

**THE PERIOD OF THE ‘NEW-FRISIAN’ PENNY IN OOSTERGO
(c.1350-c.1500)**

Finally, we must focus on the third Frisian sealand, Oostergo. At the beginning of the late Middle Ages, Oostergo consisted politically of 3 districts: the Northern Nine, the Southern Nine or Leppa,¹ and Bornego.² The first two districts were jointly called Wynyma;³ these districts had the following late-medieval money history in common. The last district, Bornego, was separated from Oostergo during the course of the 15th century to become the main part of the regional unit of Sewenwalden. The money history of Sewenwalden has been dealt with in the chapter on Westergo. Although the district of Achtkarspelen was also ranked with the third sealand, it stood politically apart from Oostergo; its late medieval money history has already been dealt with in the chapter on the Ommelanden.

The money history of Oostergo will prove to be the most indistinct of the various parts. This is caused not only by a scarcity of sources but also by the fact that specification of money amounts is lacking in the documents that we have.

The historical context

The economic position and development of Oostergo during the late Middle Ages did not differ substantially from that of Westergo. The international trade of the harbour sites of Dokkum and Leeuwarden had already declined during the previous period. The Middelzee, that had connected Leeuwarden with the sea, had gradually silted up, leaving Leeuwarden, from about the middle of the 13th century, accessible for international shipping only by the Dokkumer Ee.⁴ Oostergo too had become an agrarian region with a growing interest in cattle breeding and dairy production. The Frisian ship-owners imported, among other things, cattle and horses from Oistringen. These were grazed in Mid-Frisia and subsequently exported to Flanders and France. Shipping also remained an important profession, but based on shorter distances than in previous ages. Now the

¹ Fockema Andreae, “Dijken of wijken”, 192.

² De Langen, *Middeleeuws Friesland*, 14.

³ Sometimes also named ‘Winninghe’. De Vries, “That is riucht...”, 172-173; Buma, “Wynyma wilkeren”, 97.

⁴ Schuur, *Leeuwarden*, 98; 169.

ship-owners mainly transported cargo between northern Germany, Holland, Guelders and Flanders.⁵

Like Groningen, Leeuwarden tried to compensate for the decline of its sea trade by promoting its position as a regional market centre.⁶ Its aim at occupying a central position may appear, for example, in its acquisition of responsibility for the upkeep of the sluices and waterways and the regulation of shipping traffic in the Leppa - the southern district of Oostergo.⁷ These waterways were connected with those in Sewenwalden that led to the Zuiderzee, providing a direct connection with Guelders and Holland. Leeuwarden also acquired the higher jurisdiction over the administration of justice in this part of Oostergo.⁸

In the conflict between the Schieringer and the Vetkoper factions, the towns of Leeuwarden and Dokkum belonged to the latter while the former was the most powerful in Oostergo, as elsewhere in Mid-Frisia.⁹ We have seen how the conflict between these factions resulted in bitter fighting involving most of Frisia. A few decades after the 1422 'reconciliation treaty of Groningen' the conflicts were resumed in Mid-Frisia on a more local level. Oostergo had its own statutes: the (undated) 'Wynyma wilkeren',¹⁰ but here too difficulties in executing the law were evident. Moreover, neither Dokkum nor Leeuwarden could offer the executive power to enforce justice and peace that Groningen could - the *pax groningana*. Hence, after 1426,¹¹ several treaties were made between subdistricts in Oostergo and Sewenwalden on the one hand and Groningen on the other in an attempt to realise these aims. In 1467, in the treaty between Groningen and Kollumerland,¹² the executive power of Groningen was actually established within this area by the building of a fortification manned with troops.¹³ In 1477, in a 10-years' treaty with Groningen, the courts and councils of Westergo and Oostergo accepted this encroachment subject to the condition that there would be no further infringement of Mid-Frisian jurisdiction. After those 10 years, from 1487 onwards, Groningen continued its policy, supported by the Vetkoper faction in Oostergo, that included the towns of Leeuwarden and Dokkum. This provoked resistance by the Schieringer faction in Oostergo and Westergo, a battle in 1492 and a final appeal to the Emperor by

⁵ Slicher van Bath, "Middelleeuwse welvaart", 222-224.

⁶ Schuur, *Leeuwarden*, 170.

⁷ De Vries, "That is riucht", 173.

