THE IMPERIAL BUDGET

INTRODUCTION

Before approaching coinage and currency, we need to look in more detail at the empire's financial position. The next two chapters consider the scale of spending and tax revenue. No complete figures for income or expenditure have survived, but large areas of expenditure can be estimated in some detail. Expenditure can then be compared with indications about revenue, to arrive at a rough figure for turnover. The scale of public spending provides a valuable backdrop against which estimates of the scale of monetary output can be assessed.

1. ARMY COSTS

1.1. SALARY COSTS

Army costs can be assessed by two routes. One is a detailed calculation based on number of units and rates of pay, while the other is based on Dio's figure for the cost of Caracalla's increase. The results can be tested against each other.

If total salary-cost was equal to paying half a million legionaries (Table 3.1), the cost of army pay would be roughly that shown in Table 3.2, assuming an increase of one-third in 202.²

Set against Dio's Hs280 million for the actual cost of Caracalla's increase, the estimate of its paper cost as Hs400 million in Table 3.2 would make the army seriously below strength, at a time when Severus's pay-increase should have been making army service more attractive. The shortfall would be 30% ($\frac{400-280}{400}$). The recent large pay-increase makes that implausible. Arrius Menander, a member of Severus's *consilium*, explicitly contrasted voluntary recruitment in his own day with conscription at an earlier date.³

Thus the figures as they stand contain a serious contradiction. Since most

¹ Dio 78.36.3, with Herodian 4.4.7. For an earlier argument based on these co-ordinates, see Develin 1971, written before the work by Speidel and Holder used for the present estimates.

From references to his declared policy of enriching the soldiers, Severus's pay increase (Herodian 3.8.5) must have been substantial (Dio 75.2.3; 76.15.2). But placing it above ½ makes the discrepancies noted here even greater (for ½, see Develin 1971, 692; cf. Duncan-Jones 1990, 115 n.28). According to the life of Severus, the increase took place in AD 202, the tenth year of the reign (HA Sev. 16.9). For his army policies in general, see Birley 1969 and Smith 1972.

³ Dig. 49.16.4.10; Brunt 1990, 189-90.

Table 3.1 The number of troops c.AD 200 and their cost

	Number of legionary salaries (monetary equivalent)
1. 33 legions at 5,500 men	181,500
2. 47,900 alares at legionary rate	47,900
3. 176,240 cohortales at $\frac{5}{6}$ legionary rate	146,867
4. Rome units plus fleets (rough estimate)	40,000
5. Further 20% for higher ranks, and numeri	83,253
Total	499,520

Note: For pay, Speidel 1973 with Speidel 1992, showing a 5:6 ratio between cohortalis and legionary. The size of the legion is taken as 5,500 (Wierschowski 1984, 287). The legionary total includes new units raised under Marcus Aurelius and Septimius Severus. The figures for auxiliary strength come from A. R. Birley's estimates for AD 150, using Holder 1980 (Birley 1981B, Table 5; Holder 1980. See also Frere, Wilkes 1989, 118). Birley's estimates omit the cohorts now known in Asia, but 23 of his auxiliary units are not assigned by region (Speidel 1984). The fraction for officers is taken as roughly 20%, following estimates by Frank and Domaszewski, where officers add 21% to the rank-and-file cost for legionaries and Rome troops (Frank ESAR 5. 4–5; cf. Develin 1971, 691 where officer cost in the legions adds 20%).4

Table 3.2 Provisional cost of army salaries (millions of sesterces)

Period (AD)	Army cost	Additional cost	Legionary pay per head
Before 84	450		900
84-202	600	150 million	1,200
202-212	800	200	(1,600)
212-	1,200	400	(2,400)

Source: Table 3.1.5

⁵ The size of establishment varied slightly. For the legions, see Dio 55.23.4.

of the unit and unit-strength estimates are straightforward, it seems that Caracalla's pay-increase and Dio's figure for its cost must refer to less than the whole army. Most of the discrepancy disappears if it is assumed that Caracalla's increase applied to the rank and file, but not to officers. The prospective cost would then be 312 million, making the shortfall between estimated and stated figures 10% ($\frac{312-280}{312}$). That difference may be unreal, since Dio's figure of 'over 70 million denarii' could mean an actual cost as high as 75 million (HS300 million).

