

From Raider to Ruler in a Predatory State: The Case of Viking Age England

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Abstract: A gap in the literature exists concerning historical public choice approaches to predatory states. As argued theoretically by Olson (1993), an economically rational raider may shift to ruler when it pays to do so. We ask when raiders will become rulers in a predatory state by focusing on the intriguing case of Viking Age England. Here, written records do exist and they show how local English kings were not able to protect their areas against competing Viking raiders. Defense was, however, eventually supplied by the strongest military leader among the Vikings, namely Cnut the Great. He switched from raiding England with his father, Swein Forkbeard, to monopolize violence and started taxing the local citizens in return for protection against himself and other Vikings. We show how taxation was maximized through different payments and that Cnut acted economically rational when switching from raider to ruler. Producing rather than fighting was now possible due to effective defense, enforcement of property rights and institutionalized tax systems thus serving the overall economic interests of England too.

Keywords

Public choice; historical process; predatory state; raiding; taxation; defense; free-riding; England; Viking Age; Swein Forkbeard; Thorkell the Tall; Cnut the Great.

*I will that every man be entitled to his hunting in wood
and in field of his possession,
and let everyone forego my hunting.*

Cnut the Great, Cap. 81 in Charter of Canute, 1017.

1: Introduction

A gap in the literature exists concerning historical public choice approaches to predatory states and more work is needed (Piano 2018; Powell and Stringham 2009). According to Vahabi (2016), a predatory state aims in essence to maximize the revenue of the group in power rather than taking overall society into account. Thus, there is a severe risk that only the elite prospers at the expense of ordinary citizens. The predatory state will grasp as much as possible and this economically harmful redistribution may result in economic stagnation or decline.

An intriguing case of a predatory state is Viking rule of England. Earlier on, Kurrild-Klitgaard and Svendsen (2003) and Baker and Bulte (2010) have offered general public choice approaches to Viking Age. We contribute to this understanding of historical processes by providing a focused case study of Viking Age England. The specific application of public choice theory to the Viking period is, however, complicated by a significant absence of written evidence attesting to the nature of plunder, taxation and the motivation on the part of the actors involved. Eventhough the Vikings did not keep their own written records, other European countries did (Young 2016).

This is exactly why England is the most relevant example as many written records do exist. Consequently, the case of Viking activities in England from the late 990s over raiders such as Thorkell the Tall to the reigns of Cnut the Great in the first half of the eleventh century provides a rare exception and affords us the opportunity to test whether public choice theory is viable in the study of the Viking period. Eventually, the former Viking raider Cnut the Great replaces the local kings and becomes ruler after raiding England with his father Swein Forkbeard. This shift of power in Viking Age England has, to our knowledge, not been analyzed yet in a public choice framework. We focus on this specific case study providing an in-depth analysis concerning the shift from raider to ruler in a predatory state. Thus, the main research question is:

When will raiders become rulers in a predatory state? The case of Viking Age England.

Historical public choice studies are useful in many ways and can eventually increase our understanding of the evolution of political institutions and the rise of high-productivity economies in the western world such as the ‘European miracle’ (Piano 2018). In the following, we first develop a theoretical framework (Section 2). Next, we analyse the case study of Viking Age England and the shift from raider to ruler (Section 3). Finally, Section 4 gives a conclusion.

2. Theoretical framework

What makes societies move from chaos to order, from raids to violence monopolization and taxation? Mancur Olson found an answer when studying the wars of medieval China. Here the local population apparently preferred that a former raider, *Feng*, settled down in their area and became a local king even though he now started taxing people instead. Why? Because *Feng* could now, as the strongest military leader, defend the population against other raiders, especially a particularly bad one called *White Wolf* (Olson 1993, 568). Monopolizing violence excludes further raiding from other competing groups and enforcing property rights in this way can more generally pave the way for taxation and further political and institutional development (Salter 2015; Vahabi 2011). Because the time horizon of *Feng*’s ruling system lasted long enough to ensure that the accumulated value of tax earnings would by far exceed the accumulated value of possible plunder from arbitrary confiscation of tangible assets (Vahabi 2016). Basically, the deal was protection in return for tax money and a win-win situation was achieved.

Mancur Olson’s general theory on the shift from raiding to taxation may also be applied to the case of the Viking Age England. The shift from raiders to a ruling king is logical as anarchy and violence is not at all rational for a society. The victims of violence and theft not only lose what is taken, they also lose the incentive to invest and increase production in the future. Thus, production without law and order will be disturbed as already predicted by Thomas Hobbes (1651) and it is crucial to prevent plunder and unpredictability in society (Hendrickson et al. 2018). The conflict between raiders and their victims during anarchy calls for third party intervention (Powell and

