

The Origin and History of the Polish Money. Part I

Pochodzenie i historia polskiego pieniądza. Część I

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Abstract

Poland's money has a pedigree of over a thousand years. At the end of the 10th century the silver denar began to supplant various commodities that had previously functioned as means of payment. The denar system survived for several centuries. In the 14th century, the role of the denar was taken over by the silver grosz. The end of the 15th century witnessed the birth of the Polish zloty, taken as equal to 30 silver grosz. The beginnings of the historical path travelled by the Polish zloty were promising. The zloty corresponded in value to the gold ducat and to the silver thaler. Later, however, things got worse. The crisis of the state and the economy was accompanied by the decline of the currency. It was not until the end of the 18th century that the sound quality of the coin was restored.

A monetary history of Poland after 1795 will be presented in the next issue.

Keywords: Poland, denar, grosz, Polish zloty, ducat, thaler

JEL: E40, E42

Streszczenie

Polski pieniądz ma ponadtyścioletni rodowód. W końcu X wieku srebrny denar zaczął wypierać różne towary, które dotychczas występowały w roli środków płatniczych. System denarowy przetrwał kilka stuleci. W XIV wieku miejsce denara zajął srebrny grosz. Koniec XV wieku przyniósł narodziny złotego polskiego, jako równowartości 30 srebrnych groszy. Początek dziejowej drogi złotego polskiego był obiecujący. Złoty był równowartością złotego dukata i srebrnego talara. Potem jednak było gorzej. Wraz z kryzysem państwa i gospodarki następował upadek pieniądza. Dopiero w końcu XVIII wieku moneta odzyskała dobrą jakość.

Historia monetarna Polski po 1795 r. zostanie przedstawiona w następnym numerze.

Słowa kluczowe: Polska, denar, grosz, złoty polski, dukat, talar

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In the 10th century the mounting ascendancy of the Slavonic tribe of the Polanians resulted in the birth of a state structure known as Poland. Around the year 960, power in this state was assumed by Prince Mieszko I.

Mieszko I (960–992), the first historical ruler of Poland, incorporated the country into Christian Europe. The baptism of Mieszko in 966 marked a historical turning point that firmly placed the new state with the sphere of West European culture.

We have no absolute certainty that Mieszko I did in fact begin coining his own money. The prevailing view, however, is that Mieszko did. The first Polish coin is considered to be a silver denar depicting the top of a chapel and bearing the legend of „MISICO” with an equal-arm cross on the reverse. This coin, struck around 982 or 984, began Poland’s monetary history¹. The coin was modelled on the denar then accepted throughout the Western Europe².

The denar period

A natural economy was firmly dominant, while the commodity economy was marginal. Goods were mainly exchanged by direct barter. Commodity money (pelts, lengths of cloth, amber, salt, iron bars), precious metals (mainly silver) and foreign coins, although gaining in importance, still played an auxiliary role. It is likely that the denars of Mieszko I did not come into circulation but were subject to hoarding and later they were, as precious metal, remonetised and entered circulation through subsequent issues after the death of Mieszko I.

His son, Boleslaus I the Brave (992–1025), continued the minting of coin. Now the mintage was several times greater, so these coins probably became a noticeable component of the stock of money in circulation (Kiersnowski 1962, p. 147).

Successors of Boleslaus I the Brave, Mieszko II (1025–1034) and Casimir the Restorer (1034–1058), paid tribute to their neighbors. When the central political authority was again reinforced, Boleslaus II the Bold (1058–1079), levying tributes on others, reinstated the production of the Mint around 1069. His denars were different from those of the first Piasts. They were known as light denars containing a half silver fineness comparing with heavy denars at the turn of the 10th and 11th centuries. Due to mint output under

Boleslaus II the Bold (1058–1079), then Ladislaus I Herman (1079–1102) and finally Boleslaus III the Wrymouthed (1107–1138), money supply was gradually dominated by domestic coin. At the end of the reign of Boleslaus III the Wrymouthed, in the years 1133–1138, the first Polish denars of the bracteate type were struck. These coins were minted single-sided, from very thin silver blanks. The larger surface of the coin permitted a more distinct and legible presentation of the stamp, in the device and inscriptions.

