

JOSE ANTONIO MATEOS ROYO

University of Zaragoza

Faculty of Economic and Business Sciences

Department of Economic History and Structure and Public Economy

Gran Vía, 2 ZARAGOZA –50005- (SPAIN)

E-mail: jmateos@unizar.es

THE BURDEN OF TRADITION:

MONETARY CIRCULATION, PUBLIC POLICY AND MERCANTILIST DEBATE IN SEVENTEENTH-CENTURY ARAGON

SUMMARY: This paper looks at monetary circulation, public policy and economic debate in Aragon during the seventeenth century. Rising market demand for money with a lower metal content encouraged the appearance of counterfeit and foreign coins. Though they facilitated transactions, these flows had adverse effects on the economy and kindled disputes between institutions with regard to the advisability of a devaluation of local coins in the second half of the century. The failure of this debate after 1675 prevented the emergence of an autonomous monetary policy aimed at stimulating economic recovery and facilitated increasing state intervention in the eighteenth century.

Key words: monetary circulation, policy and debate, Aragon, seventeenth century

Over the last fifteen years, Spanish historiography has seen an unusually vigorous recovery in studies concerning the coinage and monetary circulation in early modern Spain, which gained considerable significance, and produced some very interesting work, around the middle of the twentieth century, particularly in the 1960s and 70s. Closer inspection of the fields of research concerned reveals a considerable imbalance in the issues examined, however. Thus, historians have tended to focus on the coinage of Castile, due to its implications for the finances and foreign policy of the Spanish monarchy and its greater significance for the world economy. Clearly influenced by the ground-breaking work of Hamilton and Domínguez Ortiz,¹ these studies show a clear predilection for the seventeenth century in an effort to explain how monetary policy influenced the economic decline of Castile as the metropolis of the Spanish empire. Drawing on the rich documentary sources provided by the State archives, this research has extended our knowledge of monetary debate, the amount of issues and the links between the intrinsic value of the silver minted, the evolution of international trade and the monarchy's borrowings from bankers and other lenders.² However, local archives have been largely ignored, and this approach has hampered understanding of monetary

circulation in the interior of Spain due to a narrow focus on the possible effects of measures taken at the level of the State which ignores market responses to policy.

Meanwhile, studies of monetary circulation and policy in the Spanish territories of the Crown of Aragon (federation of kingdoms that integrated Aragon, Catalonia, Valencia, the Balearic Islands and different Italian provinces) during the early modern period have fared considerably worse. In contrast to the interest in the medieval monetary policy agreed, it is believed, between the monarchy and the institutions, the evolution of this field of research has been treated, despite the stimulus provided by Vilar's work,³ as conditioned by Castilian directives and largely irrelevant until the extinction of the local coinage in the eighteenth century. This field is, however, of considerable interest. In the first place, studies have revealed the factors governing monetary circulation in the Crown of Aragon and its capacity to adapt to economic change, which affected international monetary flows. Secondly, they show the patterns of negotiation between the Spanish monarchy and the regional institutions and the possible influence of contemporary monetary debate on the policy adopted in a context in which the Castilian coinage was gaining ground in other areas of Spain. Thirdly, where the available documentation is examined in a critical spirit, studies provide a more nuanced picture of the combined effects of market pressures and state policy on the structure of the coinage in circulation. Lastly, this research allows comparative analysis of monetary circulation in the Crowns of Castile and Aragon and measurement of the impact on regional economic divergence in early modern Spain.

This paper seeks to build on these considerations by addressing the links between monetary circulation, public policy and economic thought in the kingdom of Aragon in the seventeenth century. In this way, we shall show that the kingdom saw significant changes in the coinage in circulation from the early 1600s on, as in fact happened throughout the Crown of Aragon. Market demand was for money with a lower intrinsic value than the Aragonese coinage, would be more closely aligned with the real value of gold and silver and would facilitate transactions. This need was in fact met through the surge in foreign, counterfeit and debased coins in Aragon, which had adverse effects on the economy though it benefited trade. This situation sparked serious debate between the public institutions on the need to increase seignorage or reduce the intrinsic value of the local coinage in the second half of the seventeenth century. As a result of this political interest, the debate arising between 1674 and 1702 reflects a modest influence from the Castilian mercantilism and considerable knowledge of monetary developments in Catalonia and Valencia. In contrast to these territories, however, the inability of the

Aragonese institutions to bring about the necessary monetary reforms not only hampered economic recovery but eventually put an end to the last attempt to forge an autonomous monetary policy for Aragon in the early modern period.

1. Aragon in the 17th century: monetary circulation

The main feature of monetary circulation in seventeenth-century Aragon is the shortage of local coins, a problem already identified in the medieval period, and the misalignment between market value and market demand.⁴ This problem was particularly acute in the petty coinage. The gold florin, which was common throughout the Crown of Aragon was first introduced in the mid-fourteenth century, was devalued by the monarchy several times in the late medieval period in coins struck, in general, in its other territories (such as Catalonia and Valencia). In Aragon itself, however, the nobility was more successful in preventing the king from reducing the weight and fineness of the *jaquesa* petty coin in the fourteenth and fifteenth centuries.⁵ As this coin was the benchmark unit for the official accounting system throughout the territories of the Crown of Aragon, the nobles were interested in maintaining its face value in order to boost their earnings from the export of raw materials (wheat, meat, oil, wool). The kingdom of Aragon lacked a silver coin similar to those of Catalonia and Valencia, while commercial transactions were further constrained by the meager supply of Aragonese petty coins and their high intrinsic value, which also prompted the export of bullion. As a consequence, market demand encouraged counterfeiting and debasement, not to mention the use of foreign silver, though this was strictly forbidden by the Aragonese Parliament.

Faced with these endemic problems, monetary circulation was transformed in Aragon in the sixteenth century as a result of the reforms introduced towards the end of the reign of John II (1458-79) and, especially, under Ferdinand II, the Catholic Monarch (1479-1516).⁶ These reforms aimed to bring the intrinsic value of the Aragonese coins into line with gold and silver prices, and to align their metal content with the coins struck in the other kingdoms of Spain and Europe. In the first place, the traditional issue of florins was gradually abandoned after 1477 due to its low fineness (18 carats) in favor of a more prestigious gold coin with a higher intrinsic value, the *ducado*, which was based on the Venetian model with a fineness of 23.75 carats and a weight of 3.5 grams. Ferdinand also introduced this coin in Castile in 1497. Secondly, the Parliament resolved in 1484 to introduce a series of silver coins (*reales* and *medio reales*) with a fineness of 11 *dineros* or 22 carats. Finally, the intrinsic value of the *jaquesa* billon coin

was reduced when these silver new silver coins appeared, as the Parliament lowered the silver content from 25% to 12.5%.

This depreciation of the petty coinage was needed to retain the kingdom's local fractional coins. The *jaquesa* petty coin was thus kept as a base coin for the official accounting system, together with its multiples, the *sueldo*, equal to twelve *dineros*, and the *libra*, equal to twenty *sueldos*⁷. The fiat and theoretical intrinsic value of one *real* was thus equal in the sixteenth and seventeenth centuries to two *sueldos* or twenty-four *dineros*. The adoption by the Aragonese Parliaments of 1519 and 1528 of the purities and weights prevailing in silver and gold issues in Castile favored transactions with Castile and the penetration of Castilian coins.⁸ Although the petty coins of Castile never circulated in the Crown of Aragon in the sixteenth and seventeenth centuries, the use of Castilian gold and silver coins became increasingly common from the sixteenth century on. The use of Castilian coins in Aragon in place of the declining issues of local currency, especially after the middle of the sixteenth century, stimulated trade and helped to reactivate the economy. After 1564 the *ducado* was replaced by the *escudo*, based on the French model with a fineness of 22 carats, but the other regulations enacted by the Parliaments of 1519 and 1528 for all issues of Aragonese coins were maintained for the rest of the century.

