

GENERAL CONCLUSIONS

Findings, generalised.

So far, this study has painted a fairly coherent picture of the evolution of medieval Frisian money as a measure of value. Unfortunately, it had to be restricted almost solely to silver equivalence. Moreover, because of gaps in the surviving data, it had to be drafted partly with the help of conjectures. To summarise the conclusions found in the previous chapters I propose the following statements, illustrated by the graph on page 257.

1. The evolution of the medieval Frisian measure of value began in the 7th century. The (Frisian imitation of the) Merovingian gold *solidus* (c.3.9g gold equivalence) was the first known standard for the Frisian system of money of account.
2. After that the standard of the Frisian system of money of account changed four times.

The first change, in around 700, was the transition from the gold *solidus* as the standard of value to a double standard system in which a gold *solidus* was reckoned equivalent to 3 shillings = 36 silver pennies (c.1.3g silver equivalence apiece). The silver standard in this system was successively represented by the Anglo-Frisian penny (*'sceatta'*) and, perhaps during the last decades of the 8th century, by the 'pre-reform' Carolingian penny.

The second change was the renewal of this double standard after the increase of the silver penny to c.1.7g; this was a consequence of the monetary reform of the Carolingian penny by Charlemagne in 793/794 and the introduction of a new gold *solidus* of 4.4g by Louis the Pious in 814. It is assumed that, in Frisia, these coins formed the basis of a double standard system of money of account in the 9th century, still using the conventional proportion of 3 shillings (36 pennies) to 1 gold *solidus*. However, this assumption is questioned because an alternative might be the continuation of the pre-reform standards on the basis of still circulating pre-reform silver pennies and low-grade imitative *solidi*. It is also assumed that, because of a changing silver:gold ratio, the gold coin was ousted during the second half of the 9th century and, moreover, that

the official Carolingian pennies were replaced by Frisian imitations so that the silver equivalence of the standard gradually decreased as the silver content of the imitative pennies declined. During the second half of the 9th century it declined to the pre-reform level of c.1.3g., and the decline continued to c.0.9g by the end of the 10th century. The role of the imitative Carolingian pennies was taken over by the 'old-Frisian' pennies from the 11th to the 13th century.

The third change was the transition from the 'old-Frisian' penny to the English penny as standard, represented by the genuine English penny (c.1.3g of silver) and/or the Frisian imitative sterling (c.1.2g of silver). The distinction is somewhat problematic as it has not so far been underpinned numismatically.

The fourth and last change was the transition from this English money to the 'new-Frisian' system of money of account ('usual or everyday money') during the 14th and 15th centuries. It is assumed that this initially emanated from the English money system, possibly via continental derivations - the low-grade or brown sterlings. This standard was succeeded by various larger silver coins - *groten* - that originated in the southern Low Countries, but this development differed from region to region. This last transition was also not complete as in a few regions the English penny remained as standard or alternative standard until the end of the Middle Ages.

The replacement of the Anglo-Frisian penny as standard by the (imitative Frisian) Carolingian penny may have been induced, with political motives, by Charlemagne. Fraud may have played a major role in the decrease of the Groningen money in the second half of the 14th century. After that the Groningen town government tried to control the money standard but, seemingly, with only partial success. In Oistvriesland such control may have occurred after the emergence of the county in 1464. For the rest, the transitions in the money of account system in Frisia were brought about unintentionally by social forces that were conditioned by a free market environment. Foreign monetary policies, for instance in France, England and the Netherlands, did influence the money of account system in Frisia, but this also was brought about by free market forces - notably foreign trade and the exchange market.

3. From the 8th century at the latest, the silver equivalence of the unit of account was in decline. We know little about the course of this decline in the early Middle Ages - besides the fact that it was c.1.3g in around 790 and c.0.9g about 200 years later. However, because of the interference of Charlemagne in 793/794, a new course of evolution began at the new level of 1.7g silver equivalence. From the lack of counter-evidence, it is supposed - with appropriate reservation - that the Frisian merchants accepted this penny as the new standard for the penny of account. In the Carolingian realm the silver content of this penny was maintained during most of the 9th century. Without further

numismatic evidence we can only guess the silver content of the Frisian imitative pennies during the 9th and 10th centuries. At the beginning of the 10th century it may have been c.1.3g, like that of the Carolingian pennies of Strasbourg at the time. If the new penny of Charlemagne and its successors was the standard for the Frisian system of money of account, the decline of the unit of account from the beginning of the 9th century (1.7g) to the end of the 10th century (0.9g) is remarkably large. It is difficult to explain this; a normal decrease of that size cannot be assumed, while massive fraud in Frisia would have been disastrous for Frisian trade relations and therefore has to be excluded as well. One might think of economic causes: a rise in the price of silver caused by increasing scarcity of this metal as a consequence of the imbalance of payments from trade with the East.

In the next two and a half centuries, when the 'old-Frisian' penny was standard, the decrease proceeded at a fairly stable annual rate with only temporary accelerations. This resulted in an average loss of nearly 0.3g of silver per century (which is, on average, approximately 0.1g of silver per generation). As this decrease in silver equivalence is very close to the normal decrease of the standard coins generated in the coin sphere, we may conclude that this must have been its major cause. The accelerations can be explained by influences from the economic sphere, particularly those of the silver market.

The same holds true for the succeeding English penny as standard coin. This decreased from c.1.3g of silver in the middle of the 13th century to c.0.7g in the second half of the 15th century; that is, a decrease of c.0.3g per century. Apart from the assumed misuse of the Groningen mint, the decrease of the 'new-Frisian' pennies also followed the normal secular trend, and this includes that of the larger silver standard coins - worth 5 or 8 or 12 units of account in the various Frisian regions - that succeeded the 'new-Frisian' pennies in the 15th century. The decrease of the larger silver coins resulted in a barely noticeable decline in the units of account themselves. Hence, before the so-called 'monetary war' in the last decades of the 15th century, the silver equivalence of the units of account remained fairly stable.