In accordance with the Testament left by Boleslaus III the Wrymouthed, the rule of individual regions of the country was given to his sons, with supreme power being assigned to the eldest (the „senior prince”). Poland now began almost two hundred years of regional fragmentation.

To the end of the 12th century supreme power in the state was held by sons of Boleslaus III the Wrymouthed. They were also the chief issuers of coin. The quality of coin gradually deteriorated. Subsequently, the place of the double-sided denar was taken by the single-sided bracteate, with a marked decline in weight and silver content. Minting was also undertaken by regional dukes, imitating the coins of the ruling Princes. The weight of the coins dropped even to as little as 0,1 grams (Gumowski 1914, p. 285). Such denars and bracteates which made up the money supply in the second half of the 12th century essentially became retail coin, used to make minor payments.

The reduction in the weight and fineness of coin generated revenue from minting operations. The new coins struck by rulers still kept the face value of the old ones. Recoinage probably began under Boleslaus III the Wrymouthed. In the 12th century the re-minting was first performed approximately every ten years, then every few years, the every year, and finally even several times a year. As the new coin, referred to as „current” coin, was brought into circulation, the old was withdrawn and prohibited from use. Thus, a new denar came into circulation, lighter or of inferior fineness. The exchange was conducted by mintmasters at markets. Following the recoinage, the outlawing of the old coins was reinforced by severe penalties for non-compliance. Up until the next recoinage, the Mint would produce the coin now current, reducing its weight or lowering its fineness, which yielded an additional profit. Recoinage was a practice tolerated at first, yet over time, as it became increasingly frequent, it sparked mounting discontent.

The essence of what was involved in recoinage is explained by a present-day interpretation. Żabiński writes: „The monarch’s pursuit of profit from the minting of coins is completely understandable, especially in an era when the tax system was poorly developed. This is because, in centuries past, decreasing the va-

¹ The history of the Polish money was described in the book: Grzegorz Wójtowicz, Anna Wójtowicz, „Historia Monetarna Polski”, Twigger, Warsaw 2003. It was translated by Stefan Piekarczyk into English and edited as: *A Monetary History of Poland*, Twigger, Warsaw, 2005.

² Initially denars were minted from 214 BC in ancient Rome. Later, in 794, Charlemagne reformed the monetary system and 1 pound of silver was used to produce 240 denars. Up until the 13th century the denar was virtually the only monetary unit throughout almost all of Europe.

lue of coin or replacing it (*renovatio monetae*) constituted the equivalent of today's sales tax (...). This circumstance is underlined by the fact that the coins were exchanged at markets. It was at these markets that the commercial revenues of those times could be intercepted (...). In olden days, an ignorance of the laws of economics (...) led to a mistaken explanation of the causes of generalized poverty, which was rooted in the lack of a sufficient quantity of goods (...). This state of affairs was blamed on high prices, and these in turn were believed to be the result of a debased currency. Yet the shortages on the market stemmed from the low level of agriculture and the poor development of handicrafts (...). Thus, cause and effect were confused" (Żabiński 1981, p. 36; 1986, p. 119–120).

In the 13th century the weakening of central government was accompanied by a further decentralization of coinage. The coins produced were directed to local markets. The denars, already miniaturized earlier, lost little of its weight and precious metal content in the 13th century.

The denar system in Poland lasted over three hundred years. The system was in practice based on a single metal, silver. As such, it was a monometallic system. One denomination was current, a denar. The inconvenience of using a single denomination was dealt with in two ways. Either mint-weight units were used as multiples of the denar (the *grzywna*, for example), or resort was made to splitting coins, thereby bringing into circulation fractional denars.

Initially the denar was primarily one of the „trappings of power and the state”, but in time it simply became the currency in general use. In Poland and other countries of continental Europe, at a time when the tax system was underdeveloped, the coinage was subject to debasement and reminting, furnishing the rulers with mint seigniorage to cover the expenditure of the state. It led to the miniaturization of the denar. Table 1 shows the evolution of the Polish denar.