Even so, the stability of the rules governing issues gradually gave way to adaptations of the monetary units required by the market in the second half of the sixteenth century as the price of gold and silver shifted. Thus, Aragonese bullion responded well to moderate domestic demand until the end of the sixteenth century as a result of the alignment of the weight and purity of coins to these fluctuations, and the greater frequency of issues compared to gold and silver coins in the later decades of the century.⁹ However, both the scarcity of local coinings in gold and silver (*ducados*, *escudos* and *reales*) in this period and increasing exports of Aragonese and Castilian coins to France from the mid-sixteenth century onwards, a consequence of their high intrinsic value, began to undermine the monetary situation.¹⁰ The suppression of customs duties on the gold and silver coins exported to Catalonia by the Aragonese transit to France and the arrival of counterfeit and debased coins in Aragon.¹¹

Table 1

Main units of the Aragonese monetary system under the Hapsburg monarchy

Unit	Metal	Issue	Fineness	Number/Marc	Weight
<i>ducado</i>	gold	1518-56	23.75 carats	67	3.5 grams
<i>escudo</i>	gold	1564-76	22 carats	68	3.15 grams
<i>real</i>	silver	1518-1652	22 carats (11 <i>dineros</i>)	67	3.42 grams
<i>dinero</i>	bullion	1518-98	3 carats (1.5 <i>dineros</i>)	288	0.81 grams
<i>dinero</i>	bullion	1611-80	3 carats (1.5 <i>dineros</i>)	360	0.65 grams

Note: The Aragonese bullion issued in the latter decades of the sixteenth century appears already to have undergone some reduction in weight and fineness, although less than in the period between 1611 and 1680.

Sources: Mateu, “Sistema” and Archive of the Crown of Aragon, Council of Aragon, file 91.

The coins circulating in the kingdom would be transformed in the early seventeenth century as a consequence of changes in the money supply throughout the Crown of Aragon. The rise in the price of gold and silver stoked the market demand for coins with lower intrinsic value than the established fiat values. Thus, early efforts to devalue silver coins in Catalonia and Valencia were a response not only to the fact that their face value was lower in the Iberian Peninsula than their market value in other European countries, not to mention Asia, but also to the appreciation of gold against silver in Europe, which forced the monarchy to raise the legal parity in Castile.¹² As in the neighboring countries, the public institutions in the Crown of Aragon pressed for the devaluation of the coinage to improve the functioning of the market or obtain higher profits on issues. The need for reform became increasingly acute as the petty coinage depreciated, and the trade deficit and financial weakness of the monarchy in Castile drove the flight of gold and silver coins. In addition to these problems, the Castilian economy was unable to supply the Crown of Aragon with low value currency because Castilian petty coins (*maravedís*) had neither legal nor real tender in these territories, and its silver coins (*reales*) preserved their traditional high face and intrinsic value over most of the seventeenth century. The Crown of Aragon only received large numbers of Castilian *reales* of below-legal fineness struck in Peruvian mints between 1650 and 1654. As we shall see below, when Charles II devalued the Castilian *real* in the 1680s,

the presence of this coinage in the Crown of Aragon had already been supplanted by low value (weight and purity) coins from Catalonia and Valencia.

As a part of this process, the consolidation of a more outward-looking economy in Aragon favored the larger, more constant monetary flows in coins with a lower intrinsic value than the local currency. The extinction of Aragonese mercantile capital in the late sixteenth and early seventeenth centuries¹³ (which would only recover in the form of rentier capitalism in the second half of the century) and the sharp decline in local manufacturing output¹⁴ after 1650 caused a lasting trade deficit, which resulted in the flight of gold and silver. The main destination of high intrinsic-value coins was France, whose merchants controlled major transactions in Aragon, facilitating French imports of raw materials like wool and the export of manufactured goods, which were more competitive than Aragonese products.¹⁵ Assisted by the greater openness of the economy, which had become increasingly specialized in the production of raw materials, successive invasions of low quality foreign coins, whether legal currency or local and alien counterfeits (normally struck in neighboring territories), took the kingdom by storm. As we shall see, the scant issues of silver and billon coins by the Zaragoza mint in the seventeenth century, and their high intrinsic value drove the spread of this coinage at the bottom end of the monetary system.

Coins from Valencia were the spearhead of these incursions of foreign currency into Aragon. First observed in the early seventeenth century (1603, 1606, 1612, 1614 and 1619) by the *Diputación*, which acted as a standing committee of the Parliament that governed Aragon and protected its rights, penetration gathered pace around 1650 due to the favorable trade balance between southern Aragon and the kingdom of Valencia based on strong demand for wheat and meat.¹⁶ Silver and petty coins from Valencia had been used in Teruel since the late medieval period¹⁷, entering southern Aragon to offset the deficit, often in the hands of merchants attending the main fairs, such as that held in the town of Daroca. The use of the Valencian *real* took hold and spread in the Aragonese market when it reached a parity of sixteen *dineros*, which was lower than its face value of eighteen, but higher than its intrinsic value of eleven or twelve *dineros*. Driven by these factors, silver and billon coins from Valencia became common in the south of the kingdom (districts of Teruel, Albarracín, Daroca and Alcañiz) during the second half of the seventeenth century, and were widely used even in Zaragoza, the capital of Aragon.¹⁸

Meanwhile, bullion was the core of the coins supplied by Catalonia, which had a smaller, more local impact in Aragon.¹⁹ At times associated with invasions of French

(e.g. Béarn *vaquettes*) and Valencian coins, Catalan currency first entered Aragon around 1611 and grew rapidly between 1620 and 1640. The shortage of coins to meet the fifteen-year subsidy voted by the Parliament of 1626 to Philip IV made it necessary to resort to silver coins from Valencia and Catalonia in Aragon even in the 1630s. However, the flow of these coins was halted by the war of Catalan secession (1640-52), which caused the collapse of transactions with the Principality, while the presence of a Castilian army and the Court in Aragon attracted silver coins into the kingdom, temporarily facilitating payments and trade. Even though a part of the abundant issues of low quality bullion in Catalonia during this conflict did circulate in Aragon in the second half of the seventeenth, the take-up of these coins was very limited compared to that of coins from Valencia, which squeezed Aragonese and Castilian pieces out of the market.²⁰ Two orders issued by the *Diputación* in 1689 and 1695 banned the use of Valencian bullion, recognizing in passing that this coinage was entering Aragon not only from Valencia but also from Catalonia and other frontier kingdoms.

Associated with the penetration of foreign currency, various counterfeits of low value local coins also appeared in Aragon in the seventeenth century.²¹ Thus, the incursion of Valencian coins in the early seventeenth century coincided with fraudulent debasements of Aragonese *reales* and counterfeiting of silver and petty coins. Meanwhile, the arrival of false Aragonese *reales*, known as *bosqueteros* or *bosquejos*, struck in Béarn in 1611/2, in the hands of Gascon and Catalan traders stung the authorities into serious legal action in Zaragoza against counterfeiters and debasers of the currency. New counterfeits of Aragonese petty coins were detected after 1620, especially between 1626 and 1632, riding a wave of French, Catalan and Valencian coins entering the kingdom. In 1660, meanwhile, counterfeit Aragonese coins struck in France and Navarre would spread throughout the kingdom. A new bullion issue in 1677-80 again stimulated counterfeiting in Zaragoza, prompting the municipal authority to order all false coins discovered to be melted down.

In principle, the presence of all of this coinage in Aragon in the seventeenth century had the virtue of expanding the money supply, which was hamstrung by the scarcity of Aragonese and Castilian coins (particularly in the southern part of the kingdom) and the misalignment of the legal currency with gold and silver prices. As had occurred in the late medieval period, this was a response to market demand and it had again the effect of stimulating trade. The modest increase in the premium paid by parties receiving silver instead of bullion on these transactions, compared to the situation in Castile,²² where it ballooned, is a clear indication of these positive

outcomes. The premium estimated by the *Diputación* in the course of the 1626 Parliament for the preceding ten years was 1% to 2% of the transaction value.²³ This increased to 3% around 1650, where it stayed throughout the second half of the seventeenth century.²⁴ Though many of the Aragonese institutions (the *Real Audiencia*, *Diputación* and the municipalities) blamed this increase in the premium on the irruption of foreign and counterfeit bullion, as well as on other coins with a lower intrinsic value than local issues, the continuous uptake of Valencian *reales* probably helped to moderate this phenomenon.

Nevertheless, this currency also had a range of adverse effects on the economy. Thus, it displaced both Castilian and Aragonese coins with a higher intrinsic value in transactions, in accordance with Gresham's law. Together with the trade deficit with France, the arrival of low quality *reales* also drove the flight of gold and silver coins with the result that the fairly large issue of Aragonese *reales* made in 1651/2 swiftly vanished from the market. In response to increasing scarcity, people began to hoard gold coins, which appreciated sharply against local silver, rising by some 8.7% against the Castilian *doblón* and 7.7% against the Aragonese *escudo* in the last quarter of the seventeenth century.²⁵ These flows also led to frequent restamping of Aragonese petty coins, which were also often debased, to strike counterfeits or legal tender with a lower metal content, a strategy employed by the Valencia mint towards the end of the seventeenth century to increase its profits.²⁶ The emergence of this currency undermined confidence in the currency, an effect that was compounded by the disappearance of local coins, and complicated transactional conversion between Aragonese and foreign money. In the absence of any regulation, the rapid spread of these low value coins sometimes stoked inflation, as revealed by the prices of manufactured products in the decades of the mid-seventeenth century.²⁷ Worsened by the decline and outward projection of the Aragonese economy, these problems increasingly came to concern the kingdom's authorities, because they reduced control of the market, since they were not the result of autonomous policy measures, and they were decisive in shaping the monetary debate in the last quarter of the seventeenth century.

