, or, at any rate, one better and more fitting than my own. In these obscure and complicated matters I am not so obstinate or tenacious of my own judgement that I believe in it like the Gospel. The explanation I have given seems to correspond most nearly to commercial practice, more especially since we are not at present investigating the nature and justice of one sort of exchange transaction, or two, or any in particular, or transactions effected either abroad or within the kingdom, but are considering all exchange business in general. For all such transactions in common I can certainly see no more universal root than this, and no other explanation that harmonizes so many different facts. I well know, of course, that sometimes the necessity of one man, or the tyranny of another, causes the increment to be high. But we need not take this into consideration when we are discussing the exchanges in general terms.

It remains to show that this explanation suffices to justify the profit made in exchange transactions. We have already said that 'to exchange' means in plain language to barter. Now barter, if it is to be lawful, must first and foremost be equal. One thing must be worth the same as the other, or there will be injustice and offence. We know, too, that the same article of clothing may vary in price from province to province. A measure of wine is incomparably more valuable in the Indies than in Spain, and a measure of oil in Flanders than in Castile. So much so, that one barrel of wine in Mexico is worth ten in Jerez, and they could lawfully be bartered and exchanged, giving one barrel in New Spain against ten in Cazalla. And, within a single kingdom, a basket of olives in Valladolid may be exchanged for four in Manzanilla, and yet the barter will be just and equal. The same thing happens to sums of money, which, because money is more highly esteemed in one place than in another, come to be equal even though the sums are different, 93 in Flanders to 100 in Seville, not because the ducats are of a different fineness or tale, but because the country in itself, so so speak, causes money to be more highly regarded. We are accustomed to say 'A *real* here is better than two elsewhere'; not because a *real* is not worth 34 *maravedís* here and two *reales* 68, but because the 34 here are more highly esteemed than the 68 elsewhere.

Thus, corresponding to the advantage which the Indies enjoy over Spain in their abundance of gold and silver, so are 70 ducats in Madrid esteemed as highly as 100 in Lima and 90 in Vera Cruz; and if I were to state that the excess were larger I do not think that I should be deceived. It is the same between Spain and Rome, for 100 in Burgos are certainly worth 94 in Rome. Therefore, to exchange the 100 for the 94 is a just transaction, even if the 94 in Italy could be paid on the very same night and with no delay or lapse of time. Indeed, people often wish to be paid immediately in this way—for instance, if they are sending the costs of certain dispensations, or if they are eager to make a profit. On the very same day that they deliver the money here, they want, if possible, the bill to be settled within a few hours. And yet they often lose 10 or even 14 per cent.

All the foregoing will be repeated and more extensively explained in the rest of this little book. It is the very foundation of the edifice, the very base of the column, that we are seeking to build up. In fact, little remains but to apply this doctrine and general rule to each particular kind of exchange transaction.

V

Francisco García, *Tratado utilísimo y muy general de todos los contractos*, Valencia, 1583

Of the just price, what it is, and how it may be known

Now that we come to treat of the just price, what it is, and how it may be known, we must first of all consider in what the value of things consists, since their value is the rule and measure by which we come to know their just price, in so far as value and price ought to correspond.

The value of things is very differently judged by the Moral Philosopher and by the Politician. When the Philosopher estimates the value of a thing he considers its nature: but the Politician looks only to its use and to the utility it brings, and to the service it can render us for the satisfaction of our needs and our human wants. Ask a philosopher which is better and nobler, a mouse or a measure of corn, and he will answer, the mouse, for it is a substance that has life, and the corn has none. But put the same question to a politician, and he will say that the corn is better and more valuable than the mouse, since it is necessary for preservation of human life, and the mouse has no such utility. For this reason does St. Augustine say that he would rather have his house full of corn than of mice.

This utility, which causes us to esteem things and hold them dear, is of many kinds. A thing may be used in a way that is necessary for the preservation of life, as in eating, drinking, clothing ourselves, and remedying pain and human ailments. Or we may use it for our pleasures and human pastimes, such as when we read a book, contemplate the nature of things, or ride a horse. Or it may serve for the adornment of mankind or to delight our curiosity; and for this use gold and silver, precious stones, silk, brocade, tapestry, and many other such things are particularly appropriate. There are other uses that serve the infinite demands of mankind, which beyond a certain number cannot be comprehended.

Now, there are three ways in which a thing is said to be of greater or less value, bearing in mind its utility. Firstly, one thing may have many uses and serve for more purposes than another. Thus we say that a certain slave is better than his fellows if he has a wider range of skills and can perform more services. We judge between two horses in the same way and say that one is worth more than the other, all else being equal, because he can be used for riding in town or country, drawing a carriage, ploughing, and bearing burdens, whereas the other serves only for riding in town or drawing a carriage. Secondly, one thing may render a greater service than another. Corn is more valuable than stone, because the former serves to sustain life and the latter only to build houses. Thirdly, a service may be better performed by one thing than by another.

Corn is worth more than fruit because it is more useful for human nourishment.

All these comparisons must be understood as being true only if all other things remain equal, and not otherwise. For we must now explain that there are reasons for which prices rise and fall, and these, uniting together, may cause the value and estimation of things to decrease or increase quite apart from their utility. For example, we have said that bread is more valuable than meat because it is more necessary for the preservation of human life. But there may come a time when bread is so abundant and meat so scarce that bread is cheaper than meat.