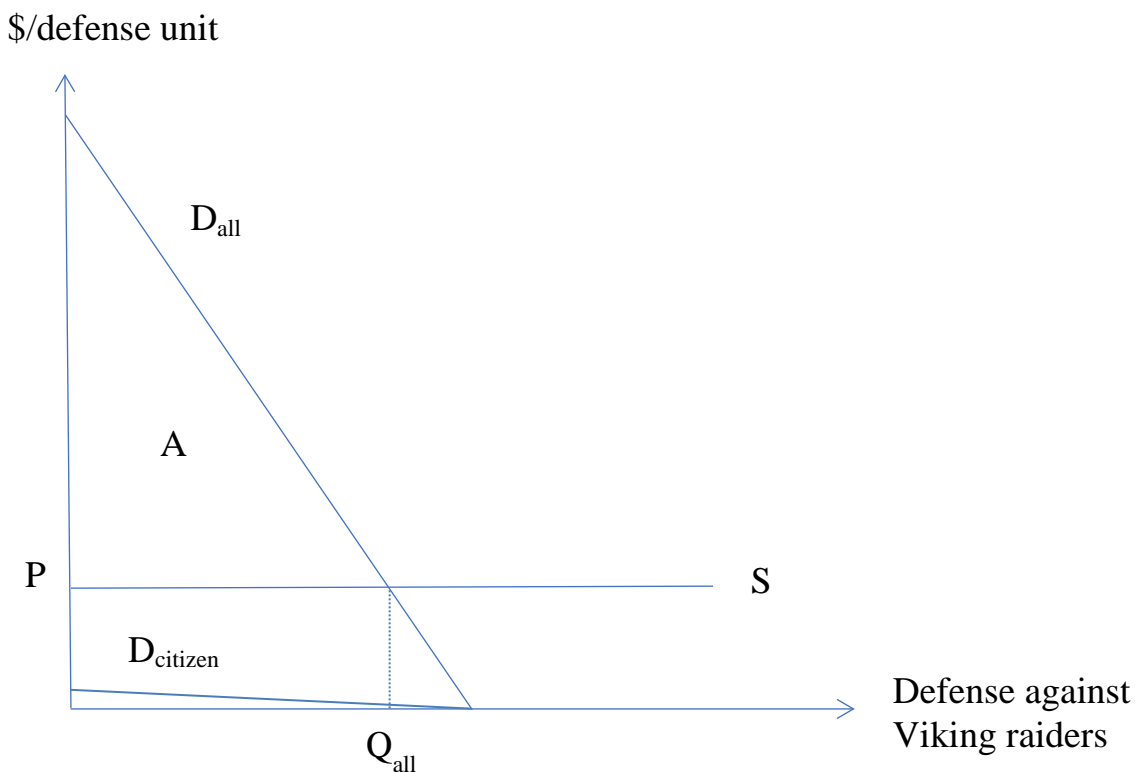
Stringham 2009; Young 2018; Baug et al. 2018). Raiders typically operate in relatively small groups with concentrated benefits from plunder whereas the victims, typically farmers, face a free-rider problem. In a given context, there may be an organized defense headed by a local English king, for example, but in case this king cannot provide the collective good of defense against Vikings, the defense system breaks down and farmers will have to undertake individual action.

So, if a society counts 1 million farmers, an individual farmer will obtain only one millionth of the benefits from fighting but must alone pay the much higher costs of undertaking such action.

Therefore, there is no net gain and a single farmer has no incentive to contribute to collective action and common defense. In this way, it is harder for large 'latent' groups to overcome the collective action problem as opposed to small 'privileged' groups (Olson 1965). A collective good means that no single citizen can be excluded from consuming the collective good. Furthermore, jointness of supply means that there is no rivalry and deterioration of the good when consumed (Tietenberg and Lewis 2011).

In other words, when providing units of security in an area such as defense against Viking raiders, all local citizens can consume this good and no one can be excluded from the benefits. Therefore, it may be rational to free ride and enjoy the benefits without contributing to the costs of providing the public good (Olson 2000). This logic leads to undersupply of the good as illustrated hypothetically in Figure 1 below.

Figure 1: Undersupply of defense due to the free-rider problem.



The horizontal axis depicts the level of defense against Viking raiders provided. The vertical axis shows the costs and benefits to local citizens in pounds from producing units of defense. Now, the optimal level of defense provision for society can be identified as an equilibrium where marginal aggregated demand (D_{all}) crosses the marginal costs of supply for all citizens (S), leading to the optimal amount of good provision (Q_{all}). Note, that because of collective good provision where everybody benefits from any amount, D_{all} is derived from vertical aggregation of individual demand curves from single citizens (in contrast to a private good and horizontal aggregation) (Svendsen 2003). The single citizen will, however, not provide any defense for a country privately as the $D_{citizen}$ curve does not cross the supply curve (S). Even though all citizens as a group would get a clear net gain A from providing the optimal amount of defense (Q_{all}), it does not happen as no single citizen will take the initiative. The Olson logic leads to the collective action problem and a free-rider problem exists. It may also be that English kings undersupply the optimal level of defense thereby only achieving a small amount of the total potential net gain A to the dissatisfaction of their subjects.

Thus, the locals are not acting collectively even though they have a shared interest in securing law and order due to the ensuing great economic benefits. A better outcome must always exist without arbitrary use of violence because the parties will be able to share at least the saved costs by avoiding the use of violence (Hillman 2019). This new monopolization of violence can, dependent on context, be further strengthened if the magnates of the country furthermore support the Viking king as he is the one who can provide stability. Thus, the switch from plunder to taxation can be accelerated even further when local support for the new Viking king prevails.

In this predatory state, the king will seek to maximize the revenue; i.e. reach the highest point on the Laffer-curve where the optimal tax rate multiplied by tax base gives the highest total revenue. The king will increase the tax rate as long as it means more tax revenue. The total revenue will rise until the optimal tax rate is achieved and then it will go down. It is now rational, however, for the king to invest some of the tax revenues in providing collective goods such as security, building roads, bridges, fighting pollution, diseases etc. which increases market activity and production in society. Tax revenue may also be based on a tax in kind, for example to stand up as a soldier or bridgebuilder, deliver horses etc. When tax revenue in this way is invested in collective goods such as defense, it is now possible to increase production and thereby increase tax collections even further over time (Olson 1993; Kurrild-Klitgaard and Svendsen 2003).

Well-defined markets, safe trading centers, infrastructure etc. are established, e.g. it is no longer allowed to confiscate other people's property arbitrarily and long-distance trade was supported as well (Sindbæk 2005; Baug et al. 2018; Svendsen and Svendsen 2016). This win-win situation for both local population and the new provider of safety makes both parties richer. Thus, the new monopolization of violence did not arise as a result of a voluntary 'social contract' but as a result of the Viking king that is able first to weaken the already existing violence monopoly and then organize a new one that he controls. Only the new king is hereafter allowed to use violence and collect taxes.

