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Sources of power and infrastructural conditions in medieval governmental accounting

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ABSTRACT

The role which accounting plays in power and governance is a key issue in accounting history. This study looks at a crucial development in accounting history, the emergence in the 12th century of Exchequer accounting. Exchequer accounting played a significant part in the rise of the European administrative state. This paper uses Mann's Model of the sources of power to study the nature and role that accounting played in medieval governance. The ideological, economic, military and political sources of power are shown to be underpinned by key infrastructures such as accounting. The interrelationships between accounting, other medieval infrastructures (such as the feudal system, administrative and territorial organisation, logistics, coinage, and literacy and numerical technologies) and the sources of power are explored.

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Introduction

The role which accounting plays in power and governance has increasingly become a key issue of concern in accounting history (Hoskin & Macve, 2000). For example, the study of power, knowledge and government was identified by Napier (2006) as a key theme of the new accounting history which had concerned many authors (such as Burchell, Chubb, & Hopwood, 1985; Hoskin & Macve, 1986; Loft, 1986; Miller & O'Leary, 1987). As such this confirms the need more actively to probe the "underlying processes and forces at work" in accounting (Hopwood, 1987, p. 207). These enquiries will, in turn, place greater emphasis on the social, economic and political forces implicated in the structuring of accounting institutions (Miller, 1986).

The nature and role of accounting techniques and practices in the establishment, emergence and extension of governmental power has traditionally received relatively little attention. However, since Miller's (1986, 1990) early seminal studies investigating the interactions between accounting and the state, several studies (such as Carpenter & Feroz, 2001; Edwards, Coombs, & Greener, 2002; Neu, 1999; Neu, 2000; Robson, 1994) have investigated key aspects of the way in which accounting supports governmental power. The current study adds to this literature.

This paper looks at a crucial period in accounting history: the emergence of Exchequer accounting in the twelfth century, which formed the basis of charge and discharge accounting, the dominant form of accounting in the UK government until 1830 (Edwards et al., 2002). It looks at the interrelationship between government and accounting at a time of great historical importance; the emergence of the administrative state in the Early Middle Ages. At this time, emergent nations, such as England, France and Scotland, were in constant struggle with their neighbours with fluid territorial boundaries. Political power was dependent on military power which, in turn, was dependent on finance. As a consequence, there was a pressing necessity for states to raise money for wars and for their domestic needs. These states were complex. They comprised multiple interacting power sources underpinned by supportive infrastructures such as accounting. Accounting helped to solve key organisational problems of control, logistics and communication. Financial administration was becoming the sine qua non of these embryonic states.

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The central thesis in this paper is that accounting technologies played a significant part in the emergence, development and extension of state power in England in the twelfth century. For the first time in Western Europe. accounting enabled the state to govern effectively over territorial distance through the mechanism of an annual audit at the Royal Exchequer. The Exchequer was supported by a complex administrative and technological infrastructure. It enabled the king to collect the money from his own landholdings in the shires. More importantly, in the longer term, it also provided an efficient method to raise and collect taxes. This source of finance underpinned the growth of the modern state by enabling it to develop its military power. In fact, the unprecedented administrative efficiency of the state was premised upon a well-developed accounting system. The accounting system itself was operationalised through the use of other related infrastructures. This central relationship between government and accounting is embedded within a broader nexus of interlocking structures and technologies. These involved personal relationinstitutional and organisational ships. structures, economic, administrative, political structures and accounting technologies. The English state at this time has been seen as having the most sophisticated governmental structures in Europe since the Romans (Hollister, 2001).

This new state was innovative both in its accounting technology and in its administrative structures. Consequently, new methods of control were successfully introduced and institutionalised. "Henry's government produces the first records of the newly constituted Exchequer, the Pipe Roll of 1130, by far the earliest surviving kingdom wide financial survey in the history of humankind" (Hollister, 2001, p. 368). As a result a fundamental problem of twelfth century financial administration was solved: how to account for and efficiently collect at the centre money due and raised by the localities. In effect, this solved a crucial problem with extensive patrimonial power: "The problem of maintaining adequate surveillance and control over expansive territory" (Clegg, 1989, p. 170). Giddens (1984) terms this "time-space distantiation". This problem was effectively solved by physically bringing the localities as personified by local administrators to the centre as represented by the Exchequer. So government at a distance was achieved by removing the physicality of distance. The creation of the publicly accountable subject; the sheriff, the king's "accountant" in the shire, was the effective solution.

The state controlled the sheriffs through the use of an accounting system which enforced a strict accountability. In effect, the government, perhaps for the first time in Western Europe, set up a surveillance system which had the effect of establishing a new mode of accountability and control. In is own era, it was the equivalent of the surveillance regimes of later centuries (Miller and O'Leary, 1987; Carmona, Ezzamel, & Gutierrez, 2002).

This paper has four specific contributions. First, it adds to our general understanding of the relationship between accounting, power and governance by a detailed exploration of the English Royal Exchequer accounting in the Middle Ages. Second, it explores the interactions between accounting and the economic, political and social structures of medieval England. Third, it shows the interrelationships between accounting, other non-accounting infrastructures and the sources of power in medieval England. Fourth, it provides further evidence on the use of accounting as a device for enforcing power in the context of medieval English state and demonstrates accounting's power to monitor an individual's performance, through an exploration of the nature and function of an accountable subject, the sheriff.

This paper uses a theoretical model novel to the accounting discipline to show how accounting is implicated in the territorial centralisation and emergence of the twelfth century English state. This is Mann's model of the four sources of power (ideological, economic, military and political). Mann believed that these four sources of power underpinned the development of the state. Society needed to be seen not as a unified whole, but as four separate networks of social interactions (Brenner, 2006, p. 189). These four sources of power were, in turn, underpinned by key infrastructures such as accounting, feudalism, administrative and territorial organisation, literary and numerical technology, communication and transportation, and coinage. Mann's model shows how these infrastructures were melded by the government into a complex set of techniques that enabled it successfully to solve the spatial problems of governance. The state's territorial centralisation allowed it to develop infrastructures to reinforce its power (Hobson, 2006). These infrastructures not only facilitated and enabled the creation of the Royal Exchequer system, but allowed it to develop and flourish. In this paper, the relationships between accounting, the sources of power and the other infrastructures are examined.

Mann's model has been the subject of much controversy. On the one hand, Mann's model has been widely acclaimed: "Michael Mann's two-volume Magnum Opus, The sources of social power, is, in my opinion, one of the most impressive works of scholarship produced in the last fifty years" (Hobson, 2006, p. 150). While Gorski (2006, p. 101) terms it "the single most ambitious work of historical sociology to appear during the last thirty years". However, on the other hand, there are critics such as Robert Brenner and Gianfranco Poggi.¹ Brenner, a Marxist, unsurprisingly dislikes Mann's fourfold taxonomy. He asserts the supremacy of economic primacy and the importance of feudal lordship (Brenner, 2006). Brenner, in effect, sees political power as a by-product of economic power. Mann (2006, p. 369), in reply, believes that Brenner is too reductionist: reducing "Europe to the villages and manors of feudalism". Poggi (2006), by contrast, is unhappy with Mann's separation of political and military power although he accepts his ideological, economic and political sources of power. For Poggi, military power is always subordinate to political power. Both Mann (2006) and Schroeder (2006, p. 12), however, robustly defend military power as a separate source, for example, in

¹ Interested readers are referred to *An Anatomy of Power. The Social Theory of Michael Mann* (Hall & Schroeder, 2006). This volume contains essays by leading sociologists who debate Mann's theory from different theoretical perspectives. In the concluding chapter, Mann provides a detailed defence of his theory.

the domination of the South by the North in the American civil war.