⁸ OFO2: 3 (1392); Schuur, *Leeuwarden*, 143.

⁹ Jappe Alberts, "Frysk en frij", 161.

¹⁰ Statutes named after a village in Oostergo called Wyns. See Buma, "Wynyma wilkeren", 71-133.

¹¹ PG: 4; in this treaty Achtkarspelen was involved in addition to districts in the Ommelanden.

¹² Kollumerland was the most eastern part of Dantumadeel, one of the three northern districts of Oostergo (see map of De Vries, "That is riucht ...", 172-173), but in due course it was apparently acting separately as it used its own seal (Vries, *Het Heilige Roomse Rijk*, 18-19).

¹³ Vries, "Histoaryske ynlieding", XXII; PG: 19.

the Schieringer faction. This brought about the end of Frisian independence, as we have seen.¹⁴

The history of the means of payment

In the second half of the 14th century, in Oostergo, as elsewhere in Frisia, Flemish and French coins and their imitations would have been imported, while sterlings were gradually disappearing. Whether so-called ‘usual money’ infiltrated the currency from the Ommelanden and Groningen is unknown but seems likely. On the subject of imitations, I must mention the coins struck in Cunre, just over the border south of Mid-Frisia. Cunre was a seignory situated in Het Oversticht, a fief of the Bishop of Utrecht. The Lords of Cunre were in fact burgraves of the Bishop, but they behaved like independent princes. They probably usurped the right to operate a mint.¹⁵ In addition to Cunre, they might also have been minting within Frisia because in 1331 the Lord of Cunre was enfeoffed by the Count of Holland (*sic!*) with property in Oisterzee,¹⁶ - a place situated close to Cunre in Mid-Frisia - and the name of this property, ‘*Penningenhuse*’, suggests that it was a house used as a mint.¹⁷ But no coins struck in Oisterzee have been discovered as far as I know. In the period under discussion the Cunre mint produced, among others, imitative *tornoyse groten*, possibly cavaliers, Flemish half *groten* (with lion), so-called Frisian sterlings (imitative long-cross sterlings), small coins (called $\frac{1}{4}$ th *groten* and $\frac{1}{8}$ th *groten* by numismatists¹⁸), imitative Holland pennies¹⁹ and Flemish *placken*.²⁰ The so-called $\frac{1}{4}$ th *groten* might have been the ‘new-Frisian’ pennies found in this study from the second half of the 14th century onwards. Many of these Cunre coins have been discovered in areas around the North Sea and the Baltic. They may have been current in Oostergo as forerunners of indigenous Oostergo money before the Cunre mint was closed in around 1390,²¹ but there is no documentary evidence.

A handful of discovered coins²² and one late medieval document²³ reveal the existence of Oostergo/Leeuwarden money from the end of the 14th century. This is the very meagre evidence of late medieval indigenous Oostergo currency. The oldest coins to

¹⁴ *Ibidem*, XXI; Vries, *Het Heilige Roomse Rijk*, 85-185.

¹⁵ Grolle, *De Heren*, 4.

¹⁶ Chbk1, 186.

¹⁷ Grolle, *De Heren*, 10.

¹⁸ Grolle, *De Heren*, 15; Puister, “Munten der Oost-Nederlandse heerlijkheden”, 32.

¹⁹ Puister, “Munten der Oost-Nederlandse heerlijkheden”, 32, calls these ‘*kopjes*’ - probably mistakenly. See minting by the burgraves of Coevorden in Chapter 12, ‘The history of the means of payment’. Some of these Holland pennies were struck by the Lords of Cunre in Emmeloord rather than in Cunre itself.

²⁰ Grolle, *De Heren*, 15-16.

²¹ *Ibidem*, 5; 12.

²² Puister, “Friese stedelijke munten”, 36-39.

²³ Excursus 7.1: ‘On the Midfrisian conversion manual’.

have been discovered (*MONETA NOVA DE OESTERGHO.FACTA IN LEWER*’, c.-1425?), were a kind of *grate*.²⁴ They were followed, in the first half of the century, by coins no longer designated as coins of Oostergo although they were also struck in Leeuwarden (*MONETA NOVA DE LEWERD*).²⁵ It seems that, after a hiatus between c.1440 and c.1470,²⁶ minting in Leeuwarden was resumed with the production of black *stuvers* or *philippuses* and their related coins, modelled after the Groningen (*stad*)*vlieger*.²⁷ Besides these indigenous coins, the 15th century Oostergo currency consisted of various coins of foreign origin. The main elements of the currency mentioned in the documents are in silver: *grata*, *flamska grata* and (*ald*) *flams* (= old *vleemse groten*?), *tunan*,²⁸ *braspenningen*,²⁹ white *stuvers*; and in gold: (*aldera*) *scildan* (= old *schilden*), *clinckerts*, *rinsguldiers* and *postulatusguldiers*.

