

Purchase, Patronage, and Professions: Incentives and the Evolution of Public Office in Pre-Modern Britain

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August 2003

Prior to the 19th century virtually all European civil appointments were made through outright sale or patronage, and the offices were effectively private property. During the first half of the 19th century all of these offices converted to professional bureaucracies with salaried employees. This paper explains the choice over purchase and patronage prior to 1800, and the later transition to professions, using the NIE hypothesis that the Crown was interesting in maximizing the value of its offices, and therefore, its own treasury. This hypothesis is tested by examining three branches of the British civil service: the military, judiciary, and treasury.

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June 18, 1660: Back again to the Admiralty and so to my Lord's lodgings, where he told me that he did look after the place of the Clerk of the Acts for me. ... June 22: In the afternoon, one Mr. Watts came to me, a merchant, to offer me £500 if I would desist from the Clerk of the Acts place. ... July 30: ..the sword-bearer of London (Mr. Man) came to ask for us: with whom we sat late, discoursing about the worth of my office of Clerk of the Acts, which he hath a mind to buy and I asked four years' purchase ... August 6: This night Mr. Man offered me £1000 for my office of Clerk of the Acts, which made my mouth water; but yet I dare not take it till I speak with my Lord to have his consent.

[The Diary of Samuel Pepys, Vol. 1, pp. 177–216, 1970]

1. Introduction

Whether Pepys' patron, the 1st Earl of Sandwich, discouraged the sale of Pepys office or not we do not know, but fortunately for the English Navy Pepys remained as Clerk of the Acts for thirteen years and gained an everlasting reputation as an administrator — he also gained a considerable fortune, far in excess of the annual salary of £350 he received as Clerk, in the form of fees, prizes, and bribes.¹ Several aspects of Pepys' entries in the summer of 1660 are foreign to the modern reader. First, there is the awarding of an important administrative post to a young man, not based on merit or training, but based on loyalty to a peer during the restoration of Charles II.² Second, there is the possibility a public office, once given, could be turned into a tidy sum of £500-1000 in a matter of days. Though we know nothing of the talents of Mr. Watts and Mr. Man, no doubt they held the same professional qualifications as Pepys. Finally, there is the matter-of-fact tone of Pepys' recording of the event, which underscores the ubiquitous and everyday feature of patronage and sale of public office among western countries from the twelfth until the nine-

¹ Pepys' diary contains dozens of references to bribes unabashedly received, everything from silver plate and diamonds, to oysters and beef tongue. In dozens of other entries he expresses his desire for more. From his entries it is clear bribes and gifts were the social norm of the time.

² Although not awarded on qualifications for the job, Pepys was well aware his political favor depended on his competence. He recognizes later in his diaries "how little merit does prevail in the world, but only favour — and that for myself, chance without merit brought me in, and that diligence only keeps me so" (Pepys, Vol. 6 p. 285.)

teenth century when the system was replaced by merit, examination, salaries, and a professional bureaucracy.³

Historically, offices of the state were either sold or given as patronage. Since the number of occupations assigned this way was incredibly large, the object here is not to discuss the intricacies of each office, nor how these influenced the incentives of sale or patronage, but rather to provide a general theory for the choice over patronage, purchase, or profession for the public service during the pre-modern era, and to test this theory by examining three British public offices: the military; the judiciary; and the treasury. These three branches of the British crown represented the lion's share of public expense during the pre-modern era, and they contain enough variation to test the hypothesis of this paper: namely, that the crown was interested in extracting wealth from its ownership over public offices in the most efficient manner.⁴

Although managing public offices was often accomplished through the sale of an office, the crown was aware incompatible incentives often resulted from sale, and this reduced the ability of the office to generate income. With a failure to generate income the price of the office falls, and crown wealth falls. Patronage was used as a substitute for sale when the profit motives of office holders were not aligned well with the interests of the crown. All three branches of public service, however, involved serious transaction costs when provided through quasi-market institutions like sale or patronage. Thus when the crown's costs of monitoring its servants began to fall in the 18th century, a system of professional bureaucracy arose and public service came under the direct control of the government.

³ The transition was complete in all practical senses by the mid 19th century. However, small pockets of patronage and purchase remained longer. Indeed, in France the practice of selling offices did not completely end until 1998 when entry into the EU forced the termination of the sale of offices for notaries and auctioneers (Doyle pp. 316–317). Although it is common to speak of “patronage” appointments today, the similarity with the pre-modern era is mostly in name only.

⁴ Generally speaking, economists have ignored the fact that “public” goods were historically provided through private enterprise. Notable exceptions include attention to “tax farms” (Kindleberger, 1993), and lighthouses (Coase, 1974).

An efficiency theory of purchase and patronage stands in contrast to virtually everything written on the subject. Throughout its history, the practice of selling offices was criticized by contemporaries both within and outside of government.⁵ Historians have tended to agree with the contemporary critics of sale of public office, and have mostly described it as a desperate effort to generate revenue or as a form of outright corruption.⁶ And yet the practice continued for hundreds of years.

⁵ According to one Spanish contemporary:

Why should anybody be willing to buy for several thousand ducats an office of councillor to which on a salary of 2000 or 3000 marevedis was attached? ... the purchaser wanted ... to send his cattle into the common grounds ... to sell his bad wine as good wine ... to occupy the waste grounds ... to disobey any rule or convention ... Also to take the first seat at public ceremonies and to usurp an honor which belongs to somebody else.

[Swart, p. 26, 1949]

Voltaire, despite having held office at one time himself, was no fan of the practice.

The comptroller at that time was a Siennese peasant, by name Particelli Emeri, whose mind was even lower than his birth, and whose pomp and dissoluteness aroused the whole country's indignation. This man invented burdensome and ridiculous expedients. He created the posts of controllers of faggots, jurors for the selling of hay, king's councillors to act as criers of wine; he also sold letters of nobility.

[p. 26, 1961]

⁶ In fact, historians often refer to the pre-modern civil administration as the "Old Corruption." Parry, in his book on the sale of offices in the Spanish Indies states:

The whole government of Spain and the Indies under the later Hapsburgs became infected by a practice which, by modern standards of administration, was an intolerable abuse.

[p. 1, 1953]

Swart states:

This latter policy ["waging glorious wars or building luxurious palaces"] exhausted the treasuries of the European kings and made them lacking immediate cash. Sale of offices was one of the means they used to meet the emergency.

[p. 7, 1949]

Doyle, in his extensive study of French venality, concurs:

Doyle, in speaking to the French experience, sums up best in saying:

No serious attempt, therefore, was ever made by ministers of the *Ancien Régime* to eliminate venality from French public life. The attacks which it sustained were never more than partial means to other ends rather than steps towards comprehensive reform. For all the preambles to edicts denouncing venality as an abuse deriving solely from past financial necessities, no ministry ever conceived the strategic vision of ending it entirely.