In the next section, the prior literature relating to medieval accounting is evaluated. The remainder of the article is then structured as follows. A brief focused description of the Exchequer system as a medieval administrative system is provided next to set the scene for the later discussion. In the section "Sources of power", Mann's model of the four sources of power and their underpinning infrastructures is explained. In the section "Multiple interaction networks in the twelfth century", the four main sources of power are then explained in the context of twelfth century England. In the section "Infrastructures", the general infrastructures (feudalism, administrative and territorial, logistical and monetary) and the specific infrastructure which underpinned accounting and the twelfth century state are discussed. Then in the section "Linkages of the accounting infrastructure to non-accounting infrastructures and the sources of power", interrelations between the accounting infrastructure and the non-accounting infrastructures and the sources of power are investigated. Finally, the conclusion summarises the paper.

Historiographical reflections

Very few accounting researchers investigate accounting history in the Early Middle Ages in England. Most of those that do cover this topic in a broad way in Meta histories (see, for example, Brown, 1905; Chatfield, 1973 and Edwards, 1989) or as part of general articles which have a broad historical sweep (e.g., Hoskin & Macve, 1986; Jack, 1966; Yamey, 1983). Only a few articles deal specifically with the twelfth or thirteenth centuries (e.g., Baxter, 1989; Noke, 1981). Noke (1981) focuses on bailiffship in thirteenth century England, while Baxter (1989) reviews the tally and the checkerboard in the Early Middle Ages. These articles traditionally adopt a rather narrow historical focus with little contextualisation of accounting within an interdisciplinary framework. Consequently, only a handful of authors (such as: Bryer, 1994; Bryer, 2000a; Bryer, 2000b and Hoskin & Macve, 1986) focus on the wider interactions between accounting and society.

Bryer (1994) adopts a Marxian perspective. His basic focus was on manorial accounting from the late thirteenth century onwards and he sought to account for the social relations of feudalism. Bryer saw the history of manorial accounting as the "implementation and development of a system for helping to manage and intensify feudal exploitation" (1994, p. 226). Bryer's two later articles (2000a, 2000b) deal with the transition from feudalism to capitalism and use Weber's and Marx's theories; however, they primarily begin in the sixteenth century. Bryer's work, therefore, is wider in scope than the present paper which investigates administrative mechanisms in the Early Middle Ages. In addition, Bryer's focus is on manorial accounting and the feudal surplus rather than more particularly, as in this paper, on the Exchequer. Hoskin and Macve's (1986) seminal article adopts a wide historical sweep using a Foucauldian framework. In a brief overview of financial administration at the Exchequer in the Early Middle Ages, Hoskin and Macve (1986) analyse the basics of the Exchequer system as a powerknowledge control system. However, there is little explicit recognition of the other three Mannian sources neither of power (economic, ideological and military) nor of key infrastructures such as feudalism or coinage. The focus of this particular article, accounting's relationship to the sources of power in the twelfth century and its interaction with other infrastructures, is thus new.

The Exchequer as a medieval administrative mechanism

The Exchequer-based accounting system was essentially a twelfth century institutional innovation which allowed the centre, the state, to control the periphery, the shires. It substantively increased the power of the state. The sheriffs, the king's officials in the shires, accounted to royal officials for revenues from inter alia the royal manors and shires, from taxes such as Danegeld and from the administration of royal judicial administration.² The Exchequer was assembled circa 1110 using current technologies by Roger of Salisbury, the king's Justiciar, probably to raise a marriage aid for Henry I's daughter (Hollister, 2001, p. 216; Jones, 2009). Its origins are traceable to Anglo-Saxon England and to the post 1066 Anglo-Norman state (Jones, 2009).

The Exchequer was an accountability device. At its heart was a relationship of personal control and accountability. The king attempted to restrain the power of the sheriffs, raise taxation efficiently and tightly organise the rather scattered geographical resources of the Crown. The sheriffs received summonses, reported personally and rendered their accounts to the Exchequer twice yearly. There were, in reality, two Exchequers: an upper Exchequer (court of audit) and a lower Exchequer (essentially a treasury).

In the upper Exchequer, the sheriff's sums payable were calculated in front of the Barons of the Exchequer by a royal official (the calculator) on the Exchequer board (a chequered table), resembling an Abacus, with scribes keeping written records on Pipe Rolls. Importantly, the sheriffs' account was rendered on oath and there were penalties in place for non-attendance.

The audit was conducted using a set defined protocol in what has come to be known as charge and discharge format. The sheriff was formally 'charged' with prior years' debts, the king's revenues, principally the farm. The sheriff was then allowed authorised expenses, allowances and cash payments as his formal 'discharge'. This 'charge and discharge' system proved a very successful accounting system spreading from the English Exchequer to the English Church, to manors, to universities, to boroughs and guilds (Jones, 2008b, provides more detail).³

² The word sheriff derives from the Anglo-Saxon, "shire reeve". This was the official in charge of the shire. The farm of one night was an annual payment to the king from royal manors.

³ Earlier systems of accounting have used accountability-based systems (e.g., in Mesopotamia, Greece and Rome). However, they do not have the sophisticated format, structure or terminology that characterises charge and discharge accounting (Jones, 2009).

The Exchequer itself is an example of a calculative technique that was an ensemble of practices and rationales (Miller & Napier, 1993).⁴ The accounting infrastructure comprised a complex set of interrelated features. This simple accountability relationship operated with the prevailing social, economic, political and administrative framework of feudalism. It was predicated upon an effective coinage, efficient communication and transportation system and on a literary and numerical technology which included Pipe Rolls, writs, tallies and the Abacus.⁵

Sources of power

Mann offers a distinct view of looking at human societies. Societies, according to Mann (1986, p. 1), are dynamic and are "constituted of multiple overlapping and intersecting sociospatial networks of power". They do not exist as systems, nor should societies be conceived as unproblematic, unitary totalities.⁶ Societies are necessary to help human beings to attain their goals. Human beings come together to organise and control people, materials and territories. Central problems are thus organisation, control, logistics and communication. Accounting can play a key part in this process, for example, by the control and organisation of people and resources.

"Power is the ability to pursue and attain goals through mastery of one's environment" (Mann, 1986, p. 6). Using Mann's theoretical framework power can be distributive or collective, extensive or intensive, and authoritative or diffused. Distributive power is restrictive power (e.g., A controls B by establishing accounting control and monitoring techniques). By contrast, collective power is where individuals can enhance their joint power over third parties. Extensive power refers to the ability loosely to organise large numbers of people over wide territorial regions. By contrast, intensive power is the ability to organise tightly e.g., over widespread geographical regions. Accounting is useful for either "extensive" or "intensive" power, in particular, facilitating control at a distance. Authoritative power consists, in essence, of commands and orders. It is very controlling and conscious (e.g., subjects may be commanded by their king by writs). Diffused power, such as social norms, is a subtler, more normalised power. Individuals follow social norms either because they are natural, moral or out of self interest. The Exchequer was in essence an example of distributive, intensive power.