1.2. DISCHARGE COSTS

In addition to army salaries, there were discharge-bonuses (praemia) for those who survived the quarter century of army service. Augustus fixed the amount at HS12,000.6 Several group-dedications by legionaries discharged after serving their full term of 25-6 years survive in the second century; although 25 was the official limit, discharge in alternate years meant that some men served an extra year. These lists show totals of approximately 120 survivors per year, in two cases out of four, a third case being clearly exceptional. If typical, that would imply mortality of about 44% over 25-6 years of service, from an average intake for a legion of 5,500 men of about $216\left(\frac{5,500}{25.5}\right)$. The typical age of recruitment to the legions was about 20, and the implied survival-rate is below even the lowest standard demographic projections.

But mortality would reduce the number during the years of service. From the closest fit in model life-tables, the reduction by the halfway point, year 13, would be about 20%. Thus on average about 80% would survive as serving legionaries at any given time. In order to maintain full unit-strength under this regime, the intake would need to be 270 ($\frac{100}{80} \times 216$). The mortality then implied, already below the 'worst case' in model life-tables, would be 55% over 25 years of army service, instead of 44%. That might still be plausible for a very high-risk group in the pre-modern world. But the sample of legionary registers is very small, and its results cannot be pressed.

Taking 120 as the mean number of survivors per legion, the number of praemia required annually for an average complement of 30 legions would be 3,600 (2.18% of establishment). This would cost Hs43 million per year at the Augustan rate of Hs12,000 per head, rising to Hs47 million under the Severi

⁴ For another estimate, based on Domitianic strengths, see Wierschowski 1984, 213. Hopkins (1980, 125), modifying figures from Frank, estimates 420,000 in legionary equivalent for the first century, when there were fewer legions. Estimates of army cost by MacMullen (1984, 579–80) use a much lower rate of auxiliary pay (\frac{1}{3}\) the legionary rate, from Watson 1969, already superseded by figures in Speidel 1973). Estimates for the third century by Campbell, who discounts Dio's evidence for the size of the Caracallan pay-increase (1984, 162 n.2), assume that Severus raised pay by 66%, relying on doubtful arguments by Domaszewski from the benefits paid by military clubs at Lambaesis (Campbell 1984, 161 ff.).

⁶ Dio 55.23.

⁷ See Mann 1983, 59: about 120 per year in *ILS* 2302 and *CIL* III 6580; just over 100 in *CIL* III 6178; about 230 in *CIL* III 14507, but in this case probably reflecting exceptional recruitment in AD 169 due to plague or battle-losses.

Figures for age of recruitment summarised in Forni 1953; for stylisation in the age-data, see Scheidel 1992. The survival-rate is below the lowest seen in the Princeton Tables (South), where 61% of males survive from age 20 to age 45 in a population with an expectation of life at birth of 19.0 years.

The proportion of males alive at 20 who survive to 32 ½ is 80% in the South Model 1 projections: Coale, Demeny', 656.

Table 3.3 Annual cost of army salaries and praemia: schematic estimates (millions of sesterces)

	Salaries	Praemia for legionaries	Total	Total if praemia also paid to auxiliaries
31 BC-AD 84	450	43	493	554
84-202	600	43	643	704
202-212	800	47	847	908
212-	1,080	4 7	1,127	1,188

Source: Table 3.2 and text. The figures do not allow for variation in the size of establishment (n.15).

when there were 33 legions. Caligula had halved the amount of the *praemium* for legionaries assembled for a German campaign, but Suetonius does not indicate that this had any long-term result.¹⁰

Auxiliaries, who received civil privileges such as citizenship at retirement are not explicitly known to have received *praemia*. Nevertheless, auxiliary service seems to have competed with legionary service; this would have been difficult if remuneration were much less. Assuming that all *praemia* were roughly proportioned to salary, the mean number of legionary-equivalent *praemia* for the auxiliary numbers indicated by Table 3.1 is 4,245 per year (at the factor of 2.18% already calculated). That would cost a further HS51 million per year. A further 40,000 legionary-equivalent shares for other units in Table 3.1 could add a further HS10 million on the same footing.

Thus a rough calculation of the cost of *praemia* could put it at about HSIO4 million if payments were made to auxiliaries and other units, or about HS43 million if legionaries were the only beneficiaries. Whether praemia can have been increased in step with salary remains very uncertain. Apart from salary, the main vehicle for increased payment seems to have been the donative. donative. Apart from the donative.

