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The Dissolution of the English Monasteries: A Quantitative Investigation

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<u>Abstract</u>

In this dissertation I use the remarkably complete dataset contained within the 1535 *Valor Ecclesiasticus* to investigate key questions surrounding the 1536-9 Dissolution of the Monasteries by the English King Henry VIII. In combination with other historical data, multivariate regression analysis can help to uncover trends and connections not visible when looking solely at qualitative sources. I investigated three central issues: the role of the Dissolution in provoking the 1536-7 rebellions in England, the pattern of monastery closures and what it may reveal about the decisions of commissioners and religious residents, and the changes in economic structure that may have resulted from the rapid expropriation and secularization of land. I find significant evidence that the dissolution of small monasteries whose monks had fewer options strongly predicts the outbreak of rebellions in 1536 and 1537. I also find that monks from smaller orders were more likely to resist the closure of their houses, reaching settlements with the Crown to continue operating. Finally, I find no evidence that the Dissolution caused any long-term economic change that would distinguish ex-monastic land from land which had always been secular.

Introduction

The seizure and sale of monastic property during the Dissolution of the Monasteries by Henry VIII was the single largest transfer of wealth in English history since 1066, first from the religious orders to the crown and later to wealthy aristocrats, gentry, and court favourites like William Cavendish, one of the dissolution commissioners who used his new monastic lands to found landowning dynasty which continues to this day.¹ The sheer scale of monastic holdings— estimated by G.O. Woodward at 5-16% of all land in England—combined with the rapidity of the nationalization and privatization make this episode ideal for studying the social and economic effects of mass expropriation and secularization.²

This paper seeks to shed some quantitative light on three main questions concerning a massive, but still understudied episode of expropriation: the Dissolution of the Monasteries in early

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¹ W. G. Hoskins, The Age of Plunder: King Henry's England, 1500-1547, London : Longman, 1976, 133.

² G.W.O. Woodward, The Dissolution of the Monasteries, London: London, 1969, 4.

modern England. First, what was the pattern of the Dissolution and what could the pattern of monastic suppression indicate about the motivations of the Crown? In addition, what can the pattern of monastic survival or closure tell us about the options available to members of religious orders once the Dissolution had been announced? Second, what was the relationship between the Dissolution and the spate of rebellions that broke out across England in its immediate aftermath? Were these rebellions primarily a reaction to the closure of monasteries or were they motivated by economic grievances? Finally, what were the long-term social and economic impacts of such a massive transfer of wealth? While some of these questions have been addressed in the literature from a qualitative perspective, multivariate regression using highly detailed surveys of Church and lay property can offer a more all-encompassing view, particularly as many of the crucial elements— the true motivations of the King and his commissioners, , the deliberations of monks and nuns upon hearing of the suppression, and ultimately the decision of poor peasants to take up arms against royal officials—were never recorded for posterity. Quantitative analysis cannot answer these questions definitively, but it can certainly provide a useful adjunct to more traditional qualitative histories.

Historical Background

Causes of the Dissolution

While most scholars point toward a financial motive for the Dissolution, others see politicoreligious concerns behind the 1535 Act of Suppression.³ The Dissolution occurred in an era of financial strain, during which the King and his inner circle were continuously searching for additional revenue sources.⁴ Henry's inherited wealth was rapidly spent in Continental wars, highly unpopular taxes were levied in 1512, 1514, and 1515, and large sums were borrowed simply to pay the wages of revenue officials.⁵ Shortly after Henry VIII had made a formal break with the Roman Catholic Church over the Pope's refusal to annul Henry's marriage with Catherine of Aragon, the King was short of both allies and funds. The "French Pension," owed to previous English kings, revived by Henry VII, and augmented by war indemnities secured through the victories of his son, formed a substantial part of the income of the English Crown.⁶ Henry VIII's divorce from Catherine indirectly destroyed this source of income, simultaneously making a potential enemy of her nephew, Holy Roman Emperor Charles V—probably the single

³ Suppression of Religious Houses Act 1535, (27 Hen. 8, c. 28.)

⁴ Frederick C. Dietz, English Government Finance, 1485-1558, Urbana: University of Illinois, 1921, 98.

⁵ Ibid. 93, 97.

⁶ Ibid. 56, 100-101.

most powerful man in Europe. The very real possibility of an invasion by Imperial armies forced England to pay for a French alliance by remitting pension payments.⁷ This situation was compounded by a fall in wool subsidy revenues, a rise in the King's household expenses, and the enormous cost of putting down Scottish raids and Irish insurrections.⁸ All these factors combined in the early 1530s to create an acute shortage of coin, and desperation on the part of the King and his councillors.

A financial motive is easy for modern people to understand: the Church had an enormous amount of wealth at its disposal—some scholars estimate that as much as one third of the land in England was in Church hands⁹— and there had been occasional calls by secular authorities for the Crown to take control of Church lands as far back as 1410.¹⁰ Henry VIII and some leading nobles had themselves proposed seizures of religious property in 1524, over a decade before the Dissolution began.¹¹ Accusations of "praemunire," the unlawful assertion of papal supremacy, had already allowed Henry to extract over \pounds 100,000 from the upper hierarchy of the Church in England, but his coffers remained worryingly light.¹² There were Continental precursors to the English Dissolution as well, with many German princes massively increasing their wealth by expropriating their local monasteries beginning in the 1520s.¹³

In addition, most abbots had already taken the oath of loyalty to the King as head of the Church of England, as required by the Act of Supremacy passed in 1534. This substantially reduced the potential for religious opposition and concerns about the loyalty of the monastic houses, pointing toward a financial motive.¹⁴

However, there are indications that religious motivations may have been at least as important as financial ones. There were many monks among the leading critics of Henry's divorce and the split from Rome, and while most monks and nuns had recognized royal supremacy in religious matters, the dissenters were a key base of resistance.¹⁵

⁷ Ibid. 105.

⁸ Ibid. 103-4.

⁹ Hoskins, Age of Plunder 29.

¹⁰ Dietz, English Government Finance, 109.

¹¹ Hoskins, Age of Plunder, 123.

¹² Philip Edwards, The Making of the Modern English State, 1460-1660, Basingstoke: Palgrave, 2001, 154.

¹³ Davide Cantoni, Jeremiah Dittmar, and Noam Yuchtman, "Religious Competition and Reallocation: The Political Economy of Secularization in the Protestant Reformation," *The Quarterly Journal of Economics* 133, no. 4 (2018): 2053. ¹⁴ G.W.O. Woodward, *The Dissolution of the Monasteries*, London, 1969, 50-1.

¹⁵ G.W. Bernard, "The Dissolution of the Monasteries." History (London) 96, no. 4 (324) (2011): 395-6.