While no political power was really dominant in Westergo we might imagine that the town of Leeuwarden interfered in the monetary affairs of Oostergo - as Groningen tried to do in its own surroundings. Apparently this was not the case. There is no extant documentary evidence even to the administration of minting by the town government. Although the governors of Leeuwarden named themselves *aldermanni et scabines* as early as the last quarter of the 13th century,³⁰ it took yet another century before Leeuwarden was really dissociated as a town from the rural community from which it had emanated. In 1392, a number of district courts in Oostergo conveyed to the town government the right to administer justice for capital crimes perpetrated by their inhabitants in Leeuwarden.³¹ A decision by the town government to operate a mint for Oostergo, a few years before this event, would be appropriate for the development of Leeuwarden at that time, but for the rest the town government seems not to have been really concerned with the money system. We can assume that it would have given instructions for

²⁴ Boeles, “Verslag”, 173-174, identifies this coin as a double *grote*. Puister, “Friese stedelijke munten”, 36-37, calls it a *kromstert*, but this last name is not found in the documents that concern Oostergo. The silver content of these coins is unknown. The only 2 specimens discovered, kept in the Fries Museum in Leeuwarden, have gross weights of 2.5g and 2.3g respectively. (Information kindly supplied by Mr Mensonides of the Fries Museum.)

²⁵ One type of these coins is mentioned in a valuation in Deventer in 1462: coins ‘*dair die leuwe inne staet tot leuwarden gemuntet*’, worth half a black *stuver* (Van der Chijs, *De munten van Friesland, Groningen en Drenthe*, 110, note 1).

²⁶ Puister, “Friese stedelijke munten”, 29.

²⁷ For instance: OFO1: 261 (1475, Giekerk). The Groningen *vlieger*, struck from 1454, was called *philippus* (1.4g of silver) (*Encyclopaedie*, sv. *philippus*). See also Chapter 12, ‘The history of the means of payment’.

²⁸ OFO1: 60 (1432, Husemer nyland). A *tun* was the double *grote* struck in Holland in the first decades of the 15th century (Van Gelder, *De Nederlandse Munten*, 271). *Tunan* were struck in Marssum, near Leeuwarden, by the Count of Holland - John of Bavaria - before 1422 (Van der Chijs, *De munten van Friesland, Groningen en Drenthe*, 602-603).

²⁹ OFO4: 16 (1453, treaty regarding Bergum sluice).

³⁰ Schuur, *Leeuwarden*, 141-143.

³¹ OFO2: 3.

the standards and examined the quality of the coins, but we must also assume that it derived the standards from the foreign currency that it followed. According to numismatic findings, minting in Leeuwarden occurred sometime during the period 1420-1440, in 1471-1473, in 1487 and in 1491-1493.³²

The history of the measure of value³³

Apart from the so-called Mid-Frisian conversion directive in two versions of the Mid-Frisian judges' books,³⁴ neither the Oostergo money nor the Leeuwarden penny (= Lyodera penny) is mentioned *expressis verbis* in the documents. Its very existence is almost hidden behind the usual language of the time itself, and its origin is completely obscure.

The data derived from the so-called Mid-Frisian conversion directive must be handled with caution.³⁵ Nevertheless, to a certain extent, those that concern Oostergo money are confirmed by data from other contemporary sources. The conversion directive tells us that there was a Leeuwarden penny, that there was a mark of 10 'Aestergae *liteka scillinghe*' (= Oostergo minor shillings), hence of 120 Leeuwarden pennies, and that there was a 'Lyodera *graete merck*' (= Leeuwarden major mark) of 12 Oostergo shillings, hence of 144 Leeuwarden pennies. Although the names Leeuwarden pennies or Oostergo shillings have not been found in other documents, the notions of a major mark and a minor mark have indeed been found. I mention the following sources that probably refer to Oostergo money.

