

National accounts for the middle ages: Are they possible?

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Summary:

One way of producing long time series of macro-economic aggregates is to work back from existing data making suitable assumptions about how far existing institutional arrangements and basic definitions can be applied to the past. This paper takes a different approach. Is it possible, starting from an understanding of how the medieval economy worked, to consider whether an economic accounting system broadly consistent with the SNA can be applied? What sort of institutional units is it sensible to identify in a world before corporations producing for the market were widely established? Are the SNA rules on imputing values for non-monetary transactions satisfactory when these form the majority of transactions? Do any adjustments need to be made to the various income concepts we are familiar with? What constituted fixed capital? In the absence of financial markets how can flows in one period be reconciled with those in the next? This enquiry is carried out against the background of the known data sources for England from shortly after the conquest by William of Normandy in 1066.

Introduction

In the 1950s and 1960s, in the UK at least and I believe more generally, there was considerable interest in deriving long-run time series of macro-economic aggregates. When the disillusion with Keynesian modelling set in the 1970s, this interest in historical data waned and apart from sporadic articles on specific topics has only recently re-emerged as an area of interest. A new initiative claims to have developed estimates of GDP for part or all of the UK back to 1270¹. This and similar exercises work from the present backwards in various tranches. Although there is very good data on agricultural yields and prices for England going back to about 1270, converting these to estimates of GDP involves a number of assumptions about the ratio of value added to output and the ratio of value added across industry that eventually fall back on assuming constant proportions and movements in line with population, which is itself based on steady long term trends. Analysis of the results that show a slow but steady increase in the standard of living over the long run is more in the nature of an analysis of the assumptions built into the data than necessarily a measure of what was happening at the time. Apart from major disruptions such as the Black Death in the middle of the fourteenth century, and the consequence for population levels, it is impossible to see the effects of less cataclysmic events such as wars and financial extravagance by the rulers on the ruled.

¹ Broadberry, Stephen (University of Warwick, UK), Bruce Campbell (Queen's University, Ireland), Alexander Klein (University of Warwick, UK), Mark Overton (University of Exeter, UK) and Bas van Leeuwen (University of Warwick, UK), [British Economic Growth, 1270-1870](#) Paper presented to IARIW 2010

Economic history, like national accounting, has become somewhat unfashionable but some important studies have been produced showing how the economy developed in the first part of the last millennium². In addition England is blessed with a collection of documents relating to the stock of assets in the country and the income arising from them (Domesday Book and various follow-up exercises³) and extremely detailed records of accounts of the king (especially the Great Rolls of the Exchequer⁴ which exist in continuous series from 1155 to 1832), as well as some information for some years for some baronial manors and great churches⁵. For a national accountant, the possibility of using this data to construct accounts is obviously enticing but before this can be attempted, it is necessary to understand how the economy then functioned and what exactly the various accounting records represent. This paper therefore has the more limited goal of considering whether the economy of the eleventh and twelfth centuries can be construed in a way that is sufficiently similar to the way we are accustomed to look at the economy now for SNA-like accounts to be both practical to construct and useful for analysis.

Institutional units

We are used nowadays to consider the institutional units of the economy as corporations (financial and non-financial), government and households plus, ideally, a small sector of non-profit institutions serving households (NPISHs). Corporations, in the sense of institutions financially separate from their owners that produce goods and services for the market did not exist in the period we are considering. Nor was government financially separate from the king's household⁶. However, even if we are left with only "households" we can make a useful distinction between them. From the middle of the first millennium, it was common to describe society as consisting of three orders; *bellatores*, *oratores*, and *laboratores*. These were described in English as "those who fight, those who pray and those who work"⁷. This is not an exact division (even apart from ignoring women and children) since even those who fought and prayed sometimes worked also, and those who

² Britnall, Richard *Commercialisation of English Society 1000-1500* (Cambridge 2009) ; Dyer, Christopher *Making a Living in the Middle Ages: The People of Britain, 850-1520* (Yale, 2009)

³ Domesday Book was compiled in 1086/7 and covered most of England south of the Humber. It showed who held land, how much it would yield in a year, as well as information on livestock, mills and so on. It also showed the amount due to be paid annually to the overlord as well as the name of the overlord

The *Cartae Baronum*, which recorded the amounts due from the barons to the king was commissioned by the Treasury in 1166.