The later dissolutions of the large monasteries were often accompanied by blanket denunciations of monasticism rather than complaints against specific houses, indicating a general assault on the religious life rather than simply an attack on those who had lapsed in their duties. The Abbot of Bittlesden Abbey in Buckinghamshire was forced to confess that the monastic life

dothe most principally consyst yn certayne dome [dumb] ceremonyes and yn certayne constytutyons of the bysshoppe off Rome and other forynsycall potentates as the abbot off Cystuus [Citeaux]...and nott towght in the trew knowlege off Gods lawe by procuryng allwayes exemptyons off the bysshoppes off Rome.¹⁶

Few other such confessions survive, but all point toward a general attack on the religious life.¹⁷ The suppression of friaries, smaller religious houses whose residents relied on community charity and therefore had little or no property to their name, also points toward a general assault on monastic orders rather than a simple land grab.¹⁸ Some scholars have also pointed toward a doctrinal motivation for the Dissolution. Monasteries had historically been intercessory institutions, with houses set up to pray for the release of their founders' souls from Purgatory, a service already fading in importance by the end of the fifteenth century.¹⁹ After the King's split with Rome, this function became irrelevant as Purgatory was eliminated entirely from the doctrines of the new Church. The Dissolution thus helped to bring religious practice in England and Wales in line with the new metaphysical views of Church and Crown.²⁰

The Mechanics of the Dissolution

In 1535, commissioners working on behalf of the Crown conducted a nationwide survey which recorded the income and expenses of all Church property in England and Wales, the *Valor Ecclesiasticus*. The commissioners also produced a relatively scathing report on the behaviour of the monks and nuns in each religious house. Armed with a survey of potential victims and a justification for their expropriation, Henry VIII passed the Suppression of Religious Houses Act in 1535, slating all monasteries with incomes under £200 per year for dissolution. For simplicity, this paper will use "small houses" or "small monasteries" to refer to the houses that fell under the £200 cut-off, and "large houses" or "large monasteries" to refer to those above it. Many of

¹⁸ Woodward, *The Dissolution*, 115. Mendicant friars undertook a more socially-oriented form of religious life, centered on service to the community and reliance on charitable donations. Traditional monks were more inwardly-focused, with allegiance to their house and an emphasis on separation from the secular world.

¹⁶ Ibid. 406.

¹⁷ Ibid. 406-8.

¹⁹ R.W. Hoyle, "The Origins of the Dissolution of the Monasteries." *The Historical journal* 38, no. 2 (1995): 276. ²⁰ Peter Cunich, "The Dissolutions and Their Aftermath," in *A Companion to Tudor Britain*, ed. Robert Tittler and Norman Jones, Malden, MA: Blackwell Publishing, 2004, 221-2

the small religious houses were not actually dissolved in 1536, but were allowed to keep operating after either the payment of a "fine for continuance" or a successful petition to the crown. Only 30% of small monasteries were actually closed in 1536, with others closed in 1537 or later.²¹ Among those which were allowed to continue, only half were required to pay a fine.²²

Following a rebellion known as the Pilgrimage of Grace, discussed in more detail below, the Crown began targeting larger monasteries. While there was no formal act of suppression as there had been with the smaller monasteries, the second round of dissolution was far more complete. Monasteries were targeted individually and pressure was put on abbots to capitulate to royal officials. After the execution of a few recalcitrant abbots for the small parts they had played in the rebellion, every large monastery in England and Wales surrendered their lands and assets "voluntarily" to the Crown.²³

The Rebellions

A series of three rebellions rocked the English countryside between 1536 and 1537, with tens of thousands taking up arms in response to a wide range of grievances. The rebellions began in October 1536 in Lincolnshire, with over 10,000 people taking up arms against the royal commissioners shortly following the their arrival at Louth Park Abbey.²⁴ Rumours of planned oppression both spiritual and secular had been circulating for months, with wild claims that churches would be torn down, christenings and burials taxed, and taxes levied on all horned cattle.²⁵ The Lincolnshire Rising was crushed in a matter of days, but less than two weeks later the Pilgrimage of Grace, a far more widespread rebellion, broke out across the North of England. The rebellion eventually grew into nine well-equipped rebel forces.²⁶ Faced with such numbers, local officials made concessions to the rebels without royal approval, and the rebels dispersed.²⁷ In February of 1537, after rumours that the Crown would renege on its concessions, another rebellion was raised by Thomas Bigod. The rebels were crushed by the Crown, finally ending the rash of rebellions against the Tudor state.²⁸

²¹ Woodward, *The Dissolution*, 68.

²² Ibid. 72.

²³ Woodward, *The Dissolution*, 100-101.

²⁴ Diarmaid MacCulloch and Anthony Fletcher, *Tudor Rebellions*. Routledge, 2014, 28.

²⁵ Ibid. 28-9.

²⁶ Ibid. 33.

²⁷ Ibid. 36.

²⁸ Ibid. 49-50.

The demands of the rebels paint a complex picture of both religious and economic motivations, with both the Lincolnshire and Pilgrimage rebels targeting the Dissolution, peacetime taxation, and the Statute of Uses for repeal.²⁹ These demands form the core of an ongoing historical debate about the relative importance of economic and religious factors in motivating and sparking the rebellions. This debate is divided between scholars who emphasize economic motivations and those who see the risings as primarily religious in nature. Proponents of the economic perspective view economic grievances as the prime mover in the rebellions against the Crown. They point toward royal taxes as a key motivator: opposition to the Fifteenth and Tenth of 1534³⁰ and its accompanying Tudor subsidy³¹ figured prominently in rebel grievances, and Cromwell was denounced specifically for his fiscal extractions from the commons.³² Modifications to the tax code and fiscal innovations designed to increase revenue had provoked active and passive resistance in the past, and the tax levy of 1534 was the latest in a long pattern of Royal tinkering with taxation.³³

The amount of tax money extracted by the Crown had risen sharply in the first few decades of Henry VIII's kingship, with revenues between 1509 and 1540 totalling nearly twice that extracted during his father's entire reign.³⁴ There had been substantial resistance to taxation under both Henry VII and VIII, and minor revolts against the harsh taxation of the latter had previously met with some success.³⁵

On the religious side, the dissolution of the smaller monasteries has been identified as a cause behind the outbreak of the Lincolnshire Rebellion and the Pilgrimage of Grace, with common people rising up to protect local institutions they saw as essential to the practice of their faith. While it may be tempting to take an overly teleological view of the Reformation—one which paints the Catholic Church as a morbid survival from nightmare antiquity, broadly reviled and devoted more to simony and graft than to the lives of the faithful—recent scholars have emphasized the degree of popular religiosity and a relative lack of anticlericalism among the

³¹ The "Tudor subsidy" describes an addition to the Fifteenth and Tenth designed to bolster the flagging revenue of that essentially medieval form of taxation by adding income, debts, and wages as taxable categories. For a more detailed description see Schofield, "The Geographical Distribution of Wealth in England," 491

²⁹ Ibid. 35.