1. The Mid-Frisian conversion directive itself.

This is not dated. With provision it can be dated between 1412 and 1422.³⁶ The Leeuwarden penny was equivalent to $\frac{1}{5}$ th *grate*; the Oostergo minor mark was rated at 24 *grate* and the major mark at 29 *grate* less 1 Leeuwarden penny (= $28\frac{4}{5}$ *grate*). These *grate* could be interpreted as old *fleemska grate*, but this is doubtful. The *grata* in this directive, rated at 2 English pennies, had a c.20% higher silver equivalence. As I see it, either the rate was simply wrong or the *grata* in the directive was not the old *fleemske grata*. In this respect the directive remains puzzling for the time being.³⁷

³² Puister, "Friese stedelijke munten", 29.

³³ In this section no mention is made of the ('old-Frisian') pound as multiple unit of account in Oostergo, although it frequently appears in the sources. It has already been dealt with in Chapter 7, 'The history of the measure of value' and in Excursus 7.2: 'On the definition of the pound as a multiple unit of account in late medieval Frisia'.

³⁴ Buma, *Westerlauwersches Recht I*, 424-429 (version Jus municipale); RQ, 385-387 (version Druk).

³⁵ Excursus 7.1: 'On the Midfrisian conversion directive: a survey'.

³⁶ Ditto.

³⁷ Ditto. To solve the puzzle I have ventured the idea that in this directive the old *vleemse grote* was replaced, with political motives, by the imperial *grote*, to be struck in Leeuwarden by grant from the Emperor Sigismund in 1417. This replacement would result in a 20% increase of the silver equivalence

2. The 1412 synodal statutes of Leeuwarden.³⁸

These have fines in minor marks ‘new money’, a mark being reckoned at 24 *grata*. The *grate* are, unfortunately, not specified. Presumably they were old *fleemska grate*; a clerical reward of 1 *fleemska grata* is mentioned in these statutes.³⁹ This mark strikingly matches the Oostergo minor mark mentioned in the directive, which was also valued at 24 *grata*. Moreover, the minor marks in the synodal statutes are denoted as ‘new money’. The use of the words new money excludes English money; in 1412 English money of account in Leeuwarden would have been old in every respect, and the term ‘old money’ was also often used to denote English money in the other Frisian areas. New money appears to be what I have called ‘new-Frisian’ money. It may refer to the *MONETA NOVA DE OESTERGH*O mentioned in the previous section.

3. Charters concerning conveyances of land in Mid-Frisia.

These charters, drawn up from c.1390 onwards until the end of the 15th century,⁴⁰ sometimes mention amounts expressed in major marks, and it is noteworthy that these are found only in Oostergo. It can be demonstrated⁴¹ that these major marks were not marks of 16 shillings English, found for instance in the treaty between Oostergo and Groningen in 1318;⁴² what else can they have been, then, but Oostergo major marks?

4. The 1444 treaty between Oostergo and Groningen.⁴³

This treaty concerns internal peace and justice. It includes a mark of 29 old *vleemse groten* which is most likely to have been an Oostergo major mark, announced in the conversion directive as a mark of 29 *grate* less 1 Leeuwarden penny.⁴⁴

We may, then, admit the existence of a system of money of account in Oostergo in the first half of the 15th century that was characterised by

of the Leeuwarden penny and in the creation of a multiple unit of account, the Frisian *sceld*. If true, this replacement was wishful thinking; the imperial *grote* was probably never struck, and the Frisian *sceld* has not so far been found anywhere.

³⁸ Chbk1, 375-377, particularly §19 (this is the version Gabbema, very similar to, and therefore probably copied from, a version in the ms. Unia. Another version is found in the ms. Furmerius; see Van Steijn, “Het ‘Leeuwarder seendrecht’”, 31-72) and Excursus 13.1: ‘On the money of account in the 1412 synodal statutes of Leeuwarden’.

³⁹ Van Steijn, “Het ‘Leeuwarder Seendrecht’”, 36; 39.

⁴⁰ First time: OFO1: 3 (1390, Berraveen, possibly between Eastermar and Garyp); last time: OFO1: 393 (1492, Schyra Monka Ham).

⁴¹ Excursus 13.2: ‘On the kinds of marks used in the prices of land in Mid-Frisia 1390-1500’.

⁴² Chapter 6, ‘The history of the measure of value’.

