

THE HISTORICAL EFFICIENCY OF EUROPEAN GUILDS

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ABSTRACT

This paper presents and tests a new interpretation of European guilds and the nature of their policies. The traditional view, from classical economics, is that guilds, at least those of the bureaucratically active, entry-restrictive variety common in late Medieval Europe, were monopolistic and economically inefficient, representing net drains on the society's resources. In contrast, our interpretation is that such guilds were both adopted and eliminated by legislatively pragmatic European states soon after the corresponding changes in economic policy were in the collective interest of the members of the state. Moreover, states dominated by legislative ideology, classical economics included, rather than legislative pragmatism have systematically over-discouraged guilds and suffered greatly as a result.

INTRODUCTION

A. The Traditional View: A Critique

The traditional interpretation of entry-restrictive guilds is that such guilds represented, among other things, socially inefficient cartels. Through the work of Gross, Pirenne, Mickwitz, Hibbert and Postan, this classical economic view of entry-restrictive guilds has gradually risen to where it is now dominant among historians as well as economists (see, e.g., the recent survey of Black). Earlier scholars (e.g., Toulmin Smith, Commons, Thrupp, Ashley and Unwin), writing in an anti-classical tone and alleging that early medieval guilds were probably socially beneficial in that they served to facilitate mutual aid and enforce product quality, could not explain why these trade associations would have systematically reduced the entry of all kinds of fixed capital inputs, including quality-enhancing capital inputs (e.g., Renard, Chs. V-VII). As a result, virtually all of these institutionalist authors eventually acceded to the classical monopoly view, at least as regards the mature, substantially entry-restrictive, guilds of late medieval and early modern Europe.

But the now-essentially-universal, classical monopoly view of entry-restrictive guilds has serious problems. There is little evidence that Western European guilds actually implemented anything like a rational monopoly policy. Although frequently cited evidence for a short-run monopoly policy is that these guilds, in conjunction with city administrators, often set nominal price levels, these controls always specified maximum, never merely minimum, nominal prices (Thrupp, 1963, pp. 246-265; Renard p. 42, Ashley pp. 31-34, Coornaert pp. 92-93, de Roover, 1958, p. 424, and Unwin, pp. 38-46). And guilds were seldom allowed to set maximum quality levels, some such restrictions being required by monopolistic cartels to prevent

quality competition from converting above-competitive nominal prices into competitive real prices. Rather, guilds typically set only minimum observable quality levels (Renard pp. 34-35, Ashley pp. 17-34, Coornaert pp. 104-105, Unwin pp. 86-92, and Johnson, pp. 116-117).¹ The only conceivable rationale for a peacetime policy fixing maximum nominal prices and minimum observable qualities is that such a policy serves as a short-run anti-monopoly device, a policy establishing maximum real prices. Such a policy could obviously serve to prevent the already-organized masters from working to set monopolistic real prices.² Most authors attempting a general economic

¹One social function provided by the essentially universal guild policy of imposing minimum observable quality levels, as well as the frequently established city regulations against selling below the maximum price, was to reduce the market participation of beggars, petty thieves, and the more disease-carrying elements of society. This social function, however, can be easily supplied in the absence of guilds. Observable quality minima were set long before guilds appeared and are commonly observed today in the cities of poverty-plagued third-world countries.

Consequently, this social function, like several other guild functions we shall mention below, can be considered only ancillary in that provision of the function by producer organizations does not lead to substantial net changes in social welfare. This is because the ancillary function is either socially unimportant or can be easily provided by alternative social institutions. Our concern in this paper will not be with ancillary but with primary guild activities, activities that are both socially significant (either positively or negatively) and that could not be readily provided in the absence of these producer organizations. To keep this in mind, we define guilds to be partially independent, producer organizations whose policies have both direct and primary effects on productive activities.

Note that our definition excludes modern "guilds" groups of similar service-providers who, because of the peculiarities of their trade, contract in such a complex manner that it pays them to join together to provide their employers with self-regulation as a substitute for the ordinary legal system in order to efficiently draw-up and enforce their service contracts.

²As the regulators did not during peacetime buy and sell to absorb surpluses and fill deficits at the controlled prices, it would be ridiculous to assume that these regulatory policies established actual real peacetime prices. Rather, the maximum real prices set by the observed policies had to be above-equilibrium prices, set sufficiently low to prevent guild members from attempting to collude on real price. In this way, the policies induced free competition at least in the quality dimension and therefore essentially competitive real prices.

During wartime and analogous emergencies, when the government did become

interpretation of these short-run price regulations have indeed concluded that the regulations created essentially competitive short-run behavior (e.g., Thrupp, 1963, p. 246; de Roover, 1958, p. 434; Unwin, p. 92; Pirenne, pp. 181-188).