³⁰ A Fifteenth and Tenth was a standard tax levy in the late medieval and early modern period, totaling a tenth of the value of the moveable property of urban inhabitants and a fifteenth of that of those in rural areas. For a more indepth description on the tax and its shortcomings, see Bush, "Tax Reform and Rebellion," 381-2.

³² Michael Bush, "'Up for the Commonweal': The Significance of Tax Grievances in the English Rebellions of 1536," *The English Historical Review* 106, no. 419 (1991): 299, 304.

 ³³ Michael Bush, "Tax Reform and Rebellion in Early Tudor England," *History (London)* 76, no. 248 (1991): 385-6.
³⁴ Macculloch and Fletcher, *Tudor Rebellions*, 27.

³⁵ Ibid. 20-25.

common people.³⁶ Cistercian monasteries in particular are identified as very popular in the counties which saw rebellions, continuing to take in large donations and serving as a focal point for the rural religious.³⁷

Some scholars have identified the Pilgrimage and its accompanying rebellions as a crucial tipping point in Henry's attitude toward the religious houses, with the participation of local abbots convincing him that monasticism needed to be completely destroyed.³⁸ The suppression of the smaller houses may have been an earnest attempt to rectify the behaviour of the religious previously identified as sinful by the commissioners.³⁹ The commissioners had recommended transfer to larger houses so that the religious could be reformed, and this option was taken whenever possible during the first round of suppressions.⁴⁰ However, the second wave of suppression sought to dissolve all of the country's monasteries and put their property in the hands of the King. It is still unclear whether conducting the Dissolution in two rounds was a stratagem devised by the Crown to reduce monastic resistance or a series of independent decisions made in response to events on the ground.⁴¹

Consequences of the Dissolution

When a religious house had been informed of its impending dissolution, its inhabitants were ordered to maintain their goods and lands until they were transferred to the Crown.⁴² Once in royal hands, monasteries were stripped of all moveable wealth. Plate and jewels were taken to the royal treasury to feed Henry's ever-hungry coffers, bronze abbey bells were melted down into cannons, and the lead holding the roofs together was stripped and sold or used to secure loans,⁴³ exposing the building interiors to the elements.⁴⁴ Most monastic land was sold off in the few decades following the Dissolution to quickly raise funds for Henry VIII's war with France.⁴⁵ The main buyers of ex-monastic land were peers, royal civil servants, and gentry, who used the land they purchased from the crown to solidify their economic and social position in the

³⁶ Ben R. McRee, "Traditional Religion" in *A Companion to Tudor Britain*, ed. Robert Tittler and Norman Jones, Malden, MA: Blackwell Publishing, 2004, 208.

 ³⁷ Michael Carter, "'It Would Have Pitied Any Heart to See': Destruction and Survival at Cistercian Monasteries in Northern England at the Dissolution." *Journal of the British Archaeological Association* 168, no. 1 (2015): 83, 88.
³⁸ Bernard, "The Dissolution," 402.

³⁹ Hoyle, "The Origins," 294.

⁴⁰ Ibid. 297.

⁴¹ Woodward, The Dissolution, 71.

⁴² Ibid. 82.

⁴³ Dietz, English Government Finance, 153.

⁴⁴ Woodward, The Dissolution, 125-6.

⁴⁵ Patrick O'Brien and Philip Hunt. "England 1485-1815." in *The Rise of the Fiscal State in Europe, C. 1200-1815,* edited by Richard Bonney, 53-100. New York: Oxford University Press, 1999, 58.

countryside.⁴⁶ While scholars now largely see the Dissolution as accelerating social change in the English countryside rather than inaugurating it, the immediate effects on social and economic life were substantial.⁴⁷

Economic and historical literature has often taken a dim view of the macroeconomic effects of expropriation. The mere threat of expropriation has been identified as one of the key factors which held back economic growth in the pre-industrial era,⁴⁸ and among many less-developed countries today.⁴⁹ Acemoglu and Johnson have identified protection against expropriation as a more important legal foundation for growth than contract enforcement.⁵⁰ The spectre of expropriation reduces the incentive to invest in productive assets, thereby constraining future economic growth.⁵¹ However, there are cases in which the opposite may be true. Expropriation can *increase* economic efficiency, by rapidly transferring capital from unproductive to productive sectors.⁵² If there is sufficient reason for other private actors to believe that they will not themselves be subject to similar expropriation, it is possible that the mass transfer of capital can have a net positive impact on economic growth.

It is also important to note that the threat of expropriation was later removed by legal guarantees; North and Weingast famously use post-1689 England as their primary example of a state constraining its own capacity to expropriate from its citizens.⁵³ The Dissolution thus may not have represented a substantial change in the background threat of expropriation, which hung over all monarchical societies until over a century after Henry VIII. If this is true, the only substantial economic effects of this particular instance of expropriation would come from the transfer of property from religious into secular hands.

The only previous research which has used the data of the *Valor* systematically was conducted by Heldring, Vollmer, and Robinson, and investigates the Dissolution's role in both the rise of the gentry and the subsequent Industrial Revolution. Their analysis showed a statistically significant

⁴⁸ Douglass C. North and Barry R. Weingast. "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Seventeenth-Century England." *The Journal of economic history* 49, no. 4 (1989): 808.

⁴⁶ Woodward, The Dissolution, 163.

⁴⁷ Peter Cunich, "The Dissolutions and Their Aftermath" in *A Companion to Tudor Britain*, edited by Robert Tittler and Norman Jones, 221-237. Malden, MA: Blackwell Pub., 2004, 232.

⁴⁹ Daron Acemoglu and James A. Robinson, Why Nations Fail: The Origins of Power, Prosperity, and Poverty. London: Profile, 2012, 376

⁵⁰ Daron Acemoglu, and Simon Johnson, "Unbundling Institutions." *The Journal of Political Economy* 113, no. 5 (2005): 949.

⁵¹ Acemoglu and Johnson, *Why Nations Fail, 372*.

⁵² Ibid. 126-7.

⁵³ North and Weingast, "Constitutions and Commitment," 804.

link between net monastic income in each parish and both the presence of mills and the share of workers in industry in 1831.⁵⁴ The proposed channel for this relationship is the purchase of exmonastic land by members of the gentry, and this is borne out by a statistically significant relationship between monastic property and the later number of gentry at the parish level. The amount of monastic land in a given parish also has a statistically significant impact on the likelihood of parliamentary enclosure (reflecting the gentry's growing political power) and on the number of patents held by inhabitants of the parish between 1700 and 1850 (reflecting the gentry's role in innovation).⁵⁵ Their results are robust to a number of different specifications, and provide strong evidence that, at least at the parish level, the Dissolution and subsequent industrialization are causally linked.