An exercise similar to Domesday was mounted at the end of the thirteenth century but not all the returns survive. The records have long been popularly known as the Hundred Rolls, because most of the returns were made by hundreds, the principle subdivision of the county.

⁴ Usually referred to as "pipe rolls" because the vellum skins on which they were written were kept rolled into cylinders. They contain very detailed information on gross payments due to the exchequer and expenses allowable against the total.

⁵ The term "great churches" is commonly used to designate both cathedrals and large abbeys

⁶ In Great Britain this separation was not absolute until 1830.

⁷ This characterisation is added by King Alfred (849-899) to his translation of the Consolation of Philosophy by Boethius (ca. 480-524) and was elaborated by Aelfric of Eynsham (ca.955- ca 1050).

mainly worked were also called on to fight and pray from time to time. However, this aphorism is of sufficient value to allow us to divide households into three main sorts.

The first type of household is that of the king, the great nobles and lesser nobility such as knights. The heads of these households are those who would not only lead any fighting to be done but would also determine whether and when fighting was necessary. Besides this they were largely responsible for maintaining law and order and, for the king at least, for responsibility for negotiating with foreign powers. The numbers of such households were relatively small, probably not more than about 200, but their economic weight was very considerable. Twenty years after the conquest of 1066, when the Domesday Book was compiled, the king held directly about one fifth of the land of the country, the next 12 largest land holders, held another quarter with about 30 per cent held by other nobility. Virtually all of these households were headed by Normans⁸ but they included not just the immediate family but also household servants who would have been Anglo-Saxons.

We are so used to the role of the church being marginal in our society that it is difficult to comprehend just how powerful a force it was a thousand years ago. While there about 12 major barons William's time, there were 17 bishops and they, like the important barons, formed part of the king's council. (They were also predominantly Norman.) Nor was theirs just a moral power; the church in 1086 held another quarter of the land of the country and this proportion increased significantly over the next two centuries with the expansion of monasticism. The main function of the church, especially the monasteries, was to pray for the souls of the dead, particularly for named individuals. We may find this a service we no longer place a value on, but possibly the people of that time would find the idea of paying to watch a game of football equally incomprehensible. In addition to these "spiritual services" the church served other functions whose importance we more readily recognise. Almost everyone who could read and write had been educated by the church. Record keeping was largely done by churchmen, either monks keeping records in the monastery or those of the "secular clergy"⁹ who were the royal administrators. Such medical expertise as existed was frequently dispensed by monks. The church acknowledged a responsibility for the poor and regularly provided hospitality to travellers, especially the more exalted kind including other clerics and those undertaking pilgrimages.

Now we have a picture emerging that is curiously familiar. We have a group of households, those of the king and the nobles, that dispense what we call collective services and another group of clergy households, including the institutional households of monasteries, that dispense individual services. Both these groups of households engage in other activities such as agricultural production, and the first group sometimes engaged in individual services (for example in giving aid to the poor) and the second sometimes engaged in collective services (for example in administering justice on church land). But if we can find out how these services were financed and the extent to which their provision

⁸ Strictly speaking not all of the individuals who came with William were from Normandy, some were from Flanders, Brittany and elsewhere in what is now France but it is convenient to use the term "Normans" as shorthand for them all.

⁹ The term "secular clergy" is used for those not living within a monastic order (the "regular clergy").

changed over time, we would be well on the way to picking up the fluctuations in activity that dependence on agricultural yields alone will not provide.

The third group of households, those of the workers, is by far the largest in population terms and also the poorest in economic terms. Only about 12 per cent of men were free. They and another 40 per cent of adult men held the three per cent of the land not held by the nobility or the church. One third were peasants who were neither free nor land-holding and the remaining ten per cent were slaves¹⁰. They were uniformly Anglo-Saxon (or at least not Norman) and almost all were involved in agricultural production though there were certain other important activities that they also undertook.

Having considered whether we can talk of groups of institutional units in a way that is more or less consistent with SNA principles, we need to consider what economic activities groups of units were engaged in. Do the normal rules about production, consumption and accumulation need any sort of modification?