The potential implications of *praemia* for total army cost are shown in Table 3.3.15 Under the Principate some veterans were still granted land, when new colonies or land-assignments were made. Thus veteran colonies were founded at Antium and Tarentum under Nero in AD 60, and under Nerva

Table 3.4 The cost of citizen procurators (millions of sesterces)

	ad 192	Cost	AD 211	Cost
Trecenarii	1	0.3	10	3.0
Ducenarii	36	7.2	37	7.4
Centenarii	48	4.8	56	5.6
Sexagenarii	51	3.1	71	4.3
Total		15.4		20.3

and Trajan at Cuicul, Sitifis and Thamugadi in North Africa. Land-grants were presumably easier to fund than cash payments, especially in provinces where they could be made from agri captivi. But after Trajan, new veteran colonies ceased, possibly suggesting that difficulties in funding cash praemia had ended. 18

2. CIVILIAN EMPLOYEES

Civilian salary-costs were another significant part of the Empire's budget. The most conspicuous are the citizen procurators whose grades specify their salary level. But there were also provincial governors, legionary commanders and lesser procurators.

2.1. CITIZEN PROCURATORS

A reconstruction from career inscriptions makes the total number of equestrian procurators 136 at the death of Commodus, and 174 at the death of Severus. These should represent minimum levels, assuming that posts once established remained in existence. ¹⁹ The totals are shown in Table 3.1. The great prefectures (Egypt, the Praetorians, the *annona*) were presumably trecenarian and would add almost another million to these figures.

2.2. SENATORIAL EMPLOYEES

Senatorial governors received payment under the Principate as under the Republic. The one definite fact is Dio's statement that the proconsulship of

¹⁰ Gaius 44.1. 11 Sel. Pap. 149.

¹² The disputes over non-payment of *praemia* in Tacitus's *Annals* depict legionaries as the aggreeved parties, but auxiliaries are rare in the literary record (*Ann.* 1.17, 26, 31, 35).

Domaszewski took it that Dio 77.24 showed that the legionary praemium under Caracalla was HS20,000 (cf. also Brunt 1950, 58). But this brief fragment seems to refer to one of Caracalla's donatives. The transmitted figures for Praetorians and legionaries are out of line with each other (1,250 denarii for Praetorians, 5,000 for legionaries).

¹⁴ For donatives, cf. pp. 80-1 below.

The estimates could be refined by allowing for variations in the number of units, but these cannot always be determined for auxiliary units.

¹⁸ Government spending in the wake of Vespasian's tax-increases, including Domitian's substantial increase in army pay, Nerva's land-grants, and Trajan's child-support grants all suggests that the Empire had more funds by this time (pp. 12-13, 18).

Pflaum 1950, 78, 96. The number missing should not be large, since most of the procuratorships are attested several times. But individual salaries can sometimes be uncertain (cf. Duncan-Jones JRS 71 (1981) 130).

Africa was worth HSI million under Macrinus.²⁰ This high figure, and the obvious signs of hierarchy, imply that senators received substantially more than equestrians.²¹

A simple reconstruction might thus give consular governors HSI million and praetorian governors HS500,000. Representative figures for the second century show 14 consular and 21 praetorian governors. Their annual cost on this basis would be HS24 $\frac{1}{2}$ million. A further 14 legates presumably paid at a rate similar to that of other praetorian employees might increase that to HS31 $\frac{1}{2}$ million. Million.

Senators of praetorian rank also provided the legionary commanders. That leads to another HS12 million for a representative total of 24 legions with their own legates.²⁴

2.3. NON-EQUESTRIAN PROCURATORS

Their important fiscal and administrative tasks meant that procuratorial departments required a sizeable infrastructure. This consisted of imperial freedmen and slaves.²⁵ As with equestrian procurators, some inscriptions illustrate their careers. But the inscriptions are too few for the number of posts to be reconstructed. The one salary definitely known, that of *proximi*, was HS40,000.²⁶ Even though individual salaries must have been below those of equestrians, in view of the numbers involved, their combined cost was probably at least comparable to that of the equestrian procuratorships. A pre-Severan estimate of HS15 million is conservative.

2.4. SUMMARY

The estimated civilian costs for a second-century date before changes under the Severi are shown in Table 3.5.

3. THE EMPEROR'S HOUSEHOLD COSTS

The cost of building and staffing imperial palaces and villas was probably not known to the rest of Roman society, and even speculation on this subject is rare. Picturesque details about the cost of Tiberius's pictures, Caligula's

²¹ Some impoverished senators of good standing were paid HS500,000 a year by the Emperor, essentially for doing nothing (cf. Duncan-Jones 1982, 4 and 18 n.7).

