



What Did The Romans Ever Have To Teach Us About Money

Andrew Burnett CBE, Numismatist, Museums & Institutions Professional

Wednesday, 08 June 2022



A Word From Today's Chairman

Professor Michael Mainelli
Executive Chairman
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Today's Agenda

- 11:00 – 11:05 Chairwoman's Introduction
- 11:05 – 11:25 Keynote Presentation – Andrew Burnett CBE
- 11:25 – 11:45 Question & Answer



Today's Speaker

Andrew Burnett CBE
Numismatist
Museums & Institutions
Professional





What did the Romans ever have to teach us about money?

8 June 2022

1. Words – ‘money’ and £sd
2. Quantity theory of money (Bodin’s Law), or QE and inflation
3. Dealing with inflation
4. Roman Britain and a new monetary economy

1. MONETA = the Roman mint



ubi nunc aedes atque officina
Monetae est
("where the temple and
workshop of Moneta are")
Livy 6.20.13

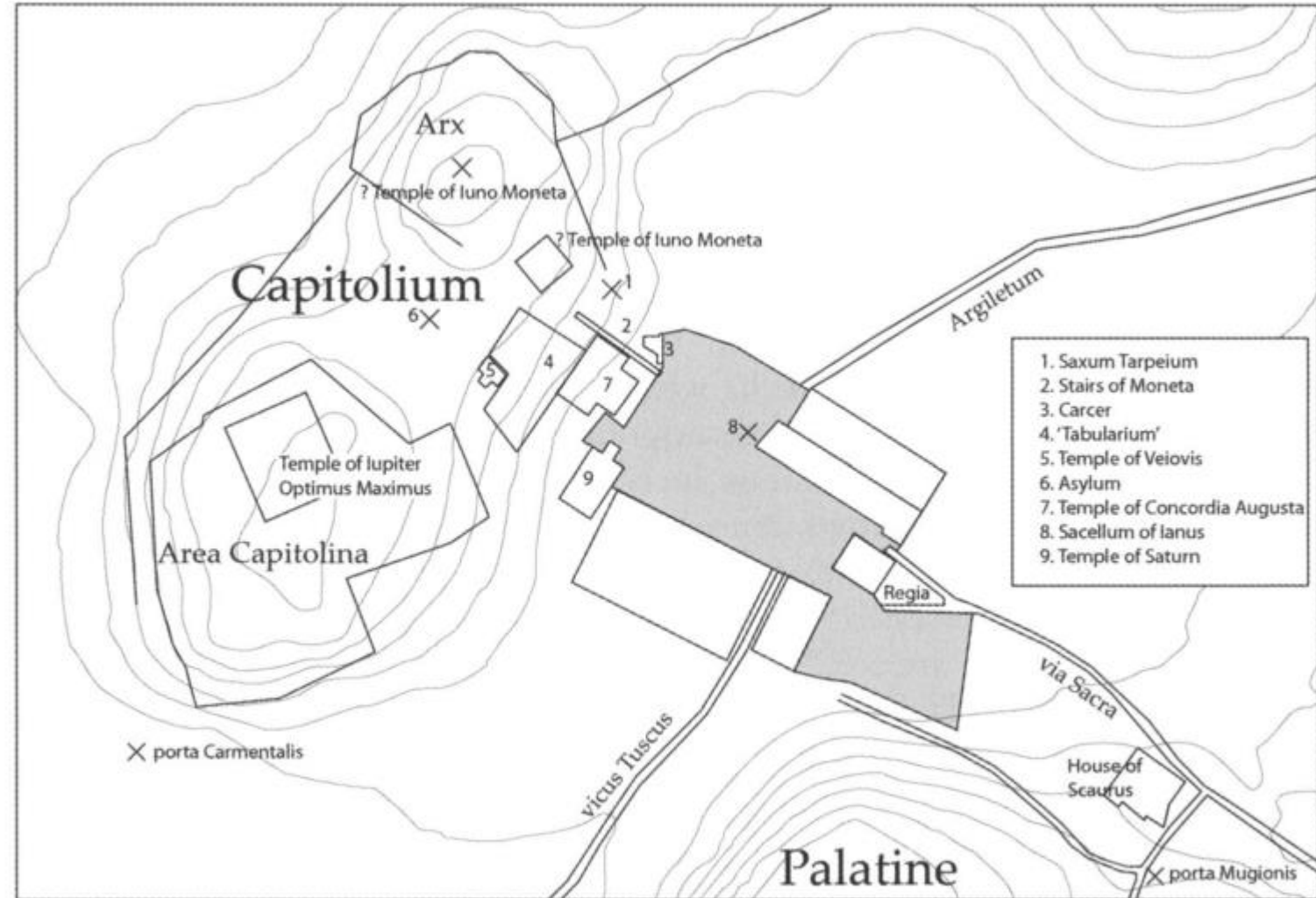


Fig. 2. The Forum and the Capitol. (Drawing: Dirk Booms.)