Mann (1986) identified four power sources which underpinned the development of states: ideological, military, economic and political. These power sources overlap, intersect and are historically contingent. In the Middle Ages, Mann argues that initially "no single group could monopolise power" (Mann, 1986, p. 397). However, from 1155 onwards there was a steady growth of political power through territorial centralisation (Mann, 1986, p. 439). The most distinctive and controversial part of Mann's model is his conceptualisation of militarism as a separate source of social power (Schroeder, 2006). Broadly this paper follows Mann's analysis with one refinement. Military power is considered too narrow. Clegg's (1989, p. 219) broader reconstitution of force as techniques of discipline is preferred. "The point of force or military violence is to secure outcomes which cannot be achieved through circuits of social integration". I use enforcement to describe this source of power.⁷ All states need some sort of enforcement power whether it be military, police, or fiscal.

Ideological power represents "the social organisation of ultimate knowledge and meaning..., necessary to social life" (Mann, 1986, p. 22). It is a broad-ranging meaning system which 'surpasses experience' (Mann, 2006, p. 345). Ideological power is dependent on accepted patterns of human behaviour, for example, norms or rituals that may or may not be based on reality. Ideological power may be transcendent or immanent. Transcendent power, the most powerful and of universal appeal, reaches outwards crossing existing social boundaries (e.g., world religions are the most important transcendent ideologies (Mann, 2006, p. 342). Immanent ideological power (i.e., concepts like nation and class) is more inward-looking; it intensifies the cohesion of an already-established group. Ideological power tends to be diffuse rather than authoritative, flowing informally and interstitially through networks of communication, relatively unimpeded by authoritative power centres like states, armies or class boundaries (Mann, 2006, p. 386).

Enforcement power is a "hard" technology that underpins most states. It can be formal (military) or informal (non-military). Military power can be defensive or aggressive. In essence, military power is concentrated, coercive, blunt power. Military power has a direct (i.e., within immediate military striking distance) and an indirect element (i.e., outside striking distance) (Mann, 1986). As military power needs to be financed, an efficient governmental accounting system facilitating the collection of revenues and taxes is an effective precursor. Taxation is necessary to enable states to make international war (Mann, 1986, p. 423). Enforcement techniques vary from state to state. In medieval times, in particular, enforcement power includes brute military power, but also includes other coercive techniques such as punishment, patronage, taxation and the judiciary. Accounting has very often been seen as a disciplinary mechanism (e.g., Hoskin & Macve, 1986).

⁴ Most of our knowledge of the operational aspects of the Exchequer system is derived from Fitz Nigel's book, Dialogus de Scaccario (Dialogue of the Exchequer). Jones (2008c) argues this was the first Western book on accounting.

⁵ Pipe rolls were records kept and maintained on vellum (calf skin); rolled up for storage they resembled pipes. Writs were informal, sealed written letters generally addressed to the sheriff and used inter alia "to send comments, grant favours, or confer privileges on named individuals" (Campbell, 1986, p. 237). Tallies are essentially short sticks on which notches are cut to represent monetary amounts and were commonly used by both governments and private individuals throughout medieval Europe (Jenkinson, 1923–1924).

⁶ Mann's view of society is thus, as he himself confesses, at odds with most sociological orthodoxies such as Marxism, structuralism, evolutionism, diffusionism, and action theory (Mann, 1986, p. 2).

⁷ I did not use the term 'disciplinary power' as it risks attributing to Medieval times a Foucauldian term more usually and appropriately used in later capitalist historical periods. As Armstrong (1994, p. 31) puts it: "In Foucault's various accounts, disciplinary regimes were concerned with moulding the actual details of individual conduct..."

"Economic power derives from the satisfaction of subsistence needs through social organisation" (Mann, 1986, p. 24). It involves control over the production, distribution, exchange and consumption of material resources. Economic power has been the subject of considerable historical discussion; often in a class context by Marxist historians. Bryer (1994), for example, argues that Marx's concept of the mode of production provides a useful conceptual framework for understanding the emergence and development of feudal and capitalist accounting. Economic power is the most deeply entrenched in everyday life. Over the long term, economic networks exercise the most massive, cumulative impact on collective power.

Political powers are those of "centralised, institutionalised, territorial regulation" (Mann, 1986, p. 11). Political power differs from the other three power sources as it is centralised and territorial, heightening boundaries rather than transcending them (Mann, 1986). "Regulation exercised from the centre through territories, rather than either legitimacy (ideology) or violence (military), is the key function of the state" (Mann, 2006, p. 353). Accounting is one obvious regulatory mechanism for controlling state functions and activities. "Expenditures give us an indicator, though not a perfect one, of the functions of the state, whereas revenue indicates its relationship to the various power groupings who compose its "civil society" (Mann, 1986, p. 417). Money not only has a functional, immediate use, but also, often incrementally, increases a state's power and scope.

These four sources of power are underpinned by universal infrastructures (see Fig. 1). "Power is most fruitfully seen as means, as organisation, as infrastructure, as logistics" (Mann, 1986, p. 518). Accounting represents one such universal infrastructure; others include literacy, coinage, administrative and territorial organisation. These infrastructures, or diffused power techniques, underpin the sources of power, enabling its more effective realisation. "For territoriality and boundedness also have infrastructural preconditions. What was achieved by the early modern European state depended on the volume of written com-

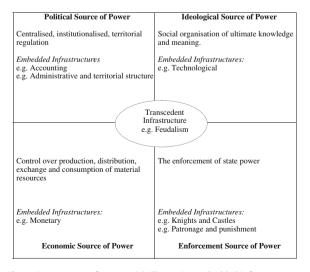


Fig. 1. Four sources of power with illustrative embedded infrastructures.

munication, accounting methods, fiscal/auditing structures, and so forth generally denied to earlier states" (Mann, 1986, p. 527). Effectively, these universal infrastructures are social inventions. "Once invented, the major infrastructural techniques seem almost never to have disappeared from human practice" (Mann, 1986, p. 524). Instead, they have continually evolved. For example, accounting has developed over time with occasionally a quantum leap (e.g., from charge and discharge accounting to double-entry bookkeeping). All these infrastructures increase collective and distributive power. Indeed, Mann sees human society as being characterised by a steady, cumulative, but uneven increase in social power (Mann, 1986, p. 524). Indeed, Mann sees human society as being characterised by a steady, cumulative, but uneven increase in social power (Mann, 1986, p. 524). Some are narrow and technical, others wide (Mann, 1986, p. 525). Some are rooted in one power source (such as knights and castles in military power), others can be located in multiple power sources (such as literacy). Importantly, and crucially, these infrastructures are interlinked and mutually dependent. Accounting thus facilitates state power, but also depends on it. Accounting enables the concentration and efficient exploitation of the state's resources. However, the state provided other infrastructures, such as territorial organisation and money, which enables accounting systems to develop.