Therefore, the only way to interpret Western European guilds as monopoly institutions is to argue that guilds worked mainly to reduce long run inputs through restricting the entry of labor or physical capital. This was Adam Smith's view. (Smith, Ch. 2, argued that guild policies pertaining to the entry of both human and nonhuman capital were monopolistically restrictive.) It has also become the view of essentially all serious students of late medieval and early modern Western European guilds. We concur in the belief that most Western European guilds, including early medieval guilds, significantly restricted factor entry.³ But if the purpose of these entry restrictions had been monopolistic, it would have been generally self-defeating for the same guilds and city governments to simultaneously work to establish anti-monopolistic short-run prices and outputs. In particular, it would have been strictly Pareto-improving to simultaneously lighten-up on the capital restrictions and adopt a fiscal policy reducing short-run outputs so as to leave prices and outputs, and thereby consumer interests, totally unaffected. The resulting improvements in factor

substantial purchasers, the established maxima of the various real prices, did automatically become subcompetitive (e.g., de Roover, op. cit.)

³Nevertheless, guilds could not generally limit factor entry at will. For instance, a prospective entrant, either master or journeyman, upon being refused membership in a London guild, could then appeal to the city council. The city council then could, if the refused individual proved his competence, either force the guild to accept the disputed membership, or grant the refused individual the "freedom" to practice his craft in the city. Guild entry-restrictions were thus jointly negotiated consumer-producer entry restriction rather than purely monopolistic. (See, e.g., Gross, pp. 61-103, Ashley, pp. 78-88, and Cunningham, pp. 98-99.)

proportions for firms would, following the logic of the classical-neoclassical theory, have amounted to an increase in welfare for everyone.

Moreover, if the classical monopoly view were correct, the consuming landlords in Royal Cities, such as Paris, London, and Winchester, where guilds had no independent policy influence, would never have rationally selected the standard sets of guild regulations that they regularly did select (Biddle, pp. 422-447; Johnson, pp. 20-27; and Van Werveke, p. 29, respectively). Similarly, if the standard monopoly view of guild restrictions were correct, late medieval towns politically dominated by merchant-traders (e.g., Leiden and Lille) would never have granted the standard forms of capital and entry restrictions that they regularly did grant to their politically powerless artisan-suppliers (DuPlessis and Howell).

The classical monopoly view also leads to the belief that the various subsidiary welfare effects of guilds could never have amounted to a social benefit large enough to significantly exceed the social cost of guild monopolization and to the corresponding belief that increased economic growth was brought about by laissez faire policies (e.g., Pirenne, Nef and Postan, on the right and Hobsbawn, Tawney and the Webbs on the left). However, such beliefs are strangely inconsistent with the simple evidence on both the rise and fall of medieval European guilds.

Regarding the rise of medieval European guilds, as we shall detail in Section I, guilds evolved among the more legislatively pragmatic, non-church-dominated, city-states of Europe on the basis of the impressive economic successes of neighboring regions experimenting with these new institutions. Moreover, the rapid growth to maturity throughout most of Western and West-Central Europe of merchant guilds beginning late in the 10th century, followed by craft guilds beginning late in the 11th century, was

accompanied by unusually high rates of economic growth all the way up to the devastating series of famines, plagues, and lengthy wars beginning around the second quarter of the 14th century (e.g., Thrupp, 1972; White, pp. 153-171). Similarly, there are many later examples of dramatic increases in economic growth immediately following sudden initial increases in guild strength. The examples include 15th and 16th century Iberia (R. Smith, Ch. 1; Kellenbenz, pp. 465-67), 17th and 18th century Scandinavia (Kellenbenz, op. cit.) and 18th and 19th century Russia (Lyashchenko, p. 297; Clarkson, Chs. 16-19).

Regarding the demise of guilds, as we shall detail in Section III.D.3 below, the sudden widespread eliminations of guilds accompanying the rise of laissez faire ideology throughout Southern and West-Central Europe around the end of the 18th century were systematically followed by dramatic decreases in economic growth in these areas during the following half-century. Earlier cases, also detailed later in the paper, of ideologically-inspired guild-weakening followed by sudden unexplained reductions in economic growth occurred in both late 15th century Northern Italy and late 17th century Holland. Russia's sudden, similarly ideologically inspired, guild elimination in 1900 provides a later, similarly dramatic, example, as described in Section III.D.1 below.