JUNO MONETA

Silver denarius of the moneyer T Carisius, depicting the head of Juno MONETA and showing, on the reverse, a set of coining tools (pincers, die, anvil and hammer)

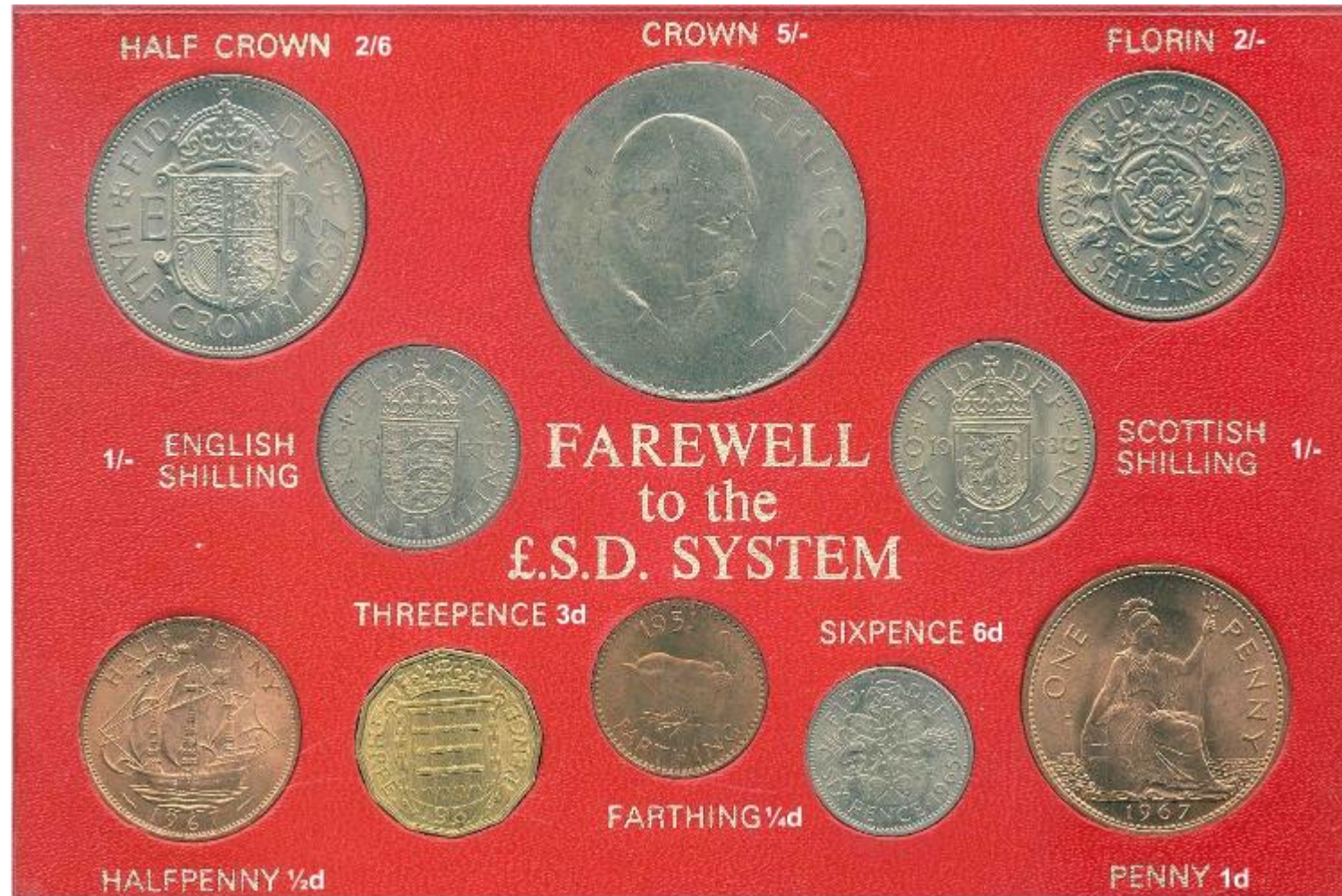
About 46 BC





Why Juno Moneta?

1. Moneta = “who warns” – geese and the supposed Gallic attack
2. Moneta = Mnemosyne, the Greek goddess of ‘memory’
3. Moneta and words like Monumentum - memorialise



£.s.d. – Pounds shillings pence librae, solidi, denarii

2. Nero (AD 54-68)



How Much is That in Real Money?



Aureus. Gold. 20mm. = 25 denarii.
About £1000



Denarius. Silver. 20mm. = 4 sestertii = 16 asses.
About £40



Sestertius. Brass. 35mm. = 4 asses.
About £10



As. Copper. 25mm.
About £2.

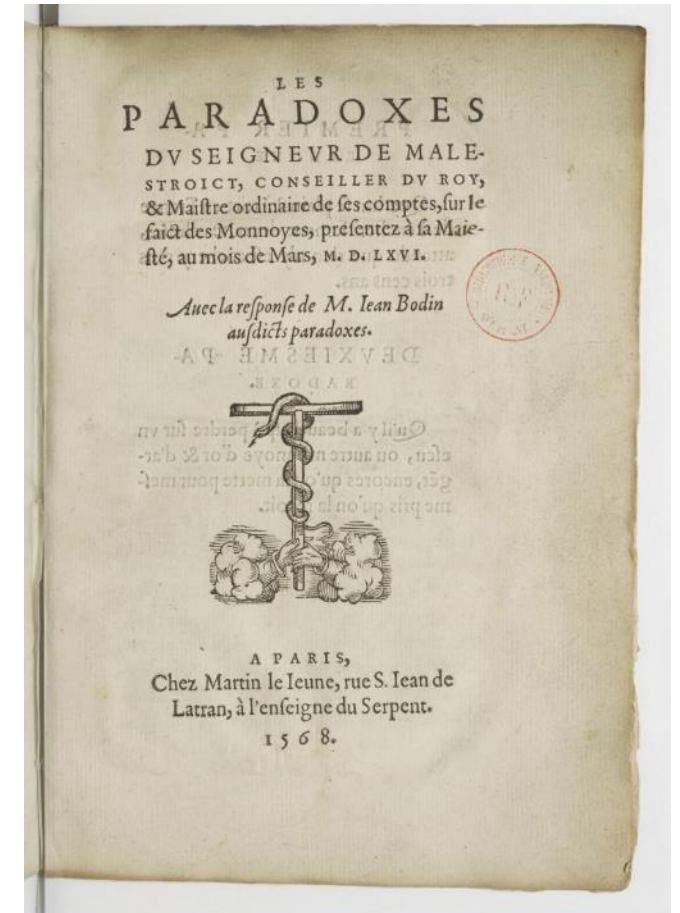
Quantity theory of money (Bodin's Law), or QE and inflation