Multiple interaction networks in the twelfth century

Ideological power

The main source of ideological power in Europe in the Middle Ages was the Church. The Church was transcendent, crossing territorial and social boundaries. Catholic Christendom extended throughout most of Europe. The Pope headed two parallel hierarchical institutions with extensive agricultural holdings: bishoprics and monasteries. The Church's own power network embraced every aspect of medieval life whether at court or on the manor. The Church provided a universal and unifying ideology, a European Christian identity. This was helped by the fact that the Church shared a common language, Latin. The ethical teaching of the Church helped to create the fundamentals of a peaceful society. The Church also reinforced state power. Individual bishops and abbots helped to administer state judicial and administrative functions. "[A]t the political level, the bishops and abbots assisted the ruler to control his domains, providing the sacral authority and literate clerics for his chancellors, backing his judicial authority with legitimacy and efficiency" (Mann, 1986, p. 383). They gave the state a moral authority. In addition, the Church played a major part in interstate politics and diplomacy. In the defence of Christendom the Church orchestrated the crusades into the Holy Land. There was also the latent, but powerful threat of excommunication.

Enforcement power

Norman power was premised upon formal military might. There was no standing army just a feudal levy. The military power of the king, and thus the state, largely depended on his relations with his vassals who were required to supply a requisite number of knights. Essentially, he could only galvanize an army with their support and in times of crisis. In effect, the king depended on the local magnates to maintain stability and enforce the royal laws. Under strong kings, such as Henry I and Henry II, this worked well. However, under weak kings such as Stephen the realm descended into civil war. The Norman network of castles stretched from Caerleon in South Wales to York in the North. This was essential not only for a profitable rural and town economy, to safeguard the citizens of the realm but also to secure the communication and transportation infrastructure.

Non-military enforcement techniques were available to the medieval government. Punishment and fear of punishment were particularly important, with possibility of exile, sequestration of lands or fines. The granting and withdrawal of royal patronage as rewards for loyal followers and retainers were also significant techniques. Ecclesiastical benefices and other fiefs were all subject to rights of appointment at a change of occupancy or vacancy. Another enforcement mechanism available to the state was taxation, whereby the state could extract funds from the population to fulfil its central functions. In addition, the judicial system was a method of coercion whereby the nobles could exercise feudal control.

Economic power

The medieval economy was primarily agricultural. The manor, the major economic unit, was the centre of a hierarchical, feudal power structure in which the peasant had his own land, but also worked for the Lord. The village community coexisted with the manors with a complex interdependency. The basis of the medieval economy has been greatly contested by social and economic historians. In particular, the role of the peasantry, population growth and class conflict has been much debated (see, for example, the Brenner Debate, Ashton & Philpin, 1985).⁸ There is no clear consensus about the drivers of the economy. However, what is fairly clear is that there was no single village type, that land laws were diverse and social gradients complex (Herhily, 1975). The traditional view that the lords coerced their peasants has recently been challenged by Campbell (2000, p. 3). He states that "The proportion of seigniorial products actually accounted for by labour services may consequently have been as little as 8%. It was as employers rather than coercers of labour that lords were, therefore, most significant. In fact, lords increasingly substituted hired labour since it was better motivated and incurred lower supervision costs". However, this does not mean that these workers were necessarily wage labourers in the modern sense, devoid of other means of subsistence or paid in cash.⁹

During the eleventh and twelfth centuries there were pressures on this agricultural economy. First, trade increased with a greater demand for luxury rather than commodity goods. Second, merchants became more important with the growth of guilds and towns. And third, the English economy gradually moved towards a money-based economy and away from the paymentsin-kind prevalent since Anglo-Saxon times. Landlords preferred the greater flexibility which money provided over labour services. Coinage provided an essential infrastructure for the efficient administration of the kingdom.

Political power

Political power in the Middle Ages was concentrated and hierarchical. Indeed, Mann comments: "Concentration of resources proved to be the key in geopolitics" (Mann, 1986, p. 440). Effectively, the king and his vassals controlled most of the power. However, compared to today there was relatively little social power to control. The king was at the top of the social pyramid; the peasants were at the bottom. The king ruled by the "grace of God". Under the contemporary notion of the state, the king was the real owner of all the land and property (of the realm) which was possessed and enjoyed by his subjects as a gift and fief from himself" (Knowles, 1941, pp. 565-566). Land was held in return for homage and military service. Government was maintained through a feudal hierarchical infrastructure, bolstered by the ideological power of the Church. For instance, at their coronations, English kings were anointed with oil (Bates, 2001, Chapter 2, p. 73). In the Middle Ages the consecration of the ruler meant that the ruler was not only outwardly changed, but also inwardly purified through the Grace of the Holy Ghost. The king gained a new status and relation with God through the Church. In granting the king consecration God had accepted him as his office bearer. This, in effect, signalled a melding of the religious and secular roles of the king. The king was ruling by divine right. It made the king dependent on the religious services rendered to him, but also created a distinct position for him that reinforced his power (Schramm, 1937, pp. 6-8).

The nature of royal power, however, was changing in the twelfth century throughout Europe, in general, but in England in particular. Anglo-Saxon England had always been advanced in terms of governance and financial administration. The Normans thus inherited an effective administrative and territorial infrastructure and an efficient communication and transportation system. However, Norman power was much more concentrated than that in Anglo-Saxon England (Hollister, 2001), "By 1150 the English state was probably the most centralised in Europe" (Mann, 1986, p. 393). The growth of financial administration and judicial power under Henry I and Henry II was unparalleled in Western Europe. Of especial importance was the role of accounting systems. "To begin with, new accounting systems appeared virtually simultaneously in state, Church, and manor. The records of Henry II themselves indicate greater logistical capacity by the state"

⁸ In this debate, sparked by a Markist economist, Robert Brenner, leading economists debate the role of agrarian class structure and economic development. Interestingly, Hilton (1985, p. 3) states that "it would seem that the gap between the opponents has much more to do with their theoretical starting points than with the evidence adduced".

⁹ I am grateful to an anonymous reviewer for this point.

(Mann, 1986, pp. 440–441).¹⁰ Although royal power was relatively limited, the king could raise taxes via the Exchequer-based accounting system for military and administrative purposes.

The universal infrastructures of power

Five infrastructures underpinned, and made possible, the accounting system. These can be conceptualised as four general infrastructures (feudalism; administrative and territorial organisation; efficient communication and transportation system; and money) and one specific infrastructure (technological).

These infrastructures did not determine the exact nature of the Exchequer system. There was no teleological inevitability about the Exchequer accounting system. However, without the other five infrastructures it would not have existed in the form that it did.

Infrastructures

General infrastructures

Ideological, enforcement, political and economic sources of power

Feudal infrastructure. Feudalism was characterised by Mann as comprising multiple interaction networks: ideological, military, political and economic power (Mann, 1986, p. 379). It provided the broad framework in which state power could be operationalised. In Mannian terms, it provides infrastructural strength, the cement which enabled English society to be governed effectively. Church and State were feudally organised. The Church's preaching supported the established feudal order.