There are four or five other reasons why the value and estimation of things should increase or decrease. The first is the abundance or scarcity of goods. The second is whether buyers and sellers are few or many. The third is whether money is scarce or plentiful: this applies to places where the dealing is on a cash and not a credit basis. The fourth is whether vendors are eager to sell their goods, and buyers much sought after and importuned. . . . The fifth, according to some authors, is the urgency of the vendor's need to sell and the purchaser's to buy, but this reason is not admitted by Dr. Soto, who very truly remarks that the reason which moves a particular individual to buy or sell does not affect the value of the thing sold.

Of the Value of Money

. . . [Money has two values]. The first of these is the natural value, which will here be called *value* absolutely;

the second is the accidental value, which we shall call *estimation*.

Now, it happens with money as with other goods, that at one time or place they may be more highly esteemed and valued than at another, although their quality and nature may not have varied. Thus we see that in the Indies, where gold and silver is very plentiful, ducats and *reales* are not as highly esteemed as in Spain, where there is less gold and silver, and for this reason people there would not hesitate to pay an escudo for something that would not fetch two *reales* here. This is because an escudo is as little esteemed there as two *reales* here, even though the natural value of money is exactly the same there as here.

Also, money may be more or less esteemed at different times. Just as in the case of a private individual, so it may be with the whole Republic. If a man is very rich and has plenty of money, he esteems a *real* as little as a poor man a *dinero*, and an escudo as little as a poor man a *real*, or as little as he himself esteemed a *real* at some other time, when he himself was poor. In just the same way, when the Republic is rich and money is plentiful, so is the latter less esteemed; and when the Republic is poor and money is scarce, so is it much more highly valued.

This greater or lesser degree of estimation usually proceeds from three causes. The first and most important is whether money is scarce or abundant, just as merchandise is little esteemed when it is plentiful, and highly valued and esteemed when it is scarce. . . .

The second cause is whether there are many or few who wish to give or take money in exchange, just as in the sale or purchase of goods the price of the merchandise rises or falls according to whether there are many or few buyers and sellers.

The third cause is whether the money is in a place where it is subject to risk or in one where it is safe. Thus, if in Flanders a city is in danger of being sacked (as Antwerp was sacked a few years ago), then money would be worth less in that city, quite apart from other considerations.

[*Summary*]

Abundance or scarcity of money may be general or particular. It will be general if it is common to a whole city or kingdom, or even to all the merchants and money-changers. It will be particular if it is confined to a few individuals. Money may be more abundant in one city than in another, and yet it may be scarce among merchants. In such a case the exchanges will reflect the relative abundance or scarcity of money in the two mercantile colonies, irrespective of conditions in the rest of the city. This is why, when money is sent between Seville and Medina, the exchanges turn sometimes in favour of Seville and sometimes in favour of Medina. If they depended entirely on general abundance they would always be in favour of Medina, since money is always scarcer there than in Seville. The same principles apply to the price of bills.

The rate of exchange depends partly on the conditions of supply and demand, partly on whether the money is present or absent. If a merchant pays out money in exchange at Medina at the rate of 360 *maravedís* to the ducat, he will make a profit of 50 *maravedís* on each ducat when he is repaid in Flanders. But if he pays out the same number of ducats in Flanders for repayment in Medina, he will make a profit of 75 *maravedís.* The same thing happens between Seville and Rome. From Seville to Rome a profit of 8 or 10 per cent. is made, and from Rome to Seville a profit of 18 or 20 per cent., and yet the transaction is just and lawful. The explanation is this: part of the profit arises from the fact that money present is exchanged for money absent in both cases, and the former is more valuable than the latter, and part from the relative abundance and scarcity of money in the different places.

VI

Martín González de Cellorigo, *Memorial de la política necessaria y útil restauración a la República de España*, Valladolid, 1600

The Reason why so great a Quantity of Gold and Silver is taken out of this Republic

In such great quantities are gold and silver taken out of this Realm that we seem to hold our riches only by way of deposit, and hand them over to other Kingdoms as though they were the rightful owners. This is because we will not understand that true wealth does not lie in the possession of great quantities of gold and silver (whether wrought, coined, or in bullion) which are destroyed as soon as they are consumed, but in the possession of things which, even though they are consumed by use, are yet preserved in kind by the medium of substitution, which enables us to take gold and silver from out of the hands of friends and enemies, just as we have negligently allowed them to be snatched from our own.

Since money is not real wealth, and since what is noble ever attracts what is base, our gold and silver has been drawn away by what is truly wealth. And this we would prove more particularly to those who claim best to understand the reason of state, when they falsely assert that the wretched poverty of this Kingdom is due to the large quantity of money which is sent out of the country to pay for the wars in Flanders and in other states belonging to the Crown of Castile. This is a sad error, for in truth all our evils proceed from our own idleness and from the great diligence of foreigners, who by their industry take out ten times more gold and silver than all our Orders in Council. Idleness may be avoided, but wars not, except at the risk of losing the states, forces, and munitions of Spain. People who make use of such arguments do not understand the nature of money. If, as the law says, it was invented only to facilitate contracts, then it is the cause and not the effect of exchange. Surely we in Spain should be sufficiently instructed in these principles, when they are daily practised either by or against ourselves. By us, in the West Indian trade, when we attract gold and silver from those parts to Spain with the aid of our natural and manufactured products, of which they stand in need. Against us, because we choose not to make the goods which our manufactures might give us already wrought and finished: and foreigners, applying themselves to the task, wrest from us all the gold, silver, and money we produce.