[p. 150, 1996]

This paper views the system of allocating public offices through patronage and sale as efficient in light of the administrative constraints of the time. The goal is to explain the choice between purchase and patronage, and their eventual replacement by professional bureaucrats.

2. A Brief Outline of Purchase and Patronage in Europe

The provision of public service from the 15th to 19th century included judicial courts, public finance, sheriffs, notaries public, and military services. Today, all are provided by federal to local governments through a professional bureaucracy, with payments made through salaries. Until the 19th century, however, with one exception public offices were either sold outright or granted through acts of patronage. Most notable was that merit, at least in the way we currently think of it, was not a consideration in the appointment to public office.⁷

Among the most reliable [sources of revenue] was the sale and manipulation of offices. Office holders could be certain that if the war was prolonged the king would seek to extract money from them through a whole range of all-too-familiar expedients.

[p. 27, 1996]

⁷ Aylmer (p. 92, 1980) notes that the system of public administration in the pre-modern era had six characteristics: i) entry into office was by purchase or patronage; ii) tenure was for life or during pleasure; iii) office holders were considered to have normal property rights to the office; iv) office holders could be absent and hire deputies to do the work; v) remuneration was by fees, shares in revenues, gratuities and perquisites, rather than salaries; and vi) an office was a private interest, not a public service.

Offices were sold in all western European countries including England, where they were called “freeholds.” Once given, the office holder held a set of property rights resembling private property in land.⁸ Generally speaking once an office had been granted it could be mortgaged, sold privately or through public auction, and bequeathed to heirs upon death.⁹ The key source of income from most offices was the right to charge fees for service. Other offices collected revenues for the crown and shared the income. Some offices were simply sinecures, where payments were collected and no service was provided. In these cases the sale of office effectively acted as loans to the government. In addition to fees, the crown might pay *gages* or other emoluments as interest on the capital paid for the office. In the military commissioned officers were paid a small salary, but were given shares in the spoils of war. However, often the most important aspect to an office was the set of privileges that came with it. These privileges could have included freedom from certain taxes, access to bribes, the ability to enter nobility (ennobling offices), local prestige, and inclusion in the ruling social class. These non-pecuniary returns explain why “none of these offices brought outstanding [financial] returns, and that many were decidedly modest.”¹⁰ Similar practices were conducted in France, Spain, the

⁸ An interesting example of the extent of these rights is seen in the case of John Churchill, 1st Duke of Marlborough. In 1692 Churchill fell out of favor with both Mary and William for corresponding with the exiled James II. After resigning his position as Gentleman of the Bedchamber, “Nottingham delivered to Marlborough a written order to sell at once all of the offices he held, civil and military, and consider himself as from that date dismissed from the Army and all public employment, and forbidden the Court.” (Churchill, p. 344, 2002). Thus, even though coming close treason, the rights to offices which were mostly granted to him through the crown were respected.

⁹ As Swart states:

Offices could be disposed of as if they were cattle or real estate. They could be bought, inherited, and divided between different persons. The proprietary rights extended to the fees attached to the offices and not even the king could deprive the officials of these benefits without proper indemnification.

[p. 47, 1949]

¹⁰ Doyle, p. 201, 1996.

Netherlands, other European countries, and most of their colonies.¹¹

The sale of public office was phased out in all European countries during the 19th century. In England, the treasury ended the sale of offices (called tax farms) in the late 17th century. Royal commissions were established in 1818 to examine office sales in the judiciary and the courts were reformed throughout the century. The sale of military commissions ended in 1871, and in 1898 the last sale was made for benefices in the Anglican Church.¹²

The alternative to venal offices was patronage. Under patronage an appointment was made to an office based on the desires of the patron, and the appointee was expected to act in the interests of the patron. The most important cases of patronage were to members of the nobility. These offices were the most restricted in terms of private property rights, often not including free rights of disposal. However, the right to a great office of the crown often included the right to sell lesser offices. These lesser offices would generally be hereditary, and were either owned outright

¹¹ In no country was the sale of office more common than in France, where it permeated virtually every aspect of daily living — well beyond the civil administration. Doyle reports that the number of royal offices in France in 1515 was between 4000–5000, and this number grew to 15,000 in 1600 and to 45,780 by 1640. (Doyle, p. 11, 1996). This trend continued with the number of French offices growing over time, and the practice included all manner of professions.

And so the list stretched on, down to 1708, when no less than thirty-six different *traités* involved new offices, from King's secretaries to pig inspectors and comptrollers, from archive keepers in parlements and superior courts to fruit comptrollers, from King's advocates in every town hall to tallow inspectors.

[Doyle, p. 35, 1996]

¹² Hence Doyle notes that:

In this context, abandonment itself of the sale of offices in France was part of a wider reappraisal of the duties and responsibilities of modern states. By the late nineteenth century it [the reappraisal] had largely triumphed in the European world ...

[p. 323, 1996]

or were domainial — held as a lease from the crown. Although offices usually sold could be given as patronage appointments, there were many offices *only* given as patronage. Income from a patronage appointment came from many sources. The office itself might have a salary or allow for fees. Often the office contained the right to sell other offices, and this was a large source of income. One of the key differences with patronage versus sale, was the appointee could be removed without compensation. In fact, removal from a patronage office often resulted in social ostracism, and the threat of removal was the critical tool in policing patronage appointments.

3. Theory of Patronage and Sale

England, from 1066 to 1850, was ruled by a monarch with limited and diminishing powers. Given the monarch was never absolute, all subjects possessed property rights of varying degree: some with great power rivaling the crown, many others with very little. If the crown's goal is to maximize the value of the kingdom, then this requires the provision of a judicial system, defense, and the revenues to finance both.¹³ The king, however, will not possess any comparative advantage in the provision of such goods, and must exchange with his subjects to engage them in production. In this context, the King is analogous to an entrepreneur who enters exchanges with capitalists and workers for the production of goods. As such the King has a number of options. He can hire workers at fixed salaries and monitor their performance (a professional bureaucracy). He can appoint individuals to certain positions in exchange for “loyal” service (patronage). Or the King can sell the franchise rights to individuals for fixed or shared amounts (sale of office).

The King transferred private rights to residuals to his public servants to maximize the value of his kingdom. The form this transfer took depended on the relative costs and benefits of each method in making the incentives of the servant *compatible*

¹³ A similar view of the state is articulated in Barzel (2001). There he explains why absolute monarchs find it in their self interest to continually transfer rights to their subjects. Here I ignore this evolution and concentrate on the structure of the transfer.

with those of the crown. Getting the rules right might have been the most important act of a king. Creating proper incentives generates wealth for both the king and his subjects. This increased wealth, though it attracts invaders, will also allow the country to out compete competitors in wars.¹⁴

The outright sale of a public office has very strong incentive effects. Income from an office or a commission is generated in a variety of ways (fees, prizes, spoils of war), and an individual who earns a residual claimant income has a strong incentive to collect and otherwise earn his fees, and to do so in a cost minimizing fashion. Generally speaking, this is a benefit of sale. Income is higher when the clerk performs well or the army captain wins the battle. Higher incomes, in a competitive market for office sale, means the crown receives a higher price for the office when it is initially sold. Such a system self-selects quality individuals for the position. Individuals who fail to perform lose money, and are better off selling to the most efficient occupier of the post. Hence the sale of public office has the benefit of eliminating the measurement of qualified inputs and monitoring the output since the residual polices behavior.

