

Spain During the Price Revolution

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AMERICAN TREASURE AND THE PRICE REVOLUTION

Before the arrival of American treasure in the sixteenth century, European trade was fed primarily by gold from the Sudan. But Portuguese expeditions along the Atlantic coast of Africa to the Gulf of Guinea between 1460 and 1470, and the establishment of direct trade relations between Portugal and the East Indies at the beginning of the sixteenth century, diverted the route of Sudanese gold away from the Mediterranean and caused a great scarcity of gold in Europe. This was supplied in part by the German silver mines, which enjoyed a period of relative prosperity between 1470 and 1530, coinciding with the shortage of precious metals. From 1530, however, this shortage was unexpectedly eased when American treasure began to replace the old sources of supply and gave Europe an immense stock of money, the origin of grave alteration in prices, especially in Spain, the country where the treasure arrived and from which it was distributed.

The influx of treasure consisted almost entirely of silver. Up to 1550, it is true, imports were mixed, but American gold was never sufficient, even in the best years, to produce an appreciable effect on prices, and after 1550 it was relatively insignificant. Silver receipts, however, expanded enormously.⁷² They began most effectively about 1530, and remained at a relatively modest, though steadily rising, level until 1550. From then the galleons began to import silver in vast quantities, which became vaster still from 1580 and caused a profound revolution in prices. Behind the flood of silver lay a technical revolution in America itself. The new method of amalgamation devised in Germany and consisting of the treatment

of silver with mercury was introduced in the mines of New Spain by Bartolomé de Medina in 1557. From 1571 it was applied to the Potosí deposits in Upper Peru.⁷³ This process increased the exports of treasure tenfold, and they reached their peak in the period 1580 to 1630, the great age of Spanish imperialism. 'The king has reason to say', wrote one of Philip II's secretaries, 'that the emperor never disposed of as much money as himself for his enterprises.'⁷⁴

The interest of the state in precious metals derived not merely from mercantilist prejudices but from their ability to buy what it most needed—the means of power. Spain was already a protectionist country, barricaded with customs, and a government which theoretically controlled everything entering and leaving its frontiers was unlikely to allow the new-found treasure to escape its grasp. But the monopoly, and the attempts to preserve it, were not perfect: there were frequent complaints from the cortes that the continual exit of precious metals—'as if we were Indians'—was impoverishing the country, and it was commonly said that Spain was 'the Indies of other countries'. Yet there were many reasons why the precious metals should escape from Spain and circulate abroad. Spain was primarily an exporter of raw materials and an importer of manufactured goods; with an unfavourable trade balance, she had to settle her payments with ready cash. This accounted for much unlicensed export of spices by Spanish merchants or by foreign merchants resident in Spain, all of which made its way to the great production centres of Europe. In a sense the precious metals were the crutches which enabled the Spanish economy to move. But alongside clandestine export, the state had to authorize some foreign payments in specie, for imports of vital food supplies and naval stores had to be bought with cash. The greatest remittances of all, however, were made by the crown itself in order to pay for its overseas commitments. Instead of investing their money in productive enterprises at home, as the Fuggers did at Augsburg with the money from their mines at Schwaz, the Spanish

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Habsburgs lavished more and more on foreign enterprises, the price not merely of ambition but of the very existence of the Spanish empire and its defence. The routes by which the precious metals left Spain all converged on northern Europe, either directly from Bilbao or via France and Italy, for it was here that Spain's political and military interests were most exposed and her balance of payments was most adverse. The money itself was vital not only in the conflict with France and the war in the Low Countries but also in the economy of northern Europe, for from Antwerp it made its way to Germany and England, while the latter also profited from the smuggling of specie by Spanish merchants in wool ships.