Of how a great Quantity of Money does not maintain a State, nor does the Wealth of Nations lie therein

It is likewise an error to suppose that in good politics the wealth of a State is increased or decreased because the quantity of money in circulation is larger or smaller. Since money is but the instrument of exchange, a small circulation has as good an effect as a large one, or even better, for instead of clogging the wheels of trade and commerce it makes them run more easily and lightly. And if this is not the rule in all cases, it is nevertheless certain that the great quantity of money which has been coined has raised the poll-tax, and the other taxes and contributions, to a point where they cannot be met unless such a flood of money is kept coursing through the Kingdom that the price of goods corresponds to the sums which the taxpayers are obliged to furnish and which are needed for the support of the monarchy and the honouring of its debts. The same is true with respect to merchandise and foreign trade: speaking generally, Spanish prices are high on account of our large circulation, although our products could find an easy vent if we so desired. But apart from these cases the same may be done with little money as with much, as is well proved by the contracts made a hundred years ago: for a thing that could then be bought for one *real* is worth fifty today. The Romans were quicker to understand this. When Paulus Aemilius (as the histories relate) brought the gold and silver from out of Macedonia, the estimation of things rose (so Pliny, Plutarch, and other authors say) by a third. And when Julius Caesar caused the spoils of Egypt to be brought to Rome, usury and the exchanges fell heavily and the cost of living rose. The same thing happened to our own people in Peru, where, if we may place our faith in the history-books, the abundance of money and shortage of other things made a frieze dress worth a thousand ducats, a horse six thousand, and a barrel of wine three hundred. And I have been told by a person of credit now living in Valladolid that long afterwards, when he was in those parts, he sold a pound of grapes for a pound of silver, which is two marks if we take the value of the *maravedí* at that time in Spain, and which would now be rather more. Such are the results of a big circulation and a great quantity of gold and silver, and such will be the value of money when there is a shortage of the things that are needed for human life. In Nations that lack these necessary things, there will true wealth also be lacking.

The Reason why Spain is not enriched by the great Quantity of Riches she imports

. . . [The cause of the ruin of Spain] is that wealth has been and still is riding upon the wind in the form of papers and contracts, *censos* and bills of exchange, money and silver and gold, instead of in goods that fructify and by virtue of their greater worth attract to themselves riches from abroad, thus sustaining our people at home. We see, then, that the reason why there is no money, gold, or silver in Spain is because there is too much, and Spain is poor because she is rich. The two things are really contradictory, but though they cannot fittingly be put into a single proposition, yet we must hold them both to be true in our single kingdom of Spain.

VII

Luís de Molina, *Disputationes de Contractibus*, Venice, 1601

Of the dual value of a single money in different places

Summary

1. There are two ways in which money may be more valuable in one place than in another.

2. The need for money, and its abundance, cause its value to rise and fall.

3. As in the case of goods, money in one place may be exchanged for money in another.

In the three preceding disputations we examined one reason why money may lawfully be exchanged between different places at a profit. We shall now consider two other reasons, and must first explain what we propose.

There are two ways in which a given money may be more valuable in one place than in another. Firstly, by virtue of public law or accepted custom, the value of a money in terms of other moneys may vary from place to place. In Portugal the ducat is worth 400 *reais* and in Castile 375 *maravedís*; the silver *real* is worth 34 *maravedís* in Castile and 40 in Portugal, while in the kingdom of Valencia it is worth less, and in Catalonia more, of the small bronze coins known as *dinars*; and its value is different in other places. Though 11 silver *reales* are worth 375 *maravedís* in Castile, they are equivalent to 475 *reais* in Portugal, omitting other places for the present. The gold *escudo*, which at one time was worth 10 silver *reales* and 10 *maravedís* in Castile, or 350 *maravedís*, was worth 11 *julios* and 1 *dimidio* in Rome, although the *julio* corresponds to the silver *real*. The *escudo* was priced differently in France and elsewhere, and it is struck today at a value of 400 *maravedís* in Castile.

But there is another way in which money may be worth more in one place than in another: namely, because it is scarcer there than elsewhere. Other things being equal, wherever money is most abundant, there will it be least valuable for the purpose of buying goods and comparing things other than money.

Just as an abundance of goods causes prices to fall (the quantity of money and number of merchants being equal), so does an abundance of money cause them to rise (the quantity of goods and number of merchants being equal). The reason is that the money itself becomes less valuable for the purpose of buying and comparing goods. Thus we see that in Spain the purchasing-power of money is far lower, on account of its abundance, than it was eighty years ago. A thing that could be bought for two ducats at that time is nowadays worth

5, 6, or even more. Wages have risen in the same proportion, and so have dowries, the price of estates, the income from benefices, and other things.