2. Minting in 17th century Aragon: legislation and public policy

The emergence of low quality coins brought about acute market changes in Aragon in the seventeenth century as a consequence of the difficulties inherent in

establishing a monetary policy that was more in line with economic developments. The scarcity of issues and a certain unwillingness to reduce the intrinsic value of the coinage were typical features of the Aragonese currency in the medieval period²⁸ and they would be replicated in the seventeenth century, especially in comparison to the other kingdoms forming part of the Crown of Aragon. Table 2 shows all of the legal issues of Aragonese currency made in the seventeenth century. In addition to the absence of minting in gold, the scarce issues of silver and petty coins were intended to by the monetary authorities to meet two different objectives.

The silver money circulating in Aragon was estimated in 1626 by the *Diputación* and the learned Doctor Francisco de Arpayón at somewhat less than 500,000 *libras*, though this figure would be increased by the presence of the royal army and the Court in the kingdom during the war of Catalan secession (1640-52), only to decline again, in all likelihood, in the second half of the seventeenth century.²⁹ In this context, the issue of *reales* was not intended to increase the money supply but to melt down the low quality counterfeit coins, *reales bosquejos* (1611/2) and *reales peruleros* (i.e. from Peru: 1651/2) that had found their way into the kingdom. The decisive support of the monarchy allowed these issues to go ahead without the approval of the Aragonese Parliament, required for any minting of gold and silver coins. This privilege, cited in 1482 by the *Diputación* and strictly applied in the first sixty years of the sixteenth century, provided the kingdom's oligarchy with an ideal mechanism to conserve the intrinsic value of the recently created silver *real* in the sixteenth and seventeenth century, as had been the case with the *jaquesa* petty coinage in the medieval period.³⁰ As an expression of the same interest on the part of the elites and the monarchy in the preservation of the weight and fineness of the currency, issues of silver coins continued to be made in line with the Castilian models established by the Parliaments of 1519 and 1528, creating 67 *reales* per marc of Aragonese silver with a purity of 11 *dineros* and a weight of 3.42 grams.

Issues of Aragonese petty coins were also few and far between, occurring only in 1611-8, 1655-7 and 1677-80. The first two issues went ahead thanks to earlier minting of silver coins and in the third to the king's interest in compensating the council of Zaragoza for military services and levies. These three issues all took account of the need to expand the supply of local petty coins, in view of the evidence (especially in 1655-7 y 1677-80) that a large part of earlier issues had been worn down, debased or restamped. In contrast to the silver minted, these issues did not require melting down illegal or foreign currency, and the main concern was the amount of Aragonese bullion

minted with a low weight and fineness that the market would support without causing prices to rise, higher silver premiums or other trade-related problems. Estimated at a maximum of 100,000 or 120,000 *libras* in the second half of the seventeenth century, these issues represented a respectable part of the total bullion circulating in Aragon, which is a clear indication of the scarcity of money in the kingdom.³¹ If Juan Antonio Costas, who was an adviser to the *Real Audiencia*, estimated that earlier issues had been over 500,000 *libras*, a more prudent report presented to the 1702 Parliament by a committee of the minor nobility set the figure at just 350,000 *libras*.

Table 2

Aragonese money minted in the seventeenth century

Period	Metal	Unit	Amount of issue	Fineness	Weight
1611/2	silver	<i>real</i>	100,000 <i>libras</i>	11 <i>dineros</i>	3.42 grams
1651/2	silver	<i>real</i>	454,000/470,000 <i>libras</i>	11 <i>dineros</i>	3.42 grams
1611-8	bullion	<i>dinero</i>	150,000 <i>libras</i>	1.25 <i>dineros</i>	0.65 grams
1655-7	bullion	<i>dinero</i>	70,000/88,000 <i>libras</i>	1.5 <i>dineros</i>	0.65 grams
1677-80	bullion	<i>dinero</i>	100,000/112,000 <i>libras</i>	1.5 <i>dineros</i>	0.65 grams

Notes: In the case of silver currency, only the fineness and weight of the *real* is given, although the Aragonese issues of 1611/2 and 1651/2 also included the *medio real*, *real de a dos*, *real de a cuatro* and *real de a ocho*.

In the case of the bullion issues of 1655-7 and 1677-80, the lowest estimates reflects the initial issue established by the monarchy, while the higher amounts include the increases permitted by the master of the mint in order to use up residual and surplus metal, thereby increasing profits.

Each *libra* issued weighs one Aragonese marc or 233.571 grams.

Sources: Archive of the Crown of Aragon, Council of Aragon, file 91 and Municipal Archive of Zaragoza, box 7805.

If silver coins preserved their intrinsic value unaltered during the sixteenth and seventeenth centuries, the metal content of Aragonese bullion was reduced at the end of the sixteenth century and during the seventeenth century. In contrast to the medieval period, devaluation of petty coins became possible from the last decades of the sixteenth century onwards because these issues could avoid their prior approval by the Parliament and benefit from a legal loophole. After the intrinsic value of *jaquesa* coins was lowered under John II and Ferdinand II, the Catholic Monarch, the weight and fineness of issues

in the sixteenth and seventeenth centuries were no longer established by law. These amounts were either set by committee, as occurred in 1519 and 1528 on the Parliament's initiative, or referred back to established tradition.³² This rather vaguely defined regulation, which required a weight of 0.81 grams and one and a half *dineros* as basic values, made room for a reduction in intrinsic value, especially during the reign of Philip II.³³ Both this reduction and the significant issues of *dineros* towards the end of the sixteenth century were absorbed by the Valencian market and may be interpreted as a way of generating revenues for the monarchy through the lease of the mastery of the mint, after the decline in issues of gold and silver in Aragon in the last three decades of the century.³⁴ Supported by Catalan and Valencian precedents, the depreciation of Aragonese billon coins grew in intensity in the seventeenth century.³⁵ The *dineros* minted between 1611 and 1618 had a fineness that was from 11.1% to 22.2% less and were 19% to 20% lighter, the latter a reduction that would be maintained in 1655-7 and 1677-80. Though this cut in intrinsic value was much less than was made in Valencia and Catalonia, it significantly changed the metal parity between silver and billon coins established by the Parliaments of 1519 and 1528. To the extent that this modification implied the abandon of the traditional conversion system between Aragonese *dineros* and Castilian *reales*, which had guided commercial transactions in the kingdom throughout the whole sixteenth century, these issues promoted strong criticism on the part of different Aragonese institutions.

The reasons for the scant supply of local money in Aragon were rooted in the legislation governing minting, which ensured that the monarchy had little interest in promoting new issues. In the first place, the king was not entitled to seignorage on the currency, having given up this right in the medieval Parliaments in return for a coinage tax (*impuesto del maravedí* or *del monedaje*).³⁶ Again with the aim of guaranteeing the intrinsic value of the coinage, the income granted to the master of the Zaragoza mint was very modest. Thus, in 1593 the viceroy of Aragon established a cut of five *reales* per marc of gold, one *real* per marc of bullion and just two *dineros* per marc of silver.³⁷ A second major difficulty was the economic evolution of the Castile and the monarchy in the century. Where the kingdom's Parliament or institutions did resolve on the issue of gold or silver coins, the Zaragoza mint had to acquire the metal required in Castile, either in the form of coins or ingots. Aside from meeting demand from other territories that lacked access to the gold and silver of America, it became increasingly hard for the State to provide the necessary precious metals as ever more gold and silver was committed to military ventures and the repayment of bank loans. At the same time, the

trade deficit led to an acceleration of outward flows of gold and silver from Castile, while devaluations of the petty seventeenth coinage encouraged hoarding and appreciation in the early seventeenth century. Finally, the need to hold down minting costs to preserve the weight and fineness of the Aragonese currency led both the monarchy and the *Diputación* to waive customs duties on precious metals, often exported in the form of struck coins, raised on the border between Castile and Aragon.³⁸