The sale of a public office, however, might create a series of incentives which are incompatible with the king's goal, since office holders may engage in activities enhancing their own wealth at the expense of the crown. Every sale of office defines the margin(s) on which income is generated for the office holder. The office holder then devotes his energies to that margin(s) and this produces an outcome. If fees are inflexible or if technology changes over time, the actions of the office holder may become incompatible with the interests of the crown. Soldiers might fight too much, bribes lead to actions against the kings wishes, too many guilty verdicts might be found, trials might take too long and collusion between tax payers and collectors might lead to low revenues. Likewise, the malincentives with purchase might arise

¹⁴ A theory of growth in empire is beyond the scope of this paper. See North and Thomas (1973) for an early articulation of this hypothesis. John Brewer (1988) exploits this hypothesis in great detail, and claims Britain's ability to extract taxation and create wealth at the same time was the necessary condition for its successes in wars throughout the 18th century.

with the king. When contracts are entered into with a sovereign, the sovereign may use his power to renege on deals after specific investments have been made. The sovereign may also be able to engage in other behavior which, ex post, redistributes wealth to him. Contracting with a sovereign is risky business, and this raised the cost of allocating offices through purchase.

Prior to the 19th century, the major alternative to sale was patronage — the selection of an individual who could be trusted to perform his duty. Patronage worked during this time because it required small governments and small aristocratic leadership. When the king granted a high office to a noble it was a source of great wealth given in exchange for loyal service on behalf of the patron, and more importantly, it was a source of privilege, rights, and other social benefits. What policed the behavior of the office holder was the threat of expulsion from the aristocracy, loss of the benefits of office, and the loss of social capital if caught or suspected of acting outside the interest of the patron. By social capital is meant human capital requiring the cooperation and recognition of others in the group. Looking back from the 21st century, it is difficult to appreciate how much aristocratic life depended on this recognition. To be accused of malfeasance and cut off from society was a social death sentence. Offices assigned through patronage often did not contain the right of resale. An individual who was found untrustworthy could be punished through ostracism where all investments in sunk social capital were lost, and where the right to mitigate losses through resale did not exist.

Patronage, however, had three major costs. First, patronage was not always made on grounds of merit, and offices were more likely to be held by incompetent people than under a system of purchase or merit. Second, patronage required additional institutions for monitoring the social capital investments of the aristocracy used to police political exchanges. These ancillary institutions were sometimes general to society and other times specific to the industry.¹⁵ Third, patronage tended

¹⁵ See Allen and Reed (2003) for a detailed discussion of the role and function of patronage during

to work only when the civil administration was small. As the civil service grows, it becomes logistically impossible to use a system of patronage to any great extent, and just as impossible to police through expulsion from the elite ruling group.¹⁶

The third alternative for staffing the civil service, and the one which eventually won out, is to produce civil goods in-house through professional bureaucrats. The incentive to use professions arises from the costs of sale and patronage. The cost, however, is that salaried workers require monitoring. As the ability of the crown to monitor both the inputs used to provide public service and the output produced improves, and as the residuals provided by purchase and patronage create perverse incentives, then the incentive to move away from a decentralized administration to a professional bureaucracy increases.

The argument for the three different methods is presented in Figure 1. If there is an effective method to monitor performance, then I assume civil service is efficiently provided through professions. If such a method is not available, then the question is, do the incentives provided by sale match those of the crown. If they do, the office is offered for sale. If they don't, the office is provided through patronage.

4. Testing the Hypothesis

The critical claim being made, therefore, is that changes took place in Europe during the late 18th century which lowered the cost of monitoring public servants in house, and/or which raised the cost of staffing through purchase or patronage. Evidence for this claim comes from a close examination of three branches of the English civil service. These include the British military, the judicial system, and the treasury, which encompass the major offices at the time.

this time. They argue that dueling was used as a screening device for social capital in a patronage system. As effective as it was, dueling was costly — not the least of costs being the loss of life to many aristocrats.

¹⁶ Compared to today, the civil service during this period was quite small. Swart reports that in 18th century London, there were only 163 saleable offices for the entire city (p. 63, 1949). In 1727 the English judiciary consisted of only 17 judges. (Duman, p. 17, 1982). Johnson and Libecap (1994) make the same case for the fall of patronage in the US during the first half of the 19th century.

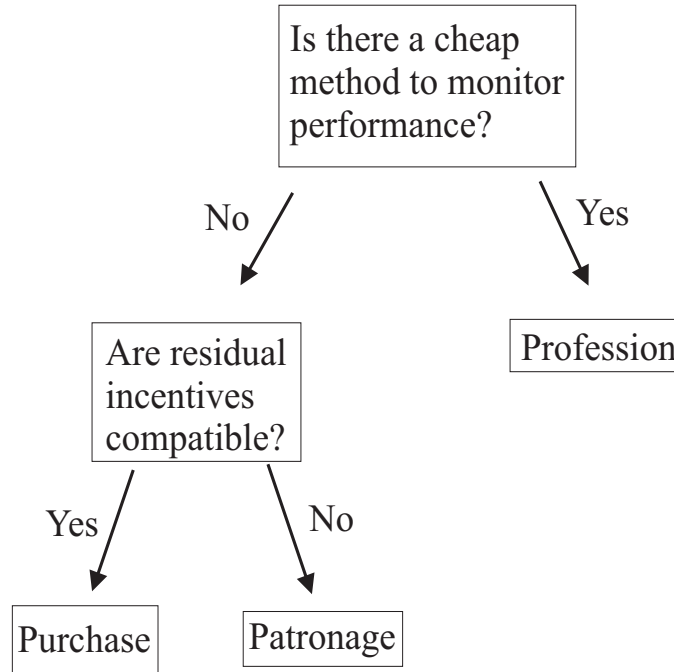


Figure 1

4.1. The Military

The British military provides a fascinating example of sale and patronage because its two branches were organized so differently. Figure 2 shows a timeline of the evolution to be explained. The army sold its commissions to officers willing to pay the most for them until 1871 when a professional officer staff was introduced. On the other hand, promotion in the navy was based on a complicated system centered around patronage until the middle of the 19th century when, again, a system of professional naval officers replaced the patronage system.

The Army

The practice of purchasing a position in an army dates back to the 13th century, and like the sale of other offices it died out in the 19th century.¹⁷ The purchase system had its beginnings when Henry II (1133–1189) began a form of taxation with

¹⁷ For a detailed analysis of the purchase of military commissions, see Allen (1998).