Political and military power was entwined. The ruling class held their land from the king and rendered military service (Keeton, 1966). The feudal society consisted of a social hierarchy bound by a multiplicity of rights and obligations (for example, reliefs, wardships, and control over marriages) (Bates, 2001, Chapter 2) which reinforced royal power within an enforcement framework. As a result of this there was a chain of accountability relationships between king and barons, barons and knights, knights and peasants. This was an intensive relationship between men at different levels of society. This personal loyalty, reinforced by an oath of loyalty (Knowles, 1941), was one of the cardinal principles of society.

In Marxist terms, feudalism involved the lords extracting a surplus from the labour of the peasants. In other words, landlords were empowered at the expense of the peasants. Mann saw the greater organisational powers of the lords as the way in which this surplus was appropriated. However, Brenner (2006, p. 208) argues persuasively that "economic appropriation depends on the emergence and maintenance, ultimately by force, of different systems... of social property relations". Under feudalism, there was "both sustained economic growth and the beginning of a growth in the powers of the state, which gave a more precise judicial bite to the normative pacification of Christendom" (Mann, 1986, p. 393).

The Exchequer accounting system represented a formal, feudal accounting relationship between sheriff and king. It was used by the king to derive surplus feudal income from the shires. In such a hierarchically-based society, an accountability-based accounting system such as charge and discharge accounting was perfectly natural. Social inferiors, sheriffs, reported to their social superiors, the king and the Barons of the Exchequer. The structure of the charge and discharge process and royal authority itself were both premised upon the concept of personal accountability.

Political source of power

Administrative and territorial infrastructure. The efficient governance of the state and exercise of political power was premised upon an effective administrative and territorial organisation. "The first means of political power is territorial centralisation; states are called forth and intensified when dominant source groups, pursuing their goals, require social regulation over a confined bounded territory" (Mann, 1986, p. 521). This also made possible a workable and sophisticated accounting infrastructure.

The efficient administration of the kingdom at both the national and at the local level was dependent upon governable and accountable units: shires, hundreds and manors.¹¹ The shires and manors, in particular, formed the administrative backbone upon which the accountability of feudal England depended. They were also the mechanism by which the king ensured effective control over his far-flung territories. The hundreds, the basic assessable administrative unit of the Danegeld (an important twelfth century tax), allowed the royal fiscal powers to be exercised at the lowest micro-political levels.

An efficient bureaucracy underpinned the exercise of state power and the Royal Exchequer. This was provided in the localities by the sheriff in the shire and the reeve on the manor. The Justices in Eyre further linked the centre to the localities supervising the sheriffs. Royal authority and control was thus exercised by a network of royal appointees. Power became more controlling and intensive.

At the centre of government was the royal household staffed by a professional bureaucracy of generally clerics. A permanent state elite was set up to provide "logistical capacities for exercising autonomous power" (Mann, 1986, p. 521). Without it the accounting system would have been much less efficient. In the shires, too, literacy gradually increased. Sheriffs either had to be literate themselves, or depend upon educated individuals, to understand the written summons in Latin. When combined these elements formed an effective network of personalised control. This supported and underpinned the political source of power.

¹⁰ Mann is not quite correct in his chronology. Jones (2008b) shows the diffusion of charge and discharge accounting in the Middle Ages. Devised at the English Exchequer (ca. 1110), it appears in the Church for the first time in the late twelfth century. Its first documented use on the manors is in 1208/1209 over a century later than its first use by government.

¹¹ The manor first emerged as a grouping of hundreds (small units of land) in early Anglo-Saxon England. The manor is broadly an area of land owned by a lord of the manor, with perhaps some tenanted land rented.

Economic and political sources of power

Logistical infrastructure, An efficient communication and transportation network also underpinned an efficient, centralised governmental accounting system and the exercise of political power. It was imperative for the system to work that the king's writs were communicated swiftly and efficiently. Without the king's instructions, intensive and authoritative political control from the centre would have been much more difficult.

There was an increasing need for royal officials, in particular, Justices in Eyre and sheriffs, to travel safely and swiftly. In addition, the sheriffs physically transferred money from the shires to the Exchequer. The concept of the peace of the king's highway was part of the state's overall enforcement apparatus. London was at the centre of the road network which was a legacy from Roman times. "Nevertheless, with all its defects, the road system of medieval England provided alternative routes between many pairs of distant towns, united port and inland market, permitted regular if not always easy communication between the villages of a shire and the county town which was its head, and brought every part of the country within a fortnight's ride of London. In the last resort, it proved not inadequate to the requirements of an age of notable economic activity, and it made possible a centralisation of national government to which there was no parallel in Western Europe" (Stenton, 1936, p. 21).

Economic source of power

Monetary infrastructure. The Exchequer system was also dependent upon a national, stable and managed coinage which also enhanced economic power. On the Exchequer table monetary amounts owing and paid were represented by counters. Underpinning this were payments into and out of the lower Exchequer in coinage. This implied a nationwide system of coinage with monetary exchange, rather than payment-in-kind, being prevalent - at least in payments to, and from, the government. Only current and lawful coins were permissible (Blackburn, 1990/ 1991). The "farm" was increasingly commuted into monetary payments. This monetarisation enabled a more precise and bureaucratic approach to be adopted to the levying and recording of monetary obligations (Britnell, 2001, Chapter 3). The collection of successive gelds was premised upon an adequate supply of money.

In England, this move from an agrarian to a monetary economy was in advance of other countries in Western Europe, such as Flanders, France and Normandy (Lyon & Verhulst, 1967). The provision of a stable, abundant money supply stimulated economic production and trade. Economic growth meant that England was richer, which, in turn, boosted the amount of tax collectable.

Political, centralised control over the money supply was at the heart of English success. Henry I took ruthless measures against malpractice by moneyers and forgers, including blinding and castration (Kealey, 1972). As well as this physical disciplining and direct control over the moneyers themselves, the ways of testing and controlling monetary payments into the Exchequer became more advanced. Sound political control led to innovations in monetary policy which could be seen as attempts to overhaul the office of sheriff, improve the control of the king's revenue and tighten the methods of accounting for payments. By these methods, the authoritative and intensive nature of royal power was enhanced.

Specific infrastructure

Ideological source of power

Technological infrastructure. At the national and local level, literary and numerical skills became increasingly more important. They became new ideological norms that gradually diffused through society. They provided the technological infrastructure which underpinned the new centralised state and facilitated the exercise of political power. A key aspect of the Exchequer accounting system, for example, was the creation of written, numerical records. Indeed, Clanchy (1998) sees bureaucracy in England beginning with the Exchequer Pipe Rolls of the early twelfth century: "There is no sure evidence then, that the regular writing down of accounts, in England certainly, and probably in France and the Empire, much preceded the year 1100 (1998, p. 146). Their production necessitated the existence of a complex and sophisticated literary and numerical technology.

Clanchy (1998, p. 114) comments broadly on the rise of practical literacy in England from 1100–1307: "[T]he combination of skills required to produce these diverse artefacts of written record, ranging in medieval Europe from the expertise of the tanner and the tally-cutter to that of the book illuminator and the master in the schools, constitutes a technology". For Exchequer accounting, major technological elements comprised: skilled scribes learned in Latin and writing; the existence of accounting rolls and tallies; and the abacus. Together this technology constituted an "advance of government through the written word" (Green, 1986, p. 214).