In addition to these difficulties, the interest and actions of the Zaragoza council, the main public institution with the economic capacity to issue coins, were constrained by the need to obtain royal licenses and to negotiate the profit on issues with the influential Lanuza family, which held the office of master of the mint between 1600 and 1658 as a result of privileges granted by Philip III.³⁹ As a consequence, the city council opted not to issue petty coins in 1611-8 and again in 1655-7, which allowed the master of the mint to reduce intrinsic value, although it did make concessions to direct the minting of silver coins. Thus, in 1611/2 the council increased the profit of the Justice of Aragón, Martín Baptista, at the time master of the mint, to one *real* per marc of silver. In 1651-4, meanwhile, this margin was sharply disputed in view of the cut in the intrinsic value of the *moneda perulera* (Peruvian silver coins), which obliged Philip IV to intervene in support of Miguel Baptista de Lanuza.⁴⁰

After Miguel Baptista died in 1658, the council, anxious to avoid any such wrangle in the future, petitioned the king to grant it the office of master of the mint in perpetuity and the right to mint coins under terms similar to those enjoyed by Barcelona.⁴¹ The interest of the city authorities is clearly reflected in the succession of petitions made to Philip IV and Charles II in 1658, 1660, 1669, 1671, 1672, 1674, 1675, 1676, 1678, 1682, 1683 and 1688. Despite the support of the viceroy Juan José de Austria, Zaragoza never gained the freedom to mint coins, although in May 1677 Charles II did grant it the office of master of the mint in perpetuity in consideration of the services rendered by the city. As a result, the issues authorized by the monarchy in the last quarter of the seventeenth century were confined to just 112,000 *libras* of bullion in 1677-80 to pay for military services in Catalonia. Isolated petitions to mint small amounts of bullion from other councils, such as Teruel in 1678, were in vain.⁴²

The rules governing Valencian and Catalan issues differed from the situation in Aragon. In Catalonia, a number of towns, including Barcelona, were granted royal privileges to mint coins by James I and Peter III in the thirteenth century, and these were subsequently confirmed by later Aragonese monarchs.⁴³ Though the monarchy retained the right to regulate the characteristics and amount of issues through the

viceroy, these did not require the approval of the Parliament. After obtaining a privilege from Philip II in 1598 to reduce the intrinsic value of the petty coinage, the Catalan towns minted substantial issues after 1611, particularly during the war of secession (1640-52), although these were suppressed by royal order after the conflict had ended in an effort to control galloping inflation. Meanwhile, the limited royal issues and outflows to France resulted in a serious shortage of silver in Catalonia in the seventeenth century. The city council of Barcelona pressed for reform between 1611 and 1617 with strong institutional support. These proposals involved reducing the intrinsic value of Catalan *reales* in order to halt exports and benefit from the restamping of Castilian coins. This reform was only completed in 1674, however, with the support of the viceroy, who also took steps to facilitate access to Castilian silver in the last quarter of the seventeenth century.⁴⁴

Issues in the kingdom of Valencia were concentrated in the capital, while seignorage was paid on silver coins from the mid-sixteenth century was extended to other coins struck towards the end of the century and increased on bullion in the seventeenth century.⁴⁵ In the sixteenth century the right to issue coins was leased or granted to certain individuals, but the monarchy switched its options in the following century, granting the right to the city of Valencia in order to improve its financial situation and in consideration of services rendered and donations. Minting was increasingly removed from the oversight of the Parliament and the viceroy gained influence in defining the characteristics of issues. Together with the customs exemption on the export of royal gold and silver to the kingdom of Valencia, the depreciation of the petty coinage in Castile and imports of Valencian silk favored the appearance of Castilian *reales* with a lower face than intrinsic value, which could therefore be restamped as Valencian silver coins. This confluence of economic and political interests and the frequent issues of silver and bullion beginning at the close of the sixteenth century led to a substantial reduction in weight and fineness in 1607-11, a situation that persisted in the numerous issues carried out in Valencia in the seventeenth century.⁴⁶ Trade exchanges increasingly displaced these pieces throughout the territories of the Crown of Aragon, a phenomenon that intensified in the second half of the seventeenth century. The only counterbalance to these flows was low intrinsic-value bullion received by Valencia from Catalonia and Ibiza at the end of the century.

In addition to the problems caused by the regulations governing minting, efforts to increase the money supply in Aragon ran up against a serious institutional crisis. As part of a process beginning in the second half of the sixteenth century⁴⁷, the longer intervals

between Aragonese Parliaments in the seventeenth century spurred various authorities, including the viceroy, the *Diputación* and the city of Zaragoza, to seek to expand their powers in monetary matters. The struggle to control minting and monetary circulation, clearly apparent in the institutional conflicts of 1611 and 1657, increased with the irruption of foreign and forged currency in the kingdom which had the effect of hampering effective public intervention.⁴⁸ The crisis became serious in the second half of the seventeenth century as political in-fighting intensified and different institutions and powerful figures sought the attention of the monarch through petitions submitted to the Council of Aragon, an administrative and judicial institution that helped the monarchy to govern from the Court the main territories of the Crown of Aragon. These pleas always asked permission to mint Aragonese coins and reduce their intrinsic metal content without the approval of the Parliament.⁴⁹

The positions adopted by the Aragonese institutions with regard to reform can be deduced both from these petitions and from the consultations undertaken by the Council of Aragon. The monarch's representatives in Aragon, the viceroy (or in his absence the governor) and the *Real Audiencia*, as the supreme tribunal of Justice created in Aragon during the late medieval period and formed by officials in service to the monarchy, accepted a reduction in the intrinsic value of the coinage, and in particular of petty coins, in 1660-76. This attitude sought clearly to increase the royal treasury's income, given the lack of seignorage and the tiny margin granted to the master of the mint and the silversmith in charge of coining.⁵⁰ However, both institutions returned to their long-standing position of supporting the traditional weight and fineness of the coinage when it became clear after 1686 that the monarchy was little interested in a project that would produce scant returns and was further comprised when the city of Zaragoza obtained the office of master of the mint in 1677. This privilege, in contrast, encouraged the city council to add the defense of devaluation to its requests to the Council of Aragon for permission to mint silver and petty, a position that was in line with the Arbitrist arguments, since this would increase profits from issues, helping to reduce the high level of indebtedness. The commercial interest of the municipal elite, comprising wealthy burghers but excluding the nobility,⁵¹ ensured a wider hearing for contributions to monetary debate in Aragonese than the representatives of the king had been willing to give.

While traditional policy had favored the free flow of goods in order to boost trade and safeguard the customs duties collected at the borders, which were the main source of its revenues,⁵² the *Diputación* consistently opposed any reduction in the weight and

fineness of the silver coinage in the second half of the seventeenth century before the Council of Aragon, on the legal grounds that these measures were contrary to the kingdom's privileges and unacceptable without the approval of the Parliament. This position was the result of the control exercised by the high and petty nobility in the *Diputación*, and the presence of the clergy among its members.⁵³ These social groups were not represented on the Zaragoza city council, and their interest in the defense of a stable intrinsic value for silver money to guarantee its face value had been defined in the medieval period, because these determined their tax yields and land rents.⁵⁴ Aragon's increasing exports of raw materials to France, Valencia and Catalonia at the end of the seventeenth century only reaffirmed this policy, which was intended to optimize profits on transactions by defending the prestige of the Aragonese *real* abroad. The *Diputación* thus opposed any devaluation of the Aragonese currency, including silver coins, or even any large issues on the grounds that such measures would be harmful to trade because they would result in a revaluation of silver against bullion, raise premiums and facilitate the flight of silver.⁵⁵ Ultimately, this defense of the fiat value of silver and bullion blocked any possibility of minting coins in Aragon and entailed acceptance of the successive incursions of low quality illegal coins, banned time and time again by the *Diputación* itself, as endemic and unavoidable.

3. Monetary debate in Aragon (1660-1702)

Significantly, the Hapsburg monarchy's own interest in regulating local issues opened the way for the monetary debate that took hold in Aragon in the last quarter of the seventeenth century. Like in 1611-20, the issue of bullion carried out in 1655-7 sparked debate between the institutions and the monarchy with regard to the regulation and rights of the mint, but the question of reform of the Aragonese monetary system was not raised until 1660. Shackled by the monarch's deficit, Philip IV, who had already been obliged to issue substantial quantities of bullion in Valencia and raise the nominal value of the petty coinage in Castile,⁵⁶ seized on the demands made by the city of Zaragoza for permission to mint as a chance to generate revenues through a fresh bullion issue. The Council of Aragon requested the viceroys of Valencia and Mallorca to report on the weight and fineness of their local petty coinage and seignorage, and undertook an examination of Catalan and Valencian coins to establish their intrinsic value. In contrast to the seignorage of 20% obtained on bullion in Valencia, despite the poor quality of the copper used and the reduction in the weight of coins, however, the income obtained by the master of the Zaragoza mint was only 6% of the face value of

the issue in 1655-57. This made twenty *dineros* per marc.⁵⁷ In the reports submitted to the Council of Aragon in 1660, the *Real Audiencia* continued to defend the traditional view that this lower intrinsic value had allowed the extraction of silver and the appearance of counterfeit coins in the kingdom, while the viceroy of Aragon recognized that a higher metal content would reduce the seignorage that the monarchy could obtain.