Jean Bodin (c. 1530-1596): rise in prices caused by increase in amount of coinage (*Réponse ... aux paradoxes de Monsieur de Malestroict* of 156) based on 46 citations from ancient literature

Cicero's letter to Atticus (17 March 49 BC): "I was then willing to give I made an offer through a third person, which he refused, when he was putting it up for sale at Antium. But nowadays I think all such properties are gone down, owing to the shortage of coin."

Suetonius, *Life of Augustus* (concerning 30 BC) "When he brought the royal treasures to Rome in his Alexandrian triumph he made money so plentiful that the rate of interest fell, and the price of land rose greatly."

Irving Fisher (1867-1947) and Fisher's equation ($mv = pq$)



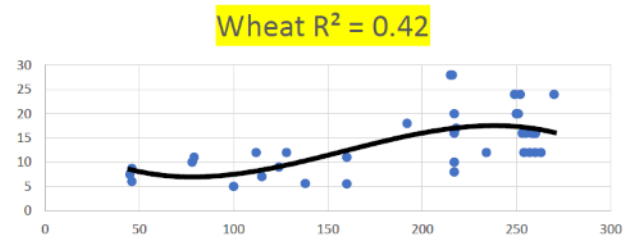
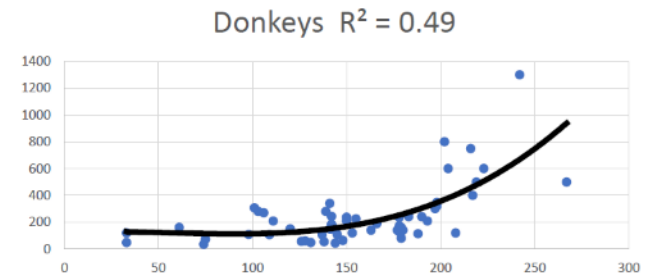
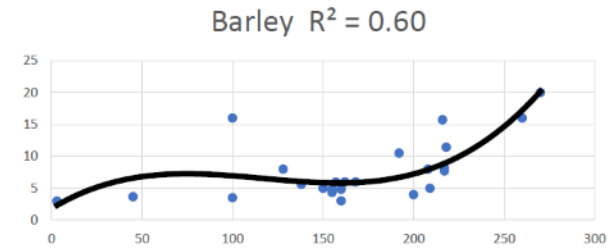
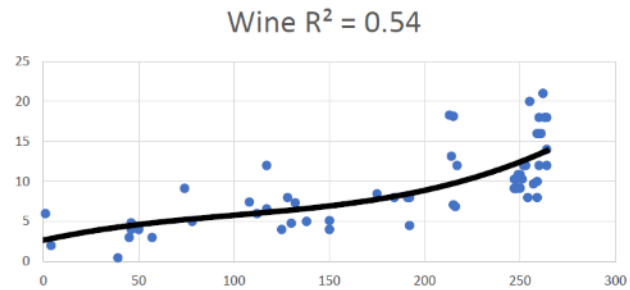
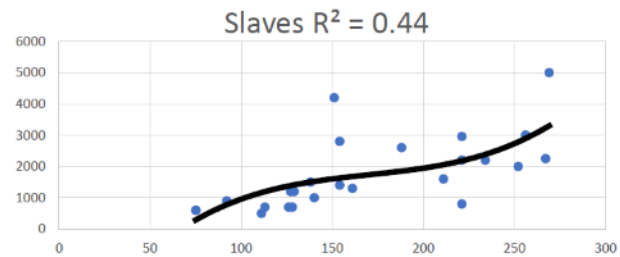
Inflation: The current 'accepted' view.....

- Scheidel 2008: 'distribution of prices of particularly well-documented goods – wheat, wine, and donkeys – points to the existence of two distinct periods of price stability, from the late first century CE to the 160s CE or a bit later and from the 190s to the early 270s CE'
- Howgego et al 2010: 'Rathbone's study of Egyptian prices, the only useable series from anywhere in the Empire, which sees the doubling between AD 160 and 190 as the only significant change between AD 45 and AD 274/5'
- Rathbone 1997: 'brusque leap in price levels around 274 by a factor of ten or more'