The grosz period

Economic changes, urbanisation and population growth in the 13th century oriented the country towards exchange and what was needed was „thick coin” (*nummi grossi*) that instilled confidence. In the towns of northern Italy a „thick coin” appeared – the

silver grossus and the gold florin (ducat)³. In Polish lands, the first attempt to introduce „thick coin” was the issue of the *kwartniki* (quarters) of the Duke of Glogow, Henry III, in the last decade of the 13th century. These coins were worth 6 denars of the time (Kiersnowski 1975, p. 156–157).

However, the turning point is considered to be the monetary reform in Bohemia in 1300 by Vaclav II, the King of that country and in the years 1300–1305 also King of Poland. Thanks to the silver mines in Kutna Hora and to mint masters brought in from Italy, the production was organized of the broad Prague groschen (*grossus pragensis*), which was to play a great role in money circulation in Polish lands in the next two centuries. The Prague groschen corresponded to 12 small denars.

The grossus reform no doubt satisfied the expectations of the growing numbers of coin users. It introduced something akin to a trustworthy „eternal denar” (*denarius perpetuus*), that was no longer subject to periodic recoinage. However, the future was to show that the grosz would follow in the footsteps of the denar, with its silver sheen becoming increasingly pale.

After the unification of Poland by Ladislaus I the Elbow-High (1306–1333) and then Casimir III the Great (1333–1370) an important part in money circulation was no doubt already being played by the Prague groschen. A grosz corresponded to 2 *kwartniki* or 12 and subsequently 16 denars. An exception of the minting of denars was the striking of the first Polish gold coin, the ducat. This probably took place around the year 1330 and emphasized the fact of Ladislaus I the Elbow-High coronation. Casimir III the Great in the years 1367–1369 tried to struck the Cracow grosz. However, given the shortage of silver, the Cracow grosz failed to play any greater role.

By the end of the 14th century, when the Union of Poland and Lithuania was concluded, the denar remained a small coin used in local trade (Pelc 1935). The Prague groschen corresponded now to 18 denars and together with other foreign currencies accounted

³ In addition to silver coin, international trade also demanded a sound gold coin. The florin, first struck in Florence in 1252, with a weight of 3.5 grams of pure gold enjoyed large popularity and was subsequently replicated in many European countries. In 1284, Venice began the production of the ducat, with the same characteristics as the florin. The latter name for a gold coin was to survive in numerous countries for many centuries.

Table 1. *The denar period*

Century	The unit of weight
10th–11th	1 pound = from 240 to 540 denars
11th–12th	1 <i>grzywna</i> = 1/2 pound, 1 <i>grzywna</i> = from 240 to 540 denars
12th–13th	1 <i>grzywna</i> = from 400 to 1,300 denars (<i>bracteates</i>)

Note: 1 pound of silver = 409 grams

Source: compiled by the author.

for a substantial part of money supply. These coins particularly prevailed in wholesale transactions. Although losing value, it continued to be strong. In international trade, it was gold coin that was sought after, principally the Hungarian ducat, which at the close of the century was valued at 20 Prague groschen. Lithuania retained its own money-of-account system.

At the conclusion of the 14th century the coin in Poland was to some extent still supplemented by silver, salt and pelts. Thus, money was produced at mints, at home and abroad, but also was sourced from mines and forests.

Ladislaus II Jagiello (1386–1434) struck half-grosz and denars. Ladislaus III of Varna (1434–1444), as well as issuing denars in Poland, struck ducats as the King of Hungary. Casimir IV the Jagiellonian (1447–1492) produced half-grosz and denars. John I Albert (1492–1501) issued half-grosz and denars. The amount of silver contained in one grosz (equivalent to two half-grosz) fell in the 15th century by about 44%. The complicated and changeable structure of monetary relationships (the Prague groschen, Hungarian ducat, half-grosz and denar), allied with the associated volatility of the gold-silver ratio, made for an unstable monetary system that needed to be put in order.

Around the year 1480, a new unit of account began to be employed in Poland, the Polish zloty, taken as equal to 30 silver grosz in current coin (Szwagrzyk 1973, p. 56–57).

The Polish zloty (zlp) was at this time worth 1 Hungarian ducat („red zloty”), a value also set by the market at 30 Prague groschen. In Polish coin, this amounted to 60 half-grosz plus a supplement (*additiones*) that offset the difference between the inferior small Polish coin and the continually superior Prague groschen.