Other studies along similar lines have been conducted on the perfect natural experiment that is the adoption of Protestantism and subsequent secularization of property in the Holy Roman Empire. Cantoni, Dittmar, and Yuchtman have argued that Protestantism gave the German princes a second option for "salvation provision," allowing them to buy religious legitimacy at a lower cost in land and treasure than they had under the Catholic monopoly. Protestant theologians were ready and willing to provide justification for the seizure of monastic property in particular, and the potential windfall proved enormously attractive to secular rulers.⁵⁶ Initially, the Continental dissolutions saw little secularization, with monastic wealth being redistributed largely to Protestant churchmen and religious social welfare. However, the price of Protestant religious legitimacy quickly fell, and princely dissolutions quickly began to resemble the later English model, with almost total secularization of monastic resources.⁵⁷ The authors find that the secularization of Church resources (both monastic and non-monastic) that accompanied the Protestant Reformation caused a statistically significant shift toward secular human and fixed capital development.⁵⁸ These results are consistent with research on the longer-term impacts of the Protestant Reformation, particularly Becker and Woessmann's findings that literacy and education were key channels through which Protestantism helped to increase economic development over the long term.⁵⁹

⁵⁴ Leander Heldring, James A. Robinson, and Sebastian Vollmer. "Monks, Gents and Industrialists: The Long-Run Impact of the Dissolution of the English Monasteries." NBER Working Paper 21450, National Bureau of Economic Research (2015): 16-18.

⁵⁵ Ibid, 24.

⁵⁶ Cantoni et al, "Religious Competition," 2053.

⁵⁷ Ibid. 2057.

⁵⁸ Ibid. 2072, 2081-2.

⁵⁹ Sascha O Becker and Ludger Woessmann, "Was Weber Wrong? A Human Capital Theory of Protestant Economic History." *The Quarterly Journal of Economics* 124, no. 2 (2009): 581-2.

Data

The Valor Ecclesiasticus

The primary dataset has been constructed from the *Valor Ecclesiasticus*, a survey of all Church property in England and Wales conducted in 1535, immediately prior to the Dissolution of the Monasteries. This document is held in the National Archives, written in Latin with income and expenses for each individual parcel of Church property recorded in Roman numerals. Due to Covid-19, I worked from a digitally-available typed copy created by a Parliamentary commission in the early 19th century.⁶⁰

The initial plan for this study was to create a dataset from the records for a selection of representative counties and produce a more descriptive survey of monastic properties. However, a digitization of the *Valor Ecclesiasticus* published this year by the National Archives allowed me to conduct a much deeper study and use quantitative methods to probe key questions in the existing historical literature. An initial version of the dataset was built by Rosalind Morris at the British National Archives but was intended to be only an educational tool.⁶¹ Morris' dataset also contained useful information such as GPS coordinates, date of dissolution, and type and order for each house. As this data was not created with scholarly research in mind, I used a random number generator to select a number of dioceses for which I had a digital copy of the *Valor Ecclesiasticus*—both the original and physical copies of the typed edition being unavailable due to Covid—and verified the accuracy of Morris' figures.

In the *Valor*, each monastery is listed with income and expenses broken down among its constituent properties, then a net income figure is generally given at the end of the section. I used these net income figures or, when they were unavailable, subtracted expenses from income myself to arrive at a yearly net value for each monastery. While the *Valor* lists the income and expenses of each house in pounds, shillings, and pence, the National Archives took only the pound values due to the enormous volume of data contained in the document. This method would therefore produce a maximum possible error of nineteen shillings and eleven pence, a minute fraction of all but the smallest monasteries. In addition, the error would tend to attenuate any effects uncovered in the regressions rather than amplifying them.

⁶⁰ Great Britain, John Caley, and Joseph Hunter, 1810, *Valor ecclesiasticus temp. Henr. VIII. Auctoritate regia institutus, Vol. I-VI.* Only Volumes I-IV are available online through Google Books.

^{61 &}quot;Discover the Dissolution," The National Archives Education Service, February 19, 2020,

https://storymaps.arcgis.com/stories/eabbb11e62b941c1bf1474a83b5ce8a1/ The dataset from which I worked was provided by Rosalind Morris of the National Archives through private email correspondence.

The verification process showed the Archives' figures to be remarkably accurate. On the county level the difference between my figures and those provided by the National Archives was below 3% in every case. After checking 20% of the dioceses in the *Valor*, there were only three individual houses for which my values and those of the National Archives varied by more than 5%: Abbotsbury Abbey, Cerne Abbey, and Combwell Priory. The portion of the original *Valor* showing the sum for Abbotsbury is missing, and the divergence (7.2%) comes from the National Archives' method of simply adding together all pound values, whereas I included shillings and pence in my total. The divergence for Cerne Abbey (10.4%) comes from the National Archives' use of a subtotal which does not include the last category of deductions. Finally, the divergence for Combwell Priory (171.2%) seems to be the result of the National Archives missing an "L" in the total line, resulting in their total of 30 while the true pound value was 80. Combwell is a small house, and the only one with a large divergence between my value and that of the National Archives, lending credibility to the Archives' figures and their validity for use in scholarly analysis. None of these three houses were placed into a different income category by the rounding errors inherent in the National Archives' methods.

Supplementary Data

For estimates of total yearly taxable income per county, I used Mark Schofield's data from *The Distribution of Medieval English Wealth*, currently hosted by the European State Finance Database. This data is crucial as it allows comparisons between secular and clerical income, without which the data from the *Valor* would be far less useful. Heldring, Vollmer, and Robinson's study used the area of each parish to calculate the density of monastic holdings as tax returns from the parish level are not available. At the county level, the availability of tax data and the wildly varying productivity and wealth per acre make Schofield's tax data a much better baseline for analysis. While these figures only account for taxable income from rents and property holdings, this makes them a perfect point of comparison to the totals from the *Valor*, drawn up through nearly the exact same process. These figures are missing totals for Cheshire, Cumbria, and Northumberland, so these counties have been excluded from the final analysis. The tax figures for all three parts of Lincolnshire and the three ridings of Yorkshire are combined into totals for Lincolnshire respectively. These figures were combined because the geographical data from Morris does not allow such fine distinctions between sub-regions.

Population estimates are drawn from a table in Stephen Broadberry's *English Medieval Population*. While the figures closest to the period under study are from 1600, given the lack of serious

plague outbreaks or substantial upheavals, they are likely similar enough to those in the mid-1500s for the current study.⁶²

The 1831 data is drawn entirely from the abstract of the 1831 census found on the Vision of Britain website, and provides a breakdown of the occupations and inhabitants in each county.⁶³ Specifically, I used the proportion of working-age males in manufacturing, trades, "educated" work, and agriculture as outcome variables for the final regression. This data was chosen to match that of Heldring, Vollmer, and Robinson in "Monks, Gents, and Industrialists."⁶⁴

Composite Data

In creating figures on the share of county income going to monasteries and non-monastic parts of the church, I used the combined total of monastic income from the National Archives data, either using it as the numerator or subtracting it from the 1535 Church income total respectively. I then divided by total secular income (1514 assessment) and Church income (1535 assessment) combined. These figures are the explanatory variable in the rebellion and long-term impact regressions, and provide a measure of the relative economic weight of monastic and church property in each county, and allows meaningful comparisons between counties.