©Paul Kelly, KCL

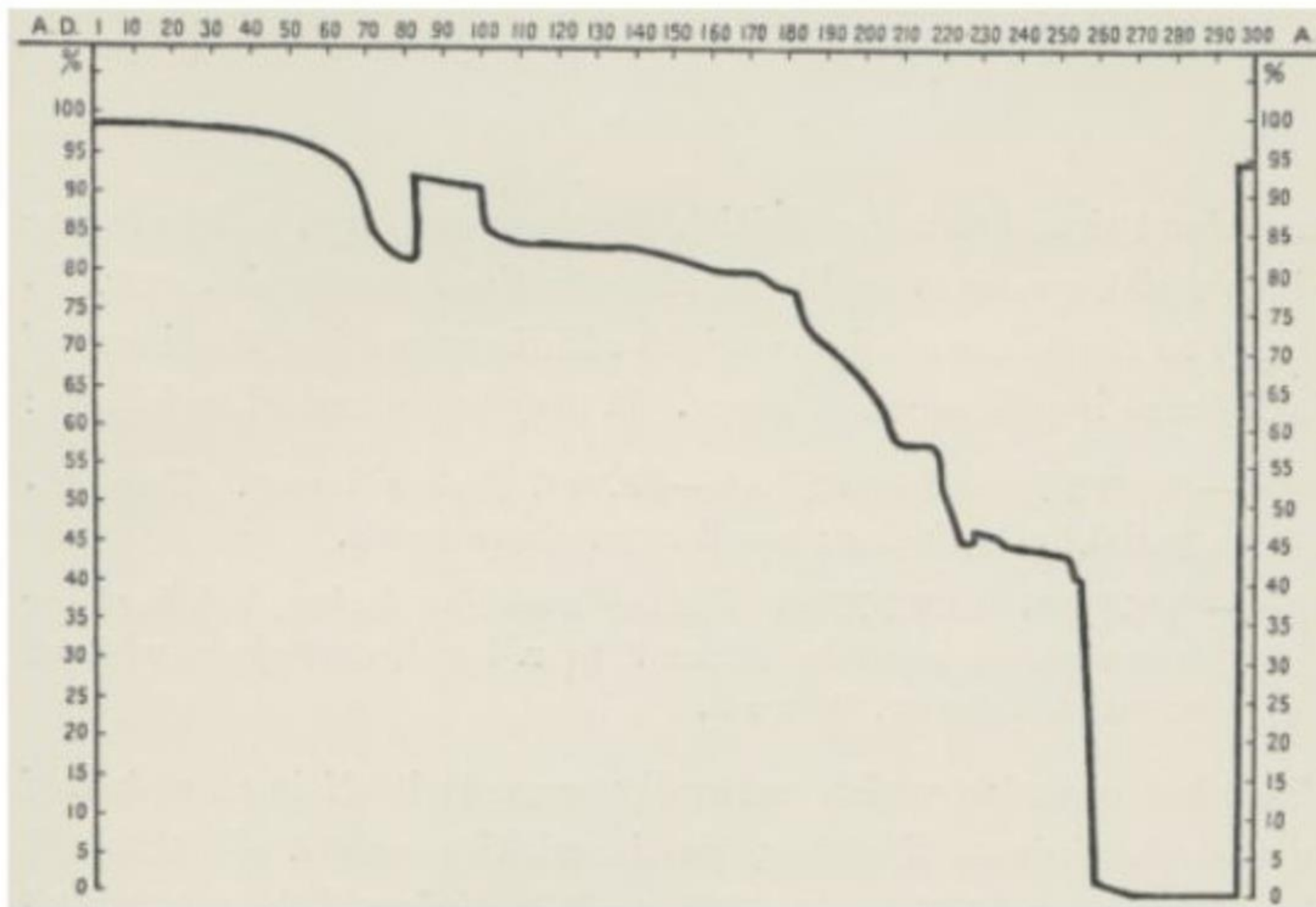
Roman Archaeology Conference, 2018

Prices to AD 270 - Odd one out?



ROMAN SILVER COINAGE

AVERAGE PERCENTAGE OF SILVER IN COINS MINTED IN A.D. 1 - A.D. 300 (INCLUSIVE)





Late Roman monetary system (late 3rd – 5th centuries AD)

Value of gold floats:

300	1000 denarii
313	1500 denarii
317	6000 denarii
388	400,000 denarii

= annual compound rate of about 11%

Gold and base coins of
Constantine the Great (306-337)