The Middle Ages were coming to an end. The Renaissance had begun the period of modern history. Geographical discoveries extended the known world. Stocks of precious metal, of gold and silver, were growing.

The grosz was becoming a small local coin, as once the denar had become. The need again arose to create a large silver coin. The birth of the Polish zloty

as a unit of account, albeit not yet a coin, was an expression of that need. The grosz period had run its course by around the year 1500 (Table 2).

The period of the Polish zloty

Poland's monetary history now entered the zloty period, which was to last for almost the next three hundred years. The economy was already being guided by the rules of the market, and in the year 1501 it was being said that the florin (ducat) was worth 32 or 34 grosz, rather than 1 zlp (30 grosz) set for all time by the Sejm in 1496.

An enormous challenge for Sigismund I the Old (1506–1548) was to put monetary matters in order. A total of 17 kinds of coin can be identified as being in circulation at the time, minted in Poland, Hungary, Bohemia, Silesia, Prussia (Royal Prussia), the Teutonic state, Germany, Lithuania and Wallachia; these were of various types, including counterfeit coin, and contained varying amounts of precious metal despite being of the same denomination and often similar in appearance.

This state of monetary disarray cried out for a profound reform. The guidelines for this were to be developed by a Cracow burgher, Justus L. Decius, and Nicholas Copernicus.

Copernicus wrote in 1517–1528 a treatise on the striking of coin. His views on coin could be presented using the language he employed (see: box).

The final structure of the new monetary system was specified in 1528.

The basic coin became the Crown grosz. The system was extended to include the ducat, a gold coin that was from then on minted continuously. In 1533, following the example of other countries, a new large silver coin was struck – the thaler⁴. Lithuania maintained the separate character of its coinage.

The introduction of the gold ducat and the silver thaler signified the establishment for a long period of

⁴ As of 1522, the Counts Schlick started the large-scale minting at Joachimstal (Jachymov) in Bohemia of the Joachimsthaler Münze, soon to become known as the thaler, which in time was to lend its name to the American currency, the dollar.

Table 2. *The grosz period*

Century	The unit of weight or account
14th	1 grzywna = 48 grosz
	1 grosz = 12, or in time 16, denars
15th	1 kopa = 60 grosz
	1 grzywna = 48 grosz
	1 zlp = 30 grosz
	1 grosz = 18 denars

Source: compiled by the author.

Nicholas Copernicus about money

Coinage is imprinted gold or silver by which the prices are reckoned. Therefore money is a common measure of values and must always preserve a fixed and constant standard. Money can lose its value most of all through excessive abundance.

The ratio for the mutual exchange of gold and silver should be 1 pound of pure gold = 12 pounds of pure silver.

It is not in the least advisable to introduce a new, good coinage while an old, debased coinage remains in circulation. Bad money drives out good*, so worse coin and better coin could not be in circulation simultaneously.

For we see that those countries flourish the most which have sound money, whereas those which use inferior coinage decline and fall. Hence it can be seen that cheap money fosters laziness more than it helps poor people.

* The same observation had been made in the 14th century by Nicole Oresme, and following Copernicus by Thomas Gresham in 1558. In Western literature this rule is referred to as „Gresham's law”.

Source: author's preface in *Monetae eudendae ratio* by Nicolaus Copernicus, *ELSet, Olsztyn 2005* (commemorative edition of the National Bank of Poland).

two measures of value. This represented the launch of bimetallism – the parallel circulation of gold and silver coin, with the gold-silver ratio set by the market. This ratio began to be defined in grosz or Polish zloty, as the equivalence of 30 grosz.

The next reform of the currency was an important task for Stephen Bathory (1576–1586) in 1580. Sound Polish coin was being taken out of the country. Low-value foreign coin, particularly German, was in circulation. A fundamental regulation, now applicable to the entire Commonwealth of Two Nations (Poland and Lithuania), realigned the monetary system to correspond to German coinage to ensure the development of commerce and to prevent the uncontrolled movement of coin of varying quality. The ducat was now priced at 56 grosz and the thaler at 35 grosz.