Despite the objections of the *Real Audiencia*, which were linked to rentier attitudes and the attachment of the jurists (burghers and petty nobles) to the feudal legal system, the institutions that were closest to the king continued with their efforts to issue coins, stepping up the pressure between 1669 and 1676 after the accession of Juan José de Austria as viceroy of Aragon. Thus, in 1663 the governor of the kingdom ordered certain municipalities to test the acceptance of new lower-quality silver *reales* (“*pilares*” coins) among the population.⁵⁸ The existence of *reales* minted in 1669 and *dineros* struck in 1670, 1673 and 1676 that were nevertheless not legal tender was the result of similar attempts.⁵⁹ As a touchstone for the prevailing climate of opinion, the reports made by the *Real Audiencia* to the Council of Aragon in 1675/6 supported the issue of billon coins without the approval of the Parliament, although they were caution on the point of excessive devaluation.⁶⁰

Against the background of this institutional interest in the devaluation of the Aragonese coinage, the Aragonese mercantilists began to debate the need for serious monetary reform when the *Junta de Comercio* (Trade Council) was formed by the Viceroy Juan José de Austria in 1674 to seek solutions to the economic problems faced by the kingdom such as the control of commercial transactions by French merchants, the decadence of manufacturing, the currency shortage and depopulation. The numerous letters addressed to the Trade Council reveal two opposing lines of economic thought, which clashed particularly on the matter of trade policy.⁶¹ The advocates of greater protectionism enjoyed the support of the municipal councils, especially that of the city of Zaragoza, which were influenced by the guilds’ lobbying against foreign competition. Represented by Marcelo Sotomayor y Urive, whose work *Discurso foral jurídico político en defensa de la libertad de comercio en el Reyno de Aragón* was published in Zaragoza in 1675, the free trade party was backed mainly by the *Diputacion*. While protectionist arguments appear to have won in the Trade Council, the adoption of policy measures was reserved for the Parliament of 1677/8, which generated a flood of new proposals.

This general economic debate sparked the first calls for a reduction in the weight and fineness of the coinage. Though evidently versed in the economics of the day, the

majority of Aragonese writers show little knowledge of Castilian thinking and do not cite the main proponents in their writings.⁶² The benchmark is rather the measures adopted in Valencia and Catalonia, which had similar institutions and monetary problems. However, the main sources used in the writings of Aragonese thinkers are observation of economic processes in the kingdom and the experience gained from travel abroad.⁶³ The monetary measures they proposed were subordinated to ideas of trade policy, which were clearly protectionist in the reports proposing legislative reform presented to the Trade Council and the Aragonese Parliament by Antonio Cubero Sebastián, Pedro Borrúel, José Tudela Tarazona and José Gracián Serrano. Only Manuel Lasheras would provide a more thorough theoretical reflection, which reveals the influence of Castilian writers, grounding the proposed reforms on a sharp criticism of the monetary policy followed by the monarchy in both Castile and Aragon. Meanwhile, the Aragonese Arbitrists concentrated mainly on the gold and, especially, silver coinage, in line with the mercantilist notion that the accumulation of precious metals was necessary to consolidate the economy throughout the whole of the territory. Much less attention was paid to the petty coinage, since Aragon had suffered less devaluation of the intrinsic and face values of the currency by the authorities than Castile. Proposals for the devaluation of the Aragonese *real* thus frequently ignored the necessary realignment to maintain the equivalence of the petty coinage by reducing its face value.

At the same time as proposing an increase in customs duties on French manufactures, some protectionist minded Arbitrists also argued for a reduction in the intrinsic value of the Aragonese *real* inspired by the Valencian currency in order to reduce the export of coins to France and correct the trade deficit.⁶⁴ Based on such arguments, which he expounded in a series of writings, Antonio Cubero Sebastián proposed a 25% reduction in the weight of the Aragonese *real* to the Trade Council in 1674, while Pedro Borrúel suggested to the Aragonese Parliament in 1678 that it should mint *sueldos* with a fineness of not more than nine *dineros* compared to the eleven established by charter. As late as 1684 José Tudela Tarazona would argue before the Council of Aragon that the issue of numerous *reales* with a low intrinsic value in Valencia had not only prevented the flight of the currency to France, but also allowed the acquisition of Castilian silver and created more favorable transaction terms.

While the Parliament of 1677/8 adopted firmly protectionist measures, it maintained the traditional ban on the debasement of the local currency to prevent the alteration of its intrinsic value. In addition to the precedent set by the Catalan authorities,⁶⁵ which had obtained the right to reduce the weight and fineness of the local

real in 1674, two monetary reforms implemented in Castile in the 1680 would reawaken debate among the Aragonese mercantilists.⁶⁶ The first was the devaluation of the petty coinage ordered by Charles II in February 1680 to reduce the high premiums on the silver currency. Somewhat surprisingly, given that Castilian writers do not refer to the matter, according to the council of Zaragoza in 1683 and Manuel Lasheras in 1684, this decision was accompanied by a surreptitious issue of underweight *reales* and *medio reales* for use as legal tender in the domestic market.⁶⁷ Following this 16.65% devaluation, the new intrinsic value of the Castilian *real*, which was equal to twenty Jaca *dineros* was constantly referred to after 1680 by writers such as Azores and Lasheras, who wished to see the Aragonese silver coinage brought into line with the pieces struck in Castile and other neighboring territories. The second measure was the 25% devaluation of the Castilian *real* in October 1686, when Charles II opted to maintain the purity of the coin but to explicitly to reduce its weight. The *reales* resulting from the minting of one silver marc in Castile thus increased from 67 to 84, approximately in line with the recommendations made by various Castilian Arbitrists in the early seventeenth century (Cristóbal Pérez de Dueñas, Luis de Arratia y Guevara, Tomás de Cardona, Alonso Carranza).⁶⁸ This reform was extended to all silver issued in Peninsular Spain.

Against this background, monetary reform again took its place on the agenda of the Parliament of 1684-6, unleashing heated debate on the issue of maintaining the protectionist policy decided in 1677/8, which had failed to reactivate the economy. This debate is illustrated by two works addressed to the parliamentary estates and published almost simultaneously in 1684. These were Diego José Dormer's *Discursos históricos políticos*, in defense of free trade, and the *Exhortación a los aragoneses al remedio de sus calamidades*, a response by José Gracián Serrano writing under the pseudonym Marcelo Nabacuchi, arguing in favor of protectionism.⁶⁹ Despite the repeal of the protectionist legislation of 1677/8, the Parliament did not change the intrinsic value of the Aragonese currency or petition the monarchy for new issues. Discussion of the problems caused by the devaluation of the Castilian *real* in October 1686 was entrusted to some delegates of the four Estates or social groups with representation in Parliament: citizens, the clergy, high and petty nobility. This Council of the Estates made consultations between 1686 and 1687 without reaching a definitive conclusion.

Seeking to make his voice heard in this debate, Manuel Lasheras appeared before the Council of the Four Estates of Parliament in April 1684 to expound his *Memorias históricas sobre el valor de la plata y oro*, which were published shortly thereafter

together with other writings in support of his opinions.⁷⁰ Aside from his estimates of the cost of manufacturing and transporting precious metals from America, Lasheras returned to the arguments of Tomás de Cardona and Alonso de Carranza, stressing the importance of undervaluation as an explanation for the flight of gold and silver from Aragon rather than the modest issues carried out in the seventeenth century or the invasion of low quality foreign bullion. Like a number of Castilian Arbitrists from the beginning of the reign of Charles II and particularly in the period 1677-84 (Francisco Centani, Sebastián Muñoz, Antonio Somoza, Juan Sánchez, Juan de Arizmendi, Pedro de la Maza)⁷¹, Lasheras concurred with both authors in proposing a devaluation of monetized silver and gold in order to prevent export. He was also well aware of the appreciation of gold against silver in Aragon in the second half of the century and recommended increasing the fiat value of the *escudo* by 28.57%, the *real* by 17.65% and the value of lower quality silver ingots by 18.75%. In order to win the necessary political consensus, Lasheras advised splitting the profit generated by the devaluation of silver between the royal treasury and the *Diputación*. Opting clearly for the free trade line that triumphed in the Parliament of 1684-6, he argued that the return of this issue into the hands of the *Diputación* could be used to cancel the fiscal debt, repeal customs duties in Aragon and strike lighter *reales* similar to those of Castile in order to align their intrinsic value with the coinage of Catalonia, Valencia and Castile, prevent hoarding and export, and facilitate trade.