A rough measure of per-capita secular income has been created from Schofield's data and Broadberry's population figures. Following Schofield, the return of 1514 was used as it excludes clerical income.⁶⁵ This return contains the poll tax mentioned below and very imperfectly measures real income, but as other returns are of lower quality and include clerical wealth it is the best available measure of income. The absolute level of per-capita secular income based on the 1514 tax return is less important than the differences between county income that this measure helps to control for. This per-capita secular income measure is essential for an investigation of potential economic causes of the rebellions which convulsed England during the Dissolution. As this measure only addresses tax liability, it is useful as a general metric of economic prosperity, but can do little to address the actual rate of taxation in the absence of true income measures.

⁶² Stephen Broadberry, Bruce Campbell, Alexander Klein, Mark Overton and Bas van Leeuwen, *British Economic Growth, 1270-1870*, Cambridge: Cambridge University Press, 2015, 25-26.

⁶³ David A. Gatley, "1831 Census of Britain: Abstract of Answers," University of Portsmouth, 2017,

https://www.visionofbritain.org.uk/census/table_page.jsp?tab_id=GB1831ABS_M[1]

⁶⁴ Heldring et. al., "Monks, Gents, and Industrialists," 4.

⁶⁵ R.S. Schofield, "The Geographical Distribution of Wealth in England, 1334-1649." *The Economic History Review* 18, no. 3 (1965): 492.

In generating a very rough estimate of extreme poverty in each county, I exploited the difference between the tax of 1514, which contained a relatively large poll tax levied on the poorest inhabitants of each county, and the tax of 1515, which did not. The value I use is the percentage difference between the 1515 and 1514 assessments. Due to some other minor changes between the two levies, this measure is imprecise but still useful as a rough measure of dire poverty.⁶⁶ The correlation between the per-capita secular wealth and the rough poverty measure is -.67, further bolstering its validity. This rough poverty measure is also essential in addressing the potential economic motivations of rebellion, and provides the most direct data available on the level of economic deprivation in each county. Again, this measure provides only a rough indication of extreme poverty, but allows this analysis to address the role of absolute deprivation in sparking rebellions.

Summary Statistics

Table 1: Monastery-Level Summary Statistics

Variable	Ν	Mean	Median	S.D.	Min	Max
Annual Net Income	622	229.46	114	369.98	2	3470
Survival (Years After 1536)	622	2.71	3	1.49	0	10

The difference between the mean and median values for monastic income is a reflection of the relatively small number of enormously wealthy monasteries which stand in sharp contrast to the great majority of relatively small houses. As can be seen above, most monasteries fell below the $\pounds 200$ per year cut-off for dissolution and were dissolved relatively early.

Table 2: Breakdown of Monastic Houses and Wealth

Order	Houses	Total Income	Percent of Houses	Percent of Income
Augustinian	233	40912	37.40	28.59
Benedictine	213	70375	34.19	49.19
Bridgettine	1	1731	0.16	1.21
Carthusian	9	2966	1.44	2.07
Cistercian	102	18746	16.37	13.10
Dominican	1	380	0.16	0.27
Franciscan	5	552	0.80	0.39
Gilbertine	24	2399	3.85	1.68
Grandmontines	1	12	0.16	0.01
Premonstratensian	34	5003	5.46	3.50

As shown by Table 1 above, the number of houses in an order and its total economic weight in the country are loosely linked, with orders like the Benedictines and Bridgettines being comparatively rich and the Augustinians and Gilbertines being comparatively poor. The largest three orders, bolded in the table, comprise approximately 88% of all houses and 91% of all monastic wealth in the country. Henceforth, "large order" refers to the Augustinian, Benedictine, and Cistercian orders, while "small order" refers to any other.

Variable	Ν	Mean	Median	S.D.	Min	Max
1831 Share of Working-Age						
Males in Manufacturing	33	0.064	.017	0.090	0.001	0.311
1831 Share of Working-Age						
Males in Agriculture	33	0.316	.330	0.126	0.032	0.515
1831 Share of Working-Age						
Males in Trades	33	0.282	.275	0.048	0.219	0.455
1831 Share of Working-Age						
Males in White-Collar Work	33	0.045	.039	0.023	0.026	0.138
Rough Extreme Poverty						
Index	33	0.200	.150	0.296	-0.118	1.482
Per-Capita Secular Income in						
1514 (£/year)	33	0.546	.590	0.187	0.062	0.854
Monastic Share of Income	33	0.056	.055	0.026	0.005	0.124
Non-Monastic Church Share						
of Income	33	0.093	.088	0.036	0.032	0.205

Table 3: County-Level Summary Statistics

The county-level statistics represent only those counties for which data was available from all three sources—Schofield's 1514, 1515, and 1535 totals, the *Valor Ecclesiasticus* itself, and Broadberry's population totals—and as such are a slightly reduced set of all English counties. Shares of working-age males will not add to 1 due to the omission of employers, male domestic servants, and men not in work.





As can be seen in Figure 1 above, the share of income going to both small houses and small orders is significantly greater in counties which saw a substantial rebellion than in counties that did not.

Methodology

The role of the first round of the Dissolution in the Monasteries in sparking the Lincolnshire Rising and the Pilgrimage of Grace—often regarded as a rebellion with combined economic and religious causes—is modelled with Equation 1: $Y_i = \beta_0 + \beta_1 R_i + \beta_2 S_i + \beta_3 P_i + \beta_4 X_i$ in which Y_i is a county-level dummy indicating a rebellion, β_0 is a constant, R_i is the religious explanatory variable for county i (proportion of wealth owned by monasteries, small monasteries, monasteries from large or small orders, or small monasteries of large or small orders), S_i is rough per-capita secular income, P_i is the rough extreme poverty rate, and X_i is a vector of relevant controls (region of England, proportion of monasteries dissolved during or before 1536, proportion of monasteries from a large order, proportion of wealth held by the Church, and average distance to London in the county).