The efficient running of the Exchequer system was dependent upon scribes (most often clerics) who could record the Pipe Rolls and also prepare the king's writs. Clanchy (1998) points out that in 1130 perhaps 300 writs were produced, and the royal output, in total, might be up to 4,500 letters. This documentary output was new in England and unique in Europe.

A perhaps unintended consequence in the growth of the letters and writs was that they were directed to individuals. As such the lines of personal accountability from monarch to royal officials (local or national) were strengthened. As Clanchy (1998, p. 66) points out: "Royal governments learned that it was possible to deal with individuals instead of communities as the Anglo-Saxons had done". These writs enhanced the political source of power of the king over his subjects (Hagger, 2004). Writs were delivered by messenger to all parts of the kingdom dealing with a wide range of financial and judicial information

Royal messengers could convey oral messages to the shires. However, these lacked the authority, complexity and reliability of written messages. Written instructions enabled for the first time in England efficient, effective and rapid control of royal officials in the shires from the centre of the kingdom. Sealed writs had three great advantages: secrecy, authenticity and portability. Secrecy in that

Political Source of Power

Accounting

their contents were hidden from the messengers. Authenticity in that the sheriffs were certain the messages originated from the king. Portability in that they could be carried quickly on horseback. Without such a system, centralised government and Exchequer accounting would have been much less efficient.

The main writing materials at the medieval Exchequer were the Pipe Roll and tallies. The Pipe Roll (or Roll) became a key feature of Exchequer organisation and of English government more generally from about the start of the twelfth century. Kept in a rough charge and discharge format, they stressed accountability. Kealey (1972, p. 58) comments: "It was not their shape that was remarkable, but the fact that they were permanent, orderly, complete, easily used records of all Exchequer receipts, expenditures and judgements; they were better registers than those of any other contemporary European government". The roll effectively underpinned the development of early accounting techniques and enhanced royal control by creating a means by which the sheriff's actions could be recorded and controlled. A new, enhanced financial discipline was enforced.

Tallies, the mainstay of everyday financial transactions both at national and local level, proved an effective and easy contemporary method of recording debts. They were also cheaper than parchment and, later on, when available paper (Baxter, 1989). Like the rolls, they proved an effective way of enhancing financial discipline and control. "Tallies were not a primitive survival from the preliterate past, but a sophisticated and practical record of numbers" (Clanchy, 1998, p. 124). Tallies underpinned Exchequer accounting.

The core purpose of the Exchequer was to calculate how much the king was owed by his subjects. The columns on the Exchequer board were set out in terms of pence; shillings; pounds; scores of pounds; then hundreds, thousands and tens of thousands of pounds. "The Exchequer makes more sense as an aid to accountability than as a help for the illiterate" (Green, 1986, p. 40). The Exchequer operated principally on the basis of addition and subtraction. Fitz Nigel (1179, p. 505) believed that the business of the Exchequer would have been impossible without the Abacus.

Linkages of the accounting infrastructure to nonaccounting infrastructures and the sources of power

These five infrastructural conditions are linked, in turn, to the four sources of power (see Fig. 2). For instance, coinage is embedded in the economic source of power whereas administrative and territorial organisation is closely associated with the political sources of power. The literary and numerical technology draws much of its existence from the ideological source of power.

Accounting and the ideological

Without the literary and numerical expertise of the Church, the Exchequer accounting system would have been less efficient. At all levels in the kingdom the king and the Church were mutually reinforcing pillars of the

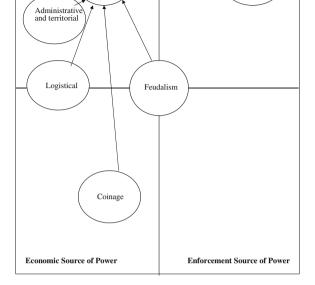


Fig. 2. Linkages of accounting infrastructure to other infrastructures and sources of power.

establishment. Leading royal officials such as Roger of Salisbury (the first justiciar and presumed originator of the Exchequer) and Richard Fitz Nigel (a treasurer of the Exchequer) became Bishops of Salisbury and London, respectively. At a lower level, scribes, often trained in the Church, provided the literary skills to operate the royal administration. The need to monitor the collection of taxation was the main motive for the emergence of a written accounting system (Clanchy, 1998). This new breed of professional administrators (Green, 1986) staffed the Exchequer and Chancellary, supervised the administrative procedures, wrote the royal writs and summons and maintained the Pipe Rolls. They ushered in, for the first time in England, the bureaucratic mass production of writs and summonses. Technically, clerics, their first loyalty was to the king's administration (Clanchy, 1998).

After 1066, Latin, the language of the Church, was the functional language of the Norman bureaucracy. The Church facilitated the spread of literacy, essential in increasing the efficiency of financial administration, royal bureaucracy and, in particular, the Exchequer. Leading royal administrative officials of the twelfth century had generally been educated by the clergy. Power and control became associated with literacy. Literally, knowledge of reading and writing was power. Literacy helped both to increase the power of the Church as well as to consolidate royal control.

Literary and numerical knowledge resided in the higher echelons of society, the Church and, particularly, with the royal household. "Starting at the top of the social hierarchy, historians have demonstrated that at least an acquain-

Ideological Source of Power

Technological

tance with Latin became increasingly widespread over the two centuries 1100-1300" (Clanchy, 1998, p. 235). Both Henry I and Henry II were considered literati (broadly literate). A pragmatic, Latin-based, literacy spread downwards through society. Latin was learnt either at monastic schools, at the royal court or increasingly at secular schools such as Paris or Oxford (Clanchy, 1998). Gradually, an education infrastructure emerged which fostered the growth of literacy. The new social norm of literacy promoted the proliferation of documentation. In turn, documentation encouraged literacy. A virtuous circle of literacy was created. Royal officials, scribes and sheriffs all needed a working level of literacy, most usually acquired through the church, to enable them to process the ever-increasing documentation which underpinned the bureaucratisation of the financial administration.

Churchmen were also at the forefront of other technological developments. Robert Bishop of Hereford in 1079 and the Cathedral school of Laon were both early advocates of the Abacus (Evans, 1979; Haskins, 1912). The earliest English roll was that of the Bishop of Canterbury in 1088. The Church, in short, provided the cement which enabled the royal bureaucracy and the Exchequer to function effectively.

However, the Exchequer system proved invaluable to the Church too. The earliest manorial accounting records, premised on the Exchequer-based accounting system, were found on ecclesiastical lands, such as the Bishopric of Winchester from about 1208.¹² In addition, monasteries were in the vanguard of the new record-keeping with many monastic Exchequers in the thirteenth century. They enabled the monasteries and bishoprics, amongst the greatest landholders in the realm, to control their financial resources more effectively.

The Church ironically, by providing personnel to operate the Exchequer, also helped to strengthen the state vis-à-vis the Church in the longer term. For as the Exchequer became more efficient the state gradually became richer until it surpassed the wealth of the Church.