Dicoletian (284-305) and his colleagues: addressing the problem of inflation



<p> A...URVM CATIOSEMORVM CLAVANTIVM TELAM I ♂ IV AVANTIVM TELAM I ♂ XXXVI VANTIVM A ♂ XX FAEC LAVANTIVM TELAM I ♂ XV TELAM I ♂ III PRASCRIPTISSPECIEBVS EN SVRAS OBSERVARI CONVENTET TEMETIN PANTILIBVS CETERISQVE S QVAVMSPECIALITER MENTIO STINTEREMPTORE ET VENDITORE IONETAM QUALITATIS PURPURAE ET PONDERIS ET OPERIS ET MEN SVRAB CTIO POTERIT CELEBRARI OB RYZAE IN REC VTISSIVE SOLIDIS PONDVMVNVM ♂ XXXII LINETTI PONDVMVNVM ♂ XXXII ARTIFICIBVS BRATTIAS FACIENTIBVS IN PONDVMVNVM ♂ V AVRICAESORIBVS IN PONDVMVNVM ♂ III AVRIVICTORIBVS IN LAMINA IN PONDVM ♂ CCC AVRINECTRICIBVS IN PONDVMVNVM ♂ IID AVRIFICI IN OPERESIMPLI IN VINCIA NA ♂ I EIDEM IN OPERESUPTILI ♂ LXXX ARGENTIO HOCEST PVS VI AD PPI PONDVM I ♂ VI ARGENTI ARTIFICI IN OPERIS PRIMI IN PONDVMVNVM ♂ CCC IN OPERIS SECUNDO IN PONDVMVNVM ♂ CL IN OPERIS CUM VVNIS IN PONDVMVNVM ♂ LXXV </p>	<p> SP AD ANTO Q TORAGINTA MULIER AETATIS SS ITEM VIR ABANNIS XL AD AN NOS IX MULIER AETATIS SS PVER ABANNIS VIII VSQVE AD AN NOS XVI ET PVELLAMA AETATIS SS HOMO ABANNIS (X SVPERIV SET VIII INFERIVS MULIER AETATIS SS PROMANCIPIO ARTE INSTRVCTO PROGENERE ET ATATE ET QUALITATE LARTIVM INTEREMPTOREM VEL VENDITOREM DE PRAETIO PLACERE CONVENIET ITAVT DV PLVM PRAETIVM STATVTVM IN MAN CIPIVM MINIME EX CEDERE DE PRAETIO IVMENTORVM EQVVS CVRVLIS EQVVS OPTIMVS MILITARIS PRIMAE FORMAE MVLA OPTIMA PRIMAE FORMAE BVRDO OPTIMVS EQVVA OPTIMA PVLLATA CAMELVS OPTIMVS BACTRIANVS CAMELVS BIGIBBIVS FEMINABIGIBBIS ARABICVS OPTIMVS DROMADARIVS OPTIMVS ASINVS AD MISARIVS OPTIMVS ASINVS DORSVARIVS OPTIMVS ASINA OPTIMA FETVALIS BOVVM PAR OPTIMVM TAVRVS ARIVS OPTIMVS FORMAE PRIME VACCA FORMAE PRIMAE VVER VEX FORMAE PRIMAE OVES PRIMAE FORMAE HIRCVS PRIMAE FORMAE CAPRA PRIMAE FORMAE </p>	<p> ♂ XXX ♂ XXV ♂ XXV ♂ XX ♂ XX ♂ XV ♂ X ♂ C ♂ XXXVI ♂ XXXV ♂ XXXVI ♂ X ♂ XXV ♂ IX ♂ XXX ♂ XL ♂ XX ♂ XV ♂ VII ♂ V ♂ X ♂ V ♂ II ♂ II ♂ 0 ♂ CCC ♂ 0 ♂ CCC </p>
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Race horse 100,000 denarii
 Best war horse, first category 36,000
 Best she-mule, first category 36,000

>1000 items

>1000 items

I. Pulse and cereals	XX. Wages for embroiderers
II. Wine	XXI. Wages for weavers
III. Oil, salt etc.	XXII. Wages for fullers
IV. Meat	XXIII. Silk
V. Fish	XXIV. Purple thread
VI. Vegetables, fruits	XXV. Woollens
VII. Wages	XXVI. Linens
VIII. Hides, leather	XXVII. Linens
IX. Shoes	XXVIII. Linens
X. Leather goods	XXIX. Purple textiles
XI. Products made of camel- and goat's hair	XXX. Gold and silver
XII. Timber	XXXI. Slaves
XIII. Combs, spindles	XXXII. Cattle
XIV. Poles, firewood	XXXIII. Marbles and other stone
XV. Wagons, wooden tools, metals and terracotta, pottery	XXXIV. Animals from the wild
XVI. Ivory, needles	XXXV. For waxes and resins, etc
XVII. Freight, fodder	XXXVI. For drugs, paints, dyes, glues
XVIII. Feathers, cushions, writing utensils	XXXVII. Sea freight
XIX. Clothing	

To be sure, if any spirit of self-restraint were holding in check those practices by which the raging and boundless avarice is inflamed, an avarice which, without regard for the human race, not yearly or monthly or daily only, but almost every hour and even every moment, hastens toward its own development and increase; or if the common fortunes could with calmness bear this orgy of license, by which, under their unhappy star, they are from day to day ripped to pieces - peradventure there would seem to be room left for shutting our eyes and holding our peace, since the united endurance of men's minds would ameliorate this detestable enormity and pitiable condition....

It is our pleasure, therefore, that those prices, which the concise items of the following list indicate, be held in attention throughout our whole domain, in such a way that all men understand that freedom to exceed them is removed