B. The Intellectual Causes and Practical Consequences of the Traditional Monopoly View: Suggestions of an Alternative View

Early classical economists traditionally attempted to escape the empirical inconsistency regarding the early success of guild-dominated medieval towns by arguing that the guilds became seriously monopolistic only an extremely long time after guilds had become established institutions. This has indeed become the standard inference, despite the inherent implausibility of any argument requiring simple policy lags measured in the

centuries. The inference has been based largely upon a simple monopoly interpretation of the commonly observed jumps in guild entry-restrictions and concurrent decreases in economic growth following the various 14th century population catastrophes (e.g., Gross, Pirenne, Unwin and Thrupp). Since a sharp decrease in the efficient rate of investment would obviously follow a negative population shock, the observed retardation in the rates of economic growth and the correspondingly observed consumption boom (the Early Renaissance) can be interpreted as qualitatively efficient responses to an unfortunate series of population shocks. However, since guild entry-restrictions would have no reason to increase under the old, quality-enhancement alternative to the classical monopoly argument, most historians have been reluctantly converted to some form of classical monopoly view despite the inherent implausibilities of the view. What has been overlooked is the possibility that a social optimum requires the equivalent of an externality-internalizing tax on real capital, whose presence increases the defense burden of the area in which the capital is located (Thompson, 1974, and Section II below). With guild entry-restrictions serving to induce the same investment path as would be induced by a constant, efficient, *ad valorem* capital tax, the restrictions would necessarily jump in response to a negative population shock, the jump being required to reflect the new, substantially lower, optimal rate of investment. The subsequent maintenance of relatively high entry-restrictions long after the 15th and 16th century population recovery could, under the capital tax theory, also be easily rationalized due to the historically high defense expenditures, and correspondingly high rates of optimal capital taxation, characterizing the development of modern nation states.

Contrast this simple efficiency interpretation of the data with the standard one in which guilds suddenly became severely monopolistic -- irreversibly for some peculiar reason -- throughout Europe during the plagues, famines and wars of the 14th and 15th centuries. This standard, albeit peculiar, monopoly interpretation of the jump in entry restrictions is immediately faced with the logical difficulty of explaining why the widespread emergency price regulations during the plagues were consistently of a sub-competitive variety (Cunningham, pp. 330-32; Coornaert, pp. 99-100). In short, classical economists, and now historians as well as economists, have been much too quick in inferring increases in the degree of monopoly from increases in entry restrictions. Increases in entry restrictions could simply, and more plausibly, reflect increases imposed by efficient governments using investment restrictions to implement the policy-equivalent of an efficient capital tax.

The failure to see this simple, efficiency-based, alternative interpretation of observed guild-strengthening policies has no doubt been responsible for a pro-laissez-faire bias in subsequent economic thought. Nevertheless, classical economics -- and the costly laissez faire policy experiments that immediately followed -- emerged largely through an additional, complementary error in the interpretation of subsequently observed, guild-weakening policies. In particular, classical economics emerged largely through an additional act of scientific myopia leading to a misattribution of the source of the impressive growth rates of early 17th century Holland and 18th century England, to their respective anti-guild policies. We obviously should be more specific here.

The first widespread elimination of European guilds occurred in the third quarter of the 17th century, when Holland and neighboring Protestant

provinces began a permanent attack on the entry-restricting power of the small guilds of artisans supplying her large merchants and giant trading companies.⁴ The immediately prior, quite dramatic, economic success of the relatively laissez faire city of Amsterdam throughout the 1st half of the 17th century had supplied the empirical inspiration for that pioneer of the modern theory of free markets, Pieter de la Court, and his more politically astute co-author, John de Witt, the autocratic leader during the 1660s of the previously democratic Netherlands (Blok, Ch. 10; Rowen, Ch. 19). These policy pioneers, like subsequent free-market authors, failed to recognize that uniquely low defense costs -- such as those lying at the foundation of

⁴Rather than a commonly asserted fact, the timing of this attack on craft guilds is our inference from available 17th century Dutch histories. Van der Wee tells us that Dutch guilds declined throughout the 17th century (p. 360) while other noted Dutch historians (De Vries, p. 56; Smit, pp. 61-66) tell us that Dutch guilds had become insignificant by the end of the 17th century. Since, from Unger (Ch. IV), we know that guilds persisted in the important Dutch shipbuilding industry throughout the 17th century (and even developed into an all-input-restrictive form early in the 18th century) we can conclude that entry-restricting Dutch guilds, other than shipbuilding guilds, significantly declined during the 17th century. (Later we shall point out a special advantage of having all-input-restricting guilds in export industries such as the Dutch shipbuilding industries.) More detailed 17th century Dutch histories further isolate the period of decline of entry-restricting guilds to the second half of the 17th century. For example, Van Dillen (Ch. 1) mentions no case of guild decline (other than in a relocating industry) during the first half of the 17th century, but (in Ch. 2) notes many such cases during the third quarter of the 17th century. Also, from other sources we find, for example, that Middleburg guilds were abolished in 1658 (Unger, p. 86), that Groningen guilds repeatedly rioted over new anti-guild laws in the early 1660s (Blok, p. 314), and, even in relative conservative Leiden (where entry restricting guilds did not fully decline until the end of the 17th century) that guilds were subjected to substantially relaxed entry restrictions during the early 1660s (DuPlessis and Howell, p. 63). The reason, we believe, that this concentrated decline in the effectiveness of entry-restricting guilds in the Protestant United Provinces has not been commonly acknowledged is that Jon De Witt, the unusually autocratic Dutch leader of the era (e.g., Blok, p. 354), though decidedly against the entry restrictions that guilds used to raise the costs of the goods traded by the large merchant class whom he represented, was a master of political appeasement and clearly saw the advantage of having relatively contented groups of suppliers (Blok, Ch. 9; Rowen, Chs. 3-12, esp. pp. 58-59, 188-89).