In addition, the Church contributed to the pacification of the land. "On the ethical level, the Church preached consideration, decency, and charity toward all Christians: basic normative pacification, a substitute for coercive pacification normally required in previous extensive societies" (Mann, 1986, p. 381). Christian "values legitimated and thereby secured obedience to social norms by the general population" (Hobson, 2006, p. 196). At the state level, it supported the secular state by providing clerics, by preaching and by reinforcing its judicial authority. At the local level, it took action against bandits and predatory lords. Finally, at the economic level "[I]t was legitimating a highly unequal distribution of economic resources" (Mann, 1986, p. 385). In effect, the Church clothed the exploitation of the peasants with sacred qualities stressing the sacred rights and duties of the monarchy (Mann, 1986). Collectively, this 'normative' pacification ensured a more peaceful realm, increased trade, increased security and

engendered economic prosperity. In turn, this facilitated the collection by the king of the revenues due to the state.

Accounting and the enforcement

The enforcement system of the Middle Ages has been theorised as a formal and an informal system. The formal enforcement system hinged on the military power of the Normans: the castles and the knights. These had a reciprocal relationship with the accounting infrastructures. Accounting, through periodic taxes such as the Danegeld and the money from the shires, helped the king to build and maintain the castles and to contribute to the costs of war (such as ships and weapons). Taxes were, in essence, a coercive means by which the state extracted money from its population. The new Exchequer accounting system routinised and systematised the collection and distribution of both income and expenditures. Much of the tax receipts collected by the Exchequer were spent on warfare (Epstein, 2006, p. 245). The Exchequer was thus key to a state's external relations which were predicated on force and the threat of force.

Local lords were allowed "to amass the minimal coercive capacity to reproduce themselves economically by exploiting the peasantry "through" their construction of castles as centres of military control and arming themselves as mounted warriors on horseback with coats of armour" (Brenner, 2006, p. 214). The possession of these coercive resources enabled them to enforce their control, to levy exactions, extract feudal dues and taxes. As Foucault (1980, p. 4) put it: "the judicial system became, in the hands of the nobles, not only an instrument of appropriation - a means of coercion - but a direct source of revenue". There was an undercurrent of force. The presence of a network of castles and powerful local magnates also helped to maintain a peaceful realm. Peace and stability facilitated travel, including the safe passage of the king's messengers and the sheriffs. The establishment, development and efficient running of the Exchequer system were all predicated on a peaceful realm. If the sheriffs' personal security was in doubt, their biannual visits to the Exchequer would have been infeasible.

A crucial aspect of enforcement power was thus its facilitation of a peaceful realm, particularly important in an age of violence (Mann, 1986, p. 420). It is no coincidence that the Exchequer system emerged under Henry I when there was an unprecedented peace in England from 1106–1135 and in Normandy for 27 out of 29 years (Hollister, 2001). Both chroniclers and historians regard this as a result of Henry I's strong governance (Hollister, 2001, p. 484). It also meant that Henry could turn his full attention to developing an efficient administrative system. Once established the Exchequer could be passed on to his successors.

The informal royal enforcement system comprised patronage and punishment: rewarding followers and punishing transgressors. The kings exercised tremendous ecclesiastical and lay patronage. All public sector authority and offices derived from the king; the nobles and the peasantry were dependent on royal grace and favour. A permanently maintained accounting system provided a systematised way in which the king could arrange patronage more effectively and reward his followers. Grants of

¹² Earlier records now lost may have existed from 1205 or 1206 (Vincent, 1994).

land and relief of taxes are assiduously recorded in the Pipe Rolls. For example, Fitz Nigel (1179, p. 519) comments: "The Barons of the Exchequer shall pay nothing by way of tolls and customs for the victuals of their household bought in cities, towns and port".

Built into the Exchequer accounting system was a coercive system. Sheriffs were summonsed to the Exchequer. They were then bound by oath – a formal, overt and public expression of the feudal, accountability ties between subject and liege. This oath, parralled the homage ceremony in which one man became another's vassal. The oath was essentially a religious act so violations would not just be punished on earth, but also by God. In this sense, therefore, the oath was the intersection of political and ideological power (i.e., temporal reinforced by the spiritual).¹³ The oath was an important medieval device by which direct control of one individual by another was established. It was equivalent of the modern signature.¹⁴ It was a very intense way by which authoritative royal power and authority was exercised.

If the sheriffs did not attend the Exchequer, without good reason, they faced severe, formalised and escalating penalties. Fitz Nigel (1179, p. 538) in the *Dialogue of the Exchequer*, for example, states "if debts remained unpaid, then, "the latter shall be made good from thy chattels and the revenues of thy estates. Thou thyself, in the meantime, if the barons have so decreed, shall be lodged in a safe place under liberal surveillance". Sheriffs detected trying to defraud the king were also severely punished.

Accounting and the economic

A key precondition of the Exchequer-based accounting system was the monetarisation of the economy. The development of coinage and the payment of the farm in cash by the start of the twelfth century enabled the growth of a systematic monetary-based revenue collection system. The improved monetary system enhanced the economic source of power. This monetarisation enabled the English state more effectively to collect its money than other countries. This well-developed centralised English state and fiscal system enhanced both English power and prestige in Europe as well as English political structures (Barlow, 1954; Mann, 1986).

In turn, monetarisation changed the mechanisms of government. The treasury grew in importance and in sophistication. It became rooted in Winchester, the centre of English government under William the Conqueror and subsequent English kings, until the middle of the twelfth century. In addition, procedures for checking, storing and testing that the receipts were of good, sound coin became more elaborate. Gradually, simpler methods of testing coinage were replaced by assaying. This was the most scientific method introduced in Henry I's reign. It included the supervised and regularised melting of money to ensure the purity of the silver.

The growth of the economy in the Middle Ages also had more subtle interactions with the accounting system. First, an accounting and economic system based on money encouraged the minting and development of money. In turn, this increased the need to develop an accounting infrastructure of tallies, accounting rolls and the Abacus systematically to record monetary flows. Second, the growth of trade promoted a general improvement in both land and water transport. Throughout the Middle Ages, the "transition from oxen to horses, the dramatic expansion in the number of bridges, the integration of roads and rivers with an increasing sophisticated urban network, and the proliferation of markets and marketing" (Masschaele, 1993, p. 277) all encouraged the growth in transport. Those engaged in local and long-distance travel such as pilgrims or clergymen benefited as well as increasing numbers of royal officials. Roads, bridges and canals were all built and repaired under the economic pressures of trade. Economic growth provided a transport system which enabled sheriffs efficiently to travel to London and Winchester twice a year from shires all over the kingdom. For example, William de Percehay travelled from York to London (192 miles) in 6 days (Stenton, 1936, p. 17). Overall, therefore, the transport system appeared perfectly adequate for royal messengers and for the biannual visits of the sheriffs from the shires to London.

Accounting and the political

Accounting was a key mechanism by which state power was maintained and enhanced. The English state and the Exchequer accounting system were closely intertwined. As the medieval states increased in efficiency through territorial centralisation, interstate competition and warfare intensified (Hobson, 2006, p. 198). The accounting system enabled the state to raise money from royal lands and from taxes. This could be spent on the royal household, military expenditure or on governmental administration. In fact, the bulk of the state's revenue came from crown lands (Mann, 1986, p. 418) and was accounted for at the Exchequer. To collect the revenues a sophisticated financial administration system developed: the upper and lower Exchequers. The full power of the enforcement system (such as the castration of the moneyers to ensure a sound underlying coinage) was used to keep the system working.