In this context, Arbitrists such as Miguel Azores and Martín Ezpeleta argued for a reduction in the intrinsic value of the currency from a more practical standpoint. While they defended monetary autarky to strengthen the kingdom's trade and prevent the flight of gold and silver, they ignored the productive sectors of the economy and both protectionist and free trade measures to combat the trade deficit. Based on a detailed knowledge of the costs of minting coin in Aragon and the monetary reforms applied in Castile, Catalonia and Valencia, they proposed a temporary agreement between the Aragonese authorities and the monarch to issue new coins. This pragmatism ensured that both kept a sharp eye on the difficulties posed by the kingdom's legal and institutional framework, and their proposals always included cash compensation for both the royal treasury and the council of Zaragoza, which had become the perpetual master of the mint in 1677.

Miguel Azores stands out for his insistent petitions to the Aragonese institutions.⁷² In various reports submitted to the Council of Aragon between 1680 and 1686, he unsuccessfully defended an initiative to mint *reales* with the same fineness as

in Castile but 16.65% less in weight. The devaluation of Castilian silver by Charles II in 1686 led Azores to make an even more radical proposal in 1688. *Reales* could be minted with a 25% reduction in weight in line with the new intrinsic value of the Castilian *real*, together with the issue of *dineros* with a 38.80% reduction in purity to replace the existing bullion issued in Aragon. This proposal was rejected in 1689, and a final petition made in 1691 to mint *reales* with a similar weight and fineness to the Castilian coinage met the same fate. The result of Martín Ezpeleta's offer to the Council of Aragon in 1692 to mint Aragonese currency and lease the kingdom's customs duties between 1693 and 1695 was identical.⁷³ In addition to the issue of *reales* with the intrinsic value applied in Castile, he sought an audacious reduction of 50% in the fineness of the metal, inspired by the *ardite* petty coin minted in Barcelona.

The main institutional support for these monetary reforms came from the municipal elite of Zaragoza. Significantly, their support for Azores proposals before the Council of Aragon in 1683 and 1688 was based on their interest in minting money to relieve the municipal treasury, and their arguments reveal that they had quickly picked up the main lines of the monetary debate and the need to define new objectives that were better aligned with their commercial interests.⁷⁴ In contrast with the protectionist approach adopted in 1683, the council in 1688 defended the alignment of the weight and fineness of Aragonese coins with their Castilian, Catalanian and Valencian counterparts to facilitate transactions. After criticizing the high intrinsic value of Spanish gold and silver coins, the burghers' discourse took up the goals associated with devaluation, as proposed by Manuel Lasheras: to develop trade by increasing liquidity, promote manufacturing and enhance its competitiveness in view of foreseeable rises in the price of foreign goods, and to prevent the flight of Aragonese gold and silver currency, as well as slowing the invasion of foreign coins with a lower intrinsic value.

Despite the support of the city of Zaragoza, these reforms were opposed tooth and nail by the *Diputación*.⁷⁵ Moved by the interests of the predominant social groups and its intense political rivalry with the council of Zaragoza, in 1681 the *Diputación* financed the publication of Vincencio Juan de Lastanosa's *Tratado de la moneda jaquesa y de otras piezas de oro y plata en el reino de Aragón*, a numismatic work written in 1661 that attacked the reductions in the intrinsic value of the petty coinage carried out in Aragon since the end of the fifteenth century. In 1684 and 1689 the *Diputación's* lawyers spoke against Azores' reforms before the Council of Aragon, arguing that they were in breach of the kingdom's charter and were unacceptable without the ratification of the Parliament. The publication in 1689 of two works entitled

Discursos jurídico-políticos, one by the *Diputación* and the other penned by Francisco Arpayón y Torres, reaffirmed the institution's ideology, stressing its right to participate in any currency issues in Aragon and the mandatory injunction to maintain the weight and fineness of the coins in accordance with the charter, based on the defense of the intrinsic value of the *jaquesa* coinage established in medieval legislation.

Institutional opposition to monetary reform in Aragon was eventually sanctioned by the monarchy when at the end of the seventeenth century it ceased its efforts to increase seignorage and reduce the intrinsic value of the issues made between 1660 and 1676. As a reflection of this development, the *Real Audiencia* would support the conservation of the traditional weight and fineness of the coinage defended by the *Diputación* in 1686-9.⁷⁶ There were three reasons for this turnaround by the monarchy. In the first place, where the economic recovery of Catalonia had been aided by institutional consensus, which allowed a reduction in the intrinsic value of the *real* in the last quarter of the seventeenth century⁷⁷, the lack of economic leadership in Aragon was accompanied by political conflict, preventing any similar reform measures. Secondly, the increasingly export-oriented economy of Aragon towards the end of the century consolidated commercial and monetary flows associated with the restructuring of trade in the seventeenth century, as we have seen. If the import of manufactured goods and the presence of French mercantile capital had propitiated the trade deficit and the flight of gold and silver, the export of raw materials to France, Valencia and Catalonia obliged the kingdom to accept coins of a lower weight and fineness than the levels set for legal tender in Aragon. Finally, the coins minted in Valencia provided the monarchy with a higher return, and it therefore preferred to conserve the system of monetary circulation already established for trade between the two kingdoms. Thus, at the same time as it had allowed constant issues of bullion and silver in Valencia between 1681 and 1699, it rejected the minting of coins in Aragon or any reduction in their intrinsic value.⁷⁸

Clearly reflecting these adverse circumstances, monetary Arbitrism gradually faded away in Aragon, together with the petitions of the council of Zaragoza to Charles II to mint silver and petty coins, in the 1690s. At the same time, the Aragonese Parliament ceased to be held, and this was the only forum recognized by the institutions that were most opposed to reform to overcome the legal obstacles to the measures proposed. The last Parliament held in the early modern period still allowed the Estate of the petty nobility (*caballeros* and *hidalgos*) to submit to Queen María Luisa de Saboya in 1702 a report in support of the devaluation of the Aragonese currency. Having

accepted the impracticality and futility of minting gold and silver coins with the traditional weight and fineness, the petition sought to prevent the flight of local *reales* and *dineros* by manufacturing coins with an intrinsic value that would be more similar to the Valencian and Catalan coinage.⁷⁹ Despite recognizing the monarchy's right (either in perpetuity or until a new Parliament might be held) to issue coins with a lower metal content and retain the resulting profit, this plea did not prosper.⁸⁰

The failure of the voices in favor of devaluation to make themselves heard meant that Aragon was deprived of the stimulus to its economy that would have come from a local currency regulated by its own authorities and more closely aligned with market demand. In response to this demand, the invasion of foreign and counterfeit coins continued throughout the early modern period, and its adverse effects could not even be partially offset. In contrast to the autonomous leanings of both individuals and institutions in Aragon in the seventeenth century, the monetary policy of the Bourbon monarchy in the eighteenth century clearly shifted to a state-wide conception of affairs. Despite the acceptance of the arguments of the Arbitrists in the bullion issue of 1710-9 and the devaluation of 1718, no new Aragonese currency was issued. Instead, the more-centralizing Bourbon state began to promote a slow process of harmonization of the coinage minted in the different territories of Peninsular Spain, which was based on the Castilian system and placed particular emphasis on bullion, with the ultimate aim of eliminating local coins and instituting a national currency.⁸¹

4. Conclusions.

The Crown and kingdom of Aragon underwent far-reaching changes in monetary circulation in the seventeenth century as a result of market demand for money with a lower intrinsic than face value that would be better aligned with the actual price of gold and silver. The failure of the existing supply of Aragonese and Castilian failure to meet the market's needs for legal tender led to widespread debasement and counterfeiting, as well as the arrival of low quality foreign coins. Though they facilitated transactions, these phenomena also had a damaging impact on the market, fostering the export of gold and silver and the disappearance of local coins, as well as reducing confidence in the face value of the currencies, which engendered inflationary processes. These problems, worsened by the decline in the Aragonese economy, which was all too clear in the trade deficit with France, became a matter for serious concern among the authorities, affecting control over the market in the absence of an autonomous policy, and they were decisive in shaping monetary debate.