3. Analysis

3.1 *Heregeld* and *gafol*

After decades of relative peace, a new wave of viking raids on England were launched from Scandinavia towards the end of the tenth century. This period is often known as England's second Viking Age. The movements, intensity and sometimes size, of the attacks can be following with some detail in the *Anglo-Saxon Chronicle*. In 980 the first viking army to arrive in England for a generation (or more) sacked Southampton and the same year Thanet and Cheshire were ravaged by naval forces from Scandinavia.¹ The attacks continued—though not continuously—all along the southern coast in the next years following a pattern similar to that of the viking raids of the late eighth and ninth centuries: The first attacks appear to have been small and sporadic but the raids soon increased in strength as well as in frequency and from 991 the vikings began to exact payments of tribute from the Anglo-Saxons.²

These payments are often labelled Danegeld—a difficult term that has been thoroughly debated in Anglo-Saxon scholarship.³ The early eleventh century saw the emergence of a new form of tax instituted for the payment of Scandinavian mercenaries in the service of the English king—most notably Thorkell the Tall. The *heregeld* ('army-tax') was a land tax on landowners, levied per hide and collected by local officials at a fixed time each year.⁴ With this, Wareham has argued, Anglo-Saxon England transitioned beyond the domain state to become a tax state.⁵

Following the Danish conquest of England, the *heregeld* was continued by Cnut the Great and his successors as a way to finance their standing force. It was continued, initially, by Edward the Confessor but abolished in 1051. The *Anglo-Saxon Chronicle* states:

¹ ASC C, 980 and D, 981 (980).

² ASC D, 991.

³ Gillingham, John. "'The Most Precious Jewel in the English Crown': Levels of Danegeld and Heregeld in the Early Eleventh Century." *The English Historical Review* 104 (1989): 373–84; Lawson, M. K. "The Collection of Danegeld and Heregeld in the Reigns of Aethelred II and Cnut." *English Historical Review* 99, no. 393 (1984): 721–38; Lawson, M. K. "Danegeld and Heregeld Once More." *English Historical Review* 105, no. 417 (1990): 951–61; Sawyer, Peter. "Danegeld and Cnut." edited by Else Roesdahl, James Graham-Campbell, Patricia Connor, and Kenneth Pearson, 157–60. *The Vikings in England and Their Danish Homeland*. London: The Anglo-Danish Viking Project, 1981; Metcalf, David Michael. "Can We Believe the Very Large Figure of £72,000 for the Geld Levied by Cnut in 1018?" edited by Kenneth Johnsson, 165–76. *Studies in Late Anglo-Saxon Coinage*. Stockholm: Svenska numismatiska föreningen, 1990.

⁴ Simon Keynes, 'Heregeld,' in *The Blackwell Encyclopaedia of Anglo-Saxon England*, eds. Michael Lapidge et al. (Oxford: Blackwell, 2001), p. 235.

⁵ Wareham, 'Fiscal policies,' pp. 926-928.

“And in the same year King Edward abolished the army-tax which King Æthelred had imposed, that is in the thirty-ninth year after it had been instituted. That tax oppressed all the English people for as long a space of time as we have written above. That tax always came before other taxes, which were variously paid, and it oppressed people in many ways.”⁶

According to Simon Keynes, it may have been reinstated the following year.⁷ It is important to distinguish the *heregeld* from the payments of *gafol* (‘tribute’) paid to secure the peace of ravaging viking forces from 991 to 1012 (and again, but under more complex terms, in 1018). These payments appear to have been raised, primarily, through the exploitation of the dominion resources of the king as well as perhaps those of other lords (including the Church), including the sale of land and privileges, taxation, and the use of available reserves of treasure and coin—this may have included the melt-down of Church treasure.⁸ The evidence for taxation as a way of meeting the increasing payments demanded by the marauding vikings is inconclusive.⁹

It is likewise important to separate the *heregeld* from the taxation later known as Danegeld. The *heregeld* did provide the model for the development of the later Danegeld, the name of which clearly points back to the taxation by and for the Danes in the early half of the eleventh century. But the Danegeld belongs securely in a post-conquest Anglo-Norman conquest and represents a different system of assessment and collection from the Anglo-Saxon *heregeld*.¹⁰

Payments to the vikings in return for (a promise of) peace has become intrinsically associated with England’s second Viking Age and the reign of Æthelred II ‘the Unready’ in particular. But even though the *Anglo-Saxon Chronicle* describes the tribute of 991 as *ærest* ‘first’, similar payments had been extracted by the vikings of the previous century.¹¹ The payments of the late tenth and early eleventh century, however, do appear to significantly exceed the payments of the earlier period—in

⁶ “7 on þan ylcan geara alede Eadward cyng þæt heregyld þæt Æþelred cyng ær astealde, þæt wæs on þam nigon 7 þrittigoðan geara þæs þe he hit ongunnon hæfde, þæt gyld gedrehte ealle Engla þeode on swa langum fyrste swa hit bufan her awriten is, þæt wæs æfre ætforan oðrum gyldum þe man myslice geald, 7 men mid menigfealdlice drehte.”ASC D, 1052.

⁷ Keynes (1986).

⁸ Ibid.

⁹ Wareham, ‘Fiscal policies,’ p. 921.

¹⁰ Wareham, ‘Fiscal policies,’ p. 917.