²² Marquardt 1881-5, I, 494. For fuller details, showing the various changes that took place, see Birley 1981A, 16-17 and 26.

²³ Birley 1981A, 16-17.

²⁴ Birley 1981A, 16: in several small provinces the governor was also the legionary legate. This does not exhaust the list of salaried staff (even the *comites* of a legate received salaries, *Dig.* 1.22.4): but further estimating is difficult.

²⁵ Weaver 1972; Boulvert 1974. For named posts, Boulvert, 1974, 151-4; for salaries, Weaver, 1972, 229 and n.4 (cf. Boulvert, 1974, 154-5).

26 CIL VI 8619.

Table 3.5 Estimated civilian salary-costs

Category	Salary-cost
Senatorial governors and legates	31.5
Legionary legates	12.0
Equestrian procurators	15.4
Prefects	0.9
Freedman and slave staff	15.0
Total	74.8

dinner parties, or Nero's tableware, reveal little of the Emperor's domestic spending.²⁷ The Emperor was richer by several magnitudes than his wealthiest subject. His way of life outshone everyone else's, and his domestic staff was much bigger even than that of the city-prefect with 400 slaves in his townhouse.²⁸

Positions in the imperial household could carry immense power, and gave access to great wealth.²⁹ Holders include notorious figures such as Augustus's freedman Licinus, said to have made HS200 million as procurator in Gaul, Claudius's freedman Pallas, rich enough to refuse the Senate's grant of HS15 million, and Nero's freedman Polyclitus, sent to oversee the policy of consuls in Britain.³⁰ Imperial slaves could buy themselves out of slavery (there was a fiscus libertatis et peculiorum). Thus they owned a peculium, and posts of any significance were presumably salaried.³¹

4. HANDOUTS TO CIVILIANS AND SOLDIERS

An important touchstone of Imperial generosity was the cash handout to army and people.³² The civilian handout was called a *congiarium* and the military handout a *donativum*. Already emphasised by Augustus in the *Res Gestae*, the handout soon became an inescapable public ritual, growing bigger and more frequent. Like the *sportulae* of municipal benefactors, the imperial handouts were nominally attached to specific events, in this case occasions

^{20 78.22.5.} Cf. Tac. Agric. 42.

²⁷ Pliny NH 35.70; Seneca Helv. 10.4; Pliny NH 37.20.

²⁸ Tac. Ann. 14.43. Under Claudius and Nero an inscription at the imperial villa at Antium lists several imperial freedmen and freedwomen each year with their job-titles (topiarius, structor, tegularius, nummularius, among others: CIL x 6637).

²⁹ For their power, see Pliny Pan. 88.1.

³⁰ Duncan-Jones 1982, 343; Pliny Ep. 8.6.10; Tac Ann. 14.39.

³¹ This fiscus is discussed in Jones's excellent study of clerical and subclerical grades in the civil service (Jones 1960, 160; cf. 109). High manumission payments, as high as HS13 million in the case of the dispensator of Nero's Armenian campaigns, were presumably 'earnings-related' in some way (Pliny NH 7.129). For proportioning of manumission payments to earnings, see also Duncan-Jones 1984. For manumission, cf. Jones 1960, 159–60, Weaver 1972, 97–104.

³² For the army, see chapters 5 and 6. For the total cost, see also Appendix 1.

such as accessions, betrothals, or the naming of heirs. The average amount spent usually remained stable or increased.

The handouts went to privileged recipients who were already receiving regular payments.³³ The citizen recipients, the *plebs frumentaria* of Rome, were also paid every month in corn. Membership of this group could be purchased: Dionysius Halicarnensis shows slaves being freed in order to benefit from the corn-dole.³⁴ Soldiers received regular salaries paid partly in cash and partly in kind.³⁵ The handouts, at first every five to ten years, then roughly every three years on reign average, were a sizeable extra benefit.³⁶

Congiaria totals per reign are known, and the amounts spent can be estimated reasonably well (see Appendix 1). The scale of donatives is more obscure, because written sources rarely report such details. But the sources suggest that handouts for the plebs typically meant money for the troops as well, and the two are unmistakably linked in Pliny's account of what was expected from a new ruler.³⁷ Quite different evidence, the surviving coin-hoards, shows strong overall dating correlations with the handouts to the plebs. This coincidence is difficult to explain except by recognising the hoards, distributed over most of the empire, as remains of the army handouts which typically accompanied congiaria in Rome.³⁸ That gives donatives approximately the same frequency as congiaria.