Production

It would be a mistake to think that the economy operated only at a subsistence level. From Anglo Saxon times there are records of dozens of mints making silver pennies for use in commercial exchange. Payments of geld¹¹ to the Danes was regularly made in pennies and the amounts involved speak to the existence of significant amount of market activity.

Nevertheless, production for own final use was enormously important not just for the poor, but for all three groups of households. Most food consumption would have been of own produce and it was only the excess that was sold in a market place. Some limited processing was common, a mill to produce flour, a blacksmith to make metal goods, spinning and weaving of flax and wool, the production of beer and possibly wine. Some specialist activities also took place, gold and silver-smiths, for example, making valuable objects for the court and church, and moneymen. Although shops as such did not exist, there were a number of merchants facilitating trade in goods transported over some distance and they would have earned margins as now.

Clearly the range of products made in the eleventh and twelfth centuries was much narrower than we are used to nowadays. Many products we are used to simply do not exist; others that did exist we are familiar with only in museums or in books, such as the military weapons and armour of the time. The question is whether we need to consider any changes to the production boundary or to the method of valuation we use in the SNA.

The production boundary in the SNA states that production covers goods and services provided to others, goods retained for own final use, knowledge-capturing products, own

¹⁰ The king, court and clergy accounted for the remaining five per cent.

¹¹ The geld was a tax initially used to pay to raise an army to fight the Danish Vikings but later became a form of protection money paid to the Vikings in return for freedom from attack. It is estimated that in total the Vikings received about sixty million pence in geld. In fact it was the sophisticated administration that was in place to collect Danegeld that was to form the basis of William's fiscal system.

account production of housing services and paid domestic staff. Three immediate questions arise. The first of these is whether the distinction between goods and services is the same as we are used to since, if it is not, that could change the boundary of what is included and what is not. In a less sophisticated economy, there is less processing of goods into other products so the size of intermediate consumption relative to output will be smaller than we are used to. But this is not all. One of the most ubiquitous forms of processing was grinding grain into flour. Mills of course existed; the introduction of water mills was one of the major technological innovations of the end of the first millennium. Usually, however, the miller performed a service rather than producing a good; he ground another unit's grain for a fee (possibly a share of the grain or resulting flour). It is clear that such a service should be included in our production boundary and valued at the fee paid to the miller, whether in cash or in kind or some combination. But what about grain milled at home without the use of the latest technology? The SNA would suggest that the end result was a good and so should be included in the production boundary. But how should it be valued? There was effectively no market for flour so the use of a comparable market price is not an option. The alternative would seem to be to use a sum of costs approach, that is the value of the grain plus an estimate for the time spent grinding it. Using the miller's fee to value this time would be to overstate the valuation since the miller's fee must cover the acquisition and use of the mill as well as placing a value on his time. And if we value the time a woman spent grinding the flour, why would we not value the time she spends baking it into bread, or the time she spends converting some grain to beer? (Water was normally unsafe to drink.) Here we quickly come back to the proposition that food preparation at home does not constitute production. So it seems that the implication is that the activity of grinding grain at home would be excluded from the production boundary even though the result was a product (flour) that could be produced for a fee.¹²

The other major processing activity, mainly undertaken by women, was spinning flax and wool into yarn and then weaving it. Like flour, there was little if any market for the yarn material or clothes resulting from material made. Unlike the case of milling, there was no market service for these activities either. Spinning and weaving would have been done in both the affluent institutional households of the king and nobles and the poor farming households. Again there is the question of whether we should try to put a value on the time spent on spinning and weaving or whether to include the value of the raw materials but treat the act of processing them as an own account service and thus outside the production boundary. This seems questionable but is it really any different in kind from excluding the other major preoccupations of women, childcare, cooking and other housework which we not only countenance but justify?

The consequence of recognising that many processes become ones of buying in services rather than transformed products, means that consumption would consist of grain and possibly a milling service rather than bread, for example, and grain rather than beer, wool rather than clothes. An input-output table would be even sparser than we might have first thought. As with the implication of the revised treatment of goods for processing

¹² This is probably still true in many parts of Africa, for example.

incorporated into the 2008 SNA, such a table would reflect economic interaction rather than technology.

