

Buying Power of Ancient Coins

What were my Roman coins worth 'back then'?

I get mail. Most of the time I enjoy the mail that results from these pages but I must admit I dread the regular appearance of questions that I can not answer. These include "How can I clean my junk box coins and make them look like new?" and the subject of this page "How much were my coins worth back then?" At least most folks have read my index page where I posted my refusal to address the collector value of your coins (I don't do appraisals!!!) but questions on buying power are a fair, but difficult, subject. What most folks want is a number like an exchange rate to the effect that a denarius was worth exactly \$20US. Sorry, it just is not that simple.



This gold aureus of Marcus Aurelius was worth 25 silver denarii and would represent a month's pay to a legionary soldier. Gold was probably used mostly for large purchases by the wealthy with the common man rarely having this much money at one time.

In the first place, Rome used coins for a period of over 700 years. Over that period the ups and downs of inflation and recession operated exactly like they have over the years from 1300 to 2000 AD. We can not consider 'Ancient Rome' as a single time but have to realize that any answers that

apply to the time of Augustus may be totally inappropriate for the same question in the time of Constantine or even Trajan. Prices and wages varied across the Empire with prices in Rome being much different than in a small town in Syria. This is exactly like the situation in modern days when we see differences in the price of fresh fruit in Florida, New York City and Alaska. The worst problem of all, however, is the fact that there are very few things that were purchased by the average Roman that are still a common item of commerce today. We can compare food to food but we must be very aware that the dietary expectations of days gone by prevent answering questions on the price in denarii of a pepperoni pizza. Surviving records of wages and prices are, at best, spotty. We have relatively few organized price lists but have to piece what we know together from the occasional mention in surviving documents. In some cases this can lead to seeming contradictions but considering the variations in wages and prices we see from place to place and day to day today, the Roman monetary structure almost seems stable. Being finished with the disclaimer section, the remainder of this page will look at a few examples of wages and prices that might be of interest.

The Roman diet was very dependent on grain. The average



Roman adult male ate two pounds of wheat bread each day. While loaves of baked bread were available in the market, most evidence on prices that have come



This denarius of Septimius Severus shows a modius filled with fruit as the reverse type.

down to us refer to the standard measure for wheat, the modius (about two gallons). A modius would bake up into roughly 20 one pound loaves of bread so it would provide the needed bread for ten days. The Roman mind placed importance on a concept of 'Just Price' feeling wronged if grain was not available at this price (or less). Politicians and those who would be public benefactors could gain considerable status by insuring the availability of grain in the market even to the point of buying high priced grain and reselling it at a loss as a public service. In the early years of coinage, the 'Just Price' was about 4 asses per modius. By the time of Caesar it was 12 asses; under Nero it could be as much as 2 denarii (32 asses). These prices are really rather stable when compared to the inflation that the modern world has experienced during the century now ending. The wars of the third century resulted in an end of this stability frequently raising prices to levels where ordinary workers were reduced to near subsistence levels.



This Republican denarius c. 137 BC would have paid a legionary soldier for about three days and bought enough wheat to bake his daily bread for nearly a month.

This 1st century AD dupondius of Nero would have purchased a loaf of pre-baked bread in Pompeii or Rome and two loaves in smaller cities in Italy where prices reflected the simpler lifestyle and lower prices.

In the Republic (c.200-150 BC) we find records of the pay for a legionary soldier set at 3 asses per day and wheat sold for 4 asses per modius. This would allow a soldier to buy enough bread for a year with about two month's pay. The revaluation of the denarius from 10 to 16 asses in 141 BC raised the legionary pay to 5 asses a day and the price of wheat to a bit over 6 asses per modius. By the time of Caesar, a legionary made 10 asses a day but wheat cost 12 asses a modius. Allowing for local variations all of these prices remained somewhat proportionate to the wages. During the early Empire a modius would sell for two denarii in Rome but could be had for half that price in the rural parts of Italy and only 8 asses (half a denarius) in the breadbasket of Egypt.