¹¹ See f.x. ASC C 866 (865). Keynes, Simon. “A Tale of Two Kings: Alfred the Great and Æthelred the Unready.” *Transactions of the Royal Historical Society* 36 (1986): 203.

part due to their being collected across a united English kingdom. Some examples of payments are in 991, when the Scandinavian army took 10,000 pounds, in 1011 48,000 pounds, and finally in 1018, the fleet of Cnut the Great received 82,500 pounds.¹²

The reasons for these large and increasing payments to the vikings are often discussed from the perspective of the Anglo-Saxons.¹³ But the theoretical framework here invites us to consider the taking of tribute from the perspective of the viking invaders. The attacks follow an almost set pattern, mirrored in the early viking period, where small, sporadic plundering expeditions are followed by larger, more organised raids which result in the extraction of tribute and finally conquest. We might say that the attackers engaged in profit-maximizing behavior. This argument, of course, only deals with the actions of the vikings abroad and does not engage with the underlying motivations for leaving home to go on a raid in the first place.¹⁴

The taking of tribute demands a slightly wider time frame than the hit-and-run attack as the viking army must wait while their payment is gathered through collection of taxes and conversion of other resources. Furthermore, the viking army must be sizable enough to pose a sustained threat to the defending society during this time—it must be considered cheaper to pay off the attackers rather than meet them on the battlefield. The dilemma faced by the Anglo-Saxon elite is no more apparent than during the viking attacks of 991:

“In this year Ipswich was ravaged, and very soon afterwards Ealdorman Brihtnoth was killed at Maldon. And in that it was determined that tribute should first be paid to the Danish men because of the great terror they were causing along the coast. The first payment was 10,000 pounds. Archbishop Sigeric first advised that course.”¹⁵

¹² ASC D, 991, 1011 and 1018. See also Kurrild-Klitgaard and Svendsen (2003, 264).

¹³ Keynes (1986).

¹⁴ For this see Barrett, James H. “What Caused the Viking Age?” *Antiquity* 82, no. 317 (2008): 671–85; Sindbæk, Søren M. “Silver Economies and Social Ties: Long-Distance Interaction, Long-Term Investments – and Why the Viking Age Happened.” edited by James Graham-Campbell, Søren M. Sindbæk, and Gareth Williams, 41–59. *Silver Economies, Monetisation and Society in Scandinavia, AD 800-1100*. Aarhus: Aarhus University Press, 2011; Ashby, Steven P. “What Really Caused the Viking Age? The Social Content of Raiding and Exploration,” *Archaeological Dialogues* 22, no. 1 (2015): 89–106.

¹⁵ “*Her wæs Gypeswic gehegod, 7 æfter þæm swyðe raþe wæs Byrihtnoð ealdorman ofslagan æt Meldune. 7 on þam geare man gerædde þæt man geald ærest gafol Deniscum mannum for þam myclan brogan þe hi worhton be þam særiman, þæt wæs ærest x þusend punda. Þæne ræd gerædde ærest Syric arcebisceop*” (ASC D, 991).

The resistance of Earl Brihtnoth was since recorded in an epic poem but apart from the fame and glory nothing was won by meeting the vikings on the battle field. On the contrary, many lives were lost and it is not unreasonable to imagine that the paying of tribute must have appeared a sensible solution to a current problem. The vikings, however, returned the following years.¹⁶ But the payment of tribute combined with other measures did, in some cases, lead to the desired outcome. When the combined armies of the later Norwegian King Olaf Tryggvason and the Danish King Swein Forkbeard attacked London in the autumn of 994, King Æthelred payed them off with provisions and a tribute of 16,000 pounds. The *Anglo-Saxon Chronicle* further relates:

“And they then brought Olaf to the king at Andover with much ceremony, and King Ethelred stood sponsor to him at confirmation, and bestowed gifts on him royally. And then Olaf promised—as also he performed—that he would never come back to England in hostility.”¹⁷

Olaf died in the year 1000 but did not, as the chronicler informs us, return to England in the years before then. It is interesting to note that Swein Forkbeard, who appear to have taken part of the tribute but not the baptism (as he was already a Christian), did not return to England before 1003.¹⁸ That is not to say that England was not attacked by Scandinavian forces in the intervening years (though the years 995-996 seem to have been relatively quiet), but Swein himself does not appear to have been involved.¹⁹

3.2 Thorkell the Tall

The absence of large figures such as Swein Forkbeard left room for other players. One of these was Thorkell the Tall who first enters the *Anglo-Saxon Chronicle* in 1009.²⁰ Like those before him, Thorkell adapted a strategy of raiding combined with extraction of tribute. The people of East Kent first *frið [...] genamon* ‘made peace’ with him for the price of 3,000 pounds. He then continued to

¹⁶ ASC D, 992 and 994.

¹⁷ “7 hi ða læddon Anlaf mid miclum wurðscipe to þam cyninge to Andefron, 7 se cyning æþelred hys onfeng æt bisceopes handa, 7 him cynelice gyfode, 7 him ða Anlaf behet, eac swa gelæste, þæt næfre eft to Angelcynne mid unfryðe cuman nolde.” (ASC D. 994).

¹⁸ ASC D, 1003.

¹⁹ ASC D, 995, 996, 997, 998, 999, 1001, 1003.

²⁰ ASC C, 1009.

ravage along the southern coast but took up winter quarters back on the Thames.²¹ The attack continued throughout 1010 and through to Easter of 1012 when Thorkell's army took captive the Archbishop Ælfheah of Canterbury and extracted a payment of 48,000 pounds from across the English kingdom. But according to the *Anglo-Saxon Chronicle* the Archbishop advocated against any payment of the vikings resulting in one of the most memorable event of the period:

“They seized the bishop, and brought him to their assembly on the eve of the Sunday of the octave of Easter, which was 19 April, and they pelted him with bones and with ox-heads, and one of them struck him on the head with the back of an axe, that he sank down with the blow, and his holy blood fell on the ground, and so he sent his holy soul to God's kingdom [...] When that tribute was paid and the oaths of peace were sworn, the Danish army then dispersed as widely as it had been collected. Then 45 ships from that army came over to the king, and they promised him to defend this country, and he was to feed and clothe them.”²²

This marks a significant change in the tactics of both vikings and Anglo-Saxons at this time, though it is not unknown from earlier periods. Here we see the Anglo-Saxon king investing in a common good for the benefit of all. In order to pay for the defense services of Thorkell's army, King Æthelred instituted a new tax, the *heregeld*.²³ For the army of Thorkell the Tall the arrangement provided a steady income partially free from the uncertainties associated with the career of the raider. The employment of Thorkell the Tall can be viewed as a step between the viking raids and extortion of tribute and the Danish rule of England.