As now, we want to value market production at the price paid for the products and production for own final use at a similar value when similar products are regularly marketed. By restricting goods to those that are marketed and for which we have documentary evidence and services that are equally documented, we are better able to follow SNA valuation principles than if we were to introduce items that we now regard as goods but for which no market then existed. Extensive use will still be needed for the output of non-marketed output as the sum of costs but information on the costs involved will generally be available.

A second question relevant to goods and services to be included in the production boundary is how many households we have in each group. This will determine when services are produced for own final use and when not. For monasteries, it seems clear that we are dealing with institutional households, some of which would have been quite large. Income was pooled, or at least administered collectively for the members of community. Individuals who worked in the monastery would most often have been regarded as lay brothers of the community and not members of a separate household.

What about the king's household? This was made up of the king and his immediate family, long term "guests" including on occasion hostages, young members of other families sent for training in martial and other arts and a number of administrative staff, a chaplain and servants. In many ways, this too seems like an institutional household. The information we have treats it as a single entity and it would be difficult for us to follow the SNA recommendation that paid staff and the servants be treated as separate households. Much of the payment to servants was in the form of the provision of food, clothing and shelter. To the extent that, for example, total food consumption for everyone in the king's household is well estimated, it does not really matter how many households we spread this over. For money wages there is more of a problem. If we were to treat the servants as forming separate households, the payments to them would represent a purchase of services by the king and the expenditure of these wages as further household consumption expenditure (ignoring saving by servants). For practical reasons, and until more information is available on the relative importance of money wages, it would seem reasonable to treat servants as forming part of an institutional household.

The third problem relating to the production boundary is less about the nature of the goods and services concerned than about how the income arising from production is allocated to households. So far most of the discussion has been about goods and services produced by individuals within the same household. However, the households headed by unfree men also contributed labour to the output of goods and services by the institutional households, both monasteries and those of the nobility. Often this labour was provided as an obligation consequent upon the holding of land. The SNA would have us estimate the value of labour services, have this amount paid to the workers as compensation of employees and then paid back to the landlord as primary income. Making estimates for the value of these labour services is not easy. We could hope to be able to derive a figure for output by the households engaged in labour services and perhaps with some broad assumptions could derive a figure corresponding to the compensation of employees part of mixed income. In

order to quantify the flows corresponding to payments of rent, we would need the number of days labour involved and the appropriate daily wage rate. Deriving this from an estimate of compensation of employees is problematical since output will depend on labour inputs from all family members, whereas labour services may have been usually provided by adult males. Deciding the number of days work output represents is equally uncertain.

One possibility is to modify the sequence of accounts. As noted, what the SNA recommends is to allocate the income flows arising from value added first to the units involved in production and then reallocate some back to the landholders as rent. If we omit the flows in both directions, institutional households will have a figure for “mixed income” that will include the labour contribution of tenants payable as rent; poor households will have a figure for “mixed income” that excludes the value of the work they contribute to other types of households but also excludes rent payable. In a world where there are no corporations and so no dividends and where for the moment at least we can ignore interest payments, we have figures consistent with the balance of primary incomes. To make this modification clear, we could talk of “mixed primary income” instead of “mixed income”. This term would include not only income from self-employment and the return to own capital but also include or exclude the imputed labour costs due as rent as appropriate.

There are two benefits to this proposal besides the pragmatic advantages of how to deal with the labour services due by unfree tenants. It deals with knight service (which is effectively the up-market version of the unfree man’s labour; it is discussed further below) and means that the imputed rent of owner-occupied dwellings reduces to purely the rental on the building since the land component is already dealt with.

Consumption

As noted above, intermediate consumption will be proportionately smaller in the Norman economy than we are used to but it still needs to be identified. The largest items will be agricultural products, grain used as seed and fodder for animals in particular.

For final consumption, we would have an immediate breakdown into consumption by king and court, by the church and by other households. Separating the first two between public and private consumption would be difficult and in any case ambiguous. If the king presides over a lavish dinner table at which foreign emissaries are present, or is entertained to dinner by a baron in whose domain he is administering justice, is this personal expenditure or part of “government services”? We lose some detail on the nature of final consumption by keeping to a three way split of consumption into (1) Court and collective consumption expenditure, (2) Church and individual consumption expenditure, and (3) Other household consumption expenditure. However, given that we know the relative land holding and numbers of adult men in each group, we gain information on the distribution of income, expenditure and wealth that present-day national accounts can only aspire to.