American treasure had profound effects not only on Spain but also among its neighbours. The rate and volume of its arrivals in Seville, especially from the 1570s, conditioned economic trends in Europe and the patterns of its migration became indicators of economic performance. American silver fuelled financial markets in Italy, southern Germany, and the Netherlands. It relieved the chronic shortage of circulating money which had hindered economic activity in western Europe, stimulated production and commercial flows, and became an agent of growth until a hesitation in silver imports in 1619-22 caused financial and commercial turbulence.⁷⁵ Other indicators confirm these trends. Interest rates in 1570-1620 decreased under the influence of greater money supply, and this encouraged trade and manufacturing. Prices rose from the mid-sixteenth to the early seventeenth century, undergoing a threefold increase in Spain and in France and England more than twofold, not a 'price revolution' by modern standards but sufficient to affect the economies of early modern Europe.⁷⁶ Wages meanwhile lagged behind prices, thus creating profits for investment in further production. Silver-led growth explains much but not all; and it leaves some awkward questions.⁷⁷ Why did economic growth anticipate the silver boom? How rapidly did precious metals reach Italy and northern Europe and in what quantities? How much was accumulated as capital for investment as distinct from luxury spending? Silver-led growth presupposes the existence of integrated national markets in which currency circulated at constant velocity, not at different rates in numerous local markets. And while there appears to be some correlation between the downturn in the European economy and the hesitation in silver supply in 1619-22, the silver age of the European economy was by no means over. American mining did not suddenly collapse after the 1620s; and American treasure continued to flow copiously into Spain and Europe in the second half of the seventeenth century.⁷⁸

In Spain itself American silver became a hazard for the economy and a problem for later historians. The 'extremely close correlation between the volume of treasure imports and the advance of commodity prices throughout the sixteenth century, particular from 1535', has been so well established that the products of the American mines must be regarded as the principal cause of the price revolution in Spain.⁷⁹ The Spanish government, like its neighbours in the rest of Europe, did not understand the causal connection between the influx of precious metals and the rise of prices, and was thus hampered in its economic and financial policies. On the other hand, contemporaries were certainly aware of the price revolution, for it was reflected in the cost of living, and although there was much uncertainty and confusion about its causes, individual economists began to appreciate the role of American treasure. Of these the most distinguished was the French theorist, Bodin, who established a connection between treasure imports and inflation in 1568. The views of Bodin, however, has already been anticipated in Spain. Twelve years previously, in 1556, Martín de Azpilcueta Navarro, a canon lawyer, produced the first clear statement known to exist that the high cost of living was a result of treasure imports:

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.⁸⁰

Other Spaniards of the Salamanca school showed similar awareness. The Dominican, Fray Tomás de Mercado, published his *Tratos y contratos de mercaderes y tratantes* in 1569—it was completed by the previous year and owed nothing to Bodin—and although it was full of ethical analysis in the traditional style it also contained some acute economic observation, including the quantity theory of money and the relation between American treasure and the current inflation.

An adequate understanding of the problem, however, had to await modern scholarship. The causal relation between the influx of precious metals and the rise of prices is to be distinguished by regions and by periods. Broadly speaking, the price rise was greatest in Andalucía, which through its monopoly of the Indies trade always received the first impact of treasure imports; this was followed by New Castile, then by Old Castile and León on the one hand and Valencia on the other, corresponding to their distance from the

receiving centre. The general price level in Spain slightly more than doubled in the first half of the century. In this period the rise occurred largely in the first, third, and fifth decades. Prices continued to rise in the second half of the century, with plateaux of relative stability in the years 1551-6, 1562-9, and 1584-95; but from 1596 prices soared, reaching their apogee in 1601 with an index number of 143.55 on a 1571-80 base. By 1600 prices had risen to a level four times as high as that of 1501. From 1601 the process was checked, and after a period of oscillations ended in a temporary decline from 1637 to 1642 when there was a drastic drop in remittances from America, but prices never fully descended from the peak attained at the close of the sixteenth century.⁸¹