We likewise see that money is far less valuable in the New World (especially in Peru, where it is most plentiful) than it is in Spain. But in places where it is scarcer than in Spain, there will it be more valuable. Nor will the value of money be the same in all other places, but will vary: and this will be because of variations in its quantity, other things being equal. Value in this sense is not indivisible, but enjoys a certain freedom, just as goods whose price is not legally controlled are priced according to the judgement of prudent merchants. Even in Spain itself, the value of money varies: it is usually lowest of all in Seville, where the ships come in from the New World and where for that reason money is most abundant.

Wherever the demand for money is greatest, whether for buying or carrying goods, conducting other business, waging war, holding the royal court, or for any other reason, there will its value be highest. It is these things, too, which cause the value of money to vary in course of time in one and the same place.

Certainly, when money in one place is exchanged for money in another, for the purposes of trade or for the other reasons just mentioned, it has, like goods, its minimum legal price, which fluctuates according to the relative scarcity of money in the two places. For just as the value of other goods rises and falls according to their abundance or scarcity, to the greater or lesser need which is felt for them, and to the larger or smaller number of merchants who require them, so does the bigger or smaller quantity of money in a place, the greater or lesser need which is felt for it, and the larger or smaller number of dealers who can and will give and take it in exchange, cause money to be worth more in one place than in another at one and the same time, or, at different times, to be worth more or less in one and the same place, even at the same fair. For at the beginning, middle, and end of a fair there is a variation in the number of those who require money or who wish to exchange it for money abroad, and a similar variation in the number of those who are able and willing to give money in exchange.

When, therefore, the republic fixes the value of larger coins in terms of those of smaller denominations, this is only to facilitate the changing of money in one and the same place, the purchase of goods, and the payment of their price. But the republic never intended to fix this second kind of value when money is exchanged for money in another place. This value is inconstant, and yet it is just, even though the tale of the money is fixed by law. To control it would do a great deal of harm to the republic, because such a course would bring about a shortage of necessary goods. The practice has always been, and rightly, for the value of money in exchange to be left to vary freely; and Pius V approves this kind of transaction undertaken at a profit.

VIII

Pedro de Valencia, *Discurso sobre el precio del trigo*, 1605 (reprinted in *Pedro de Valencia, Escritos sociales*, in Biblioteca de clásicos sociales españoles, Madrid, 1945)

p. 91

THOSE who collect more corn than they require for the satisfaction of their own needs do so in order to make a profit, to wait for and instigate a rise in its price, so that they may sell it for an exorbitant sum. The simplest and most universal remedy against such people, and one that has been found and proved by many years' experience in this Your Majesty's realm, is to set upon corn a just price that may never be exceeded. This will cause dealers and other powerful men to lose confidence in their ability to sell as dear as they choose, and either they will cease to hoard corn, or else, when the fixed price is reached, they will sell it in case the price drops still further or the corn gets spoilt by weevils, and so as not to keep their money lying idle. Also, everyone will then be able to buy and support himself with corn, for its price will not be beyond the reach of the ordinary common people, who form the greater part of the Republic.

And this possibility is the certain rule of the just and proper price of corn, and any other consideration or calculation that is made in order to measure and assess its natural and just price will be unsure, unequal, and harmful to the community. The value and estimation of money and of the metals from which it is made is diverse and variable in different provinces, occasions, and times, so that by considering the price of money we cannot set upon corn a price that will be universally just and appropriate to all times and places. Moreover, to compare the value of other common articles with that of corn (such as saying that a *fanega* of corn ought to be worth a certain quantity of wine or oil) will prove equally useless for our purpose, because we should simply be measuring one unknown thing by another, and the value and quality of such articles varies from year to year and from place to place.

If we measure the price of bread by the benefit and utility it brings, and by its own intrinsic value, we shall find that a loaf is worth more than all the gold and diamonds in the world. Yet in this respect air, water, and light are still more valuable, and God willed that these three things should cost us nothing and that corn, which is next to them in the scale of things that are useful and necessary to life, should cost the sweat of man. This is in accordance with natural law and divine ordinance, for the value of corn not only equals but exceeds its price, life being more than meat and the body than raiment. And this is the just and legal price, general and unalterable in every time and place, fixed and decreed by the supreme, universal, and immortal King and Lord of all ages, who announced it to men when He drove them forth from Paradise, saying to Adam and all his descendants: In the sweat of thy face shalt thou eat bread.

God and all reason require that men shall earn their bread by their toil, that this may be sufficient to support them in life, and that those who will not work, neither shall they eat. Setting all else aside, we should consider only how many working days ought in justice to be given for a measure of corn, so that the labourer may support himself, however poorly and roughly, and may eat, drink, and clothe himself, keep a roof over his head, marry and beget children and support them while they are little, and not have to work every day, because sometimes there will be no work for him, and because there are days of tempest, and of sickness, and of rejoicing. It seems that even if he must go to the workhouse or beg in his old age, a man cannot live unless he can earn a *fanega* of corn in not more than five or six working days, which at present in this province are worth 14 or 15 *reales*.

p. 111

And those who allege that a thing is worth whatever price it will fetch must be understood as referring only to things that are not essential to life, such as diamonds, falcons, horses, swords, and also to other commoner things when there is no fraud, compulsion, or monopoly, and when vendor and purchaser enjoy equal liberty and suffer equal need. But in the case of bread, in years when it is dear—and it is for such times that the *tasa* is instituted—the vendor always enjoys liberty and plenty, and the purchaser always suffers urgent need and want. The just price is not whatever a thing will fetch on account of the purchaser's need, nor can such a price in conscience be demanded. No price is just or should be regarded as current if it is against the public interest, which is the first and principal consideration in justifying the price of things.