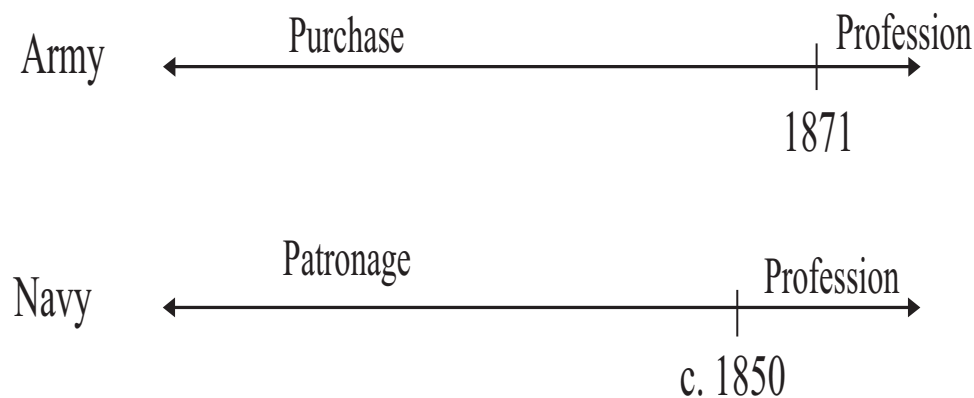


Figure 2

which he hired mercenary companies for fighting. In addition to pay, the companies received a fraction of the plunder of war, including any ransom from captured prisoners and contributions for protected property.¹⁸ Shares in these companies were determined by the capital investment of its members and were tradable. The purchase of shares by active soldiers was the institutional forerunner of the formal purchase of commissions, which fully developed in the 17th century.¹⁹

Initially these corporations were composed mostly of foreigners. Eventually, they became dominated by nationals, and by the time of the Tudors the crown was granting commissions only to landed subjects who then raised a company in service to the British King. As a standing army evolved in the 18th century, the

¹⁸ See Frey and Buhofer (1988), for a fascinating discussion of the treatment of prisoners and the rise and fall of ransom.

¹⁹ Churchill notes:

Every step in the commissioned ranks of the Army, whether gained by seniority or good service, had to be purchased. A captaincy, a majority, a colonelcy, the command of a regiment, of a troop of Life Guards; a high post in the Quartermaster-General's department, a seat upon the Board of Admiralty, even the offices of the Court and around the Royal Person, all passed to new recipients of the royal favour at a market price which varied with supply and demand like the membership of the New York Stock Exchange.

[p. 408, 2002]

practice of purchasing commissions continued. “According to the most informed estimate some two-thirds of the commissions held in the British Army at anyone time were had by purchase, the remainder having been obtained by a variety of non-purchase methods.”²⁰ All purchases were technically subject to the approval of the crown, and the King reportedly paid close attention to the granting of commissions, especially at the higher ranks.

The institution of purchased commissions meant the crown and Parliament did not have total control over army staffing. However, the government made several efforts to regulate resale, including a list of regulated prices, minimum ages, minimum times between ranks, and conditions for transfer. As with the sale of other offices, the property rights to a military commission were strong, and compensation was made when the system ended.²¹

When the incentives created through purchase are compatible with the crown, then purchase will dominate over patronage. It is only when these incentives become incompatible that patronage arises. The distinction between officers in the army and navy during the age of sail is revealing. Officers in the Army purchased their commission and promotion was based on one’s willingness to pay for a higher rank. This system worked because with the small battles of the pre-modern era, payment through military prizes in the army created no major incentive problems between the officer in charge and the crown. Prizes motivated soldiers to fight, and ensured

²⁰ Houlding, (p. 100, 1981) . These non-purchase methods might have included patronage, but most were promotions made in the heat of battle. When an officer was killed, a junior officer would be promoted on the spot to replace him. There was no wide scale use of patronage for the appointment of army officers.

²¹ Although it was illegal to sell above the regulated price, there appears no evidence that the crown made any effort to prevent it. When the time came to abolish purchase in 1871, this presented Her Majesty’s government with a dilemma: to compensate commissioned officers for only the regulated value of the commission would mean massive opposition from the Army and the House of Lords, as well as a likely defeat in the Commons; to pay for the “black market” value would be to recognize an officially illegal practice. The solution was found in establishing a Royal Commission which concluded that the centuries old “tacit acquiescence in the practice” amounted to “a virtual recognition of it by civil and military departments and authorities.” (As quoted in Bruce, p. 123). The result being full compensation.

the better soldiers were self selected to the highest positions of command. Purchase required the crown to engage in trivial amounts of monitoring because in land battles the targets are fixed. With fixed targets, it was clear whether or not an army carried out its stated mission. Armies that attacked the wrong city, would not get paid.

The Navy

Officer positions in the navy during the age of sail could hardly have been acquired more differently than in the army.²² A young teen would enter the service as a midshipman, and after a specified time could be recommended for the exam to lieutenant. If he passed and was appointed to a ship he was promoted to lieutenant, and after a period of 3 to 6 years qualified for promotion to post captain. There are two critical features to the lieutenant's position. First, unlike the officers beneath him, he could not be removed or demoted on the sole authority of the captain. Second, having qualified for captain, he could remain a lieutenant for his entire career — there was no automatic promotion. On the other hand, once a lieutenant was made a post captain (that is, his rank did not end with his commission), it was only a matter of time before he became an admiral, and if he lived long enough, admiral of the fleet — promotion above the captain's rank was automatic.

The actual process of promotion was quite complicated. Often admirals of the fleet made promotions, but the Admiralty had veto power. Unlike in the army the most important factor was patronage. Rodger, the leading authority on the organization of the British Navy during the age of sail, states:

successful patronage was the key to a successful career, the principal means by which a reliable ships company was cemented, and one of the strongest social forces within the Navy.

[Rodger, p. 124, 1986]

Rodger elsewhere states that:

²² For a detailed discussion of naval organization during the age of sail, see Allen (2002).

This power of patronage was the key to the eighteenth-century Admiralty's authority, the one element which counterbalanced weakness to command and near inability to punish.

[p. 245, 1984]

Thus the military provides an interesting case where in one branch officers owned their commissions with the right to sell them, while in the navy this was never done and appointments were made through a series of investments in learning and patronage.

Although both the navy and the army paid their officers through shares in war prizes, during the age of sail the key difference between the branches of the military was the ability to monitor how those prizes arose. Prior to the introduction of steam in the first half of the 19th century and the invention of the chronometer, it was difficult to know the exact position of ships at sea and difficult to fine tune navigation in times of battle. The combination of paying prizes of war and not having complete control over a ship's position led to issues of failure to engage enemy ships and a temptation to attack enemy merchant vessels.