The relative size of expenditures on *congiaria* and donatives is indicated early in the period. In the legacies of Augustus, the citizens received Hs260 per head, with a little more for the tribes, and the legionaries Hs300. Here civilian and military entitlements were roughly the same, even though the few troops in Rome received higher rates, the Praetorians Hs1,000, and the urban cohorts Hs500. The main allocations under Tiberius's will in AD 37 were similar: Hs300 for the citizens, Hs300 for the legionaries, and Hs500 to the Praetorians.³⁹

Later evidence for a combined *congiarium* and donative under Hadrian suggests a high military allocation, with a capital cost perhaps twice that of the civilian handout.⁴⁰ That might indicate that by this date or on this occasion, Aelius's designation as heir, the auxiliary troops were being given donatives as well. It can be assumed that the cost of army donatives at least matched the

Table 3.6 The cost of congiaria and donatives: schematic estimates (millions of sesterces)

Reign	Congiaria cost per reign-year	Congiaria and donatives combined
Augustus	9	18
Tiberius	7	14
Claudius	7	14
Nero	4	8
Vespasian	5	10
Domitian	9	18
Trajan	12	24
Hadrian	22	44
Antoninus Pius	22	44
Marcus Aurelius	25	50
Commodus	39	78
Septimius Severus	41	82
Caracalla	70	140
Elagabalus	113	226
Severus Alexander	42	84

Note: Reigns of four years or more are shown. The estimates in the second column assume equal costs and identical occasions for *congiaria* and donatives. Schematic totals are used, in the absence of exact reporting of the number of recipients. For sources and arguments, see above and Appendixes I and 7.

cost of *congiaria* in Rome. A series of amounts can be calculated on this assumption (Table 3.6).

5. BUILDING

The few extant cost figures are enough to show the vast scale of Imperial building expenditure, without offering any real guidance to the ordinary level of spending. Thus in the first century, two aqueducts cost Hs350 million and the gilding of the Flavian Capitol Hs288 million (Table 1.2, nos. 8 and 15). Some imperial buildings can be reconstructed from their physical remains. Their approximate construction costs could potentially be worked out by analogy with smaller Roman buildings whose size and cost is known.⁴¹ But such reconstructions face considerable difficulties.⁴² One is the problem of allowing for the luxury component of imperial building in Rome, which is very

³³ Almost the only chance the unprivileged had of receiving anything was when the Emperor gave *missilia* or *sparsiones*, which meant money or gift-vouchers thrown down from on high on festive occasions in Rome (Millar 1977, 137).

³⁴ 4.24; see also Dig. 32.35.pr. Tacitus suggests a predominance of slaves in the city plebs (Ann. 4.27); and under the Principate, people of servile origin or immediate servile descent predominate overwhelmingly in tombstones from Rome (Taylor 1961).

³⁵ For payment in cash with stoppages for items in kind, see Rom. Mil. Rec 68-9. For payment in kind, see Dio 78.34.3; Suet. Nero 10.1; Tac. Ann. 15.72; ILS 2163.

Je For comparability between donatives and stipendium in the fourth century, see Duncan-Jones 1990, 115-17.

³⁷ P. 87 n.4 below.

³⁸ For detailed argument, see chapters 5 and 6 below. The hoards contain other distinctive features which mark them out from ordinary private savings.

³⁹ Table 1.2, nos. 2 and 6. Suet. Gaius 17; Van Berchem 1939, 146-7.

⁴⁰ See p. 88 below.

⁴¹ Thus unpublished work by the writer analysed a dossier of 11 public buildings in North Africa in this way, using inscriptions and archaeological remains.

⁴² For some estimation for the Julio-Claudian period, see Thornton, Thornton 1989. The coefficients proposed do not always give convincing results.

THE IMPERIAL BUDGET

43

substantial and cannot be gauged from provincial analogies. Enormous quantities of the most recondite marbles were brought from imperial quarries in the eastern Mediterranean, under non-market conditions.⁴³ A further difficulty is the lack of parallel data for the imperial palaces.