Diocletian, Price Edict (AD 301), chs. 2, 12

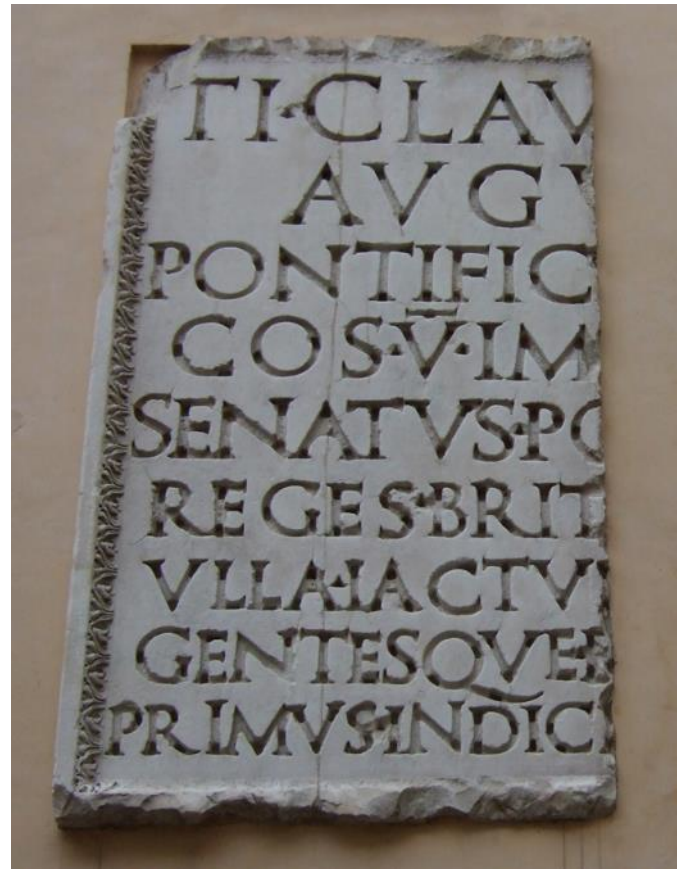
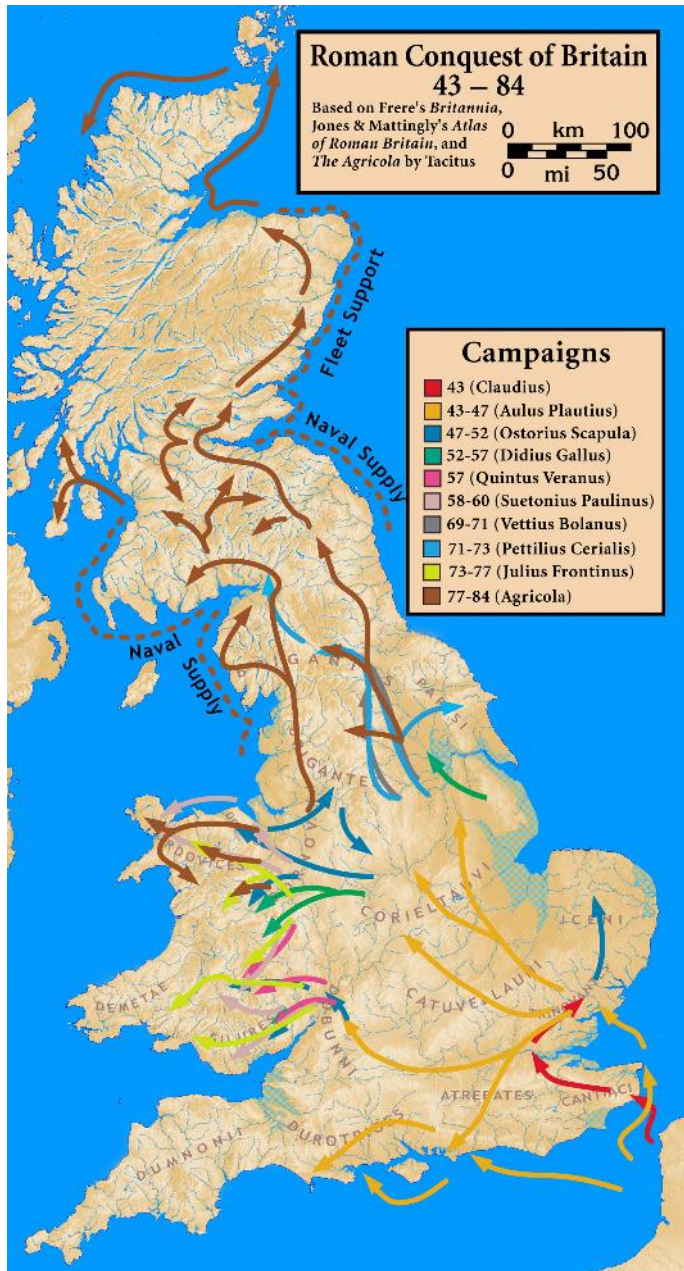
We are faced ... my Lords, with a major and pressing problem in tackling inflation: a problem not unique to our own country, one which we share in a greater or lesser degree with most other industrial countries. May I again express my conviction that if we fail to tackle it this time, we shall not only allow our economy to be crippled, but our democracy to be eroded. It is no secret that the policy which we decided to adopt was not our first choice. However, given the failure to reach effective voluntary agreement, despite sincere, sustained and strenuous efforts, we felt and we feel that there was no option but to submit these proposals to the test of Parliament.

Earl Jellicoe, Lord Privy Seal, House of Lords 5 March 1973 (Counter-inflation Bill)

Diocletian, that author of crimes, and deviser of misery, ... when by various extortions he had made all things exceedingly dear, attempted by a law to limit their prices. Then much blood was shed for the merest trifles; men were afraid to expose aught to sale, and the scarcity became more excessive and grievous than ever, until, in the end, the law, after having proved destructive to multitudes, was from mere necessity annulled.
(Lactantius, *On the Deaths of the Persecutors*)