Capital formation

Following this thought, it is both practical and informative to consider capital formation undertaken by each of three categories in turn, not least because almost all of it was undertaken on own account.

For the king and his court, the most urgent and most expensive was the building of castles throughout the kingdom. Initially these were of the motte-and-bailey type, a mound of earth with wooden palisade on top which served as a look-out as well as defensive quarters. There is an illustration of one being constructed in the Bayeux tapestry; the most famous is the central keep of the tower of London. Very many of these were built to keep the population of an occupied country under control. Some would have resulted from forced labour but with the passage of time the timber palisades were replaced by stone buildings and costs were incurred and recorded. The castle at Orford¹³, for example, was rebuilt between 1165 and 1173 at a cost of £1,413.

The church was also engaged in massive building activity, constructing new churches, cathedrals and abbeys. Some of the labour would have been voluntary in one form or another but much of the skilled work was paid for and documentation for much of this exists. The impetus to church building coincided with, but was not wholly dependent on, the conquest. A similar increase in church building was taking place throughout Europe at this time following the reforms of pope Gregory. ¹⁴Churches also began building tithe barns for the storage of agricultural produce due to them.

The king and court also had need of the tools of those who fight; war horses, armour and weapons. These were sometimes bought in but most frequently would have been raised or made within the estate of the owner.

Both the king and court and the church also has assets required to cultivate the land, notably oxen and ploughs, and livestock. They may also have owned the mill that everyone used (for a fee) and the smithy. Other households would have owned few assets, some animals and rudimentary housing but making estimates of the value of these is less easy.

Wealth

The single most important asset and the basis of all wealth was land. The politics of land-holding and consequential payments of rent is discussed below but there are other items contributing significantly to wealth.

¹³ Orford is about 150 kilometres north-east of London on the coast, so a place to guard against possible further Viking attacks as well as being well-positioned to keep an eye on a particularly unruly area. By the time of its rebuilding, however, the king was more concerned about the over-ambitious local baron than by the population at large.

¹⁴ In England prior to 1100 there were fewer than 100 religious houses; by 1175 there were 340. It is estimated that perhaps one in six adult men were associated with a religious house either as a monk or lay brother.

The most obvious case is the silver penny. This was not a financial asset as we would recognise one. There was no matching liability and pennies were frequently melted down and reminted. This was the accepted way of dealing with foreign coins; for example, melt down silver Euros and mint the silver as new drachmas. But it was also the way to ensure the purity of the coins and only much later was the currency devalued by adding base metal to the silver when reminting.

There was the question of what to do with a surplus of coins. Sometimes there were simply hoarded but often they would be melted down and fashioned into items for use in the liturgy of the church or in noble homes. If and when there was a demand for more silver pennies, this “plate” could be melted down again and converted back to coins. Both the silver pennies and the silver products that could be converted to them we would, since 1993, regard as valuables. Both the king and the church would hold other valuables also, items made of gold and encrusted with jewels, for example. This wealth had been one of the attractions for the Vikings; within months of the conquest many church valuables had found their way across the channel to ecclesiastical foundations in Normandy.

At this time, the church forbade all forms of usury so if this prohibition were strictly followed, there would be no need to consider the giving of loans and the payments of interest. Various ways were found round this prohibition, though. The most usual was for the church to advance money and in return take over the running of an estate, keeping the income. It became particularly prevalent when the crusades were launched. The borrower did not always return to retake possession of his estate, and if he did might, out of gratitude for his survival might leave some of all of the estate in the hands of the church. Deriving any figures for the extent of this may be problematical, however.

Curiously, though, there was one financial asset that was very well documented. The accounts of the king were recorded on an accrual basis. Each year’s statement of account began with what was owing from last year, added amounts due this year, deducted payments made and ended up showing what remained unpaid. In some cases, amounts owing were carried forward for many years. Write-off of unpaid dues were also scrupulously recorded¹⁵.

Land and rent

As king of England, William claimed ownership of the whole land area of the country. Some he kept in his own immediate control but some he made available to chosen individuals (mainly his barons and the great churches) in return for an annual payment. These “magnates”¹⁶ in turn sub-contracted some part of the lands they had been given to others and so on in a cascading system of “sub-infeudation”. Land was held at the pleasure

¹⁵ This treatment may be compared with GFSM1986 where government accounts are recorded only on a cash basis. Further the medieval accounts record payments in kind, for example the gift of a hawk in return for a particular favour, which would also not feature in GFSM 1986.