To this factual description, however, two considerations should be added. First, although prices reached their apogee in the second half of the sixteenth century, the price rise was proportionately greater in the first half of the century. From 1501 to 1550 the advance was 107.61 per cent., while in the last half of the century it was 97.74 per cent. Moreover, the rhythm of acceleration of the price revolution slackened in the middle years of the century. Between 1549 and 1560 prices increased only 11.9 per cent, and the year 1562 marks the transition from a rapid rise (2.8 per cent half yearly increase) to one more moderate (1.3 per cent). This mid-century phenomenon can be related to the contemporary depression in the Indies trade (the channel of American treasure) and indicates that the economic depression of the seventeenth century and its relation to the influx of treasure were already foreshadowed at the beginning of Philip II's reign.⁸² Secondly, it would be wrong to ascribe the difference between the economic progress of Spain and that of northern Europe uniquely to prices. In general, it is true, the rise of prices was later and less intense in the rest of Europe than in Spain, because of the time required for American treasure to circulate there and the dilution suffered in the process; first France then England felt the impact. But this does not give us a complete picture of the cost of living in these different countries: grain, for example, was always dearer in France than in Spain during the great inflationary period. A third question concerns the rate and timing of inflation, and can only be answered by speculation. Why did the inflationary trends of individual countries not synchronize chronologically with their absorption of American treasure? Spain itself is an example of this problem. Spanish treasure flowed abroad, in search of food, manufactures, naval stores, and military victories. Its place was taken by a whole series of financial expedients—vellon coins, notes, credit arrangements, and banking developments—thus

freeing bullion for external use. In effect American treasure was displaced from Spain by the creation of domestic money. But the physical absence of treasure specific country during that country's inflation does not disprove the monetary interpretation of sixteenth-century price inflation. The influx of precious metals, it is argued, influenced international markets, to which Spain and other countries were inextricably linked. Spain's inflation, therefore, should be viewed as a reflection of the overall European price revolution.⁸³

Treasure in itself, however, was not the only cause of the price revolution. The quantity theory of money, by which an increase in the quantity of money in circulation brings a proportionate increase in the level of prices, is too crude to account for all the factors involved in the history of Spanish prices. Prices are also affected by conditions of supply and demand. Industrial and agricultural production, therefore, must also be taken into account. An increase in the amount of money in circulation without a corresponding increase in the production of goods means that the same amount of goods is chasing more and more money, and therefore prices rise. The money pumped into Spain from America was not used to increase domestic productivity, and higher prices were the inevitable result. After an increase in industrial production in the first half of the sixteenth century, though one which did not keep pace with the increase of money, Spanish output then fell off and money sought products abroad. The demographic factor also played its part. The significant increase of the European population in the period 1460-1620 meant that there were now more people to be fed and clothed and housed, and raised the demand for goods of all kinds. But agricultural products were crucial. Producers were unable to respond to the rising demand, and new and less fertile lands were cultivated; in this way marginal costs increased, and per capita yields became smaller, while demand continued to rise. Prices of agricultural commodities, especially grain, rose sooner and faster than those of other goods, and the inflation of agricultural prices eventually caused a general increase in price levels.⁸⁴

The consequences of the price revolution are perhaps even more difficult to elucidate than its causes. It certainly caused a general rise in the cost of living, but what this meant for the different classes and for the economic development of the country as a whole is by no means clear. According to the classical explanation, the economic backwardness of Spain was related directly to the results of inflation there.⁸⁵ The lag of wages behind prices in Europe aided the accumulation of capital; the diminishing price of labour gave

entrepreneurs the opportunities of exceptional benefits which could then be further invested. Spain, on the other hand, was claimed as an exception to this general rule, for although there was a lag of wages behind prices it was not enough to afford extraordinary benefits and therefore give great impetus to capitalism. A further refinement of the argument was to note the close correspondence between periods of inflation and deflation of benefits and those of national rise and decline; in these terms the greatness of Spain coincided with the inflation of 1520 to 1600 and its eclipse with the deflation of 1600 to 1630.⁸⁶ For there was a close relation between inflation of benefits and accumulation of capital; as wages in Spain were higher than those elsewhere, so there was less opportunity to accumulate capital, and this was the principal reason for Spain's economic inferiority. But these monetary theories leave many questions unanswered. Apart from the fact that inflation of profits does not necessarily imply an industrial boom, there is no ground for arguing that all Spanish wage-earners were better off than their foreign counterparts during the price revolution. From a comparison of the wages of builders in England and France with those in Valencia, it is clear that the latter underwent at least the same progressive losses as the former throughout the sixteenth century.⁸⁷ In any case, builder's wages, unaccompanied by those of industrial and agricultural workers, are not representative enough to justify generalization. It is true that the Spanish inflation did not produce an accumulation of capital for investment. But this was because those who profited from it used their wealth unproductively, either in buying a title and an estate, or in extravagant building, in the purchase of luxury consumer goods, or in simple hoarding.