Nevertheless, Domitian's reign may offer some crude guidance to the overall pattern. The gilding of the Capitol cost 12,000 talents (HS288 million) according to Plutarch, a keen contemporary observer.44 High though the figure is, it need not represent more than a third of the building costs of the reign. These also included the structure of the Capitol, the final tier of the Colosseum, a big stadium (whose site is now the Piazza Navona), and a palace whose immensely high gilded ceiling impressed visitors including Plutarch and Statius. If Domitian's building expenditure during a fifteen-year reign was roughly three times Plutarch's figure for one part of it, thus about HS900 million, the yearly average would be about HS60 million.

The scale of Domitian's building evidently stood at one end of a spectrum whose opposite end might have been as little as HS20 million per year. In default of anything better, these annual estimates of HS20-60 million can be taken as a rough order of magnitude for imperial building outlays.45

6. GIFTS AND PUBLIC SPENDING

When the traveller Ibn Battuta visited the Sultan of Delhi in 1334, he found ritualised gift exchange at the heart of court etiquette. No visitor could arrive empty-handed. But the Sultan's response was always so generous that suitable gifts could be had on credit. Ibn Battuta was thus able to equip himself with horses, camels and white slaves as his entrée to the palace. The presents showered on him in return included 5 villages and their revenues, 10 infidel slave-girls, the post of qadi of Delhi, very large sums of money, and vast amounts of flour and meat for his servants.46

Gifts had a similar importance at the Roman court, and there is little here that a Roman Emperor could not have given, whether that meant estates, preferment, revenues, money or payments in kind.47 Emperors, like Sultans, were expected to give more than they received, a fourfold tariff applying to

⁴³ Some of this came from Mons Claudianus and Mons Porphyrites in Egypt: see Klein 1988. For other supplies, see Fant 1989A. See also Gnoli 1988; Anderson, Nista 1990. For further discussion, Fant 1988 and Fant 1993.

⁴⁴ Publ. 15.3-4. It grated on Plutarch that the Capitol's imported columns, which he had seen in Greece, were reworked and spoiled by Roman masons. See also p. 13 n. 106

45 Some of the building took place in the provinces: MacMullen 1959.

46 Ibn Battuta, a cleric of distinguished family from Tangier, was being welcomed in Delhi as a fellow Muslim (Gibb 1971, 595-6, 738, 741, 745, 749).

⁴⁷ For gifts of slaves, note Titus's disposition of prisoners after the Jewish revolt, some of whom were used in building works in Egypt, and others given to different provinces (Josephus BJ 6.417-18). In Lucian de salt. 64, Nero granted a petitioner the right to make any request, and was then asked for a pantomime dancer (Millar 1977, 467). For a gift of corn by Augustus, see Millar, 135. For estates, cf. Pliny Ep. 10.58.5, where Domitian buys a small farm for a Bithynian philosopher.

New Year gifts in one source. 48 Members of the Senate who fell on hard times could sometimes expect a large capital payment, or even a princely salary for life. 49 Handouts to the people of Rome and to the troops were common events, and an obvious drain on resources.⁵⁰ But the outgoings for personal gifts could also be enormous. Tacitus's total of HS2.2 billion for the cost of gifts by Nero to his favourites is one of the largest figures recorded.⁵¹

The fact that a senatorial commission was set up to retrieve the funds spent by Nero shows that they could not all have come from the Emperor's purse. But even contemporaries found it difficult to distinguish between spending from the aerarium, the traditional state treasury, and spending from the fiscus, or Emperor's treasury. Clearly there was no real barrier to what the Emperor could spend.⁵² In practice his financial position tended to coalesce with that of the state, even if Emperors varied in their willingness to exploit this fact.

Some other customs worked financially in the Emperor's favour. One was the crown gold traditionally given by each province at his accession. Another was the extremely widespread practice of remembering the Emperor in private wills.53 Nevertheless, gift-obligations represented an open-ended economic commitment for the Emperor, because of the need to spend heavily on social encounters whose frequency could not easily be controlled.

7. FOREIGN SUBSIDIES AND GIFTS

The Empire's foreign policy involved monetary outlay in two main ways.⁵⁴ The first was a version of the gift exchange familiar in Roman society itself. Thus under the Julio-Claudians, contacts with foreign rulers meant large gifts or ceremonial outlays, in dealings with eastern kingdoms such as Parthia, Commagene and Armenia.55 These gifts were semi-reciprocal, intended to

48 See Millar 1977, 139-44, and especially 142-3 (gifts to the Emperor); 135-9, 467-8, 491-500 (gifts by the Emperor).

⁴⁹ See Duncan-Jones 1982, 4, 18 n.7. This applied only to socially worthy cases, not to spendthrifts, who were sometimes ejected from the Senate (Tac. Ann. 2.48). Generosity in this area was perceived as an imperial virtue very early on. Writing as a contemporary, Velleius could praise Tiberius's gifts to senators, which the hostile Tacitus afterwards condemned for their meanness (Velleius 2.129.3; Tac. Ann. 2.37-8; Suet. Tib. 47.2).