There is common consent that the 16th century was a period of particularly swift price growth. The price revolution was undeniably linked to the discovery of the Americas and the supply of gold and silver flowed from there. Yet it began even earlier, with the increase in silver production in Europe at the end of the 15th century and the use of non-precious metal currency – bills of exchange – which expanded the money supply. At the same time there was a demographic boom, especially in urban (non-farming) communities. Demand for foodstuffs went up, and so did food prices. The mounting cost of living kindled pressure for higher wages. As a result, the price of non-food commodities also rose. Poland, with its agriculture, was able to export a sizeable surplus output and take advantage of favorable terms of trade. The country grew richer, which was reflected in an inflow of coin and precious metal. In the 16th century the annual price inflation came to 1.5% in silver or 1.6% measured in coin which had been slightly losing its silver content. Before that, during the denar period

the annual change of prices in coin was 1.1%, while in the grosz period 0.2% only.

The flourishing expansion of the 16th century was followed by stagnation, then regression. The Commonwealth was now going through a difficult period. The King, Sigismund III Vasa (1587–1632), had to overcome a monetary crisis which was termed the „Kipper – und Wipperzeit” („the clipping and culling times”) (Kindelberger 1999, p. 214–215 and 386).

As the influx of poor-quality coin to Poland increased, attempts were made to remove it from circulation. Further, in 1601, the mints were closed. Since these efforts were to no avail, the silver content in small Polish coin was reduced, to prevent it being sent abroad. The scale of this reduction was defined by the current price of the thaler, as expressed in small coin. Reductions were made in the years of 1604–1623. By 1627, the money supply was satisfactorily stocked with small coin. A halt to the striking of coin was decreed, one that was to last until 1650. The monetary disruptions that occurred in the reign of Sigismund III Vasa could be illustrated by the following facts (author's own calculation):

- the silver content of the grosz fell 57%,
- prices measured in small coin went up 229%,
- the ducat went up in price 175%, while the thaler rose 143%.

It was not until Sadowski carried out his extensive and penetrating analysis that a convincing interpretation appears to have been given of the complex situation at the beginning of the 17th century (Sadowski 1964, p. 23–134). Sadowski's reflections indicate that the start of the 17th century witnessed a worsening of Poland's terms of trade. The response to this was an increase in grain exports. These exports were paid for in gold, which was then cheaper in the West than in Poland.

The „Kipper – und Wipperzeit“

The rise in prices in the German lands at the end of the 16th century sparked a heightening demand for small silver coin. Difficulties in obtaining silver led to an increase in its price. This meant that the production of small coin became unprofitable. Minting works bought up thick coins – thalers – in order to remint them, with the admixture of copper, into inferior small coin. The price of thalers therefore rose, as did prices reckoned in the debased small coin. Political and religious conflicts, finally spilling over in 1618 into the Thirty Years War, further swelled the demand for small coin. The increasingly numerous mints – operated by the Holy Roman Empire, dukes, towns, bishops, religious orders and private individuals, and also run illegally – obtained an assured profit by raising the denominations of particular coins, reducing their silver content, and lowering their weight. This debased coin then began to be shipped out to neighboring countries and exchanged for higher-value coin, which lent itself to reminting at a profit. A defense against this practice was to reduce the value of the local coin in the countries in question. The debasement of the coinage enveloped the whole of Germany, Austria, Hungary, Bohemia and Poland, and apparently also extended to the Middle and Far East. The whole process reached its peak in 1622. Ultimately, it led to worthless coin appearing in circulation and spurred essential reforms to stabilize the monetary situation, which were enacted in 1623.

This period has gone down in history under its German name of „Kipper – und Wipperzeit“, which may be interpreted as „the period of the money chisellers“. It has earned itself the reputation of being the first-ever international financial crisis in modern times, one that occurred in a system of precious metal money, with no role being played by bank credit.