How, then, did the price revolution affect the various sectors of Spanish society? Conditions in sixteenth-century England support the view that the divorce between constantly rising prices and fixed rents could impoverish the land-owner.⁸⁸ But this does not apply to Spain, where rents were not fixed and where the greater power of landowners enabled them to raise rents and replace their tenants by those better able to pay. There is also abundant evidence that in Spain the rich were getting richer and the poor poorer.⁸⁹ A possible inference from this is that the opening of the American market and the rise of population in the peninsula itself produced an increase in demand for agricultural products, an extension of cultivation, and a rise in the value of arable land, all of which coincided with the added stimulus of inflation. If, at the same time, the concen-

tration of property in the hands of a few extremely wealthy families is taken into account, together with power to raise rents, then it would seem that the inflationary period was not unfavourable to the great landowners in Spain and did not deter people from investing in land. But landowners were not the only ones to gain from the price revolution. Anyone with something to sell or trade could reap the benefit of inflation, as many manufacturers and merchants did in the first half of the century. When conditions then became more difficult, and constant inflation began to make Spanish enterprise less competitive in the international and colonial markets, only the more powerful merchants were able to survive foreign competition, but those who did so undoubtedly prospered. Enormous fortunes were to be made in the Indies trade, whose expansion was related directly to the rise in prices; when prices rose in Spain there was a strong presumption of an even greater rise in America, and this encouraged further investment and more profitable returns.⁹⁰ The latter were distributed beyond the merchant houses of Seville to entrepreneurs in other parts of Spain, for the American market took the oil and wine of Andalucía, the wool of Castile, the metallurgical products and ships of the Basque country. To at least the end of the sixteenth century there was still money to be made in Spain. On the other hand, the price revolution brought impoverishment to those who lived on fixed incomes and small rents, for these did not keep pace with prices. Small landowners of the *hidalgo* class, the lower clergy, government officials and many others all found their standard of living reduced as the price of commodities rose beyond their means. The situation of the peasant is less clear, for it is difficult to reconcile agricultural prosperity and the great rural emigration to the towns, which in turn makes it difficult to explain the alleged extension of cultivation in Spain. But one thing is certain—wages lagged behind prices, and the difference between the two was worse in the first half of the century. Even if the money value of wages subsequently picked up, their purchasing power continued to fall. By 1550 real wages were roughly 20 per cent lower than the average for 1501-20, and they continued to fall steadily from 1551-60 to 1591-1600, the decrease being now about 12 per cent.⁹¹ Throughout most of the sixteenth century life was difficult for the Spanish poor; indeed, for the mass of Spanish wage-earners the price revolution was a grievous blow which reduced their already low standard of living still further.

The crown, on the other hand, like its ally, the aristocracy, was less crippled by these developments

than the majority of its subjects. Certainly the cost of administration, and of paying, feeding, and equipping its armed forces, rose for the crown just as the cost of goods did for the private consumer; for war was an industry like any other, and one that was more costly to Spain than to other countries

because of her higher level of prices. But as the aristocracy could raise its rents, so the state could increase its revenue; this enabled it to keep up with prices, while inflation alleviated the burden of the loans which formed such a substantial part of its income.