3.3 Swein Forkbeard

In 1013, perhaps in response to the threat posed by the new position of Thorkell the Tall, Swein Forkbeard arrived in England with a large fleet. Before the end of the year the English had

²¹ ASC D, 1009.

²² “*Genamon þa þone bisceop, læddon hine to heora hustinge on þone Sunnanæfen .xiii. Kalendas Maias octabas Pasche, 7 hine ðær þa oftorfedon mid banum 7 mid hrypera neata heafedum, 7 sloh hine þa an hiora mid anre eaxe ere on þæt heafod, þæt he mid þam dynte nyþær astah, 7 his halige blod on þa eorþan feoll, 7 his þa halgan sawle to Godes rice asende [...] Ða þæt gafol gelæst wæs 7 þa friðaðas asworene, þa toferde se here wide swa he gegaderod wæs. Ða bugon to þæm cyninge of þæm here fif 7 feowertig scype, 7 him beheton þæt hi woldon þisne eard healdan, 7 he hi fedan sceolde 7 scrydan.*” ASC D, 1013.

²³ See above.

surrendered to the Danish king and Æthelred had fled to Normandy with his wife and children.²⁴ Despite initial success, Swein's time in England was short. The king died on 3 February 1014.²⁵

In consequence, it is difficult to test the reign of Swein Forkbeard by the standards set out by the theory above. Swein's conquest of England appears to have been motivated, not just by the possibility of increasing his income by exchanging plunder and tribute for regular taxes—in fact, Swein himself had not been active in England since 1003.²⁶ This did not mean, however, that Swein did not take advantage of the opportunities afforded by the conquest of the highly organized administration of the Anglo-Saxon state.

3.4 Taxes in Anglo-Saxon England

The ability of the Anglo-Saxon rulers to exploit the resources of their subjects appears to have existed from a very early date and taxation in the form of rents, fines, levies and obligations must have been behind many of the achievements of the Anglo-Saxon kings.²⁷ According to Mark Ormrod, Anglo-Saxon England (as well as the later Norman and Angevin regimes) conforms to the fiscal system of the domain state. He argues:

“Far from neglecting the precocious taxative authority of the late Anglo-Saxon and Norman regimes, this categorization acknowledges both the eleventh-century Danegeld and the early thirteenth-century taxes on movable property but, by recognizing their extraordinary nature, assumes that over the period as a whole most royal revenue continued to derive from the exercise of regalian rights.”²⁸

In the Anglo-Saxon state the king and his agents exercised authority over communities with public obligations such as military service, bridge-building, and work on fortifications.²⁹ These obligations are best illustrated by the Burghal Hidage. This document – generally dated to 911-914 but

²⁴ ASC D, 1013.

²⁵ ASC D, 1014.

²⁶ ASC D, 1003.

²⁷ *The Blackwell Encyclopaedia of Anglo-Saxon England*, eds. Michael Lapidge et al. (Oxford: Blackwell, 2001), pp.

²⁸ Mark Ormrod, ‘The English State and the Plantagenet Empire, 1259-1360,’ in *The Medieval State: Essays presented to James Campbell*, eds. J.R. Maddicott and D.M. Palliser, (London: The Hambledon Press, 2000), pp. 198-199. See also Richard Bonney and Mark Ormrod, ‘Introduction,’ in *Crises, Revolutions and Self-Sustained Growth: Essays in European Fiscal History, 1130-1830*, eds. Mark Ormrod, Richard Bonney and Margaret Bonney, (Stamford: Shaun Tyas, 1998), pp. 1-23.

²⁹ See for example the Burghal Hidage below.

appearing to describe a system largely implemented in the last quarter of the ninth century during the reign of Alfred the Great – provides a list of thirty three fortified places (*burhs*) in Wessex and the number of hides (i.e. taxes) assigned for their maintenance.³⁰ In the words of Andrew Wareham: ‘King Alfred responded to the Viking threat by investing in domain sources of power, primarily by increasing labour services and public obligations. Favourable terms were offered to lords entrusted with ‘the protection of all the people’, and to peasants (*ceorls*) in encouraging them to take up the hard life of garrisoning fortified towns (*burhs*), while the church took on responsibility for urban defense.’³¹ A similar strategy is evident with the renewal of viking attacks in the early eleventh century. The *Anglo-Saxon Chronicle* informs us that ‘In this year [1008] the king ordered that ships should be built unremittingly over all England, namely a warship from 310 hides, and a helmet and corselet from eight hides.’³²

Leaving aside, for the moment, the discussion of coinage, a central element in the wealth of the king (and thereby the state) was the possession of royal lands. The provisioning of Anglo-Saxon kings in the form of food rent (or *feorm*) from royal lands can be traced back, at least, to Ine’s Laws (688-694). This edict states that the following is to be paid as food rent from ten hides: ‘10 vats of honey, 300 loaves, 12 ambers of Welsh ale, 30 of clear ale, 2 full-grown cows, or 10 wethers, 10 geese, 20 hens, 10 cheeses, an amber full of butter, 5 salmon, 20 pounds of fodder and 100 eels.’³³ Food rents, as well as military service and maintenance (and later the payment of *geld*) were all assessed on the hide.