⁴³ Worp, *Kronijken*, vol.4, 80-85.

⁴⁴ Excursus 13.3: ‘On the mark in the 1444 treaty between Groningen and Oostergo’.

- a Leeuwarden penny equivalent to $\frac{1}{5}$ th *grata*,
- a minor mark of 120 pennies equivalent to 24 *grate*,
- a major mark of 144 pennies equivalent to 28 $\frac{4}{5}$ *grate*,
- a *grata*, probably equivalent or even identical to an old *vleemse grote*.

There is no indication of a political act having established this new money system, and it certainly did not emerge out of the blue; therefore it must have evolved organically from a previous stage. This previous stage, however, is a missing link in our knowledge. As yet it can only be reconstructed by conjecture. We must presuppose that this link connects the English money system known in Oostergo in the first half of the 14th century to the money system characterised above. My suggestion would be a link that fits into the picture of the ‘new-Frisian’ money system in general, as found in the Yade and the Emden areas and in the Ommelanden, Groningen and Drenthe during the second half of the 14th century. The nearby town of Groningen might have been particularly influential.

The conjecture would be that, somewhere between the 1350s and the 1380s, what I have denoted as ‘new-Frisian’ coins (light or brown sterling derivatives?) from Groningen, and possibly also from Cunre, infiltrated the currency in Oostergo. As elsewhere in Frisia this small money was attractive to the urban population. A new system of account, based on the small penny *payment*, could have emerged after some time alongside the still extant, but gradually being ousted, English money of account system. However, the ongoing decrease in the value of these coins might have become alarming during the course of the 1380s. The Groningen mint was exploited by the Van Coevorden dynasty, and a similar development may have affected the Cunre coins. The local authorities in Oostergo had no grip on the matter. With or without the support of the town government of Leeuwarden, this situation would have challenged enterprising moneyers in Leeuwarden to supply a more trustworthy local penny for Oostergo. The silver equivalence of the ‘new-Frisian’ penny in Groningen in the 1380s was a little below c.0.3g, and this value would have been the starting point. At that time the old *vleemse grote* (*grata*) was an antiquated coin with a silver equivalence of c.1.4g.⁴⁵ It would be worth 5 ‘new-Frisian’ pennies, and henceforth this rate could have become the norm for the silver content of the new Leeuwarden penny. In this way the old *vleemse grote* would have been used as the standard for the new Oostergo money system of account. It follows that 24 old *vleemse groten* (*grata*) represented a minor mark (120 pennies), while 28 $\frac{4}{5}$ *grata* were a major mark (144 pennies).

⁴⁵ Van der Wee, *Vlaams-brabantse muntstatistieken*, 44: the silver content of the old *vleemse grote* at the end of its production in 1364 was c.1.5g; after that it would have diminished a little because of normal decrease. See also Excursus 12.2: ‘On the meaning of a lot of silver in Groningen’.

In the third quarter of the 15th century new concepts entered the Oostergo system of money of account owing to the penetration of new coins into the currency of Oostergo: the white *stuver* and the black *stuver*. The white *stuver* can be identified as the popular *stuver* (c.1.6g of silver) that was launched in 1433 in the Burgundian Netherlands⁴⁶ and no doubt also imported since then into Oostergo. The black *stuver* was also called *philippus* and can be identified with the Groningen (*stad*)*vlieger* (c.1.4g of silver) that had been struck since 1454.⁴⁷ This coin took the place in the system that had previously been held by the old *vleemse grote*. It became the model for the *stuver* of Leeuwarden⁴⁸ that was struck from the 1470s onward. In Groningen, during the 1450s, 5 white *stuvers* were rated equivalent to approximately 6 black *stuvers*.⁴⁹ This relationship between the white *stuver* and the black *stuver* is of interest because, in Oostergo, a mark of 20 white *stuvers* is found in 1482⁵⁰ and, in addition, a mark of 24 *philippus* (that is 24 black *stuvers*⁵¹) is found in 1475⁵² and 1482.⁵³ Assuming that the ratio between the white and the black *stuvers* just mentioned was conventional, it follows that both marks must have been equivalent. What mark was it? It seems very unlikely that a mark of 20 *stuvers* would be an Oostergo major mark of 144 pennies; that would imply the odd proportion of $7\frac{1}{8}$ pennies for a *stuver*. Therefore, it is most likely that the mark was an Oostergo minor mark of 120 pennies: a white *stuver* equivalent to 6 and a black *stuver* equivalent to 5 Leeuwarden pennies. This implies that, at least from the 1470s onwards, 24 *grata* - worth an Oostergo minor mark in 1412 - had been replaced by 24 black *stuvers*⁵⁴ or 20 white *stuvers*. It also implies that an Oostergo major mark could be reckoned at 24 white *stuvers*. This last multiple unit of account, however, has not been found.