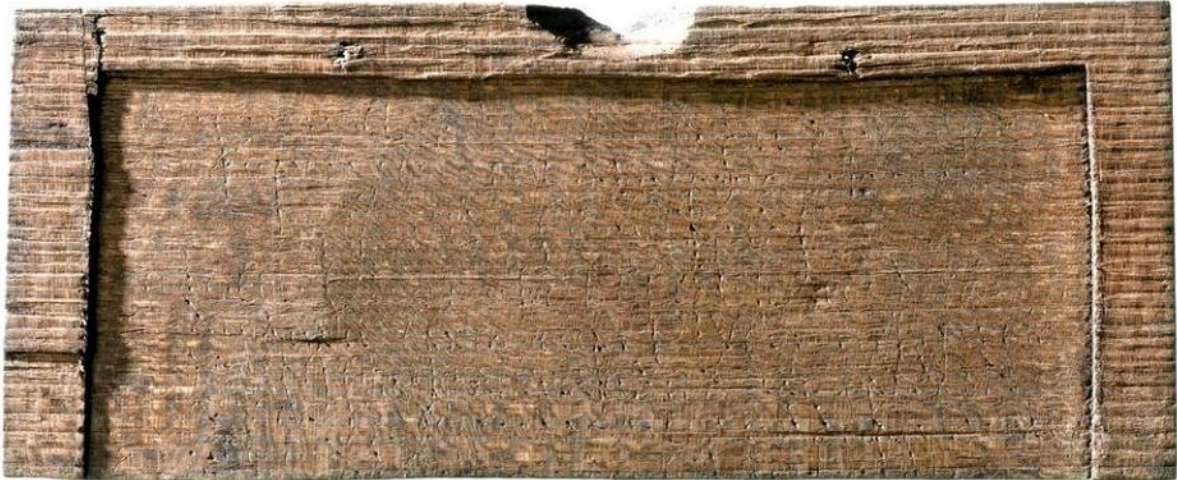
But in general, trying to keep things in proper perspective, I am opposed to direct interference with the result of market forces. This is not because I think that the direct result of market forces is always a good thing, but because I think that if it is not a good thing it is far better to tackle the fundamental influences behind demand and supply, to tackle them by way of taxes or subsidies or even by physical controls, than to monkey about with prices, which, after all, are a result of these fundamental forces. I do not believe, therefore, that price control is a good thing in itself. I do believe that all historical experience since the time of Diocletian shows how likely it is to be ineffective and how likely it is to run into grave trouble.

Lord Robbins, House of Lords 5 March 1973 (Counter-inflation Bill debate)

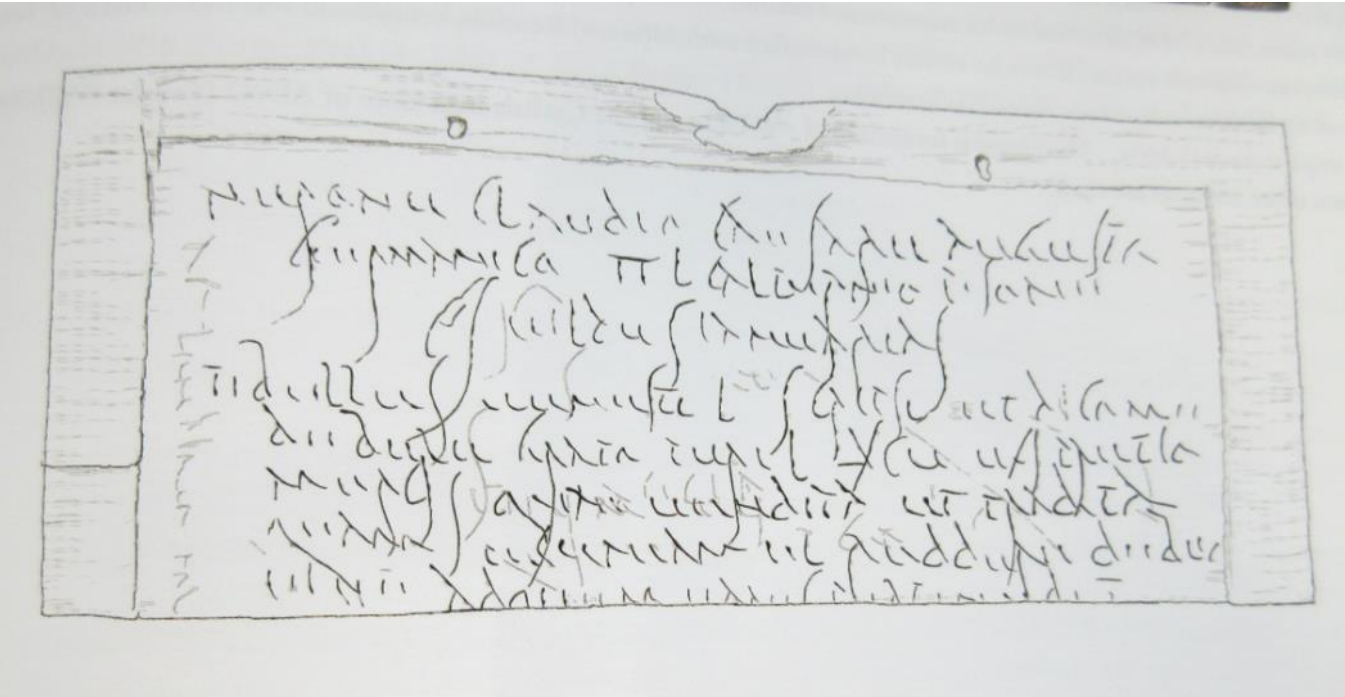


To Ti. Claudius Caesar Augustus ... because he received into surrender eleven kings of the Britons conquered without loss and he first brought the barbarian peoples across the Ocean under the authority of the Roman people. (*Fragment of the inscription from Claudius' Triumphal Arch*)

Bloomberg wax writing tablets, found 2010-13. 25 of legible 91 tablets are financial or legal



Tibullus tablet



In the consulship of Nero Claudius Caesar Augustus Germanicus for the second time and of Lucius Calpurnius Piso, on the 6th day before the Ides of January [= 8 January AD 57].I, Tibullus the freedman of Venustus, have written and say that I owe Gratus the freedman of Spurius 105 denarii from the price of the merchandise which has been sold and delivered. This money I am due to repay him or the person whom the matter will concern...