4. The legal silver equivalence of the units of account often lagged behind the current silver equivalence of the standard coins, owing to the way law was constituted in Frisia.

5. The general appearance of this 900-year evolution is found to be one of a gradual development, and thus replaces the usual image of monetary chaos in an anarchic environment.

Analysis, generalised.

In comparison with the evolution of the money standard in other countries in medieval Europe such as England, France, the German principalities, Flanders, Brabant, Holland and, later on, the Burgundian Netherlands, the evolution in medieval Frisia was almost without governmental interference. It can therefore be seen as the evolution of a system of money of account that was almost entirely the unintended result of freely interacting market forces. Where cases of interference are found, moreover, they seem either to have taken place in direct conformity with extant public preferences or to have been part of the cumbersome trial-and-error method of selecting a standard that would meet public preferences - the exception being the monetary reform of Charlemagne in 793/794. To the extent that governmental interference was not in conformity with public preferences, it was ignored. What, then, were the dominant forces that determined the standard and its value in this money system?

The most dominant force determining the standard that would be valid at any given time was human interaction emanating from social inertia - the public reluctance to accept the cost (that is, effort) of switching from one standard to another. A path-dependent development was the natural result. On only a few occasions was the standard coin replaced. Even then the succeeding coin was smoothly linked to its predecessor. The silver Anglo-Frisian penny evolved from the very debased *tremissis*; the pre-reform Carolingian penny was a new Carolingian form of what had been the standard until then - the *sceatta*; the 'old-Frisian' pennies in their turn were new versions of the Frisian imitative-Carolingian penny; the English penny, we assume, had already become a familiar element in the currency, representing a multiple unit of account - a shilling at one place, an ounce or a score of 'old-Frisian' pennies at another - before it took over the role of standard, and the 'new-Frisian' penny began as a regular element in the currency - as small money, possibly in the shape of low-grade or brown sterlings. So, the economic institution that was the money of account in Frisia had only to be adapted slightly from time to time, probably quite naturally and almost imperceptibly as far as the contemporaries themselves were concerned.

The most dominant forces determining the value of the standard coin in Frisia apparently originated from the coin sphere; they were the combined forces that I have denoted as 'normal decrease'. Because of the slow effect of these forces, the value decreased so little from generation to generation that this itself would hardly have been felt in everyday life. However, although the decrease was small in absolute figures, the percentage decrease was accelerating to the extent that the coins became lighter and thus caused a growing upward pressure on prices. Therefore, during the process, its influence on the prices would have grown stronger. At the beginning of such a process the legal *wergeld* in money of account was adapted at wide intervals, but by the end the intervals grew smaller as the increments became larger. This is demonstrated particularly

clearly in the 13th century. Most interestingly, the secular trend of decreasing silver equivalence in absolute figures from at least the 11th to the 16th century seems to have been fairly stable. It was a period of growing monetisation leading to an increasing velocity of circulation which in turn led to increasing wear and tear. Logically, the influence of deterioration by use must have increased. This would imply a decrease of one or more of the other factors of normal decrease. I can only guess which. It may be that improvement in the production of coins did reduce the variability of their weights and, hence, retarded the influence of pecking, smelting or clipping.

Although it was dominant, the secular trend in the evolution of the value of the unit of account was not the only cause of change. The process was accelerated during periods of silver 'famine', as we have seen at the end of the 9th and the beginning of the 10th century, at the end of the 11th and the beginning of the 12th century, at the end of the 13th century and during the second half of the 14th century. I would further mention the extreme debasement of the Groningen unit of account in the second half of the 14th century, that may have been caused by the greedy leaseholders of the right to mint in Groningen, and the 'monetary war' in the second half of the 15th century, that was induced by the fiscal needs of lords abroad and caused an international competition among mints.

So much for what the evolution of the money system in medieval Frisia managed to produce. What it did not produce were the next historical stages in the monetary evolution: the use of bills of exchange and credit money as means of payment and hence as potential opportunities for a different, more stabilising method of standardising the money of account. I do not think, however, that this route was blocked by path dependency. The cause is more likely to have been the stagnation of international trade in Frisia - the original source of its economic rise. There was no need for the new forms of money in the late medieval Frisian economy. They were needed, invented and used beyond Frisia, in the new centres of international trade - Italy and Flanders.

With so little governmental interference in the money standard, medieval Frisia has offered us an exceptional case for the study of the spontaneous evolution of this economic institution over a period of about nine centuries. We can only deplore the fact that the data are so scarce and difficult to interpret. It is surprising to find so stable a development of the money of account in a country that was without central government, and was continually exposed to external threat and internal strife. No doubt the local economy must have suffered from the destruction caused by the conflicts, but floods or rinderpest probably had an even more destabilising effect on production and commerce. It appears that the surviving stories of rival potentates reflect only the unruly surface, beneath which a calm and in many respects prosperous economy was the reality of everyday life in Frisia. I opened Chapter 1 of this book with a quotation

borrowed from Professor Clapham: “nothing makes history, exalts and abases men and classes and kingdoms, like the changes in the value of money”. The relative stability of the value of its money must have contributed substantially to the capacity of medieval Frisia to remain a prosperous and almost independent entity through all Middle Ages, even though external and internal menaces undermined it incessantly and ultimately caused its downfall. The members of the Upstallisbam in 1323 proved to have been fully aware of this role of money, as were the members of the European Community in 1991 who founded the European Monetary Union.