Also in Oostergo, the old *sceld* was reckoned at 30 (old) *vleemsen* from the 1430s onwards.⁵⁵ In terms of Oostergo money this implies that the old *sceld* was equivalent to 150 Leeuwarden pennies, $12\frac{1}{2}$ Oostergo shillings or $1\frac{1}{4}$ Oostergo minor marks. This does not seem to be a very convenient multiple unit; yet it was used regularly. In the second half of the 15th century the *rinsguilder* was also used as a multiple unit of

⁴⁶ Van der Wee, *Vlaams-brabantse muntstatistieken*, 91.

⁴⁷ GAG AHS: 188 (1454, Groningen).

⁴⁸ Puister, "Friese stedelijke munten", 28.

⁴⁹ In Groningen/Selwerd in 1455 a guilder was equivalent to $8\frac{1}{2}$ white *stuvers* (GAG SELWERD: 1 r144) and also to 10 black *stuvers* (GAG AHS: 142 (prov.) r81), so 1 white *stuver* $\approx 10 : 8\frac{1}{2} = 60/51 =$ approximately $6/5$ black *stuver*.

⁵⁰ OFO1: 323 (1482, Paesens).

⁵¹ GAG AHS: 188 (1454, Groningen).

⁵² OFO1: 261 (1475, Giekerk).

⁵³ OFO1: 321 (1482, Akkerwoude).

⁵⁴ Chbk1, 603: in 1462 the old *vleemse grote* was set as equivalent to a *philippus* in the statutes of the civic guard of Franeker, in Westergo.

⁵⁵ For instance: OFO1: 74 (1438, Opsterland: 30 *flimsken*); Chbk1, 519 (1439, De Geest, 30 *alder flaemscha*).

account in Oostergo. The *rinsguilder* was sometimes called a ‘gold mark’ according to a document in 1473.⁵⁶ This is conceivable. In 1483, in Leeuwarden, a *rinsguilder* was worth 20 *stuvers kaepmans paymenten*.⁵⁷ In Westergo a *kaepmansgulden* was also a multiple unit of 20 (white) *stuvers*, as we have seen. Because a (white) *stuver* was reckoned in Oostergo at 6 Leeuwarden pennies (see above), it follows that a (*kaepmans*) *rinsguilder* in Oostergo was in fact equal to a minor mark of $20 \times 6 = 120$ pennies. In Westergo 3 *rinsguldern* were equivalent to 1 mark of 120 (‘English’) pennies. Hence, 3 Oostergo pennies were reckoned as equivalent to 1 penny in Westergo, which was found to be an ‘English’ penny or *butken*⁵⁸. It follows that the Oostergo penny at that time would have been equivalent to c.0.2g of silver.⁵⁹ With the *rinsguilder* coming into use as a multiple unit, the old *sceld* - based on the worn old *vleemse grote* - lost its peculiar place as large multiple unit in the money of account system (150 pennies). In around 1500, a few years after the beginning of the Saxon rule over Frisia, an old *schild* is mentioned in the townbook of Leeuwarden⁶⁰ - valued at 20 current *stuvers* + 1 *philippus*. The value confirms its lost position; it cannot have been a multiple unit of account at the time, so this must have been an occasional market rate.

⁵⁶ Chbk1, 655-656 (1473, order to the deans in the sealands, in execution of the treaty between Oostergo and Westergo).

⁵⁷ OFO1: 329 (1483, Leeuwarden).

⁵⁸ Chapter 8, ‘The history of the measure of value’.

⁵⁹ *Ibidem*: 1 English penny \approx 0.72g of silver, so 1 Oostergo penny $0.72g : 3 = 0.24g$; Chapter 12, ‘The history of the measure of value’: 1 stadvlieger (= 1 black *stuver*) \approx 1.4g of silver in 1454, however declining.

⁶⁰ Telting, *De Friesche stadrechten*, 260-262 (§142).