51 Tac. Hist. 1.20; Suet. Galba 15.1. After Nero's death there were attempts to claw this money

back, leaving the recipients with a token 10%.

52 Millar 1977, 189-201, 167, with Dio 53.22.2-4, quoted by Millar, 190. In his account of Tiberius, Tacitus suggests that the dividing line between fiscus and aerarium was slight (Ann. 6.2; 6.17); see also Levick 1987. Nevertheless, Nero's claim to have given the res publica HS60 million from his resources each year indicates a continuing conceptual distinction between the finances of Emperor and state (Ann. 15.18). Hadrian reportedly insisted on all proceeds of property of the condemned going into the aerarium, not into the fiscus (HA Had.7.7).

53 Crown gold: Miliar 1977,140-2. The crowns offered to Claudius at his British triumph show really substantial payments (9,000 pounds of gold from Tres Galliae, 7,000 from Hispania Citerior, altogether about HS67 million; Pliny NH 33.54). For bequests to the Emperor, see pp. 6-7 above.

³⁴ For a valuable discussion, see Gordon 1949, based on his Michigan thesis which the writer has also consulted; for Germany, Wolters 1991, 116-21.

55 Gordon 1949, 62. According to Chinese sources, the first Roman embassy to China, in AD 166, brought presents of ivory, rhinoceros horn and tortoise shell (Hirth 1885, 42 and 94).

THE IMPERIAL BUDGET

mark out the importance of the occasion, and were not paid on any regular basis.

More important was the payment of foreign subsidies. Today these might represent foreign aid, but in the Roman world they were mainly a diplomatic bribe to unruly neighbours. Subsidies were one of the techniques of foreign policy which also included making client kingdoms, and granting border land to tribesmen.56 Although subsidies are rare in extant Julio-Claudian evidence, the practice seems to have existed from a very early date.57 From the time of Marcus Aurelius onwards, they are emphasised increasingly in the sources.58

Tacitus mentions regular payments to the Germans in contexts referring to the Flavian period.59 Frontinus indicates that Domitian actually paid for revenue lost by the Cubii on land added to Roman territory. 60 His inconclusive campaigns led to the payment of annual subsidies to Decebalus which soon became a pretext for the invasion of Dacia by Trajan. 61 Eulogy of Trajan, like that of Pertinax, could claim that here was an Emperor so strong that Rome no longer needed to pay subsidies. 62 Such claims were of course unreal, and complaints from the Roxolani soon showed that regular payments were still being made. 63 Hadrian, after relinquishing Trajan's eastern conquests, followed a policy of military preparedness, coupled with heavy subsidy to peoples across the frontier.64 Named recipients include the Roxolani, the Iberi and the Albani.65 Hadrian gave the Iberi an elephant, a band of 50 men and large presents.66

Under Marcus Aurelius, large-scale frontier warfare returned to the Empire. Money payments were among Marcus's strategies towards barbarian petitioners, which also included grants of citizenship and tax exemption in individual cases. 67 But Marcus's biggest concession was paid in land: he gave foreign tribes rights of settlement in Dacia, Pannonia, Moesia, Germany and, disastrously as it turned out, in Italy itself.68

Payments to Rome's barbarian neighbours took place on an important scale under Commodus.69 Pertinax even succeeded in retrieving gold that Commodus had despatched to the barbarians, and was praised for being strong enough to have no need to make barbarian payments.70 Dio shows Scottish tribes being bought off with a large sum in AD 197. He makes Macrinus claim that Caracalla increased payments to the barbarians to the point where they cost the treasury as much as army pay.71 But within months, Macrinus himself bought peace with Parthia for HS200 million.72 Dio mentions that regular payments were already being made to the Armenians.73

The sources do not give figures for subsidies before the Severan period, when the cost had clearly become high. The first payments may have been relatively small in terms of the Empire's budget. The most significant escalation in cost may have taken place under Hadrian, whose doubling of expenditure on congiaria, like his building programmes, showed an exceptional willingness to spend heavily.