Baked bread sold for a dupondius a loaf in the expensive cities like Rome and Pompeii and half that (one as) in more rural towns. By this time the legionary was earning nearly a denarius a day but the Praetorian Guard (at Rome) were paid more partially for their honored position and partly to offset

the expense of living in the City. Comparing today's prices for bread at the supermarket might suggest an as was worth a bit over a dollar US placing the denarius at about \$20.



This denarius of Julia Maesa (c.218 AD) was approximately a days pay for a soldier. Military pay was, however, supplemented by donatives of good size paid by emperors to the soldiers responsible for keeping them in power. In many years, these bonuses could exceed the salary.

This antoninianus of Philip I (c.247 AD) illustrates inflation racing through the third century. While the denomination claims to be worth two denarii, the purchasing power was similar to the denarius of a generation earlier. While heavier by 50%, debasement of the alloy left this coin with about the same weight of silver contained in the denarius of the earlier part of the century.

The introduction of the antoninianus in 214 AD recognized the fact that a denarius didn't go as far as it had previously. In fact, the buying power of the new coin would just about cover the same purchases that required a denarius a century before. The horrid inflation of the following half century saw the coins debased to a fraction of their earlier values . In 294

AD, an attempt to stabilize the situation was made by Diocletian. He recalled the old coinage and issued a new denomination now referred to as the Nummus (also referred to as 'follis' on my earlier pages). This coin was intended to have the same buying power as had a denarius in the early Empire. A farm laborer might make 2 nummi a day while a craftsman (computer programmer??) as much as 12. Military pay was more complex including regular donatives and free grain allowances as well as the salary. Considering the importance of the army in deciding the life and death of the Emperors of the day, it is not hard to understand their wages of over 1000 nummi a year (partly in the form of free grain).

By 305 AD a modius of wheat sold for between 2 and 10 nummi depending on location (Egypt still being the cheapest and Rome the top).

Around 320 AD we have a record of bread selling at Antioch for 2 nummi (a nummus then being the reduced AE3 version). The same record places meat at 4 to 8 nummi a pound and wine at 6 to 14 nummi a sextarius (about a pint) depending on quality. Oddly we could see a parallel here to modern prices if we call a nummus about a dollar. We have relatively few surviving prices for meat and wine from other periods but mention is made that the total cost of food for a family of four in the Flavian period (late 1st century AD) was 200 denarii a year or a bit over a dupondius a day per person. This rate would not support eating much beyond home baked bread, olive oil and cheap wine.



By 320 AD a loaf of bread might sell for two silvered nummi like this one of Crispus. This sample is midway in size and purchasing power for this denomination issued first by Diocletian as a large silvered coin and ending in the Byzantine period as a tiny scrap of copper. Prices followed a similar path with a modius of wheat worth 2 nummi in 305 selling for 40 nummi in 327 AD.

The gold solidus was not fixed in value in terms of the copper coins. By the time of this solidus of Theodosius the value could be as much as 7,200 nummi and could buy 30-40 modii of wheat. The daily wage for a cavalryman was then 180 nummi so a solidus represented the pay for a month and a half.

Clothing was relatively expensive. In 240 AD a pair of army boots sold for 22 denarii and a heavy cloak (suitable for cold weather wear) of the highest quality could be as much as 60 denarii. Prices for plain but high quality wool and silk in 305 AD could be as much as 16 nummi and 10 aurei a pound respectively but the fanciest dyed silks woven with gold threads could be 125 aurei or three times the same weight of gold. It becomes clear why such garments were reserved for the Emperor and his peers.

This page is one that will be expanded and corrected as I feel the need. Certainly it is an interesting question but simply not one with a concrete answer. I would enjoy hearing from those who have specific ancient references giving prices/values that would be appropriate to mention. Certainly we must be careful to discriminate between actual price data and 'official' price lists like Diocletian's Edict of Maximum Prices. Further it is important to remember that differences between ancient cultures and the modern will make it hard to equate the currencies of such different economies. If you would like to have input to the growth of this page, write me at the link above. Those interested in more study on this subject should read **Coinage and the Roman Economy 300 BC to AD 700** by Kenneth W. Harl.