APPENDIX 1

Extract from a Report drawn up in 1530 by the merchants of Antwerp and placed before the Doctors of the University of Paris, in which the merchants ask for guidance on certain cases of conscience concerning the exchanges. The full Report is printed by J. A. Goris, *Études sur les colonies marchandes méridionales à Anvers de 1488 à 1567* (1925), pp. 510–45.

A Report on the Exchanges, and the first Case about which we desire to make inquiry

The diligence and vigilance of merchants has brought them to such great subtlety and art that they have found a way to make of money a merchandise like cloth, silk, spices, pearls, or wool, wherein there is profit and loss, risk and venture. This business is very profitable to traders, some of whom would often be unable to send their goods abroad, to dispatch their cargoes, or to meet their commitments from day to day, were it not for this new-found commerce of money, by which a man who has money gains and another who has none and who takes it from him gains likewise, since he is in a stronger position to carry on his business than if he had no such remedy. At other times, however, men take this money only to lose, like those who know themselves to be lost and who take it in order to maintain themselves from fair to fair, until at last all comes crashing to the ground and they are made bankrupt.

When the time came to baptise this business of the merchants they called it 'exchange', because it bears some resemblance to real exchange. The manner of dealing is as follows:

Certain merchants are rich and powerful (though some more than others, for even those who have little deal in this way) and keep their money in cash and will not lay it out on merchandise unless it be for some good and plainly profitable stroke of business which according to the common opinion and judgement of merchants is bound to succeed. Often they do not care to learn how to buy and sell, for it is a toilsome, risky thing to jeopardise their fortunes upon the seas and to guarantee the merchandise, and they fear that they will not be duly paid. Also, they are not always very skilful when they deal in goods. Lastly, they believe that their profit will be neither so great nor so certain if they deal in merchandise as it is in this other business which they call 'exchange', and therefore they keep their money in coin in their strong-boxes, and earn their bread with it. And they do so as follows:

There comes the time of the 'fair', as the merchants say, which is held at certain times of the year such as Christmas, Easter, June, and September, according to the places where the merchants are. In these fairs they pay one another what they owe, and sell their merchandise, and dispatch their cargoes to other parts. Now it so happens that at the time of the fair the merchants sometimes find themselves with a great deal of money, and sometimes with less, and then there are great rises and falls; and according to whether money is plentiful or scarce among merchants so do those who have money give it at more or less interest to those who are in need of it. This price, be it cheap or dear, is fixed by the merchants themselves according to the need which they know others feel for their money and according to the scarcity or abundance of money which they see prevails at a particular fair. This price which they set upon money they call the 'market-rate' [*precio de la bolsa*] since no one claims for himself the power of fixing the rate but it is attributed to the community of the Stock Exchange, which is the place where the merchants meet.

So much being understood, let us take the case of Anthony, a merchant who owes a thousand ducats at the current fair of mid-Lent, and who has not got the money. Anthony goes to a broker (the person who acts as go-between among the merchants) and says to him:

'I need a thousand ducats. Let someone give them to me in cash, and I will repay them at the May fair at Medina del Campo in Spain.'

The broker replies: 'Very well, I will undertake to procure the money.' And he goes to one of the merchants who announces that he keeps his money in cash to earn his living with it and says:

'Will you give me a thousand ducats, to be repaid at the May fair in Spain in six weeks' time?'

Ferdinand replies: 'What is the market-rate?' which means 'how many *placas*[1] must I give here to receive a ducat in Spain?'

The broker answers: 'Sir, you must give 36 *placas* here and you will receive a ducat there, which is worth $37\frac{1}{2}$ *placas*.[2] This is the current market-rate, which is sometimes higher and sometimes lower.'

If Ferdinand is satisfied with the rate, he asks who requires the money. The broker replies: 'Anthony, whom you well know.' If Ferdinand thinks that Anthony is a solid, honest man who will repay the money he answers: 'Very well, I am satisfied, and will give him one thousand ducats at the rate of 36 *placas* to the ducat.' Anthony gives him a letter or bill requesting Anthony's factor or partner in Spain to pay Ferdinand's factor or partner there 1,000 ducats for the May fair at the rate of $37\frac{1}{2}$ *placas* to the ducat.

We desire to know whether, since Ferdinand is dealing plainly and in good faith and since this is his trade, he may in good conscience charge a commission on each ducat, which will vary according to whether money is scarce or

[1] *Placa:* (a) Silver money of Charles VII of France (1422–61) coined in Tournai, which circulated in the Low Countries. (*b*) Generically, silver coin.

[2] The legal tale of the coins did not always correspond to their tale in commercial practice, which was customarily stipulated in the contract.

abundant among merchants, for sometimes more and sometimes less is paid. This transfer of money, so much more being paid afterwards at the fair on each coin, is what is known as 'exchange'.

It should be noted that Ferdinand, who gives the money to Anthony on the understanding that he shall repay it with the agreed increment to his partner or servant at the May fair at Medina del Campo in Spain, intends that the said partner or servant shall in his turn give the money to some other person who is similarly in need of it, so that at the June fair Ferdinand here in Antwerp may recover his thousand ducats together with whatever increment he may have gained on the two occasions when he and his servant have given them—the first time, Ferdinand here in Flanders, and the second, his servant at Medina del Campo.