Sea battles were rare, but when they occurred during the age of sail, the captain was the most vulnerable person on ship. His uniform and position on the quarter-deck meant he was visible and highly unprotected from enemy cannon and musket fire from the other ship's decks and platforms up in the masts. For this reason, most tried cases of cowardice dealt not with the crew and junior officers, but with captains, admirals, and masters.²³ Ships were constantly heading to port with mi-

²³ A master was in charge of the safety of the ship and also took a position on the quarterdeck with the captain. Rodger notes the problem quite explicitly:

The Navy ... had a real problem of cowardice .. confined to three ranks of officer, .. and was several times the cause of serious failures in action. This was in part because the three ranks in question were admirals, commanders, and masters.

[p. 244, 1986]

Elsewhere Rodger states the same thing:

Cowardice and indiscipline on the part of captains and flag officers was then, and

nor damage that could have been repaired at sea with no interruption in fighting, and in given battles, many ships simply did not engage the enemy.

In addition to avoiding battle a captain could enrich himself by attacking merchant vessels. Generally speaking prizes came from two sources: enemy merchant vessels, and enemy military ships. Sea captains were allowed to take merchant prizes because they disrupted enemy trade, however, they were not to chase merchant prizes at the expense of their stated military missions. The primary objective of the navy was generally not to interrupt foreign trade.²⁴ Capturing an enemy military ship was valuable to the captain, but there were major costs — naval ships fight back. Ships are damaged in battle, they carry small amounts of valuable cargo, and as mentioned above, a captain stood a reasonable chance of being killed during battle. All of these factors lowered the net value to a captain of engaging an enemy naval ship. At the margin, a captain would be tempted to go after a merchant ship that does not fight back and might be loaded with a very valuable cargo.

As I argue in Allen (2002), the British Navy developed a complicated system of monitoring to prevent the captain from engaging in these tactics. The cornerstone of this system was to have the lieutenant act as a watchdog on behalf of the admiralty. This involved a complicated system of promotion whereby the loyal lieutenants were rewarded to a post of captain. Had the system of purchase been used instead, the navy would have been guaranteed captains who would have avoided their duties to engage the enemy. Not only would the system of monitoring been absent, but the lieutenants willing to pay the most for a position of captain would have been the ones bent on capturing lucrative merchant vessels and avoiding battles. Thus the

was to remain for at least a century, one of the gravest weaknesses of the Navy

...

[p. 8, 1982]

²⁴ The crown had a “second navy” called the privateers, whose job it was to pursue enemy merchant ships exclusively.

system of purchase was *incompatible* with the objectives of the crown: namely to have the battle ship engage the enemy. Had the Navy not required lieutenants to keep track of their senior officers a purchase system may have arisen in the Navy. However, the need to directly monitor captains and admirals prevented this from occurring.

Purchase and patronage both disappeared in the military because the 19th century saw developments, mostly technical, which either created incompatible incentives or improved the ability to monitor soldiers and sailors. First, on the army side, developments in weapons (large cannons, rifled barrels) changed the nature of war and the methods of fighting. For the first time in history, battles became extremely large, and strategic defensive positions in battle became more important. Payment through spoils of war and prizes do not work when companies were required to hold defensive positions for the sake of the larger battle. Furthermore, changes in weapons allowed for training in ordinance and shooting. This training allowed the army to select soldiers on observable inputs, rather than relying on the self-selection process of the purchase system. With the navy, the technical innovation of steam power in conjunction with the screw propellor, drastically changed the nature of naval warfare. With the removal of the wind as a critical element in battle, captains and admirals could no longer easily excuse their failure to engage. With the development of steam, virtually every organizational feature of the navy changed, and it became a professional bureaucracy in a very short time.

4.2. The Courts

The British courts provide another interesting opportunity to test the hypothesis of this paper because the position of judge was allocated differently from other judicial offices. Figure 3 shows a timeline of methods of appointment. Interestingly, judges have always been appointed through some type of patronage, which has changed remarkably little over time. On the other hand, other court offices were

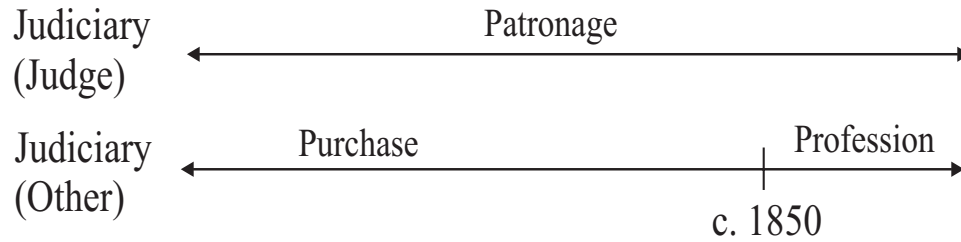


Figure 3

venal until the middle of the 19th century when those offices became professionally occupied.

Modern Courts began in medieval times where the feudal lord acted as judge and jury in disputes within his jurisdiction. The office of the court during this time was inseparable from the ownership of the land. In England the office of the court thus developed into a freehold, and as the demands for legal decisions increased, these offices were generally sold to individuals specialized in the provision of legal services.²⁵ Throughout time efforts were occasionally made to legislate these offices, and restrictions on fees and positions were put into place.²⁶ By the pre-modern era there were dozens of offices within the various courts, most with names meaningless today. For example, in 1740 there were 43 offices in the Court of King’s Bench which included the Lord Chief Justice, The King’s Coroner and Attorney, Clerk of Rule, Clerk of the Affidavits, all the way down to Tipstaffs and the Turnkeys of the King’s Bench Prison. In understanding the allocation of court offices it is important to keep separate the office of judge from all other offices in the court.

²⁵ Holdsworth, in his famous history of the common law, states that

The peculiar feature common to the history of the official staffs of the central courts is the idea that many of these offices were the freeholds or the properties of the officials.

[p. 246, 1956]

²⁶ In England these took place in 1551-1552, 1690, 1692-93, 1740, and finally a series of acts from 1818 through 1873 (Holdsworth, p. 250). As with the sale of all offices, none were examples of unfettered free markets. Though prices were used, efforts to regulate prices and practices were common.

English court judges, whether of Chancery, King’s Bench, Common Pleas, or Exchequer, *never* acquired their positions through purchase. These offices were not for sale, and the positions were filled through patronage appointments, indirectly by the King.²⁷ Patronage, in this case, did not mean judges were unqualified. Judges were chosen only from members of the bar, and almost always based on performance. Unlike the other departments of the government, “the law was a competitive profession even prior to the introduction of a system of entrance exams.”²⁸ Hence judges provide an interesting example of an office acquisition that changed relatively little from pre-modern to modern times.

Although judges were paid salaries, the bulk of their income came from fees, the sale of offices within their courts, and other sources of proprietary income.²⁹ Holdsworth states:

By the end of the seventeenth century they had asserted both as against the puisne judges and as against the crown the right to appoint to many of the offices in their courts; and, as these offices had in many cases become valuable freeholds, with either no duties to be performed, or with duties which could be performed by a deputy at a very small charge, this patronage had actually become more lucrative than all the other sources of their income put together.