Small coins from early Roman Britain

The quadrans ('quarter')

1/64 of a denarius, so modern value about 50p

<https://finds.org.uk/database/artefacts/record/id/201710>

Found in Oxfordshire, 2007

Quadrans of
Claudius I



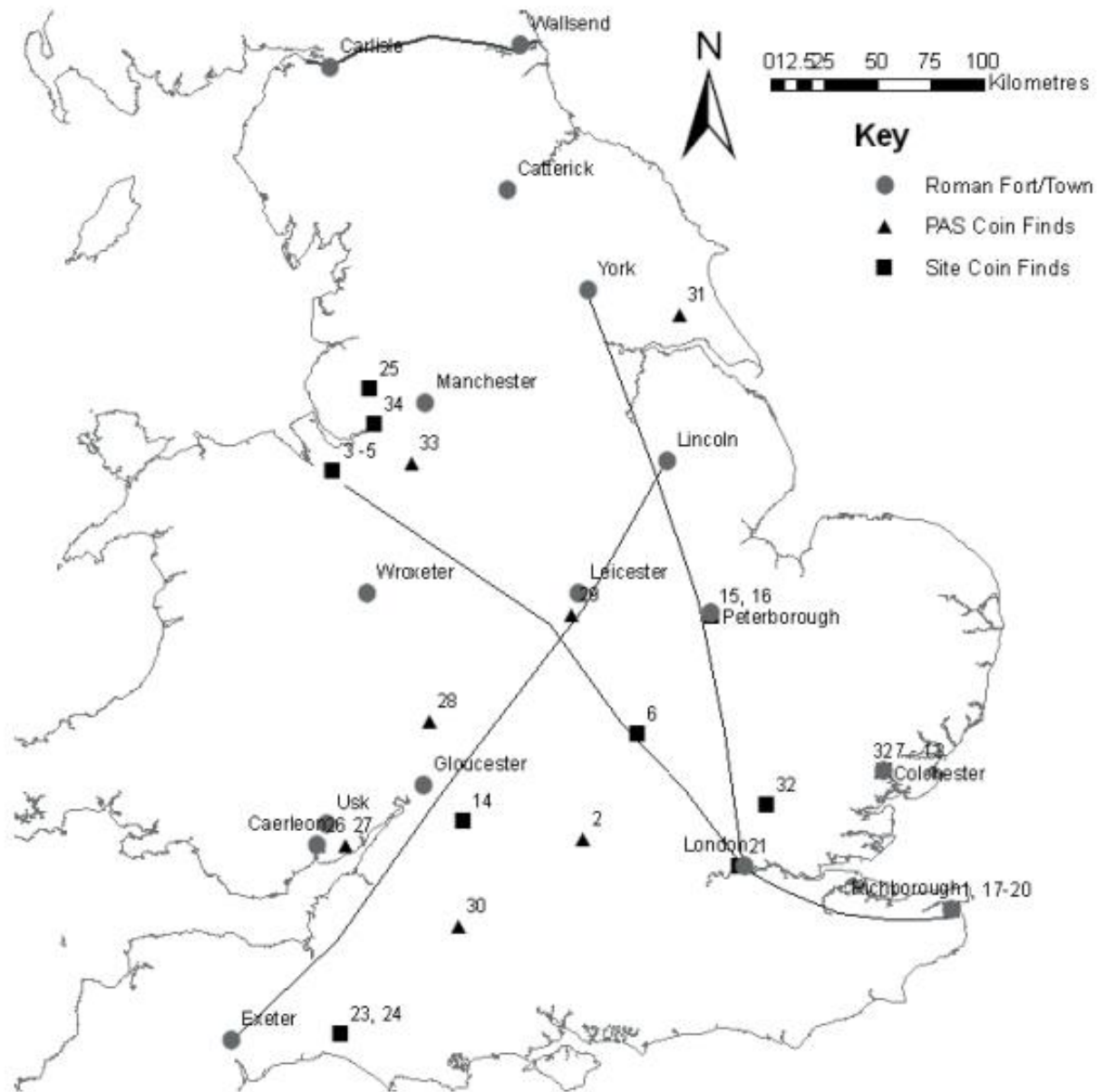


Fig. 1. All known finds of *quadrantes* in Britain.

www.finds.org.uk

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St Swithin's Lane hoard, before 1856

At least 89 plated denarii

To Claudius, AD 51

Die-links = recent production





What did the Romans ever have to teach us about
money?
Quite a lot!
Thanks for listening!



Comments, Questions & Answers





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- Thu, 16 Jun (08:00-08:45) The Global Economic Outlook: Investment, Trade & Co-operation
- Thu, 16 Jun (16:00-16:45) Price Vs Value – Active Management Is Still Alive And Well
- Mon, 20 Jun (10:00-10:45) Corruption, Capital, Power: Today's World Through The Lens Of Corruption

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