Thus, just as Anthony here in Antwerp came in need of 1,000 ducats and returned them to Ferdinand by paying him 37½ *placas* in Spain for the 36 which he received here, so in Medina does one Fabricius come to Ferdinand's servant because he is there in need, and asks him for 1,200 ducats in the form described above at the market-rate of 37½ *placas* to the ducat. Ferdinand's servant gives him the 1,200 ducats to be repaid at the rate of 40 to the ducat, the market-rate, and Ferdinand recovers his 1,000 ducats with a double profit, the first when the money leaves Spain and the second when it returns.

But it sometimes (though rarely) happens that when the money is sent back from Medina money is very plentiful among the merchants, and no one will take it except at the market-rate, which is so low that when Ferdinand recovers his money in Antwerp he has been without it for three or four months and has gained nothing. Indeed, he may even have lost. For although he sent the money to Spain with the intention of gaining the same increment on the rechange back to Antwerp, it may happen that money is so abundant in the place to which it was sent that he loses on the return transaction, and this loss may be greater than the profit made on the first occasion. This is one of the strongest reasons why merchants regard such commerce as lawful; for they hold that the risk of loss which it entails removes the savour of usury. The form of exchange just described is the first and commonest.

The universal reasons why the merchants believe the exchanges to be lawful are the following:

Firstly, because this is a pure contract made between the party who gives and the party who takes, and is in no way a loan.

Secondly, it is a contract which is most necessary to the Christian republic, in that it supplies the diverse countries with merchandise. For the merchants often keep their fortunes laid out in such a manner that they could not dispatch new cargoes, send goods to countries where great need and shortage might be felt, meet their daily commitments or maintain their credit, were it not for this instrument of exchange.

Thirdly, because both he who gives and he who takes in exchange have every intention of making use of each other, and both understand the business equally, and freely agree upon the rate, and both are gainers and thereby serve the republic.

Fourthly, because the party who gives the money is not certain of making a profit: he may sometimes gain and sometimes lose.

Fifthly, because money is the merchant's tool by which he earns his bread, and if he deprives himself of its use for the benefit of his neighbour it is just that the latter should reward him.

Sixthly, because the merchant who gives money in exchange must maintain factors and servants to help him in the business, and must defray other expenses incurred in giving and recovering his money. It is reasonable that these costs should be paid by the person to whom the money is given, since they are incurred for his sake.

All these things considered, together with any others which you, Reverend Masters, may please to investigate concerning this case, we beg you to inform us, as learned men in whose hands we place our consciences, whether this business is or is not lawful.

Reply of the Doctors of Paris to the Merchants of Antwerp

We, the Doctors undersigned, after diligently examining all the circumstances of this case, conclude that the above contract is unlawful. To the arguments advanced we reply briefly:

Firstly, that even if it be not a loan but a contract, the transaction is none the less usurious.

Secondly, that public usury may be necessary but does not thereby become lawful. No one is obliged to supply the community with more than he rightly may, and if a man trades beyond his means he is not absolved from sin when he takes money in exchange for the purpose, any more than the lender is absolved from usury, since both serve the community. It is never lawful to do evil, even though good may follow.

Thirdly, we reply that public usurers and those who borrow from them also understand the business, and freely agree together, and are both gainers, but this is no reason why it should be lawful to commit usury.

Fourthly, we say that money is as much the tool of the public usurer as of the merchant, but this is no reason why it should be thus used, for man has to use his tools in a lawful manner.

We admit the sixth argument, which we hold to be good. Nevertheless it is inapplicable to these exchanges, because the market-rate rises and falls according to whether money is scarce or abundant, not according to the amount of labour and costs expended by the person who gives the money: in which case the rate would not vary, because labour and costs do not alter except in war-time or other special circumstances.

APPENDIX 2

Extract from a royal pragmatic of 1598 condemning dry exchange

. . . And we likewise condemn as dry exchange subject to the said penalties all transactions in which the party who takes the money in exchange has no money, credit, or correspondent of his own in the markets and places outside our realm for which he takes the money, and in which it is agreed at the time of the contract that the money may be retained for the period of several fairs ahead to the prejudice of the party who takes it, and that the interest falling due at the first fair be added to the principal so as to yield more interest at the second fair, and from the second to the third, and so on. And we hereby command that the simple word or oath of persons who have given money in exchange shall not be accepted as proof that bills drawn on places abroad have been duly remitted to the said markets and places, and have been duly accepted and met, or that bills remitted from places abroad are true and genuine, or that the rates were actually those contained and declared in the said bills, or that any other requisite of a true and genuine Bill of Exchange has been complied with, and we order that all this must be proved by public and authentic documents, or by witnesses or other sufficient evidence approved by law: otherwise the contract shall be deemed null and void.

Note: A Papal Bull of 1566 condemns dry exchange in similar terms.

BIBLIOGRAPHY

THE older writers in the following list will be found useful for the history of both facts and doctrines. The titles of the more recent works will in most cases show clearly enough to which aspect of our subject they refer. I have therefore not distinguished between books on economic history and books on the history of ideas.