In contrast to Catalonia and Valencia, the adverse effects of the situation were intensified in Aragon by the lack of an appropriate monetary policy. Hampered by the lack of seignorage and the difficulty of obtaining gold and silver, any change in the weight and fineness of the coinage required wide ranging institutional consensus, even though it had become possible to negotiate issues without the approval of the Parliament by the seventeenth century, and the situation was further worsened in the second half of the century by political conflict and the divergence of economic ideas. The traditional Aragonese policy, represented by the *Diputación*, was a legacy of the medieval period and was intended to conserve the intrinsic value of the currency to guarantee its face value. This policy was defended by the social groups that were most attached to rents in cash or in kind to optimize their returns, and it gained ground as the economy grew more outward looking with the rising export of raw materials. The interest of those institutions that were closest to the monarchy (i.e. the viceroy, the *Real Audiencia* and the city of Zaragoza) in minting devalued coins after 1660 in order to generate higher revenues was not enough to overcome this opposition, which demanded the approval of the Parliament for any change in the intrinsic value applied to the currency, especially in the case of gold and silver. Meanwhile, the monarchy was patently uninterested in repairing the institutional breach in the last quarter of the seventeenth century, as it could earn a higher yield on coins minted in Valencia. This attitude condemned any possibility of minting local coins that were better aligned with the needs of the market to failure, even though this would have stimulated a recovery in the economy, thereby ensuring the perpetual recourse to foreign and illegal coins in Aragon for the rest of the early modern period without any mechanisms to mitigate the harm to transactions and trade.

Driven by the institutional interest in amending the regulations governing the issue of coins after 1660 and the creation of the Trade Council by the viceroy Juan José de Austria in 1674, monetary debate intensified in Aragon, especially in the Parliaments held in 1677/8 and 1684-6. Initially linked to protectionist thinking and strongly emphasizing the precedent of Valencia, opinions in favor of devaluation (especially of the silver coinage) took firm root when Charles II adopted a similar measure in Castile in the 1680s. These proposals were mainly aimed at preventing the export of gold and silver from the kingdom in order to correct the trade deficit. Among their advocates, Manuel Lasheras stands out for his theoretical training and defense of devaluation as an instrument to stimulate economic recovery through the suppression of customs barriers. Though well adapted to the political and legislative framework of the kingdom, the

ideas of the Arbitrists proved unable to overcome the institutional rift and achieve a reduction in the intrinsic value of the local currency, which declines rapidly in the last years of the seventeenth century, after which no further Parliaments were held. After the failure of this last effort to establish an autonomous monetary policy in Aragon under the Hapsburg monarchy, the solution to the kingdom's monetary problems was subordinated in the eighteenth century to the policy of the Bourbon State, which was increasingly aimed at the creation of a national currency in Spain.

References:

- Amelang, J., *La formación de una clase dirigente: Barcelona, 1490-1714* (Barcelona, 1986).
- Borras, G., *La Guerra de Sucesión en Zaragoza* (Zaragoza, 1972).
- Carrera, J., *Historia de la Economía española* (Barcelona, 1944-47).
- Cayón, A., C. y J., *Las monedas españolas* (Madrid, 1998).
- Domínguez, A., *Política y hacienda de Felipe IV* (Madrid, 1960).
- Domínguez, A., *Crisis y decadencia de la España de los Austrias* (Barcelona, 1973).
- Dormer, D.J., *Discursos históricos políticos*, (Zaragoza, 1684).
- Floriano, A. C., 'Teruel en el siglo XV', *Boletín de la Real Academia de Historia*, LXXXVIII, (1926), pp.785-825.
- García, E.M., *Moneda y arbitrios* (Madrid, 2003).
- Gómez, J.I., *La burguesía mercantil en el Aragón de los siglos XVI y XVII* (Zaragoza, 1987).
- Gómez, J.I., *Zaragoza y el capital comercial* (Zaragoza, 1987).
- Hamilton, E.J., *El tesoro americano y la revolución de los precios en España, 1501-1650* (Barcelona, 1975).
- Hamilton, E.J., *Guerra y precios en España, 1651-1800* (Madrid, 1980).
- Jarque, E., 'La oligarquía urbana de Zaragoza en los siglos XVI y XVII: estudio comparativo con Barcelona', *Jerónimo Zurita*, 69-70, (1994), pp.147-67.
- Jarque, E., and Salas, J.A., 'La Diputación aragonesa en el siglo XVI', *Ius Fugit*, 10-11, (2001-2002), pp.291-351.
- Mateos, J.A., *Auge y decadencia de un municipio aragonés* (Daroca, 1997).
- Mateos, J.A., 'Política económica y alteraciones monetarias en Aragón durante el reinado de Carlos III (1759-88)' in *Josep Fontana. Història i projecte social*. (Barcelona, 2004), vol. I, pp. 289-295.

Mateu, F., *La ceca de Valencia y las acuñaciones valencianas de los siglos XIII al XVIII* (Valencia, 1929).

Mateu, F., 'El sistema monetario en Aragón. Síntesis histórica', in *La moneda aragonesa* (Zaragoza, 1983), pp.93-114.

Orcastegui, C., 'La reglamentación del impuesto del monedaje en Aragón en los siglos XIII-XIV', *Aragón en la Edad Media*, 5, (1983), pp. 113-21.

Perdices, L. and Reeder, J., *El mercantilismo* (Madrid, 1998).

Redondo, G., *Las corporaciones de artesanos en Zaragoza en el siglo XVII* (Zaragoza, 1982).

Redondo, G., 'Numismática aragonesa en la Edad Moderna', in *La moneda aragonesa* (Zaragoza, 1983), pp.197-219.

Redondo, G., 'Las relaciones comerciales Aragón-Francia en la Edad moderna: datos para su estudio en el siglo XVII', *Estudios*, 85, (1985-86), pp.123-54.

Sánchez, J.M., *El pensamiento arbitrista en el reino de Aragón en los siglos XVI y XVII* (Madrid, 1997) (cd-rom)

Sánchez, J.M., 'Pensamiento aragonés sobre el comercio exterior en el siglo XVII: los arbitristas', *Cuadernos aragoneses de economía*, 8/ 1, (1998), pp.59-72

Sánchez, J.M., 'Arbitristas aragoneses en el siglo XVII', *Torre de los Lujanes*, 38, (1999), pp.222-39.

Savall, P. and Penen, S., *Fueros, observancias y actos de corte del reino de Aragón*, (Zaragoza, 1866).

Santiago, J., *Política monetaria en Castilla durante el siglo XVII*. (Valladolid, 2000).

Vilar, P., *Cataluña en la España moderna*, (Barcelona, 1978).

Zulaica, F., 'Economía monetaria y política monetaria en el reino de Aragón en la Edad Media', in *XVII Congreso de Historia de la Corona de Aragón*, (Barcelona, 2003), vol.I, pp.607-32.

¹ Hamilton *Tesoro*; idem, *Guerra*; Domínguez, *Política*; idem, *Crisis*,

² On this Historiography, see Santiago, *Política*, pp.269-75.

³ Vilar, *Cataluña*, 1, pp.390-405.

⁴ Zulaica, 'Economía'.

⁵ The denomination "jaqués" or "jaquesa" for local billon currency refers to the town of Jaca, the original capital of the kingdom of Aragon, where these petty coins were first minted during the medieval period.

⁶ Mateu, 'Sistema', pp.113-5.

⁷ Though foreign to Castile, this accounting system was widespread in Western Europe in the later medieval and early modern periods. It was in use throughout the Crown of Aragon, the States of Northern and Central Italy, France and the Low Countries.

⁸ Savall and Penen, *Fueros*, I, pp.335-6 and II, p.342.

⁹ In 1593 the viceroy of Aragon was still arguing in reports to the Council of Aragon that market demand for bullion could be met through modest issues of local coins. See Archive of the Crown of Aragon, Council of Aragon, file 35.

¹⁰ Redondo, 'Numismática', pp.209-10.

¹¹ Municipal Archive of Zaragoza, manuscript 10.

¹² Santiago, *Política*, pp.51-5, 153-74.

¹³ Gómez, *Burguesía*; idem, *Zaragoza*.

¹⁴ Redondo, *Corporaciones*;

¹⁵ Redondo, 'Relaciones'.

¹⁶ Redondo, 'Numismática', pp.210-11; Casey, *Reino*, pp.81-103.

¹⁷ Floriano, 'Teruel', pp.807-20.

¹⁸ Archive of the Crown of Aragon, Council of Aragon, files 59, 91, and 1,369.

¹⁹ Redondo, 'Numismática', p.211; Mateos, *Auge*, p.262.

²⁰ Archive of the Crown of Aragon, Council of Aragon, files 48 and 76.

²¹ Mateos, *Auge*, pp.262-3; Municipal Archive of Zaragoza, boxes 8117 and 8118.

²² Hamilton, *Tesoro*; Santiago, *Política*,

²³ Carrera, *Historia*, II, p.416.