Survey of the evolution of the money of account system in Oostergo
(c.1350-c.1500)

Period	Standard coin	Equivalence	Unit of acc./multiple units
c.1350?- 1380s	'new-Frisian' penny	c.0.4g?/ c.0.27g of silver	1 d. æ 1 standard 1 sh = 12 d. 1 minor mk = 10 sh (= 24 cavaliers?) 1 major mk = 12 sh (= 24 old <i>groten</i> ?)
1380s- c.1470	old <i>vleemse</i> <i>grote</i>	c.1.4g/c.1.3g? of silver	1 d. æ $\frac{1}{5}$ th standard 1 sh = 12 d. 1 minor mk = 10 sh (= 24 old <i>vleemse groten</i>) 1 major mk = 12 sh 1 old <i>sceld</i> = $12\frac{1}{2}$ sh
c.1470- c.1490	black <i>stuver</i>	c.1.3g?/c.1.0g? of silver	1 d. æ $\frac{1}{5}$ th standard 1 sh = 12 d. 1 minor mk = 10sh (=24 black <i>stuvers</i> = 20 white <i>stuvers</i> = 1 <i>kaepmansgulden</i>) 1 major mk = 12 sh

From the foregoing, it should be possible to estimate the silver equivalence of the Leeuwarden penny as unit of account of Oostergo, but the effort is disappointing. It can be related to what we know about the silver equivalence of the black *stuver* from sources outside Oostergo since the Oostergo sources themselves do not give much information. It is most likely that the black *stuver* struck in Leeuwarden since the 1470s was the standard coin. We know that in 1488 in Klaarkamp a gold guilder was valued at 28 to 30 *stuvers*, which must have been black *stuvers* of Oostergo. Judging by a tentative calculation, this *stuver* might have been equivalent to c.1.0g of silver.⁶¹ This would roughly

⁶¹ Chbk1, 744: ... *den golden r(y)ns golden foer tritich stuieren deer nw ter tyth gang ende geef is voer acht ende trytich al oer gold deer ney recknet ende treddehael golden rynggolden wr dan haep ... [i.e. ... the gold *rins*guilder at thirty *stuvers* as current today [,] for thirty eight [guilders] all gold together accordingly calculated and two and a half *rins*guilders included in the whole]. 1 Rhine guilder æ 30.456g of silver (Jesse, *Der wendische Münzverein*, 219), hence 1 *stuver* either c.30.456g : 30 = c.1.015g or (38 x c.1.015g) : (38 + 2.5) = c.0.95g.*

match the former ratio of $\frac{5}{6}$ th the silver equivalence of the Burgundian *stuver* at c.1.2g,⁶² but it would substantially exceed the silver equivalence of its Groningen model - at that time valued at only c.0.5g of silver.⁶³ It is doubtful whether the Leeuwarden black *stuver* could have remained in the market at a much higher silver content than its Groningen counterpart. We must assume that it followed its model because the Leeuwarden coins are included in the letters of patent of the Burgundian State in 1476 among those that were prohibited.⁶⁴ However, so far we do not have sufficient evidence to clear this question.

Economic analysis

From the survey above, the following changes in the history of the system of money of account in Oostergo between c.1350 and c.1500 must be explained:

- The emergence of the 'new-Frisian' money of account system in Oostergo in the second half of the 14th century
- The decline of the silver equivalence of this unit of account until the 1380s.
- The emergence in the 1380s of a new, Oostergo money system of account, having the Leeuwarden penny representing the unit of account and the old *vleemse grote* (*grata*), worth 5 pennies, as standard.
- The decrease in the silver equivalence of the old *vleemse grote* during the first half of the 15th century.
- The transition of the old *vleemse grote* to the black *stuver* as standard for the Oostergo money of account system in the middle of the 15th century.
- The emergence of the *kaepmans*guilder in this system of money of account during the second half of the 15th century.
- The decrease in the silver equivalence of the black *stuver* during the second half of the 15th century.