[p. 255, 1956]

Duman, who examines the salaries and investments of the 208 judges in England between 1727 and 1875 finds personal estate values ranging from £2000 – £300,000, with a median value of £60,000 towards the end of the period. When including land values into the estates as well, some judges amassed vast fortunes through the effective management of their courts.³⁰

²⁷ Technically most judges were appointed by the Lord Chancellor (who was appointed by the King) in consultation with the Prime Minister and the crown. Duman notes, however, that “regardless of which official actually chose the judges, the government and the Sovereign were consulted and their judgments influenced judicial appointments. (p. 79, 1982).

²⁸ Duman, p. 29, 1982.

²⁹ Judges were often advanced to the peerage and given incomes attached to offices in the House of Lords. Also, higher court judges were given ownership over various offices outside of their particular court which generated income.

³⁰ Lord Eldon (d.1838) was the richest with an estate of £1,300,000 at his death. Though these

Other offices within the court were sold, however, and almost all of them received no official salary. The incomes of these other positions resulted from fees regulated by parliament.³¹ The Royal Commission reports of 1818-1822 list the fees and duties of all officers in the legal administration. Some positions, like the King's Coroner and Attorney, charged for over 100 different services. Others had much more limited duties. In all cases the actual duties and fees are well defined. These fees were charged to those using the court services. In the pre-modern era apprehension, investigation, and prosecution of criminals was done by the victim through service purchased at the court and market place.³²

The use of venal court offices and private police was a second best solution to the provision of judicial services. In 1730 a royal commission was formed to investigate alleged abuses found within the system. The commission completed its task in 1740, and it found the interests of office holders often conflicted with the interests of the court. Judges created redundant offices and sinecures for sale, clerks lengthened the requirements for court submissions when paid by the page, trials were lengthened and delayed by court officials paid by the number of days of the trial, and bribes were taken over fees to move cases along or even release prisoners.³³ However, the

estate values would include wealth inherited, and though judges generally came from landed aristocratic families, Duman finds that most judges were not eldest sons and that inheritance was not a major factor in final wealth levels.

³¹ The situation in France was similar. Though judges in some lower courts could purchase their office, the highest judges in the land could not. Doyle states:

A few key posts, certainly, could not be bought. At the head of the judiciary, the chancellor held appointive office. So did the forty-two councillors of state, and the prime presidents and procurators-general of sovereign courts.

[pp. 60–61, 1996]

³² For example, Davies notes “the central feature of the old system was that the main responsibility for investigating and above all prosecuting crimes rested with the injured party” (p. 153, 2002). Similarly Hay and Snider note “In England in the eighteenth century apprehension was the task of the victim of crime, aided (where he could get such help) from a parish constable or town watchman.” (p. 18, 1989).

³³ See Alymer, 1980, pp. 100-106 for details. These problem extended to the police service

system moved along and Alymer concludes:

One is tempted to suggest that the law courts ...were the homes *par excellence* of absentee sinecurists, deputies and offices with no discernibly useful function or purpose. Yet even in those branches of government there was work to be done and there were some people doing it.

[p. 106, 1980]

By 1860 all of the court offices had been eliminated and only two classes of officials were attached to the common law courts: masters and associates, both paid exclusively by fixed salary, and hired based on civil service exams. What explains this transition?

To explain the transition of court offices, it is again important to understand the transition in arrest, investigation, and prosecution of crime. In the pre-modern era this was almost exclusively done by private individuals.³⁴ By 1856 the County and Borough Police Act made it mandatory for all jurisdictions to have a police force paid for by local taxation, and all police services were transferred from private individuals to the state. With a public police force, the sale of court services were no longer required, and the court offices were themselves brought “in-house.” Yet this begs the question, what brought an end to private police and prosecution? Prior to the industrial revolution, massive urbanization, and better roads, disputes and

provided by and around the courts as well. Parish constables and watchmen were supplemented by “thief-takers”. A thief-taker was essentially a bounty hunter, and the system of rewards often created incentives incompatible with justice. Paley (pp. 301–302, 1989) tells the tale of two young men on trial in 1754 for highway robbery. It turned out the two had been unknowingly recruited by a thief-taker to take the fall in a staged robbery. The two were convicted, but before the thief-taker could collect the £120 reward, the plot was uncovered. Paley concludes “It is difficult to escape the conclusion that the major effect of the provision of £40 rewards was to provide an incentive not to the detection of crime but to the organization of thief-making conspiracies” (p. 323, 1989).

³⁴ Hay and Snyder:

Thus not only assaults, but virtually all thefts and even some murders were left to the general public. That meant that responsibility for the initial expense and entire conduct of the prosecution was thrown on the victim or his or her family.

[p. 23, 1989]

crimes were often idiosyncratic. Under these circumstances private individuals had a comparative advantage in identifying the goods stolen and investigating the crime.³⁵ As cities became larger and as stolen goods became easier to transport, the goods become more “generic” and the crown began to have a comparative advantage in the provision of justice. With the introduction of highways “many property-owners had great difficulty finding and arresting offenders against them in the days before organized professional police forces — particularly if the offenders had traveled any distance from the scene of the crime” (Philips p. 117, 1989). Davies notes that “improved transportation and growing urbanization ... made it easier to dispose of stolen goods as they could now be taken away from the scene and sold with less danger of their being traced.” ((p. 155, 2002). Thus social changes which raised the cost of private arrest and prosecution led the way to public provision of court services.

On the other hand, judges were not paid in terms of their decisions or the number of cases they heard. In terms of their judicial work they were always on a salary. The problem with judge remuneration based on some type of piece rate is it links judicial decisions to judicial incomes. Paying by the case leads to short cases, paying by the number of convictions leads to too many convictions. The importance of independent judicial decisions hardly needs elaboration. Justice requires judges to have no financial interest in the case outcome, and as a result the judges were not, and never have been, residual claimants on this dimension.

Furthermore, judges were never allowed to resell their position or otherwise decide who would replace them. Nor were they allowed to hire a deputy to sit in their place. This again stands in sharp contrast to the freehold office holders in their court. Those individuals willing to pay the most for a position on the bench, would be the very ones who should be prevented from becoming judges. Those willing to pay the most would seek to manage the court to maximize their income,

³⁵ I am grateful to Yoram Barzel for pointing out the logic of this argument.

and not necessarily provide the best legal decisions. As a result the ability to sell was restricted. This was not the case with the lower offices. Since offices offering services to private investigations were sufficiently policed by the residual claim, and since the social cost of malfeasance was lower for these positions, the holder of the office was free to sell it to the highest bidder.

4.3. The Treasury

The final example used to demonstrate the logic of civil service evolution is that of the British Treasury. Figure 4's timeline shows that, like other offices, "tax farms" were initially purchased, and evolved into professional, civil service appointments. Unlike other offices, however, the British treasury changed much earlier.