Shrinking export receipts propped up the high price of gold. Imports, along with other payments abroad (e. g., for the maintenance of diplomatic missions and for education), were settled in silver. The outflow of silver stepped up when it began to be in short supply in Europe. At this point, silver was bought up speculatively in Poland for gold. The inflow of the latter is attested to by the numerous issues of gold ducats performed by Polish mints in the years 1609–1616. The buying up of silver constricted the money supply. Within that money supply, superior small Polish coin began to be replaced by inferior foreign coin. This evoked the necessary debasement of Polish coin. The debasement of the coinage set in motion an unavoidable spiral of successive downward adjustments to the mint-rate. The price of the gold ducat rose, supported by the high demand for gold in Poland. The price of the thick silver thaler also increased, due to demand for this coin from abroad. The thaler rapidly gained in value as the precious metal content of small silver coin started to come down. The price of goods measured in small coin shot up. Inflation depressed the purchasing power of the population and undermined their economic situation, with the exception of the magnates, the largest landowners. The monetary crisis stemming from prices rising as silver flowed out of the country preceded an economic crisis that was to grip a country geared towards grain exports, which were declining in competitiveness, and reliant on imports (including imports of luxury goods), while having a limited domestic production capacity.

In investigating the economic model that obtained in Poland in the 17th century, Topolski stresses that the concentration of ownership in the hands of a strong layer of magnates, alongside the marked impoverishment of the gentry, encouraged luxury consumption rather than capital formation and investment, i. e., rather than a process of economic development. This led to economic stagnation and regression (Topolski 1979, p. 30 and 35).

Sigismund III Vasa was succeeded by his son, Ladislaus IV (1632–1648). Beginning with this King, the royal prerogative of the Mint was transferred to the Commonwealth. This was principally related to the interests of the Treasury, which experienced a perpetual deficit.

The years 1648–1668 saw Poland ruled by John II Casimir Vasa, the half-brother of Ladislaus IV. This was a particularly dramatic period in the history of the Commonwealth, one that bore witness to battles in the Ukraine, the Swedish Deluge and wars with Russia. The country's flagging international position was accompanied by internal political disorder and economic destruction.

This political and economic situation produced a financial collapse. John II Casimir Vasa made attempts to regularise the monetary system. The needs of the Treasury led to two measures being taken:

- in 1659, the production was begun of copper szelagi representing the third of a grosz,
- in 1663, the issue of silver coins started with a face value of 30 grosz, i. e. corresponding to zlp 1.

The minting of copper szelagi coins was started by Tytus Liwiusz Boratini. These szelagi were soon dubbed simply „boratynki“. The public of that time,

still associating the value of a coin with the precious metal it contained, failed to understand that the issue of copper coinage had been induced by the financial condition of the Polish state, seeking to fund the cost of its war operations. It was for the same reasons that a Sejm committee accepted the proposal put forward by another mintmaster, Andrzej Tymff. Tymff commenced the minting of 30 grosz coins, or in other words, of the Polish zloty, which thereby became a physical coin, not just a unit of account. The zloty as the equivalent of 30 grosz should have contained 6,57 grams of silver. The zloty coins struck by Tymff, quickly christened tymfy (or tynty), had 3,36 grams of pure silver. While the obligatory official rate was 30 grosz, the market rate stood at 12–18 grosz.

The exact mintage of boratynki and tymfy is not clear. But there is no doubt that the Treasury achieved its objective, obtaining substantial revenues from the Mint (Rybarski 1939, p. 405–419; Mikołajczyk 1980, p. 33–34). Boratynki and tymfy dominated the money supply. The price of the ducat went up from zlp 6 to zlp 12 „in szelag coin”, while the thaler was valued at half of this.

The Commonwealth entered the 18th century politically and economically weakened with a feeble coin that eloquently mirrored the condition of the state and its economy. The election of Augustus II Wettin in 1697 resulted in the personal union of Poland and Saxony. By force of events, the Commonwealth became a party to the Great Northern War conducted in the years 1700–1721. During the war, foreign coin appeared alongside Polish coin as a consequence of the movement of foreign armies. The coins struck in Saxony were increasingly numerous. The conversion rates between particular coins were shaped by the market. The edict proclaimed in 1717 brought monetary denomination into line with their market value: 1 ducat = zlp 18 and 1thaler = zlp 8.

