A New Methodology for Parts of the Dutch Price History, Based on Analysis of the Paalgeld Portbooks, 1771-1778

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In the early thirties of the last century an international group of economic historians gathered to set standards for the writing of national price-histories of the participating countries. In the Netherlands Nicolaas Posthumus started the Herculean task of gathering the data for the two volumes he would publish: *Nederlandsche Prijsgeschiedenis (Dutch Price-History)*, which was published in 1943 and the second volume that was published in 1964 after his death in 1960. The last volume was completed by F.Ketner. Both volumes would become cornerstones of the Dutch economic and social history.

However, the Second World War made contacts between the historians involved very difficult and most of them decided to continue their work based on the agreements made earlier. Posthumus was very strict in sticking to the rules set by the committee, although the some of the decisions made by the group would have far reaching effects on the reliability of his work. Still, since then these price histories have been seen as the solid foundations for various discussions, a.o. for the standard of living debate.

A crucial aspect of the price-histories are the price indexes, which allow us to see developments over longer periods. There are two critical aspects in creating indexes: the choice of goods and their weights in the indexes, and the reference period for the indexes. It now seems that on both accounts the choice were unlucky.

There is good reason to question the solidity of the work done by Posthumus. First of all, the manual compilation of all the data lead to a selection of the data, since not all of the data from the Price Currents of the Amsterdam exchange could be processed. I will show that this selection has been carried out on a misinterpretation of the sources. For quite a number of goods there are more than one price notations in the Price Currents: the meaning of the various prices is not yet fully known. Posthumus just averaged these prices and used the average. It is quite unlikely that in cases where the lowest price notation and the highest price notation for the same good can

vary more than 100% that the meaning of these notations is identical.

Secondly, the methodology used by Posthumus to fill the gaps in his data is questionable. His sources were lacking and his treatment of missing data was quite creative if we put it mildly. His interpolation of missing data is based on averaging the two closest available data, not taking into account seasonal fluctuations. Sometimes the real data were years apart and interpolations were made for all months in between, creating a very static picure for some prices. Next to that, Posthumus did not make clear which prices were real and which were interpolations. Next to that for some years, for which the data in Dutch were missing, he used Italian versions of the Price Currents of the Amsterdam Exchange, forgetting however that they were dated in the Italian style of Venice, which put them in the wrong year.

Thirdly, most of the goods chosen for the indexes were imported to the Netherlands. But, because very little large scale research had been done about the composition of the total of goods going around, the choice was mainly based on pre-conceptions. Posthumus published two forms of indexes: unweighted and weighted indexes. The choice of goods for the indexes does not seem to be a real reflection of the importance of the goods that were traded on the exchange. Likewise the weights attached to the goods in computing the indexes seems to have been quite arbitrary.

Based on my recent research on the Portbooks of the levy of the Paalgeld in Amsterdam, a tax register on incoming shipping from overseas to the port of Amsterdam, which offer a complete oversight of all the goods imported to Amsterdam at the end of the 18th century, I will argue that the composition of the group of goods for the indexes does not reflect the realities of the trade. Some of the goods that Posthumus used for his indexes were not imported at all in the 18 year period, for which the data of the Paalgeld Portbooks were digitized.

I will offer a statistical analysis of the composition of the imports to Amsterdam, which will show that a different set of goods as a basis for indexes will allow a much more reliable view of the economical fluctuations. There have been plans to make a machine readable version of the *Nederlandse Prijsgeschiedenis* (*Dutch Price-History*), but I suggest that a complete rethinking of the whole project is necessary.

Bibliography

Posthumus, Nicolaas Wilhelmus. *Nederlandsche Prijsgeschiedenis*. Leiden: E.J. Brill, 1943-1964.