ENDNOTES

- ⁷² See Appendix II, Table A.
- ⁷³ See below, pp. 241-6.
- ⁷⁴ Quoted in Merriman, *The Rise of the Spanish Empire*, iv, p. 438 n. 2. On the routes by which the precious metals left Spain see Braudel, *La Méditerranée et le monde méditerranéen à l'époque de Philippe II*, pp. 377-98. American treasure returns, not including smuggling, in the period 1580-1660 totalled 771 million pesos; see Michel Morineau, *Incroyables gazettes et fabuleux métaux. Les retours des trésors américains d'après les gazettes hollandaises (XVI^e-XVII^e siècles)* (Cambridge, 1985), pp. 250, 262, who revises the pre-1660 figures of Hamilton, *American Treasure and the Price Revolution in Spain*, pp. 35-8.
- ⁷⁵ Huguette and Pierre Chaunu, *Séville et l'Atlantique (1504-1650)* (8 vols, Paris, 1955-9), viii, 2, pp. 150-290.
- ⁷⁶ Hamilton, *American Treasure and the Price Revolution in Spain*, pp. 206-8.
- ⁷⁷ For a good discussion of the evidence see Lyle N. McAlister, *Spain and Portugal in the New World 1492-1700* (Oxford, 1984), pp. 464-8.
- ⁷⁸ See John Lynch, *The Hispanic World in Crisis and Change 1598-1700* (Oxford, 1992).
- ⁷⁹ Hamilton, *American Treasure and the Price Revolution in Spain*, p. 301. Hamilton's thesis and the statistical evidence with which he sustains it are strong, but criticism of some of his methods and interpretations has been growing; see P. Vilar, 'Problems of the formation of capitalism', *Past and Present*, x. (1956), pp. 15-35; Ingrid Hammarström, 'The "Price Revolution" of the Sixteenth Century. Some Swedish evidence', *The Scandinavian Economic History Review*, v² (1957), pp. 118-54; and especially, J. Nadal, 'La Revolución de los Precios españoles en el siglo XVI. Estado actual de la cuestión', *Hispania*, xix (1959), pp. 503-29. The criticisms of later commentators can be summarized as follows: 1. Hamilton worked on town prices, but a complete study ought to take account of rural prices, paid in local markets and more closely tied to crop yields. 2. A third of Spain is omitted from his investigation, including Catalonia and the Basque country, both of which perhaps were more closely related to the European economy than the rest of Spain. 3. Price movements did not always synchronize with the flow of silver. In Spain the average annual rise in price levels in 1501-62 was about 2.8 per cent, but in 1562-1600 the rate fell to 1.3 per cent. Thus the greatest price rise occurred before the massive influx of American treasure began to reach Spain. 4. Hamilton's figures for entry of American treasure are defective in that he does not indicate the criterion adopted for separating royal income from private income or include unregistered receipts. 5. His price figures suffer from a defect of origin: they are of uniform provenance—hospitals and charitable establishments. In spite of the criticisms, however, no one has offered to replace Hamilton's work, which remains indispensable.
- ⁸⁰ In M. Grice-Hutchinson, *The School of Salamanca. Readings in Spanish Monetary Theory, 1544-1605* (Oxford, 1952), p. 95; see also Larraz, *La época del mercantilismo en Castilla*, pp. 109-131.
- ⁸¹ Hamilton, *American Treasure and the Price Revolution in Spain*, pp. 190-2, 199-203. See Appendix II, Table B.
- ⁸² See below, pp. 242-3; see also Nadal, 'La Revolución de los Precios españoles en el siglo XVI', p. 512.
- ⁸³ Denis O. Flynn, 'A New Perspective on the Spanish Price Revolution: The Monetary Approach to the Balance of Payments', *Explorations in Economic History*, 15 (1978), pp. 388-406.
- ⁸⁴ Population now competes with American treasure in discussions of the price revolution. The population of La Mancha increased by some 86 per cent in the period 1530-91, but a period of even more vigorous growth seems to have occurred in the years 1500-30, and the population may have doubled in the course of the century. Rapid population growth before 1530, if this is correct, would strengthen the argument for a demographic rather than a monetary explanation of inflation in Castile. See López-Salazar Pérez, *Estructuras agrarias y sociedad rural en la Mancha*, pp. 86-94.
- ⁸⁵ E. J. Hamilton, 'American Treasure and the Rise of Capitalism, 1500-1700', *Economica*, ix (1929), pp. 338-57.
- ⁸⁶ Lord Keynes, *Treatise on Money* (London, 1930), ii, pp. 154-55, 161.
- ⁸⁷ Nadal, 'La Revolución de los Precios españoles en el siglo XVI', 523-4.
- ⁸⁸ Hamilton, 'American Treasure and the Rise of Capitalism', p. 350.
- ⁸⁹ Viñas Mey, *El problema de la tierra en la España de los siglos XVI-XVII*, pp. 189-91.
- ⁹⁰ See below, pp. 241-9.
- ⁹¹ Hamilton, *American Treasure and the Price Revolution in Spain*, p. 280. See Appendix II, Tables C and D.