Following the death of Augustus II Wettin in 1733, the Russian intervention led to the election of his son, Augustus III Wettin (1733–1763). The coin in use in Poland was produced at the Saxon mints and in limited quantities in Gdansk, Torun and Elblag. From 1740 onwards, the mints in Berlin, Königsberg, Szczecin and Wroclaw struck coins of inferior fineness which bore the name of Frederick the Great and imitated the coin of Augustus III Wettin. This practice developed further during the Seven Years War, when Frederick the Great of Prussia occupied Leipzig in 1756 and took possession of the local mint, including all the equipment and dies of Augustus III Wettin. Frederick was able to finance the Seven Years War by illegally minting low-quality coin that was put into circulation in the Commonwealth. The superior Polish coin that was seized there was re-minted into increasingly poor coins, ones with as lit-

tle as a quarter of the silver content. Towards the end of the reign of Augustus III Wettin, coin of larger value virtually disappeared from circulation.

The next election was won by Stanislaus Augustus Poniatowski (1764–1795). Monetary disarray, together with the need to restore the health of the Treasury and ensure that the economy operated with sound money, meant that a reform of the Mint became an urgent necessity. This reform was carried out in 1766, recalling from circulation the bulk of coin from Saxon times. The changes performed to the system involved the adoption as the basis for minting of the „convention standard of Vienna”, i. e., the striking of ten thalers from one Cologne mark of pure silver. Saxony had moved to this standard in 1763, as had other German countries. The Polish system was therefore being realigned to that of Poland’s neighbours. At the same time, certain units were retained that became a feature of Polish monetary tradition (the Polish zloty and grosz), while others were abandoned (the silver tymf and few others).

The prime responsibility for stocking the money supply rested with the Warsaw mint, brought into operation in 1766. The high technical standards of this mint distinguished the new issues from coins previously struck at Polish mints. In the years 1766–1768, the Warsaw mint produced over 185 million coins, to a value of about zlp 36 million. In subsequent years, output decreased, running at the annual equivalent of some zlp 1 million (Terlecki 1970, schedule following p. 286). The silver coin struck was of good quality. The zloty coin now contained 2.92 grams of silver, which constituted a distinct improvement over the coin that had been withdrawn from circulation. However, the sound quality of the coinage was to prove the cause of further monetary problems.

Firstly, the production of the mint required the import of precious metal. The rising price of silver and gold purchased in the Netherlands meant that it was unprofitable to mint coin in accordance with the accepted standards. The King, an advocate of a very sound currency, began to make good the losses incurred by the Mint, using his own income.

Secondly, Poland’s thicker silver coin was superior to that of neighboring Prussia. Prussian gold coin and small silver coin were used to acquire higher-value Polish silver coin and then take it out of the country.

The reform of 1766, while bringing order to monetary affairs, nevertheless failed to ensure lasting stabilization.

Political stabilization also proved impossible. The year 1772 saw the First Partition of Poland by Prussia, Austria and Russia. Faced with the threat to the Polish state, a contribution was introduced and a levy in kind was set. The revenues of the Common-

Table 3. *Value of the ducat and thaler in zlp*

Year	1 ducat =	1 thaler =
1496	1	–
1528	1 $\frac{1}{2}$	–
1533	1 $\frac{1}{2}$	1
1580	1 $\frac{13}{15}$	1 $\frac{1}{6}$
1616	2 $\frac{1}{2}$	1 $\frac{2}{5}$
1623	5	2 $\frac{2}{3}$
1650	6	3
1676	12	6
1717	18	8
1766	16 $\frac{3}{4}$	8
1787	18	8
1794	18	6

Note: zlp 1 = 30 silver grosz, from 1717 zlp 1 = 30 copper grosz, from 1766 zlp 1 = 4 silver grosz = 30 copper grosz; the ducat contained almost 3.5 grams of gold; the thaler contained 24.3 grams of silver until 1650, 25.2 in the years 1651–1750, then 22.1 in 1766, 23.4 in 1787 and 16.6 in 1794.