8. TOTAL INCOME AND EXPENDITURE

Three of the headings discussed have been left unquantified, the Emperor's household costs, the Emperor's gifts, and external subsidies. Here any estimate must be arbitrary. But a figure of HS50-100 million can be assigned to the three items combined, rising to HS100-50 million in the Severan period. when external subsidies evidently increased.74 The numerical results can then be summarised (Table 3.7).75

These figures are partly notional, but a large part of the total is accounted

Table 3.7 Schematic estimates of the Empire's annual budget (figures in millions of sesterces)

	c.150 ad		c.215 ad	
Category	Low figure	High figure	Low figure	High figure
1. Army	643	704	1,127	1,188
2. Civilian employees	75	75	75	75
3. Handouts	44	44	140	140
4. Building	20	60	20	60
5. Other items	50	100	100	150
Total	832	983	1,462	1,613

Note: The items in category 5 are the Emperor's household costs, the Emperor's gifts, and external subsidies. For details, see the preceding discussions.

for by army expenditure, where estimating is relatively detailed. On present estimates, army cost makes up approximately three-quarters of the Empire's budget in the mid second century (between 72% and 77%). The escalation in

⁵⁷ Cf. Gordon 1949, 60-2. ⁵⁶ For client kingdoms, see Braund 1984.

⁵⁸ For their further history in the Late Empire, see Hendy 1985, 261-3.

⁵⁹ Hist. 4.76; Germania 42; 15.3.

⁶⁰ Frontinus, Strat. 2.11.7. This recalls Caligula's refund of tribute to the kingdom of Commagene (Table 1.2, no. 7), but its scale was probably much lower.

⁶³ HA Hadr. 6.8. 62 Pliny Pan. 12.2. 61 Dio 67,10.5.

⁶⁶ HA Hadr. 17.11. 65 HA Hadr. 6.8, 17.11, 21.13. 64 Dio 69.9. HA Hadr. 17.10-11.

⁶⁸ Dio 71.11.4-5. 67 Dio 71.19.1.

^{**} For hoards outside the empire and government payments to tribes, see for example Mihailescu,

⁷⁰ Dio 74.6.1, with Herodian 2.2.8; Herodian 1.6.9. 71 Dio 75.5; 78.12.3.

⁷² Dio 78.27.1. 73 78.27.4.

⁷⁴ But external payments were not always in cash: HA Hadr. 17.11.

⁷⁵ This broad computation does not attempt the even more difficult task of separating the Emperor's revenues from state revenues.

budget cost by the mid-Severan period, again largely accounted for by army spending, is shown as approximately 70% (between 64% and 75%). On minimum figures, state turnover appears to be roughly Hs832 million in the mid-second century, having increased from about Hs656 million in the early Flavian period.⁷⁶

It seems clear that Vespasian achieved a significant increase in imperial revenues, perhaps by as much as 20%.⁷⁷ The revenues which he inherited presumably included the Hs340 million that the empire had after Pompey's conquests; approximately Hs300 million from Egypt and Gaul; and perhaps Hs30 million from the more recent provinces of Pannonia, Cappadocia, Mauretania and Britain.⁷⁸ That would give a total of Hs670 million, which when increased by 20% would become Hs804 million.

Domitian's pay increase must have been carried out from revenue that was already there. Thus this assessment of tax-revenue is close to the estimated budget figure in Table 3.7 of Hs832 million after Domitian's increase (it includes an allowance for funds belonging to the Emperor). This can be compared with the rough assessment of the volume of coin produced in chapter 11. In very rough terms, mint-output appears to match one-quarter of the budget.⁷⁹ The proportion of revenue raised in money was probably substantially higher, though a considerable part of Rome's taxes were paid in kind.⁸⁰

⁷⁶ Army pay HS150 million less (Table 3.3), handouts HS26 million less (Table 3.6).

⁷⁷ Cf. p. 12.

⁷⁸ For Pompey, Egypt and Gaul, see Appendix 4 and Table 4.6.

⁷⁹ The estimate by Hopkins is considerably higher (HS824 million in the early first century; Hopkins 1980, 119). But its basis, coupling a notional population figure with notional subsistence costs, is a priori, not empirical. It is difficult to reconcile such estimates with the known changes in the Empire's income and expenditure.

⁸⁰ Duncan-Jones 1990, chapter 12.