Figure 4

Tax revenues for the English crown were flat and low from 1490 to 1670.³⁶ Throughout this time parliament placed restrictions on the types of taxes the king could use. Most notably, until the Interregnum, the crown was not allowed to tax internal trade through excise taxes.³⁷ At the same time, the crown was never able to raise significant revenues on its own through customs (taxes on imported goods) and land taxes. Throughout the 17th century the reign of the Stuarts was characterized by desperate measures to secure funds: from Charles I's infamous confiscation of gold stored in the Tower, to Louis XIV secret subsidies to Charles II and James II.³⁸ As O'Brien and Hunt state: "decade after decade, the Tudor and Stuart regimes tried, but failed, to collect higher levels of taxation" (p. 67, 1999). Yet, following

³⁶ See O'Brien and Hunt, 1999.

³⁷ Ibid. p. 67.

³⁸ See Churchill, pp. 74-77.

the Glorious Revolution in 1688, tax revenues increased so much historians have labeled the following hundred years the “financial revolution.”³⁹

Interestingly, the treasury’s change in fortune corresponds to changes in its internal organization. Until the mid-16th century, tax collection was mostly performed by the crown through a hodge-podge of public agents. In 1568, Elizabeth I began a system of tax farming whereby the rights to collect taxes were leased to individuals or consortiums.⁴⁰ Contracts with tax farmers included the tax rate, location, and items to be taxed. Tax farms, unlike other offices, were not sold for life, but rather were leases subject to renewal. The owners of the tax farm operated the collection as a private business, and kept the residual as income. On the surface, tax farming seems the most reasonable case in which sale of public office might work.⁴¹ There is no particular reason why the crown should have a comparative advantage in tax collection, and competition among bidders for leases should allow the crown to extract the tax farm rents. Yet, the tax farms were a general failure. The customs tax farms, begun in the middle 16th century, were gone by 1671. The excise tax farms, begun only in 1643 to mostly tax spirits was terminated in 1672. Finally, the older hearth tax farms ended in 1683.⁴² All of these farms were replaced by an

³⁹ See Dickson (1967) for the exhaustive account. As one measure of this change, consider that in the 1660s, with an approximate population of 5.5 million, the crown had difficulty raising £2.5 million, while by 1763 with a population of 8 million there was no alarm to public expenditures of £20 million and £130 million in debt. Roseveare (p. 2, 1991), states:

It was an achievement which is not explicable purely in terms of economic growth, for it has been convincingly argued that the resources of mid-eighteenth century Britain had not grown in proportion to the demands being placed upon them.

[p. 2, 1969]

⁴⁰ A land tax also existed, but this was administered through parliament.

⁴¹ Technically the office was not sold, since it was leased. Historians, therefore, do not always consider tax farms as venal offices.

⁴² It should also be noted that the tax farms were non-existent during the Interregnum as well. O’Brien and Hunt state:

Between 1604 and 1641, the system fell into such disrepute as a result of corrup-

early form of professional bureaucracy. Certainly in the earlier years it was laced with patronage appointments and sold offices, but over the next century the staff became salaried and hired on merit, especially in the case of excise taxes where most of the increases in revenue arose. It is interesting to note all of the changes took place *before* the Glorious Revolution of 1688.

Although the incentives of a tax farmer appear aligned with the crown, serious information and moral hazard problems existed on both sides. Throughout the tax farm era, the crown struggled with its ignorance of prices and volumes of trade, and the potential for tax. The crown had only vague ideas of how much trade actually existed, how many goods were smuggled into the country, and at what price trade was taking place. The Tudor monarchs attempted to address these issues by taking oaths from merchants on volumes and prices of goods traded. They also created “books of rates” to base their taxes on. Oaths tended to be unreliable, and book rates were often out of date and irrelevant. The bottom line: the crown had to rely exclusively on the competitiveness of the bidding market to ensure a reasonable share of the rents available.⁴³

Though the crown could not know the value of its tax base, it used both implicit and explicit methods to cheat tax farmers. First, it was not beyond the Stuarts to

tion, favouritism and legal complexity that the Long Parliament swept farming away in 1643 and the state reverted to the direct collection of its own customs through out the Interregnum.

[p. 72, 1999]

⁴³ There is evidence that the crown was unable to extract the full value of the tax farms. Kindleberger notes,

The state was often far from maximizing its yield, however, as is clear from the fact that James I would award particular revenues to seven peers, who would immediately turn around and sell the taxes to merchant contractors for a net return to the peers of £27,500.

[p. 159, 1993]

change the terms of the lease midway through the contract, and the lease characteristic of tax farming, in contrast with the outright sale of other offices, exacerbated this problem.⁴⁴ Furthermore, the ability to collect customs depended on the state not engaging in wars that interrupted trade, and the provision of naval services to protect trade from piracy and enemy capture. Yet the decision to wage war and protect merchant ships rested in the hands of the king who received a fixed revenue from the tax farmers.⁴⁵

Finally, there was an information problem within the tax farm themselves. Tax farms were made up of bankers and financiers who technically loaned the king money in exchange for the tax revenues. These financiers then hired agents to do the actual collecting. As bankers, they possessed no special abilities in monitoring the agents who became notorious for colluding with the merchants and accepted bribes to reduce the amount of tax paid. The general historical consensus suggests the entire system was rife with corruption. For example,

Between 1604 and 1641, the system fell into such disrepute as a result of corruption, favoritism and legal complexity that the Long Parliament swept farming away in 1643.

[O'Brien and Hunt, p. 72, 1999]

Thus, the inability of the crown to know the value of its tax base, the moral hazard on the part of the king, and the failure of bankers to monitor collectors led to a tax system incapable of raising large sums of money.

⁴⁴ See North and Weingast for a series of examples.

⁴⁵ O'Brien and Hunt note that,

... the share of indirect taxes collected by farmers oscillated from reign to reign and between periods of war and peace. For obvious reasons, farming worked best when the kingdom's foreign trade remained free from interruptions connected with warfare.

[p. 71, 1999]

The solution for England was to create the first professional bureaucracy.⁴⁶ From the 1680s onward the lion's share of revenues came from land, customs, and excise taxes. Over time the importance of land taxes fell, and those of excise taxes increased. Customs taxes were always constrained by the ability of smugglers to avoid taxes when rates increased. The excise department became the example of an efficient government department. Brewer notes that

One reason why Hanoverian ministers were so eager to rely on excise taxes was because they knew that they would be collected by a body of men widely regarded as the most proficient revenue officers in government.