The shortage of data on the emergence of the 'new-Frisian' money of account system in Oostergo is even worse than that covering the Yade area, the Emden area, the Ommelanden and Groningen/Drenthe. For that reason I tried to make a conjecture in the previous section: the 'new-Frisian' coins infiltrated the extant currency and, being small coins, were welcomed as the basis for a new money of account system, particularly by the urban population. This conjecture, obviously, is also inspired by my view on the evolution of systems of money of account in general; I presuppose a market controlled currency importing attractive foreign coins (Groningen, Cunre?) and I presuppose the creative spirit of enterprise trying out the penny as unit of account after the

⁶² Van der Wee, *Vlaams-brabantse muntstatistieken*, 91, issue of the white *stuver* = *patard* until 1487; after that double *patards*, which are ignored here, were issued instead. See Spufford, *Monetary Problems*, 40-42.

⁶³ Chapter 12, 'The history of the measure of value'.

⁶⁴ Chapter 7, 'The history of the means of payment'.

examples of Groningen and other parts of Frisia. In this system, the mark of 10 shillings (Flemish style) was also 'imported', although the peculiar Groningen appellation of this mark - 'Groningen *schild*' - was not adopted.

This system would have developed along the path of normal decrease of the standard coin if this decrease had not threatened to accelerate because of debasements in the currency abroad, in Groningen and perhaps in Cunre. This caused a creative moneyer to supply more trustworthy 'Leeuwarden/*Lyodera* pennies' as an alternative. Apart from minting or exchange costs, 5 of these were being offered for 1 old *vleemse grote* - at that time a current coin, out of production and hence with a predictable silver content. This effort would have met with a receptive social response.

After this tacit transition of standard, the development could again follow the path of normal decrease of the old *vleemse grote*. This is indeed what occurred for about a century, even though, in the 1470s, this standard was not only somewhat lighter, but the coin had also become scarce in the circulation. The Groningen *stadvlieger*, struck since 1454 and known in Oostergo as black *stuver*, was almost equivalent to the old *vleemse grote* and could smoothly replace it. This would have been tried out and would gradually have dispelled the reluctance of social inertia. This transition, of course, could not have ended the normal decrease of the standard.

At about the same time a new element, the *kaepmansguilder*, was established as a multiple unit in the Oostergo money of account system - worth 24 black *stuvers* or 20 white *stuvers*. Multiple units like these come into being as soon as a certain rate of the gold coin concerned becomes conventional. This unit must first have been tried out, but its appreciation seems obvious because it provided a convenient link for communication in trade with Westergo. Three *kaepmansguilders* were defined as equivalent to 3 minor marks in Oostergo and to 1 minor mark in Westergo, and would remain so as long as the money of account systems of both sealands evolved evenly. It also served communication in trade with Groningen and the Emden and Yade areas, where a *coepmansguilder* was worth 2 major marks in local money.

It seems that the minting of black *stuvers* in Leeuwarden began when its Groningen model was struggling with foreign competition that resulted in debasements. So far we do not know whether the Leeuwarden black *stuvers* had to follow their examples. If not, it might be that the development of the system of money of account in Oostergo just followed the path of normal decrease. However, unless the Leeuwarden money was restricted to domestic use and did not compete with foreign coins, the moneyers in Leeuwarden had to follow the forces of the economic sphere, in which case the prices of foreign currency on the exchange market would have caused another divergence from the normal path of development.

Apart from the development during and after the monetary crisis in Europe, the evolution of the money of account system in Oostergo is characterised by a relative stability: before that crisis the loss of silver equivalence in the standard coin (presumably the old *vleemse grote/black stuver*) over almost a century (c.1385-c.1475) can be roughly calculated at c.0.4g⁶⁵ to c.0.5g.⁶⁶ This can be considered as almost the normal decrease. Oostergo offers the picture of a freely-grown system of money of account, almost exclusively based on a market-controlled currency.

⁶⁵ In 1475 1 white *stuver* \approx 1.22g of silver (Van der Wee, *Vlaams-brabantse muntstatistieken*, 98). If we calculate a black *stuver* at $5/6 \times 1.22\text{g} = \text{c.}1.0\text{g}$, and bear in mind that the silver equivalence of an old *vleemse grote* in c.1385 was c.1.4g, then the loss of silver equivalence of the standard coins together between 1385 and 1475 was $1.4\text{g} - 1.0\text{g} = 0.4\text{g}$.

⁶⁶ In 1474 the black *stuver* in Groningen was struck at c.0.90g of silver (see Chapter 12), whilst, a century before, the silver content of its predecessor, the old *vleemse grote*, was c.1.4g. Hence, the loss in silver over a century was c.0.5g.