This regression allows analysis of the role of religious and economic motivations in sparking rebellion, to the extent that they are borne out in the data. Under the hypothesis of religious motivations for the rebellions, we would expect to see statistically significant results for the most-threatened categories of monasteries: those in small houses set to be dissolved as they fell under the \pounds 200 income cut-off and particularly small houses of small orders, whose religious inhabitants would be less likely to have the option of relocating to a larger monastery. The economic hypothesis would point toward the significance of the per-capita secular income variable, the rough measure of extreme poverty, or both. This analysis is not capable of addressing other potential economic motivations such as over-burdensome taxation relative to county incomes or shorter-term declines in per-capita income, as the only income data available from the relevant period comes from the 1514 and 1515 tax records themselves.

The role of social and economic factors in the year of dissolution is modelled by Equation 2: $Y_j = \beta_0 + \beta_1 O_j + \beta_2 R_i + \beta_3 N_j + \beta_4 X_{ij}$ in which Y_i is the year of dissolution of monastery j, β_0 is a constant, O_i is a dummy for monastery j's membership in a large order, R_i is a dummy for the presence of a rebellion in county i, N_i is the yearly net income of monastery j, and X_{ij} is a vector of controls (county-level dummy, x and y coordinates of the monastery).

This regression seeks to uncover the role of different monastery- and county-level factors in the pattern of monastic closure across the country. The hypothesis of religious motivations for the Dissolution would suggest that the monasteries of larger houses would be targeted for dissolution sooner, in order to break up the largest blocs of monastic opposition to the King's reforms. On the other hand, an analysis of the Dissolution as a simple land grab by a cash-strapped Crown would imply that richer houses or those most easily accessible near London would be dissolved first. Of course, under either hypothesis, it is perfectly possible that the commissioners were allowed to proceed autonomously, without the motives of the Crown being reflected in the exact pattern of dissolution.

Finally, the role of the Dissolution in future economic structure is modelled by Equation 3: $Y_i = \beta_0 + \beta_1 E_i + \beta_2 X_i$ in which Y_i is the outcome variable (proportion of working-age men in manufacturing, trade, agriculture, or white-collar work), E_i is an explanatory variable (proportion

of county wealth held by monasteries or proportion of county wealth held by non-monastic branches of the Church), X_i is a vector of controls including region dummies, the rough rate of extreme poverty, and the per-capita secular wealth in 1514).

The regressions using 1831 data seek to answer questions about the long-term economic effects of the Dissolution. The hypothesis advanced by Heldring, Vollmer, and Robinson would imply a positive relationship between monastic wealth and the future share of workers in manufacturing, and a negative relationship between monastic wealth and the share in agriculture. A slightly different hypothesis, based on Cantoni, Dittmar, and Yuchtman's work about secularization, would be bolstered by evidence showing an inverse relationship between the amount of land *remaining* in Church hands and future economic development.

Results

Rebellions

These results indicate that the best predictor of a rebellion in 1535-7 is the proportion of county wealth held by small houses of a small order; the full results of this regression are shown in Table 3 below. Regional dummies have been omitted for space reasons.

Variable	Coefficient	S.E.	Т	p-value	[95% Conf.	Interval]
Fraction of Wealth Held By						
Small Houses of Small Orders	51.868	21.999	2.360	0.030	5.650	98.085
Proportion of Houses Dissolved						
Before 1537	-0.097	0.196	-0.490	0.629	-0.509	0.316
Proportion of Houses Belonging to						
Large Orders	-0.069	0.667	-0.100	0.919	-1.471	1.333
Rough Poverty Measure	-0.356	0.241	-1.480	0.156	-0.861	0.149
Per-Capita Secular Wealth	0.235	0.353	0.660	0.515	-0.508	0.977
Fraction of Wealth Held By Church	-1.850	1.751	-1.060	0.305	-5.529	1.828
Distance to London	0.007	0.067	0.100	0.920	-0.134	0.148

Table 4: Small Houses, Small Orders

As can be seen from the results, by far the strongest predictor of a rebellion is the share of wealth held by small orders in houses which were threatened by the dissolution. No other factors appear to have a statistically significant effect, including the actual dissolution of small monasteries in the county. In particular, there is no indication that either per-capita secular income or the proportion of people living in serious poverty, as the effect in both cases is not statistically significant and has the wrong sign. Table 4 below contains the results from all explanatory variables tested.

Variable (Fraction of County				p-		
Wealth)	Coefficient	S.E.	Т	value	[95% Conf.	Interval]
Monastic	1.250	2.114	0.59	0.562	-3.192	5.691
Small Houses	11.475	5.403	2.12	0.048	.123	22.826
Small Orders	31.187	18.389	1.70	0.107	-7.446	69.820
Small Houses of Small						
Orders	51.868	21.999	2.36	0.030	5.650	98.085
Large Orders	.928	2.172	0.43	0.674	-3.635	5.492
Small Houses in Large	10.582	6.270	1.69	0.109	-2.590	23.754
Orders						
Houses Dissolved Before	12.905	8.258	1.56	0.136	-4.446	30.255
1537						

Table 5: All Explanatory Variables

The results clearly show the relevant variables to be the proportion of wealth held by the small monasteries and the proportion held by small orders. The only other variable that was occasionally statistically significant was the proportion of monasteries from the largest three orders in England. When statistically significant, the coefficient was always negative, which points toward a feature of the Dissolution that will be discussed at greater length below.

Patterns of Dissolution

The second primary question concerns the priorities of the dissolution commissioners, and by extension, the Crown. These priorities can be assessed through the uneven dissolution of monasteries after the Dissolution Act in 1535. As can be seen in Table 5, the best predictor of an earlier dissolution is membership in a large monastic order, with houses of large orders being dissolved five months earlier on average. The presence of a rebellion in the county and the income of the house do not seem to have any statistically significant effect on the survival of religious houses after passage of the Act. County dummies have been omitted for space reasons.

Table 6: Survival of Small Monasteries

Variable	Coefficient	S.E.	t	p-value	[95% C	Conf. Interval]
House of Large Order	-0.441	0.242	-1.820	0.069	-0.917	0.034
Rebellion in County	1.287	1.652	0.780	0.436	-1.961	4.534
Yearly Net Income	-0.001	0.002	-0.370	0.714	-0.004	0.002
Distance to London	-0.254	0.290	-0.880	0.382	-0.825	0.316

As in the previous tables, county-level dummies have been omitted due to space constraints. The role of large orders in predicting an earlier dissolution is shown more clearly in Table 6, in which membership in a large order is associated with a 28% lower likelihood of being dissolved in 1538 or later. As will be explained below, a late dissolution likely indicates a successful petition or monetary settlement with the Crown.

Variable	Coefficient	S.E.	t	p-value	[95% Conf	. Interval]
House of Large						
Order	-0.286	0.075	-3.790	0.000	-0.434	-0.137
Rebellion in County	0.318	0.515	0.620	0.536	-0.693	1.330
Yearly Net Income	-0.001	0.000	-1.500	0.135	-0.002	0.000
Distance to London	-0.135	0.090	-1.500	0.135	-0.313	0.042

Table 7: Post-1537 Dissolution of Small Monasteries

For large monasteries, the predictive power of membership in a large order vanishes, replaced by the income of the house itself. Interestingly, the coefficient is positive, indicating that a greater income is associated with a slightly later dissolution. Once again, the presence of rebellion in a given county does not seem to have a statistically significant effect on dissolution time.