¹⁶ The term “magnate” is used to cover both leading barons and senior clergy. Another indication of the importance of the clergy may be seen in the fact that bishops still have a seat in the House of Lords as “lords spiritual” alongside the “lords temporal” or secular lords.

of the king (or intervening landholder). It could be revoked and typically was in the case of revolt. It did not automatically pass to heirs but by custom usually did so on payment of a “relief”, an amount payable by the heir for the right to inherit. If there was no heir, the land “escheated”, that is, it reverted to the ownership of the king or intervening landholder who could then reallocate it, or not, and to whom, as he saw fit¹⁷. The amount of land held directly by the king (or any other person) thus changed from year to year as some new grants were made and some reverted to his ownership by seizure or escheat.

Land was valued by the value of the agricultural produce it was expected to yield in a year¹⁸. Part of this was then payable to the overlord. Initially, this payment was expressed in terms of either goods or services to be rendered. For high ranking tenants, payments were in terms of food renders or a number of knight’s fees. Food renders due to the king were often paid by entertaining him as he came travelling around the country to inspect it and administer justice. A knight’s fee was an obligation to put a fully equipped knight, with necessary supporters, in the field ready for battle for 40 days a year at the expense of the tenant. The number of fees due varied from estate to estate and although in general larger estates carried higher knights fees, there was no strict relation between the area of land held and knights fees due, even if allowance is made for the quality of the land. When tenants were below the rank of knight, their payments were in terms either of food renders or of labour services. These might be a commitment to work on ploughing land in spring, helping with the harvest or of undertaking maintenance work.

The value of food renders was well established. “ For enough wheat to bake bread for a hundred men they allowed one shilling; for the carcass of a grazing ox, a shilling; for a ram or a sheep four pence; for forage for twenty horses, likewise four pence.¹⁹” By the latter part of the twelfth century, the amounts due to the landlord were not just expressed in money terms but actually payable in coin. Later again, there was something of a move back to demanding payment in kind because price inflation had made this the more valuable alternative.

Some commentaries on the pipe rolls describe the payments due to the landlord as taxes since they provided the major source of finance to the king and barons but this is not how the national accounts would treat them. They are clearly property income since they are payments made in return for the use of another unit’s land. Further, such a classification allows for the payments to the king, barons and to the church to be classified in the same way whereas a classification as taxes could only strictly apply to payments made to the king.

¹⁷ In the meantime he retained the income from the estate, providing an incentive to keep positions vacant.

¹⁸ So Domesday Book incorporates the idea of capital services that we still cannot agree on making a formal part of the SNA!

¹⁹ This quote comes from the *Dialogus de Scaccario*, a document prepared in about 1179 by Richard FitzNigel who was the treasurer of England, that explains the process whereby the pipe rolls were compiled in fascinating detail.

There is an interesting footnote to the treatment of land. Long before the SEEA was thought of, the king established ownership over large swathes of land described as forests, though not necessarily densely wooded. He had absolute right to the timber and game to be found there and vicious fines and punishments were inflicted on anyone who infringed this right.

Redistribution of income and wealth

The sheriff was a key official in medieval England. He was a “reeve” (similar to a bailiff) for a “shire” (county)²⁰. Working from information in the Domesday book, the officials of the treasury made a list of the rents payable to the King and the sheriff was responsible for their collection and accounting for this every year on 29 September (Michaelmas). During the year, the peripatetic justices would have been at work and handed out judgements, including fines to be paid. These too the sheriff had to collect and account for. There were other payments he was responsible for also. Taxes were a case in point but by no means the only examples. If someone’s house encroached on the king’s highway, that led to a special sort of fine. A litigant could make a special payment to have his case heard early. Payments were sometimes offered “for the king’s favour”. All of these were documented scrupulously and in detail so we can systematically assign them as taxes or other forms of transfers.