²⁴ Archive of the Crown of Aragon, Council of Aragon, file 91. This small silver premium is also found in the kingdom of Valencia, according to Hamilton, *Tesoro*, p.144.

²⁵ Sánchez, *Pensamiento*, p.1345.

²⁶ This high intrinsic value of Aragonese billon coins led to enthusiastic take-up in Valencia from the end of the sixteenth century onwards. See Archive of the Crown of Aragon, Council of Aragon, files 36 and 92.

²⁷ This matter was a source of frequent arguments between the council and guilds of Zaragoza during the seventeenth century. See Redondo, *Corporaciones*,

²⁸ The obligation to maintain the weight and purity of *jaquesa* coins was reflected in acts of Parliament, especially under James I (1247) and James II (1307), although these strictures were not always respected by the kings of Aragon. After Peter IV devalued the local currency and proceeded to produce counterfeits of Castilian coins in the mid-fourteenth century, the Parliament of 1372 legislated to prohibit the minting of coins or the alteration of their intrinsic value without its express approval. See Savall and Penen, *Fueros*, I, pp.328-35.

²⁹ Dormer, *Discursos*, p.32.

³⁰ See notes 28 and 36.

³¹ Archive of the Crown of Aragon, Council of Aragon, file 91 and Borrás, *Guerra*, pp.119-20. The estimates made by Costas in 1655 appear to refer to the 1640s, when the presence of the Court and the royal army in Aragon allowed the supply of Castilian silver to grow, while the demand for fractional coins was boosted by trade. In view of the 470,000 *libras* of Peruvian *reales* melted down by the Zaragoza mint in 1651/2 (see table 2), it would seem that these estimates are not exaggerated.

³² In 1519 this committee was formed royal officials and members of the *Diputación*, and in 1528 by delegates of the king and the four estates of the Aragonese Parliament. See note 8.

³³ Archive of the Crown of Aragon, Council of Aragon, file 91, *Provisiones de tránsito de moneda de plata en el reino de Aragón*. This document alludes to the examination of different petty coins minted over the past 160 years in Aragon carried out in 1609. These coins were two or three grains less fine than was established by tradition.

³⁴ Archive of the Crown of Aragon, Council of Aragon, files 36 and 92.

³⁵ Archive of the Crown of Aragon, Council of Aragon, file 91.

³⁶ Orcastegui, 'Reglamentación'. This right was granted to the medieval and early modern monarchs of Aragon against the obligation to preserve the intrinsic value of the *jaquesa* coinage.

³⁷ Archive of the Crown of Aragon, Council of Aragon, files 36 and 91. In view of this miserly profit margin, the master of the mint was obliged to hold down the cost of manufacturing Aragonese coins to the maximum.

³⁸ The Aragonese Parliament of 1519 abolished customs duties on silver exported in ingots, but not on silver coins. See Savall and Penen, *Fueros*, II, p.342.

³⁹ Archive of the Crown of Aragon, Council of Aragon, files 36 and 116.

⁴⁰ Archive of the Crown of Aragon, Council of Aragon, files 91, 92, and 198; Municipal Archive of Zaragoza, Boxes 7777 and 7883.

⁴¹ Ibidem.

⁴² Archive of the Crown of Aragon, Council of Aragon, file 106.

⁴³ Carrera, *Historia*, II, pp.478-9. The privileges granted to Catalonia provided the council of Zaragoza with a point of reference when it petitioned Philip IV and Charles II to grant the office of master of the mint and the freedom to mint coins.

⁴⁴ Vilar, *Cataluña*, I, pp.391-427.

⁴⁵ Hamilton, *Tesoro*, pp.127-34. The seignorage charged in 1593-5 was six *dineros* per marc of silver coined, nine *dineros* on petty coins and seventeen *sueldos* eight *dineros* on gold coins minted.

⁴⁶ Hamilton *Tesoro*, pp.126-36; Mateu, 'Ceca', pp.129-49.

⁴⁷ See the debate between the viceroy and the *Diputación* in 1576 concerning the advisability of issue gold and billon coins in Aragon without the approval of the Parliament, in Mateu 'Sistema', p.120.

⁴⁸ Archive of the Crown of Aragon, Council of Aragon, files 76, 91, 92, 106, 116, 137, and 198. In comparison, there was a wider consensus among the Catalan institutions with regard to the monetary reforms required in this period. See Carrera, *Historia*, II, pp.259-72, 353-67.

⁴⁹ See note 48. The constant stream of petitions to mint Aragonese coins came not only from the city of Zaragoza, but also from members of high nobility such as the Duke of Híjar (1663), the Marquis of Coscojuela (1674) and the Marquis of Villarverde (1675).

⁵⁰ This modest profit was estimated at eighteen *dineros* per marc for bullion and twenty-eight *dineros* for silver. See note 40.

⁵¹ Jarque, 'Oligarquía', pp.150-2.

⁵² In defence of this commercial policy, the *Diputación* derogated different protectionist measures adopted by the council of Zaragoza during the seventeenth century. See Redondo, *Corporaciones*, pp.57-60, 152.

⁵³ Jarque and Salas, 'Diputación', pp.296-7.

⁵⁴ Zulaica, 'Economía', p.612.

⁵⁵ Archive of the Crown of Aragon, Council of Aragon, file 91.

⁵⁶ Mateu, 'Ceca', pp.140-1; Domínguez, *Política*, pp.252-60.

⁵⁷ See note 41. According to the viceroy's calculations, seignorage in Valencia had been raised in 1660 to three *sueldos* and six *dineros* per marc of bullion.

⁵⁸ Mateos, *Auge*, p.263.

⁵⁹ Cayón, *Monedas*, pp.768, 782.

⁶⁰ Archive of the Crown of Aragon, Council of Aragon, file 91.

⁶¹ Sánchez, 'Pensamiento', pp.59-72.

⁶² This paucity of references to other thinkers, even where borrowing sometimes from their writings, is a common feature of mercantilism in early modern Europe. See Perdices and Reeder *Mercantilismo*, p.20.

⁶³ Sánchez 'Arbitristas'.

⁶⁴ Sánchez, *Pensamiento*, pp.1345-6, 1419-20, 1587.

⁶⁵ See note 44.

⁶⁶ Domínguez, *Crisis*, pp.206-17, Santiago, *Política*, pp.201-48.

⁶⁷ Sánchez, *Pensamiento*, pp.1076-96.

⁶⁸ Santiago, *Política*, pp.67-9, 112-14; García, *Moneda*, pp.131-74.

⁶⁹ Sánchez, 'Pensamiento', pp.68-72.

⁷⁰ Sánchez, *Pensamiento*, pp.1082-98.

⁷¹ García, *Moneda*.

⁷² Archive of the Crown of Aragon, Council of Aragon, files 91 and 195.

⁷³ Archive of the Crown of Aragon, Council of Aragon, file 59. On the minting of bullion in Catalonia during the seventeenth century, see Carrera, *Historia*, II, pp.259-62, 360-8, 428-33.

⁷⁴ Sánchez, *Pensamiento*, pp.1076-81; Archive of the Crown of Aragon, Council of Aragon, file 91 and National Historical Archive, file 51,361.

⁷⁵ Sánchez, *Pensamiento*, pp.272-3, 1070-5; Carrera *Historia*, II, 476-8; Archive of the Crown of Aragon, Council of Aragon, file 91 and Library of the Casino of Zaragoza, Opúsculos varios de Aragón, 2, Francisco Arpayón's *Discursos*.

⁷⁶ Ibidem.

⁷⁷ See note 48. The consensus between the *Generalitat* and the city of Barcelona concerning economic matters in the seventeenth century was facilitated by the inclusion of the petty nobility in the city council and the parallel ennoblement of the burghers, which resulted in the convergence of the interests of these two social groups. See Amelang, *Formación*.

⁷⁸ Mateu, 'Ceca', pp.144-9. The seignorage generated in Valencia at the end of the seventeenth century was eight *dineros* per marc of silver and two *sueldos* and six *dineros* per marc of bullion, representing 14.3% of the face value of issues.

⁷⁹ Borrás, *Guerra*, pp.27-8, 117-21. Though the report argued for a devaluation of the Aragonese *real* in line with its Valencian counterpart, the 50% reduction sought in the fineness of the *dinero* (the same as recommended by Martín Ezpeleta in 1692), would have allowed an intrinsic value higher than that of Catalan and Valencian petty coins to be preserved.

⁸⁰ While it recognized the royalty on Aragonese issues, this proposal suggested that the monarchy should grant the authority to mint petty coins to the council of Zaragoza after the first issues and reserve the right to coin silver, in order to ensure the collaboration of the city.

⁸¹ Mateos, 'Política', pp.289-95.