Table	8:	Survival	of	Large	Mona	steries
				0		

Variable	Coefficient	S.E.	t	p-value	[95% Con	f. Interval]
House of Large						
Order	0.165	0.193	0.860	0.393	-0.216	0.546
Rebellion in County	0.432	0.601	0.720	0.473	-0.756	1.620
Yearly Net						
Income	0.0003	0.0001	2.580	0.011	0.0001	0.0005
Distance to London	-0.211	0.242	-0.870	0.385	-0.689	0.267

None of these results shed much light on the motivations behind the Dissolution, but they do help to illustrate the decisions facing the religious once their houses had been targeted. The ability of small houses from larger orders to simply consolidate with larger monasteries of the same order is likely the crucial factor driving the differential survival of small monasteries.

Long-Term Impacts

The final research question concerns the long-term economic impacts of the Dissolution. In contrast to Heldring, Vollmer, and Robinson, I find that the share of monastic property in each county has no statistically significant impact on the share of workers in agriculture, trade, or

manufacturing.⁶⁷ The share of non-monastic Church property—less likely to be secularized than monastic land—does appear to have a negative impact on the share of working-age males employed in white-collar professions and in trade, but no other effects. The results of each regression are presented below, with regional dummies omitted for space.

-			-			
Variable	Coefficient	S.E.	Т	p-value	[95% Con	f. Interval]
Monastic Share of						
County Income	0.581578	0.753443	0.77	0.449	-0.98529	2.148449
Non-Monastic Church						
Percent of County						
Income	0.495215	0.77863	0.64	0.532	-1.12403	2.114464
Rough Poverty Rate	0.072136	0.11469	0.63	0.536	-0.16637	0.310647
Per-Capita Secular						
Income	0.03665	0.130785	0.28	0.782	-0.23533	0.308633

Table 9: County Share of Working-Age Males in Manufacturing

Table 10: County Share of Working-Age Males in Agriculture

Variable	Coefficient	S.E.	t	p-value	[95% Con	nf. Interval]
Monastic Share of						
County Income	0.386719	1.003476	0.39	0.704	-1.70012	2.473562
Non-Monastic Church						
Percent of County						
Income	1.270078	1.037021	1.22	0.234	-0.88653	3.426681
Rough Poverty Rate	0.06482	0.15275	0.42	0.676	-0.25284	0.382482
Per-Capita Secular						
Income	0.279768	0.174187	1.61	0.123	-0.08247	0.642008

Neither the share of working-age males in manufacturing or agriculture seems to be predicted by any of the sixteenth-century variables used in the regression. This runs counter to the findings of Heldring, Vollmer, and Robinson, and will be discussed in more detail below.

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Variable	Coefficient	S.E.	t	p-value	[95% Cor	nf. Interval]
Monastic Share of County						
Income	-0.29343	0.368837	-0.8	0.435	-1.06047	0.473611
Non-Monastic Church						
Percent of County						
Income	-0.70401	0.381167	-1.85	0.079	-1.49669	0.088669
Rough Poverty Rate	-0.05503	0.056145	-0.98	0.338	-0.17179	0.061733
Per-Capita Secular Income	0.057117	0.064024	0.89	0.382	-0.07603	0.190262

⁶⁷ Heldring et al, "Monks, Gents, and Industrialists," 4-5.

Variable	Coefficient	S.E.	Т	p-value	[95% Con	f. Interval]
Monastic Share of County						
Income	-0.07641	0.157829	-0.48	0.633	-0.40464	0.25181
Non-Monastic Church						
Percent of County						
Income	-0.40528	0.163105	-2.48	0.021	-0.74448	-0.06609
Rough Poverty Rate	-0.01528	0.024025	-0.64	0.532	-0.06524	0.034681
Per-Capita Secular Income	-0.04434	0.027396	-1.62	0.12	-0.10132	0.012629

Table 12: County Share of Working-Age Males in White-Collar Professions

The only sixteenth-century variable which has any predictive power in relation to nineteenthcentury economic structure is the proportion of county income going to non-monastic church properties. This property was less likely to be secularized, and its negative relationship with employment in trades and white-collar professions may indicate an effect like that described by Cantoni, Dittmar, and Yuchtman, in which large-scale secularization of property results in a reallocation of both physical and human capital into more productive sectors.

Discussion

Rebellions

The results of the first equation point strongly toward religious motivations for the rebellions of 1535-7. At the time, the only monasteries threatened with dissolution were those with a value below \pounds 200, so those joining in the risings would have seen the most direct threat to the smaller monasteries in their counties. The share of income going to small monasteries is thus in index of the threat to the local social and economic fabric posed by the first round of the Dissolution. This threat was, however, modified by the ability of the religious in small houses of large orders to simply move to a larger house in the same order, an option provided by the commissioners to ease the process of dissolution. While the assets of the order were still under threat, the religious could continue their life of faith with relatively little interruption, at least until the second round of the Dissolution began after the Pilgrimage of Grace.

The two factors outlined above—the threat to smaller monasteries and the far better outside option offered to members of a larger order—in my view account for the differing significance of the various explanatory variables. Monks from small houses without a network of larger monasteries to take them in were often given very small stipends and simply left on their own in local towns. Inhabitants of counties with more small monasteries of small orders would see more former monks and nuns, often people they would have known personally, stripped of their houses and denied their ability to pursue a religious calling praying for the souls of the dead in Purgatory. A higher number of former monks and nuns, as well as a higher number of nowempty monasteries serving as a visual reminder of Henry VIII's assault on the Church, provide an intuitive mechanism explaining the power of my explanatory variables to predict the outbreak of rebellion in 1535-7.

The lack of statistical significance for per capita secular income and extreme poverty rate suggests that economic motivations may not have been as important, but as the value was calculated based on tax assessments, this analysis is at best provisional. It is certainly possible that the tax assessments were different from the underlying wealth in the county, leading to a higher rate of extraction and thus to economic grievances. The tax data also has little to say about the change in the effective rate of taxation over time, which could also be a key driver of economic resentment. While my analysis provides no evidence *for* the primacy of economic motivations in the Pilgrimage of Grace, it provides no evidence *against* it either.