The hide was a measure of land used as the basis of assessing the public obligations owed. The size of the hide could vary according the value of the land and its resources. A hundred hides formed the administrative unit of the hundred, with some variation across the country.³⁴ The administrative network surrounding the hidage would have been available to Cnut the Great on his ascension to the Anglo-Saxon throne. Wareham sets out the organisation as follows: ‘Royal officials such as reeves and riding men organized sustenance for the court for specified periods, most notably during the

³⁰ The Burghal Hidage, *UCL Institute of Archaeology*, <http://www.ucl.ac.uk/archaeology/research/projects/burghalhidage/hidage> [Accessed 28 January 2019].

³¹ Ibid.

³² ASC E, 1008.

³³ ‘The Laws of Ine’ in *English Historical Documents*, vol I: c. 500-1042, ed. Dorothy Whitelock, (London: Routledge, 2007), p. 407.

³⁴ F.W. Maitland, ‘Hide,’ in *The Blackwell Encyclopaedia of Anglo-Saxon England*, eds. Michael Lapidge et al. (Oxford: Blackwell, 2001), pp. 238-239; Sean Miller, ‘Hundred,’ in *The Blackwell Encyclopaedia of Anglo-Saxon England*, eds. Michael Lapidge et al. (Oxford: Blackwell, 2001), pp. 243-244.

winter, while some villas were also used as collection points for 'hundredal' revenues [that is revenues pertaining to the hundred]. The organization of a sophisticated system of food farms was linked to known royal itineraries, which during the early tenth century came to be concentrated within southern and midland England.³⁵ Grants of land from the king to his lords could convey with them the right to receive food rents from the local peasantry. The church likewise received food rent from its lands. Throughout the early medieval period food rents were gradually standardised to the point, in the eleventh century, when it became a fixed unit commutable for cash.³⁶

The royal treasury also relied on the levy of tolls. Revenues from urban centres (including rent and legal revenues as well as tolls) did not solely belong to the king. There are early examples of the collection of tolls being delegated to local lords,³⁷ and the post-Conquest Domesday Book contains multiple references to a tradition of dividing certain forms of revenue into thirds, with two-thirds belonging to the king, the final third to the local earl.³⁸ In the eleventh century the king's right to receive legal revenues or fines also appear to have been significantly extended. The laws of Cnut (written by Archbishop Wulfstan) are particularly meticulous in assessing which revenues belong to the Church and which to the king. The introduction of sheriffs around the turn of the first millennium also enabled a structural shift in the distribution of legal revenues as it enabled the king to collect revenues from across his kingdom in a scale not witnessed before.

Indirect taxation arose from royal management of coinage and coinage was needed for the payment of the *heregeld* as well as for the tributary payments made to the vikings in the years c. 991-1018. These payments are always counted in pounds of (presumably) silver (coins).³⁹ Through the process of *renovatio monetae* (or periodic re-coinage), Anglo-Saxon kings profited from the production of coins. From the mid-tenth century with the great coinage reform of King Edgar c. 973 the Anglo-Saxon monetary system must be counted among the most sophisticated in medieval Europe. A uniform design was rolled out across the kingdom's mints and guaranteed a high degree of

³⁵ Andrew Wareham, 'Fiscal policies and the institution of a tax state in Anglo-Saxon England within a comparative context,' *Economic History Review* 65:3 (2012), p. 915.

³⁶ Rosamond Faith, 'Feorm,' in *The Blackwell Encyclopaedia of Anglo-Saxon England*, eds. Michael Lapidge et al. (Oxford: Blackwell, 2001), pp. 181-182.

³⁷ Rory Naismith, *Money and Power in Anglo-Saxon England: The Southern English Kingdoms, 757-865*, (Cambridge: Cambridge University Press, 2012), p. 34.

³⁸ Tom Lambert, *Law and Order in Anglo-Saxon England*, (Oxford: Oxford University Press, 2017), p. 337.

³⁹ See ASC.

reliability and no internal barriers to coin circulation. Each coin named both the mint and the moneyer in charge of its production ensured a measure of accountability. The coin designs were changed every few years (initially six) and old coins ceased to be legal tender. They needed to be exchanged to the current type and this transaction was taxed—a rate of 15 to 25 percent has been suggested.⁴⁰ In addition, the value or weight of the coins steadily devalued across every issue and restored at the beginning of the next type. This appears to have been a deliberate measure.⁴¹

Throughout the late Anglo-Saxon period the control of coinage produced significant revenues for the king. These may have played a significant role in paying off the vikings.⁴² At the same time, the wealth of the Anglo-Saxon kingdom and the administrative systems in place to yield large amounts of revenue for king, lord and the Church were capable of being exploited by outside forces, most notable the vikings.

Returning to the brief rule of Swein Forkbeard in England, it is important to note that the Danish king quickly—and seemingly effectively—began collecting taxes from the English. Hermann's *De miraculis sancti Eadmundi* (c. 1100) refers to a certain Thurcytel who collected tax for Swein Forkbeard in early 1014 but paid back the money when he learned of the king's death. Hermann's source for this account is Thurcytel's own daughter, Ælfwyn, who came to live as a recluse at St Benet's of Holme.⁴³ Swein's ability to extract tax with participation from English agents (in this case one with an Anglo-Scandinavian name) demonstrates the Danish king's understanding of English affairs.

It is worth considering the nature of the tax exacted by Swein. The account of Hermann informs us little in this way but the *Anglo-Saxon Chronicle* provides an interesting comparison between the payments taken by the armies of Swein and that of Thorkell the Tall who had continued in the service of the English king until his exile:

⁴⁰ M.A.S Blackburn, 'Coinage,' in *The Blackwell Encyclopaedia of Anglo-Saxon England*, eds. Michael Lapidge et al. (Oxford: Blackwell, 2001), pp. 113-115; Wareham, 'Fiscal policies,' p. 925.