[p. 101, 1988]

What made the system so effective was a simple form of monitoring that contained strong economies of scale.⁴⁷ By 1770 the system was organized as follows. Throughout the country trained "gaugers" would assess taxes at specific establishments. These men were monitored by supervisors who would randomly inspect the gaugers work. Next came the actual tax collector, who was accompanied by a clerk and a trainee whose job it was to carry supplies and guard the money.⁴⁸ The collectors took the revenues to the central office in London. The central office was divided into four tasks: receiving funds, accounting, auditing, and inspecting excise officer journals. Thus, aside from having separation in tasks, and multiple people in charge of the money, elaborate journals were kept. Three sets of journals were kept by all officers. One was a ledger kept at the local office outlining the daily schedule, a second was a journal carried with the officer to record his actual movements, and the third was a journal of minutes left with the trader. Entries were made in ink, absolutely no alterations were allowed, and all journals were turned into the central

⁴⁶ This solution was unique to England. The continental powers clung to tax farming until the late 18th century. By the mid 1700s the English tax revenues per capita were three times those in France. See Brewer, p. 89, 1988.

⁴⁷ The following is taken from the fascinating account by John Brewer, 1988.

⁴⁸ The trainee's position resembles that of a ship's lieutenant. No doubt the trainee acted as a watchdog for the central office, and no doubt advancement was helped by the removal of a corrupt officer. The clerk's role, like that of a ship's master, provided an independent third assessment.

office every six weeks for inspection. On top of this, officers were periodically “removed” to different locations and were not allowed to serve in the location where they grew up, in order to avoid collusion with merchants. Brewer notes that as many as 41% of officers were removed in any one year.⁴⁹ Officers were required to take written and practical tests, and to complete a period of probation.⁵⁰ It took a long time to become a supervisor, and promotion was not automatic. A supervisor would earn as much as 2.5 times that of a gauger.

This complicated system was no doubt expensive, and there is no evidence tax farmers were conducting anything of similar magnitude. Indeed, the centralized checking of journals no doubt had considerable economies of scale, and these procedures would have been prohibitive for individual tax farms which were given a single port or commodity to tax. Herein lies the fundamental incompatibility of tax farming: whereas tax farming required small competitive farmers to generate competitive bids, these small farms were incapable of achieving the economies of policing to avoid the collusion among merchants and collectors. There is no question the professional system was successful in raising substantial revenues after two centuries of no growth.

What changed that allowed this financial revolution to happen? It is tempting to view the Glorious Revolution as the watershed moment. Indeed, North and Weingast (1989) argue the restraints parliament placed on the crown through the revolution and subsequent legislation prevented the crown from reneging on loans, leases, and other contracts. They argue this led to parliament’s willingness to subject itself to taxation and debt.⁵¹ As important as the Glorious Revolution was in terms of allowing an opportunity to place constraints on William and Mary, it is best seen as part of a continuous transfer of power from the Restoration onwards

⁴⁹ Brewer, p. 110, 1990.

⁵⁰ According to Brewer, “the examination was not a formality.”

⁵¹ North and Weingast see the expanse of debt and the falling interest rate throughout the next one hundred years as evidence for this. Clark (1996) rejects the North and Weingast claim, noting that the Glorious Revolution is not a significant explanatory variable.

from crown to Parliament. As noted above, the timing of changes in tax farming do not fit the watershed view of the Glorious Revolution. Changes in the way taxes were collected, and many binding restrictions on the crown occurred prior to the revolution. Had the Glorious Revolution solved a reneging problem of the crown, it seems likely the crown would have engaged in more tax farming, not less.

In-house tax collection existed prior to Elizabeth I and during the Interregnum, yet the level of tax revenue for the two centuries prior to 1688 show little change in total revenue over the entire period. The mere presence or absence of tax farming cannot explain the final success of in-house collection. The key would appear to be bookkeeping and auditing innovations that evolved from 1660 to 1670 within the context of an independent treasury. It was during this time the treasury “introduced the bookkeeping procedures which were to remain standard Treasury practice into the nineteenth century.”⁵² In 1665 an Act was passed by parliament which granted Charles II £1.25 million for the running of his government, in exchange for the treasury’s right to receive and disburse the money. Ordinary citizens who advanced money to the treasury would receive signed orders, numbered chronologically, for their repayment. This allowed parliament to back public credit rather than the personal credit of the King.⁵³ In 1667 a second act extended this principle to ordinary revenues from customs, excise, and hearth taxes. Centralizing control of finances lead to

the great blossoming of Treasury records into systematic series — Order Books, Warrant Books, Letter Books and, above all, the Minute Books which stretch in an almost unbroken series until their cessation in the mid nineteenth century. Bold ‘No. I’s’ upon the covers of the 1667 volumes still testify to this novel initiative.

p. 62, 1969]

Thus is the transfer of control from the King’s household to Parliament over finance, brought about by the unique conditions of the Restoration, required the

⁵² Brewer, p. 92, 1988.

⁵³ See Roseveare (1969, p. 61) for a detailed account.)

innovation of stringent bookkeeping to monitor performance. These monitoring innovations allowed parliament to raise taxes through a professional treasury without the “leakage” experienced by royal attempts at tax collection.

5. Summary

As has been shown, with the exception of the appointment of judges, there were radical changes from either purchase of office or patronage, to a professional bureaucracy at the end of the pre-modern era. This paper has attempted to explain both the choice between purchase and patronage, and the movement towards bureaucracy by treating the crown as having all three options to choose from. When monitoring inputs is relatively cheap, the crown opts for a professional bureaucracy, paid by salary, and hired in terms of merit. If this internal production is too expensive, the crown must opt for either sale or patronage. This decision depends on whether the incentives of private sale are compatible with the incentives of the crown in the provision of the service. If they are, the crown proceeds with sale. If they are not, the crown opts for a form of patronage. Patronage is a system of policing behavior based on investments in social capital.

Implicit in this theory is that no single system of staffing the civil service is first-best optimal. Rather, the second-best method of staffing depends on the costs and benefits of each system. Ironically, many governments today are selling operations which have been accomplished “in-house” for the past 150 years. This is expected when organizational aspects of production are conducted to maximize wealth.

This simple theory does reasonably well in explaining the transition of the civil service in Britain. In finances, it was argued that until an independent treasury was developed which could exploit the economies of scale of monitoring and credibly avoid the moral hazard problems of interfering in trade and renegeing on loans, no system of tax collection was adequate to raise funds. Thus, it is reasonable bureaucracy developed earliest in the treasury. In the military, professional soldiers

do not arrive until the 19th century, when technical innovations for both the army and navy arrived which allowed for easier monitoring of soldiers. The difference between sale of office in the army and patronage in the navy, is explained by the critical difference of the wind. The wind at sea meant captains paid by a pure system of prizes would have an incompatible incentive with the king, whereas on land this problem never arose. The judiciary provides another interesting example because for the position of judges, patronage has always been the method of appointment. In the case of judicial decisions, it is important to remove financial incentives from the process of justice. Hence, appointments were never allowed based on how much one is willing to pay for the position. Likewise, given the importance of judicial independence from the executive branch of the crown, judges would not perform well under bureaucratic conditions. It is hoped this initial inquiry will spur more detailed investigations into the pre-modern era of civil institutions.

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