Source: compiled by the author

wealth soared to three times those immediately after the Partition. The condition of the Treasury strengthened in parallel with the changes taking place in the economy. Proposals appeared for the creation of a national bank and the introduction of paper money. The first person to put forward the idea of a bank of this kind was Stanislaw Konarski, in the fourth volume of his work „On Effective Methods of Government”, published in 1763. The issue of paper currency, to a value of zlp 30 million, was first suggested by Aleksander Kraszewski in 1774. This stemmed from discussions on how such an issue could be used to repay the public debt. However, neither the idea of a national bank nor of the issuance of paper money managed to come to fruition⁵.

In the conditions of those times, it was only precious metal money that was considered to have any basis. The principles governing coinage produced in 1766 remained in force. The good quality of the coin, combined for a long period with a trade deficit, led to an outflow of coin abroad, one which prior to 1787 could have amounted to zlp 40 million. The output of the Warsaw mint in the years 1766–1786 came to zlp 53 million. The King subsidized this output to the tune of over zlp 3 million. As the balance of trade improved, foreign coin began to flow into the country. It was not until 1787 that changes were made to the monetary system – against the wishes of the King, in fact, who favoured a very sound coin.

The gold-silver ratio was changed. The price of the ducat was set at zlp 18. The precious metal content of the silver coin was reduced by 4.2%; in the case of the zloty, for example, the silver content fell from 2.92 grams to 2.80. However, the coin was still of good quality. As a result, the temptation to

take it out of the country was not eliminated, although bans on this were proclaimed and currency tariffs established for foreign coin. These tariffs, fixing the price of foreign coin in Polish currency, indicate the huge variety of coin that made up the money supply of the Commonwealth (earlier Polish coin, together with coin from Germany, Austria, the Netherlands, Spain, France, Belgium, Denmark, Sweden, Russia and Turkey). Despite this great diversity, the money supply was not that big. Around the year 1790, it was most probably about zlp 100 million (Korzon 1975, p. 149). The complaints made at the time regarding a shortage of cash came in a situation where coin was doubtlessly still being briskly channelled out of the country, although foreign coin was at the same time becoming more plentiful and the output of the Warsaw mint was increasing. Directly prior to the reform of 1787, the mint was striking coins worth some zlp 0.4–0.7 million per year, while after the reform this rose to roughly zlp 5 million.

In 1791, the Government Act was adopted, i. e. the Constitution of May 3. In 1792 the defence of the reforms sparked a Polish-Russian war. In 1793 Prussia and Russia carried out the Second Partition of Poland.

In 1794, an insurrection broke out against the partitioning powers. It was led by Tadeusz Kościuszko. On the instructions of Kościuszko coins were struck from the gold and silver of the monasteries and churches. The Supreme National Council set up by Kościuszko adopted a resolution on the issuance of paper currency – treasury notes with a mandatory exchange rate linked to precious metal money and secured by national assets. The assumptions adopted were for fairly large issues of notes. In actual fact, much fewer were printed. In all, some 15% of the notes initially planned were actually printed. They were in circulation for just

⁵ These issues are discussed more extensively by A. Grodek (1936, p. 8–9, 17–18 and 65).

under three months. The insurrection finally collapsed. Notes, which remained in private hands, were treated as the obligation of the illegal government and as such were not eligible for redemption or exchange by the partitioning powers.

After the fall of the Insurrection, events moved fast. The disappearance of the Polish state and currency were already inevitable. In 1795, Prussia, Austria and Russia concluded the Third Partition.

The monetary changes that took place during the period of the Polish zloty can be presented using the value of the ducat and thaler (Table 3)

Postscript

Following the Partitions there were still several episodic events in Poland's monetary history. The most

important of these was the activity of the Bank of Poland, the first bank of issue, established during the autonomy of the Congress Kingdom of Poland. However, the Polish lands that had been incorporated into the structures of foreign states ultimately found themselves subject to the monetary systems of the partitioning powers. In time, the money in circulation in Polish lands did even become golden, but it remained alien.

The rebirth of the Polish state in 1918 began a difficult period for the currency. Due to the weakness of the country's finances and economy at the time, the enormous issues of the Polish mark that were carried out led to a catastrophic rise in prices. Hyperinflation was brought to an end by the currency reform of 1924. Then, the zloty came into circulation once more. A monetary history of Poland after 1795 will be presented in the next part.

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