⁴¹ Blackburn, 'Coinage,' p. 115.

⁴² James Campbell, 'Observations on English government from the tenth to the twelfth century', in *Essays in Anglo-Saxon History*, ed. James Campbell (London: Hambledon Press, 1986), pp. 155–70, p. 138.

⁴³ Hermann, "Miracula Sancti Eadmundi," in *Ungedruckte anglo-normannische Geschichtsquellen*, ed. F. Liebermann (Strassburg: K.J. Trübner, 1879), 8; Whitelock, *Anglo-Saxon Wills*, p. 180 Thurcytel's will survives and the names of his kin shows this to be a fully-integrated Anglo-Scandinavian family. S 1528.

“Then Swein demanded full payment and provisions for his army that winter, and Thorkel demanded the same for the army which lay at Greenwich, and in spite of it all they ravaged as often as they pleased. Nothing therefore was of benefit to this nation, neither from the south nor from the north.”⁴⁴

The equation between the payments demanded by Swein and Thorkell suggests that the tax collected by Swein was the *heregeld* and not any of the other streams of taxation available to the Anglo-Saxon king. It is possible to argue then, that Swein Forbeard did not make the full transition from ravaging viking to taxating king in England. For this we must turn to his son, Cnut the Great, and his conquest of England in 1016.

3.5 Acceptance of a new ruler

In terms of the theoretical framework it may be relevant to view the Danish conquest of England from a different perspective, not as a conquest but as the acceptance of a new ruler who could provide stability and peace. In this context, the election of Cnut as king may be compared to the employment of the fleet Thorkell the Tall as a mercenary force in protection against other viking raider. That Cnut himself accepted this role is attested in a letter to the English people written during the first visit of the new English king to Denmark:

“Now that I have not spared my money as long as hostility was threatening you, I have with God’s help put an end to it with my money. Then I was informed that greater danger was approaching us than we liked at all; and then I went myself with the men who accompanied me to Denmark, from where the greatest injury had come to you, and with God’s help I have taken measures so that never henceforth shall hostility reach you from there as long as you support me rightly and my life lasts. Now I thank Almighty God for his help and his mercy, that I have so settled the great dangers which were approaching us that we need fear no danger to us from there; but [we may reckon] on full help and deliverance, if we need it.”⁴⁵

⁴⁴ “*Bead þa Swegen ful gyld 7 metsunge to his hære þone winter, 7 þurcyl bead þæt ylce to þæm here þe læg æt Grenawic, 7 butan þæm hi gehergodon swa oft swa hi woldon, þa ne dohte naþær þisse leode ne suðan ne norðan.*” ASC D 1013.

⁴⁵ “*Nu ne wandode ic na minum sceattum þa hwile þe cow unfrið on handa stod; Nu ic mid Godes fultume þæt to twæmde mid minum sceattum, þa cydde man me þæt us mara hearm to fundode þon us wel licode, 7 þa for ic me sylf mid þam mannum þe me mid foron into Denmearcon The eow mæst hearm of com, 7 þæt hæbbe mid Godes fultume*

Note, that no tribute appears to have been paid to the conquest army Cnut the Great from until the final payment to Cnut's army in 1018. This payment, however, took place after he had become king and its exact nature is consequently difficult to determine. What we do know is, that the payment was exacted to pay off the part of the fleet which had taken part in the conquest but did not stay in England as part of the new king's standing force. The *Anglo-Saxon Chronicle* reports:

'In this year the tribute was paid over all England, namely 72,000 pounds in all, apart from what the citizens of London paid, namely ten and a half thousand pounds. Then some of the army went to Denmark, and 40 ships remained with King Cnut, and the Danes and the English reached an agreement at Oxford according to Edgar's law.'⁴⁶

The law code *Cn 1018* which resulted from this meeting is a clear indication that Cnut intended to stay in England and rule as an Anglo-Saxon king—which included access to the resources of that office.

On the basis of the above it is clear that Cnut the Great was able to draw on a number of resources and streams of revenue through the office of the king. Like his Anglo-Saxon predecessors, he held royal lands, exacted tolls and fines and he upheld the newly instituted *heregeld* to pay for the upkeep of a standing force which, at least through the early years of his rule, guaranteed his long run hold on power and the effective defense of England.

3.6 Institutionalization of taxation

The *Anglo-Saxon Chronicle* which has provided rich descriptions of events and circumstances for the previous decades is remarkably silent for the reign of Cnut. To gauge the detail of his rule we must instead turn to the documentary sources, primarily laws and royal charters. The chronicle does

forene forfangen, þæt eow næfre heononforð þanon nan unfrid to ne cymð þa hwile þ ge me rihtlice healdað 7 min lif byð; Nu ðancige ic Gode Ælmihtigum his fultumes 7 his mindheortnesse, þæt ic þa mycelan mearmas þe us to fundedon swa gelogog hæbbe, þæt we ne þurfron þanon nenes hearmes us asittan; ac us to fullan fultume 7 to ahreddingge gyf us neod byð." 'Cnut's letter to the people of England,' in *English Historical Documents*, vol I: c. 500-1042, ed. Dorothy Whitelock, (London: Routledge, 2007), p. 459.