BARTOLOMÉ DE ALBORNOZ. *Arte de los contratos*. Valencia, 1573.

LUIS DE ALCALÁ. *Tratado de los préstamos que passan entre mercaderes y tractantes*. Toledo, 1543.

J. W. ANGELL. *Theory of International Prices*. Cambridge, 1926.

ST. THOMAS AQUINAS. *Summa Theologica*.

ARISTOTLE. *Politics* and *Nicomachean Ethics*.

ST. AUGUSTINE. *City of God*.

MARTÍN DE AZPILCUETA NAVARRO. *Comentario resolutorio de usuras*. Salamanca, 1556.

DOMINGO BAÑEZ. *De justitia et jure*. Salamanca, 1594.

JEREMY BENTHAM. *A Defence of Usury*. London, 1787.

JEAN BODIN. *Réponse à M. de Malestroit*, 1568, ed. Henri Hauser, Paris, 1932.

MARIAN BOWLEY. *Nassau Senior and Classical Economics*. London, 1937.

J.-Y. LE BRANCHU. *Écrits notables sur la Monnaie*. Paris, 1935.

J. BRODRICK. *The Economic Morals of the Jesuits*. London, 1934.

REINERUS BUDELIUS. *De monetis et re numaria*. Cologne, 1591. A number of early monetary treatises are reprinted in this volume.

R. CARANDE. *Carlos V y sus banqueros: La vida económica en España en una fase de su hegemonía*. Madrid, 1943.

J. CARRERA PUJAL. *Historia de la economía española*, vol. i. Barcelona, 1943.

M. COLMEIRO. *Historia de la economía política en España*. Madrid, 1863.

—— *Biblioteca de los economistas españoles de los siglos XVI, XVII y XVIII*. Madrid, 1880.

E. BONNOT DE CONDILLAC. *Le Commerce et le Gouvernement considérés relativement l'un à l'autre*. Amsterdam, 1776.

H. CONRING. *Examen rerum publicarum potiorum totius orbis*, ch. I in *Opera*. Brunswick, 1730.

COPERNICUS. *Monete cudende ratio*, *c*. 1538, reprinted with a French translation by Wołowski in his edition of Nicolas Oresme's *Traictie de la première invention des monnaies*, Paris, 1864. Another French version is included in J.-Y. Le Branchu, *Écrits notables sur la Monnaie*. Paris, 1934, vol. I.

DIEGO DE COVARRUBIAS Y LEIVA. *Veterum numismatum collatio*, 1550,
—— *Variarum ex pontificio, regio et caesareo jure resolutionum, libri 4*, 1554.

FERNANDO DIAZ DE VALDEPEÑAS. *Summa de notas copiosas*. Valladolid, 1553.

R. EHRENBERG. *Das Zeitalter der Fugger*, Jena, 1896 (English translation, *Capital and Finance in the Age of the Renaissance*. London, 1928).

W. ENDEMANN. *Studien in der romanisch-kanonistischen Wirtschafts- und Rechtslehre bis gegen Ende des siebzehnten Jahrhunderts*. Berlin, 1873–4.

ANTONIO DE ESCOBAR. *Theologiae moralis liber*. Lyons, 1652.

C. ESPEJO and J. PAZ. *Las antiguas ferias de Medina del Campo*. Valladolid, 1912.

F. GALIANI. *Della Moneta*, 1750. Reprinted in *Scrittori classici italiani di economia politica*, 1803, vols. iii and iv.

FRANCISCO GARCÍA. *Tratado utilísimo y muy general de todos los contractos*. Valencia, 1583.

R. GONNARD. *Histoire des doctrines monétaires dans ses rapports avec l'histoire des monnaies*. Paris, 1935.

MARTÍN GONZÁLEZ DE CELLORIGO. *Memorial de la política necessaria y útil restauración a la República de España*. Valladolid, 1600.

J.-A. GORIS. *Études sur les colonies marchandes méridionales à Anvers de 1488 à 1567*. Louvain, 1925.

HUGO GROTIUS. *De jure belli et pacis*, 1625 (English translation, Oxford, 1925).

JOHN HALES. *A Compendious or briefe examination of certayne ordinary complaints of divers of our countrymen*. London, 1581. 2nd ed.

G. HALM. *Monetary Theory*. Philadelphia, 1946.

EARL J. HAMILTON. *American Treasure and the Price Revolution in Spain* (Harvard Economic Studies). Cambridge, 1934.

P. HARSIN. *Les Doctrines monétaires et financières en France du XVI^e au XVIII^e siècle*. Paris, 1928.

W. HASBACH. *Untersuchungen über Adam Smith*. Leipzig, 1891.

E. HECKSCHER. *Merkantilismen.* Stockholm, 1931 (English translation, *Mercantilism,* London, 1935).

SIR WILLIAM HOLDSWORTH. *A History of English Law.* London, 1922–26.

FRANCIS HUTCHESON. *Introduction to Moral Philosophy.* Glasgow, 1747.

C. ILGNER. *Die volkswirtschaftlichen Anschauungen Antonins von Florenz.* Paderborn, 1904.

J. LARRAZ. *La época del mercantilismo en España.* Madrid, 1943.

JOHN LAW. *Money and Trade consider'd,* 1705.