The political organisation of the realm into shires and manors also enabled the accounting system to function efficiently. These well-established territorial and administrative units, operationalised by a network of royal officials (i.e., sheriffs and Justices in Eyre) naturally formed a convenient administrative structure for the Exchequer.

As a result of this intensive scrutiny, the sheriff became perhaps the first full "accountable subject" in history. He was also held to account at the Exchequer rather like a defendant in a courtroom witness box. There was a thorough checking of underlying documentation pertaining to his shrievalty, such as tallies and writs. The accounting system was designed to make him accountable for a preset, predetermined sum with enforcement mechanisms to ensure its deliverance. The controls were not on his day-today actions, but rather focused on his meeting expecta-

¹³ I thank an anonymous referee for this very interesting point.

¹⁴ Written records were still mistrusted as potentially being manipulatable. "Writing was converted into the spoken word by the habitual practice of reading aloud and of listening to or making an 'audit' of a statement" (Clanchy, 1998, p. 332).

tions. However, they were effective nonetheless. The norm was the expected "farm". This was preset as a standard amount to be collected and publicly accounted for at the Exchequer.

The feudal system was at the heart of the way in which the Norman political system was structured. It was based on a chain of accountability and personal loyalty that ran from peasants to king. "In medieval England, for example, relations of accountability were as indelibly inscribed as those of the social hierarchy" (Macintosh, Shearer, Thornton, & Welker, 2000, p. 19). This was a hierarchical society in which everybody knew their place based on a personal loyalty and accountability.

Feudalism was institutionalised through a commendation or ceremony of homage on oath by which a man lower in the social hierarchy bound himself to be faithful to his superior. In addition to the oath, the sheriff was held to be personally and publicly accountable for the royal finances. The sheriff rendered account for the revenues and expenses of the shire. However, his was a personal responsibility. Charge and discharge accounting was designed to acknowledge and discharge accountability (Jones, 2008a). At the start of the Exchequer hearing he was "charged" with the amounts due and at the end he was personally "discharged". The sheriff was directly responsible for any shortfalls from his own pocket - even if it was not his fault or was the debt of a subordinate who had defaulted (Booth, 1981). All of this was formally recorded in the Exchequer system. "Moreover, it shall be written thus in the annual roll concerning it: "so-and-so renders account for the 'farm' of such-and-such an 'honour'.¹⁵ In the Treasury so much; and he is quit" or "and he owes" (Fitz Nigel, 1179, p. 567).

In medieval England, there was thus a much greater association between the individual and the accounting record. To all intents and purposes, the sheriff was the "accounting record". In essence, the sheriff was a chargeable unit, a personification of the underlying accounts.

Conclusion

Mann's sources of power model (comprising ideological, economic, military and political power) was used, for the first time in an historical accounting context, to investigate how accounting was involved in the development of the twelfth century English state. Mann's model successfully demonstrated how accounting reinforces power and governance, is intertwined with the political, ideological, economic and enforcement sources of power and is interrelated with other infrastructures such as feudalism, administrative and territorial organisation, communication and transportation, coinage, and literary and numerical technology.

The main source of power in the twelfth century is shown to be political, the government. The king was at the centre of a feudal state. To govern effectively, the king needed an efficient accounting system. Ideologically, the Church supported the king in his governance providing educated clergy who helped the royal bureaucracy and Exchequer to function effectively. In terms of military power, more broadly conceptualised in this article as enforcement power, there were both formal military and informal non-militarily mechanisms through punishment and patronage. Economically, the monetarisation of the economy also enabled the Exchequer-based accounting system to develop.

Mann's system was also used to investigate the infrastructural conditions which underpinned the accounting system. Five key infrastructures were identified. First, feudalism provided a social and political structure predicated upon accountability, rights and obligations. This social system provided a firm basis for the accountability relationship between sheriff and king. Second, the territorial and administrative structure of the English realm underpinned the working of the Royal Exchequer system. A professional, educated administrative elite emerged at the start of the twelfth century which could efficiently supervise the accounting process. In addition, the basic territorial structure of the realm (shires, hundreds and manors) divided the county into accountable units administered by sheriffs and supervised by royal justices. Third, there was an adequate supply of money as payments-in-kind gave way to a monetary economy and mechanisms were established to safeguard the stability of the monetary system. Fourth, an integrated logistical system allowed reliable and efficient communication and transport. Fifth, a literary and numerical technology consisting of skilled scribes, a literate society, accounting Pipe Rolls, writing materials (parchment and tallies), the cursive script and the Abacus represented a skilful blend of available technologies and as with the Colbert period of Louis XIV's reign represented a significant period of innovation (Miller, 1990).

The accounting system used at the English Exchequer was essentially a system based on personal public accountability. Exchequer accounting was a ritualised and very public gathering of royal officials to scrutinise the public rendering of the royal revenues by the county sheriffs. "The twelfth century Exchequer was not a department but an occasion" (Hollister, 1978, p. 273). The meeting was biannual and involved a defined protocol, an Abacusbased accounting system and written records. The sheriff was ritualistically charged with the amounts owed to the king and then discharged by authorised expenses and payments. Once established as a "successful" accounting method it exemplified accounting's ability to transform organisational practice and provide a new calculative knowledge (Miller & Napier, 1993, p. 632). This appears to be an instance of a successful state producing a successful accounting system.¹⁶ Charge and discharge accounting persisted as the basis for English governments for seven centuries and quickly spread to the estates of England as manorial accounting (Jones, 2009). The accounting system of the English Exchequer was a product of its time and well-suited for its purpose which was to raise and collect the royal in-

¹⁵ An honour generally referred to the Lord's manor, usually a great fee or estate.

¹⁶ This raises the interesting research question of whether a successful state produces a successful accounting system or vice versa. A broader research study investigating this issue would be useful.

come from the county sheriffs. It was an intensive, distributive power. The king used his authority and power to monitor and control the sheriffs at a distance.

Mann's model of the sources of power thus helps to explain how the English Exchequer accounting system provided an effective way of enhancing and reinforcing the power of the English crown from the early twelfth century onwards. It also helps our understanding as to why England, rather than other areas of Europe, became the most centralised and administratively advanced state. The paper thus shows the way in which even apparently routine and technical systems of accounting may have significant social, economic and political consequences. Mann's model with its novel analytic approach which teases out different sources of power, therefore, contributes both in terms of historical understanding as well as providing a new methodological approach.

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Appendix: Chronology of Early Middle Ages

1042-1066	Edward the Confessor
1066	Norman Conquest
1086	Domesday Book
1066-1087	William I
1087-1100	William II
1100-1135	Henry I
About 1110	Exchequer system emerges
1129-1130	First Exchequer Pipe Roll
1135-1154	Stephen
1154-1189	Henry II
1179	Richard Fitz Nigel writes Dialogus de Scaccario
1189-1199	Richard I
1199-1216	John
1208-1209	First Extant Manorial Records of Bishop of Wincheste
1215	Magna Carta

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