Patterns of Dissolution

The importance of small religious orders is echoed in the results of Equation 2, with membership in a small order emerging as the best predictor of a later dissolution. Monasteries belonging to a small religious order survived, on average, six months longer than those from large orders. When a dummy for post-1537 dissolution is used, the situation becomes even clearer. Small monasteries of small orders were thirty percent more likely to survive into 1538 or later, a significant divergence from those of larger orders. This pattern of closures may indicate that larger orders with more social and political power were targeted for dissolution first, but another explanation seems more likely. The commissioners were able to reach settlements with many houses, allowing them to continue operating—at least until complete dissolution post-1539—after submitting petitions to the Crown or cash payments. Members of smaller orders had greater incentives to submit such petitions and payments, as their only other option was often to abandon the religious life entirely. This, in my view, is a more parsimonious explanation for the pattern of the first round, particularly as membership in a large order is not a strong predictor of survival in the second.

Income appeared to play little to no role in the pattern of dissolutions in the first round, and richer monasteries were not significantly more likely to be dissolved late enough to indicate a settlement or successful petition. This pattern indicates that simple and rapid maximization of

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income was not the priority of commissioners on the ground, but might indicate little about the true origins of the Dissolution. In the second round of the Dissolution, the roles of income and large order membership have reversed. A higher income now predicts a later dissolution to a statistically significant degree, perhaps reflecting the greater administrative difficulty involved in disposing of larger properties or the ability of larger and richer monasteries to resist the Crown longer before succumbing to suppression.

The rebellion variable was also not statistically significant in predicting the dissolution of either large or small monasteries, indicating either a lack of reprisal or a degree of difficulty in dissolving monasteries in the disordered aftermath of rebellion. Given the historical records of abbots required to sign confessions of guilt and dissolve their monasteries after the rebellions, the latter seems more likely. The lack of statistical significance in the distance to London may indicate a certain level of efficiency in the royal bureaucracy, as the commissioners seemed to dissolve distant monasteries with the same ease as those nearby. This could also reflect a deliberate pattern of suppression, rather than a simple protocol of moving outward from the administrative centre and dissolving monasteries along the way.

Neither of the results provides much information on the true motivations behind the Dissolution, but the pattern of the first round, in particular, does provide some insight into its mechanics and the decisions of the religious affected by it. It seems likely that the differential survival of houses from large and small orders was a result of the better options available to members of large orders who could continue their religious life in another monastery of the same order.

Long-Term Impacts

This analysis shows no statistically significant persistent effect on manufacturing, trade, or agricultural employment shares based on the amount of monastic property seized in each county. This runs counter to the findings of Heldring, Vollmer, and Robinson, who found a fairly robust positive relationship between monastic wealth and the later presence of textile mills, and a robust negative relationship between monastic wealth and the share of workers in agriculture in 1831. This is likely a result of differing levels of analysis, and the results presented here can help to shed some light on the possible mechanisms of industrial development.

The significance of monastic income in explaining the presence of industry at the parish level, combined with its non-significance at a county level, points toward a siting effect rather than a deeper economic effect. Parishes are very small, with the largest historical parish comprising only 56 square kilometres. It is plausible that early gentry industrialists, when deciding where to site a new textile mill, would select one of the large and contiguous parcels of land their family had acquired after the Dissolution, or even use the old foundations of the monastery itself. This kind of siting decision could easily cause a higher concentration of mills in parishes with more former monastic land, but would be unlikely to result in an early industrialist deciding to invest in one county over another. An explanation based on siting decisions seems the most plausible and parsimonious way to resolve the seeming contradiction between the county- and parish-level results.

The statistically significant effects uncovered in this analysis concern the share of non-monastic property held by the Church in each county. While some of these lands were later expropriated by later kings, they were not taken wholesale into secular hands in the same manner as the monasteries and thus remained more devoted to Church uses. The results mentioned earlier are in keeping with Cantoni, Dittmar, and Yuchtman's findings that the secularization of capital helps to increase its economic efficiency and that a lack of secularization breeds economic stagnation. In particular, the shift from religious to secular pursuits in higher education could be the explanation for the lower rate of employment in higher educated trades in counties which retained a higher proportion of Church land.⁶⁸ What seems to be important in this case is not the proportion of land that was redistributed to secular owners in the sixteenth century—presumably simply bringing its productivity up to the level of other secular property—but the proportion of land which remained in religious hands well into the modern era.

Finally, setting aside the benefits of secularization, the impact of mass expropriation over the long term seems to be minimal at least at the county level. It is certainly possible that, as the Dissolution took place at the behest of the central government, the heightened threat of expropriation was experienced by the entire country equally. It is also possible that, as the Dissolution was a targeted expropriation undertaken against a very specific group, secular landowners did not feel any heightened level of threat as a result of monastic land seized in their counties. A combination of these two factors seems to be the most likely explanation for the lack

⁶⁸ Cantoni et al, "Religious Competition," 2091-2.

of any detectable negative effects which vary based on the amount of monastic property expropriated.

Conclusion

My analysis of this novel data set helps to shed quantitative light on some of the key questions surrounding the Dissolution of the Monasteries. The results of the first two regression equations tell a consistent story: monasteries of larger orders, with the option to simply move their members to larger houses of the same order, put up much less resistance to the first round of the Dissolution and thus created far less social disruption. Monasteries of small orders, on the other hand, often had no such option and were more likely to resist dissolution, strike a deal with the Crown, or successfully petition for continued operation. This incentive structure is borne out in the analysis of rebellions as well, with the share of county wealth held by small houses in small orders as the best predictor of a subsequent rebellion. The presence of former monks and nuns in local communities would have been a reminder of Henry's perceived assault on religion, lending credibility to the rumours of impending religious outrages running through the country.

The explanatory power of the wealth of small houses in small orders to predict outbreaks of rebellion provides the first statistical evidence in the debate over the causes of the Lincolnshire Rebellion and the Pilgrimage of Grace, and points toward religious disruption as a key driver of discontent. These findings also lend additional credibility to authors who point toward continued popular religiosity and the generally high regard in which the religious were held by the laity.

The analysis of the pattern of the Dissolution itself can also provide some insight into the motivations and methods of the Crown and Commissioners. In the first round, houses of larger orders were dissolved more quickly and easily because they were consolidated into larger houses, while the second round saw no such effect. The only predictor of later dissolution of larger monasteries is the size of monastic holdings, likely a simple result of the greater administrative task of dissolving them.

Finally, the long-term effects of the Dissolution seem relatively minimal at the county level, but the share of Church property that remained un-secularized appears to have a negative impact on economic development. This is in keeping with the findings of Cantoni, Dittmar, and Yuchtman, who find substantial economic benefits from secularization. It runs counter to the research of Heldring, Vollmer, and Robinson, which likely points toward a more localized long-term effect which impacted siting decisions but had a minimal influence on the long-term economic structure at the county level. In the final analysis, it appears that while the Dissolution was extraordinarily disruptive in its time, creating social upheaval and fuelling rebellions, its long-term impacts were rather muted, bringing large swaths of land up to par with secular lands in productivity rather than launching a new economic regime. <u>Bibliography</u>

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