LEONARD LESSIUS. *De justitia et jure tractatus.* Louvain, 1605.

JUAN DE LUGO. *De justitia et jure.* Lyons, 1642.

GERARD MALYNES. *Consuetudo vel Lex Mercatoria.* London, 1622.

JUAN DE MEDINA. *De restitutione et contractibus tractatus.* Salamanca, 1550.

TOMÁS DE MERCADO. *Tratos y contratos de mercaderes.* Salamanca, 1569.

—— *Summa de tratos y contratos.* Seville, 1571.

C. MILLER. *Studien zur Geschichte der Geldlehre.* Stuttgart, 1925.

LUÍS DE MOLINA. *Disputationes de contractibus.* Venice, 1601.

A. E. MONROE. *Monetary Theory before Adam Smith* (Harvard Economic Series). Cambridge, 1923.

E. MORAND. *La Théorie psychologique de la valeur jusqu'en 1776.* Bordeaux, 1912.

GLENN R. MORROW. *The Ethical and Economic Theories of Adam Smith* (Cornell Studies in Philosophy, No. 13). New York, 1923.

E. NYS. *Le Droit des Gens et les anciens jurisconsultes espagnols.* Brussels, 1914.

G. O'BRIEN. *An Essay on Medieval Economic Teaching.* London, 1920.

NICOLAS ORESME. *Traictie de la première invention des monnaies, c.* 1360. Reprinted by Wołowski, Paris, 1864.

BLAISE PASCAL. *Lettres Provinciales,* 1656.

SAMUEL PUFENDORF. *Elementorum jurisprudentiae universalis, libri 2,* 1660 (English translation, Oxford, 1931).

—— *De jure naturae et gentium,* 1672 (English translation, Oxford, 1934).

—— *De officio hominis et civis juxta legem naturalem,* 1673 (English translation, Oxford, 1927).

E. ROLL. *A History of Economic Thought.* London, 1938.

JUAN DE SALAS. *Commentarii in secundam secundae.* Lyons, 1617.

LUÍS SARAVIA DE LA CALLE. *Instrucción de mercaderes muy provechosa.* Medina del Campo, 1544.

A. SAYOUS. 'Les Changes de l'Espagne sur l'Amérique au XVIe siècle', in *Revue d'économie politique*, 1927, pp. 1417 et seq.

—— 'Observations d'écrivains du XVIe siècle sur les changes', in *Revue économique internationale* (November 1928).

SIGISMUNDO SCACCIA. *Tractatus de Commerciis et Cambiis.* Rome 1618.

E. SCHREIBER. *Die volkswirtschaftlichen Anschauungen der Scholastik seit Thomas v. Aquin.* Jena, 1913.

J. BROWN SCOTT. *The Spanish Origin of International Law*, 1932.

—— *The Spanish Conception of International Law and of Sanctions.* Washington, 1934.

J. SEMPERE Y GUARINOS. *Biblioteca española económico-política.* Madrid, 1804.

ADAM SMITH. *Wealth of Nations*, 1776.

DOMINGO DE SOTO. *De justitia et jure.* Salamanca, 1553.

R. H. TAWNEY. *Religion and the Rise of Capitalism.* London, 1926.

A-R-J. TURGOT. 'Valeurs et Monnaies', in *Œuvres de Turgot*, 1808, vol. iii.

A. ULLASTRES CALVO. 'Martín de Azpilcueta and his *Comentario resolutorio de Cambios*', in *Anales de economía*, Nos. 4–5, 1942.

A. P. USHER. *The Early History of Deposit Banking in Mediterranean Europe* (Harvard Economic Studies). Cambridge, 1943.

PEDRO DE VALENCIA. *Escritos sociales*, in Biblioteca de clásicos sociales españoles, ed. Carmelo Viñas Mey, Madrid, 1945.

CRISTOBAL DE VILLALÓN. *Provechoso tratado de cambios.* Valladolid, 1542.

CARMELO VIÑAS Y MEY. *Doctrinas de los tratadistas españoles de los siglos XVI y XVII sobre el comunismo.* Madrid, 1945.

J. VINER. *Studies in the Theory of International Trade.* London, 1937.

FRANCISCO DE VITORIA. *Comentarios de la Secunda Secundae*, 1535, reprinted with an introduction by R.P.V. Beltran de Heredia, O.P., in the Biblioteca de teólogos españoles.

THOMAS WILSON. *A Discourse on Usury*, 1572. Reprinted with an introduction by R. H. Tawney. London, 1925.

XENOPHON. *Discourse upon improving the revenue of the State of Athens*, trans. Cooper, London, 1832.

R. ZUCKERKANDL. *Zur Theorie des Preises.* Leipzig, 1899.

INDEX

PRINTED IN
GREAT BRITAIN
AT THE
UNIVERSITY PRESS
OXFORD
BY
CHARLES BATEY
PRINTER
TO THE
UNIVERSITY

Spanish economic literature, particularly of the sixteenth, seventeenth, and eighteenth centuries, is so extensive and interesting that it would take a whole series of monographs to do it justice. Let us therefore disregard Don Quixote's advice and look into some of these old nests in Spain. Perhaps, after all, we may still find a bird or two in them.

Ludwig von Mises Institute | Mises.org

ISBN 978-1-61016-160-2

90000 >

9 781610 161602

SKU SS446