⁴⁶ "On þisum geare wæs þæt gafol gelæst ofer eall Angelcynn, þæt wæs ealles twa 7 hundseofonti þusend punda, butan þam þe seo burhwaru on Lundene geald, endlifte healf þusend punda. 7 se here þa ferde sum to Denmarcon, 7 .xl. scypa belifon mid þam cyngre Cnute. 7 Dene 7 Engle wurdon sammæle æt Oxanaforda to Eadgares lage." ASC D, 1018.

tell us, however, that upon his succession to the English throne, Cnut divided the country in four parts: 'Wessex for himself, East Anglia for Thorkel, Mercia for Eadric, and Northumbria for Eric.'⁴⁷ This move shows a combination of continuity and renewal. While on the one hand Cnut relied on the historical division of the English kingdom (reflecting some degree of insight into the workings of the Anglo-Saxon state) he also, with the exception of Eadric Streona, brought his own people to oversee regional governance in the early years of his reign.

Overlooking the documentary evidence pertaining to the reign of Cnut the Great in England demonstrates that this was a period of peace and rule of law. We have already mentioned the letter from Cnut's visit to Denmark in 1019-1020. On another journey in the year 1026-1027 the king travelled to Rome. In a letter written on his way home, he reports that he has reached a favourable agreement on trade and tolls with his Continental peers: 'I therefore spoke with the emperor and the lord pope and the princes who were present, concerning the needs of all the people of my whole kingdom, whether English or Danes, that they might be granted more equitable law and greater security on their way to Rome, and that they should not be hindered by so many barriers on the way and so oppressed by unjust tolls; and the emperor consented to my demands; and King Rodulf, who chiefly had dominion over those barriers, and all the princes confirmed by edicts that my men, whether merchants or others travelling for the sake of prayer, should go to and return from Rome in safety with firm peace and just law, free from hindrances by barriers and toll-gatherers.'⁴⁸ A later paragraph of the same letter provides some insight into the institutionalized collection of taxes and rule of law (for the king and Church both) in Cnut's English kingdom:

'I command also all the sheriffs and reeves over my whole kingdom, as they wish to retain my friendship and their own safety, that they employ no unjust force against any man, neither rich nor poor, but that all men, of noble or humble birth, rich or poor, shall have the right to enjoy just law; from which there is to be no deviation in any way, neither on account of the royal favour nor out of respect for any powerful man, nor in order to amass money for me; for I have no need that money should be amassed for me by unjust exaction [...] Now, therefore, I command and implore all my bishops and reeves of the kingdom, by the faith which you owe to God and to me, that you bring it about before I come to England that all

⁴⁷ ASC D, 1017.

⁴⁸ 'Cnut's letter of 1027,' in *English Historical Documents*, vol I: c. 500-1042, ed. Dorothy Whitelock, (London: Routledge, 2007), p. 486.

the dues, which according to ancient law we owe to God, shall be paid in full, namely plough-alkms and tithes of livestock born that same year, and the pence which we owe to St Peter at Rome, whether from the towns or the villages, and in the middle of August tithes of the fruits of the earth, and at the feast of St Martin the first fruits of the grain (which are called “church-scot” in English) to the church of the parish where each man resides. If these dues, and others like them, have not been paid in full when I come, the royal collectors are to obtain them according to the laws, sternly and without remission, from him who is in fault. Farewell.’⁴⁹

4. Conclusion

When do raiders become rulers in a predatory state? We found an answer by combining public choice theory with historical data collection in Viking Age England. Overall, the theoretical framework offered a plausible explanation suggesting that Cnut the Great, as the strongest military leader, was eventually capable of switching from raider to ruler in 1016. He did it simply because it paid better to tax in the longer run compared to plunder and arbitrary confiscation of tangible assets.

As the local kings were not able to defend their citizens against Viking attacks – for example those by Thorkell the Tall and Swein Forkbeard – Cnut offered a deal: tax payments for protection against himself and other competing Viking leaders. In this way, Cnut solved the free-rider problem that faced local citizens concerning defense issues and a win-win situation occurred between the predatory state and its citizens. Cnut maximized tax revenues and profits through a whole range of institutionalized tax payments. In this way, producing rather than fighting meant saved costs and

⁴⁹ “*Precipio etiam omnibus uicecomitibus et prepositis uniuersi regni mei, sicut meam amicitiam aut suam salutem habere uolunt, ut nulli homini nee diuiti nee pauperi uim iniustam inferant, sed omnibus tam nobilibus quam ignobilibus et diuitibus et pauperibus sit fas iusta lege potiundi, a qua nee propter fauorem regium aut alicuius potentis personam nee propter mihi congregandam pecuniam ullo modo deuietur quia nulla mihi necessitas est, ut iniqua exactione mihi pecunia congregetur [...] Nunc igitur precipio et obtestor omnes meos episcopos et regni propositus per fidem, quam Deo et mihi debetis, quatinus faciatis, ut, antequam ego Angliam ueniam, omnia debita, que Deo secundum legem antiquam debemus, sint persoluta, scilicet elemosine pro aratris et decime animalium ipsius anni procreatorum et denarii quos Rome ad Sanctum Petrum debemus sine ex urbibus siue ex uillis et mediante Augusto decime frugum et in festiuitate sancti Martini primitie seminum ad ecclesiam, sub cuius parrochia quisque deget, que Anglice ciricsceatt nominantur. Hec et his similia si, dum uenero, non erunt persoluta, regia exactio secundum leges, in quem culpa cadit, districte absque uenia comparabit. Ualete.*” Ibid., p. 487.

increased tax revenues in the future for the predatory state but also more prosperity for overall society

In perspective, public choice theory greatly simplifies a complex reality. On the other hand, it is parsimonious with strong predictive power. It basically enables us to gain new and universal insights on how to solve collective action problems based on economically rational agents. Future research should, however, investigate our claim that Cnut the Great acted solely according to economic self-interest when switching from raider to ruler in England. How well could he foretell his time horizon as ruler? Did religion, for example, play a role too? Also, the actions of other famous Viking rulers such as Rollo and William the Conqueror should be tested to find out how general the argument is, i.e. whether they also maximized profits by the monopolization of violence and taxation rather than raiding.

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