Some of the payments due were the sort of transfers that are familiar today; a fine for infringement of legislation is a case in point. The payment of a “relief” on inheritance, though differently labelled and levied in a slightly different way is sufficiently analogous to death duties for us to treat it as a capital transfer. Some transfers were of a type no longer common, notably the payment of ransoms for the release of a high-ranking person captured in battle. These were payable from one noble to another so would show up only when these were made abroad but then they could be very considerable and would satisfy the conditions to be treated as capital transfers also²¹.

But there were other payments that need to be classified differently. Often, an individual would make a payment in order to have an exclusive right to pursue some activity. These we would now probably classify as tradeable contracts and treat them as a form of capital²². One instance is the case of a moneyer who would pay to be allowed to mint coins, it being understood that his fee for doing so was sufficient that it was worth paying for the privilege of the appointment. Another is the case of the sheriff himself. The sheriff knew how much he had to deliver to the treasury and the amount of rent for the county was called the “farm”; that is he was a tax “farmer” and collected more than he paid over. We can only find out how much more he collected by looking at the accounts from the other

²⁰ So “shire-reeve” became “sheriff”.

²¹ Though slightly later than the period covered here, the accounts for St Louis’s expenses on crusade in 1251 show a ransom for the king of 400,000 livres tournois and 10,000 for other captives. Total expenses excluding the king’s ransom were about 700,000 livres tournois.

²² If anyone were to suggest these should be treated as taxes, I would explain that I think this classification is conceptually incorrect and driven by political considerations that are not relevant in the period in question.

side to find out how much was paid to the sheriff to match against how much he in turn paid to the treasury.

The king's account show many but not all transfers and those involving the church and either a noble household other than the king's or another household would not of course feature in the king's accounts. However, between the king's accounts and manorial and church accounts, most should be captured.

Accounting rules

It should be clear from the discussion above that most accounting rules as in the SNA can be applied even to this earlier period. Valuation will be more dependent than now on estimation at cost, but this is not at variance with the SNA. The existence of accrual accounts means that time of recording recommendations can be followed. Within our three sectors, double and even quadruple entry accounting can be applied. Some aggregation is inevitable, but the same sort of aggregation could be made for recent accounts to derive comparable data.

There is, however, one fundamental issue that has only been referred to in passing so far and that is the question of residence, which is of sufficient importance to require separate consideration.

Residence

To the chagrin of my French audience, I must point out that accounts for England from 1066 to 1214 might strictly speaking be regarded as regional accounts since the king of England was also Duke of Normandy, and from 1154 also Count of Anjou, Maine and Touraine, and Duke of Aquitaine and Poitou. Many of his nobles (and churches) held property on both sides of the channel and both the king and many nobles spent significant periods of time, sometimes in excess of a year, out of England. By considering the individuals as belonging to institutional households that are determined by land holding in England, though, we can conceptually sidestep the question of what to do when the king of England was non-resident²³.

Luckily for the accountant, the data sources allow this treatment also, the accounting information for estates in England were kept separate from those in France. It is possible therefore to treat England as one economy and the French possessions as being in the "rest of the world" though identifying and classifying expenditure on wars in France financed from English resources (the flows were all one way!) is somewhat problematical. Imports and exports of goods did take place and to a large extent can be identified.

In this period, the papacy began to take a much more directive approach to the conduct and administration of the church, demanding not only payments directly to Rome but also claiming the power to appoint senior prelates, a power that the king disputed not always

²³ Richard Coeur-de-Lion was king of England for ten years, during which he spent only about six months in the country.

successfully. At least one writer has described the papacy as the first supranational institution, but in national accounting terms we know how to deal with that!

Summary

It seems that we can characterise the economy of England soon after the conquest in 1066 in terms amenable to accounting in ways recognisable to someone familiar with the SNA. This involves a change to the disaggregation by institutional sectors, but with the consequences that leads to a picture of the allocation of income and consumption between three important groups of households and in particular shows an allocation between rich and poor. We can also see how the three sectors do or do not engage in capital formation. Interestingly, not only do NPISHs feature as being of prime importance, so do their valuables in explaining national wealth. Although the financial sector is virtually absent from the accounts, true accrual recording is possible. Importantly, the framework described here goes further than simply estimating GDP but allows for the shifting economic importance of the nobility (those who fight), the church (those who pray) and the ordinary people (those who work) to be reflected over time. The remaining task is to investigate whether the data sources are as accessible and manageable as I hope.