Amsterdam's early 17th century economic boom -- justify uniquely low effective capital taxes (Thompson (1974)), and therefore uniquely low levels of guild capital restrictions. It was therefore a serious mistake for de Witt to extend Amsterdam's weak-guild policies to the rest of the Netherlands. De Witt's subsequent inability to obtain significant guild support for his Great War of 1672 (Blok, Ch. 14) spelled the end of the great Dutch ascendancy despite Holland's benefitting from both a huge immigration of Huguenots and a favorable junior partnership with increasingly powerful England in the succeeding 100 years. The even less democratic Dutch leaders following De Witt (Blok, Ch. 17; Wilson, Ch. 1) -- whether through foreign political influence, ideology, or a simple failure to detect the institutional weakness causing the obvious jump in Dutch defense costs (Blok, p. 480; Smit, p. 62) -- did little to change basic Dutch institutions (Blok, p. 474; Wilson, p. 18). Classical economists, by similarly failing to recognize that any independent state constrained by a tax-determining legislature requires its leaders to have an ability to flexibly command involuntary wartime sacrifices from its people (Thompson, 1979 and Section II below), similarly failed to see that Holland's attack on her guilds, without a prompt replacement of the wartime contributions of the guilds, was the source of Holland's sudden subordination to foreign powers.

It was over 70 years before another country was to strip guilds of their power to restrict entry. A recently democratized England -- their pre-classical monetary practitioners mindful of the Dutch failure in the area of emergency finance (Sherwood, p. 193) -- wisely delayed granting her politically powerful merchants this favor until after pioneering the development of a flexible gold standard in the first quarter of the 18th century, a standard providing a substitute means of emergency war finance by

allowing for temporary suspensions of gold payments and, correspondingly, theoretically unlimited increases in wartime liquidity (Thompson 1987). England's subsequent elimination of guild entry-restrictions, which was concentrated early in the second quarter of the 18th century, therefore had nothing like the disastrous military consequence that it had for Holland.

Also, again contrary to the predictions of classical theory, peacetime business booms did not result from either the Dutch or the English demise of guilds. The reason is that one peacetime tax was merely being replaced by another. The Dutch and English, and eventually the rest of Europe, as detailed in Section III.D.2 below, were merely replacing their entry-restrictive, previously defense-providing guilds with an alternative, more broadly-based, national source of peacetime taxation, a national capital tax, to support their new, large, standing national armies and navies. This policy replacement, and the correspondingly offsetting aggregative peacetime incentive effect, has somehow escaped previous authors. Rather, the entire literature has treated these pioneering cases of the demise of guilds in isolation and, depending upon the author's political-economic persuasion, regarded them as: (a) fortunate eliminations of monopolistic incentives toward output restriction (peculiarly ignoring both the simultaneous impositions of national capital taxes and the long, 30-year lag between England's guild-elimination decade and her subsequent takeoff during the 1760s), or (b) unfortunate eliminations of the abilities of both consumers and common laborers to protect themselves from the quality-deteriorating effects of unregulated capitalism (peculiarly ignoring both the myriad of substitute institutions imposing legal penalties for abnormally low product quality and the steady in-migration of "victims" into the subsequently industrializing areas). However, to repeat, once the observed peacetime policy replacements

are acknowledged, it is easy for us to see why the elimination of guild entry-restrictions had no significant effect on aggregate peacetime output.

As a result of the above-described oversights by classical economists, while it was effective democracy that provided the basic source of the remarkably superior economic performances of both early 17th century Holland and 18th century England,⁵ the at-best incidental policies involving guilds ended up getting most of the credit. Therefore, while democracy failed to maintain the support of the various continental ruling classes of the early 19th century, simple guild elimination became the order of the day. The predictable economic and military disasters throughout the ideology-prone, southern and west-central sections of Europe during the 1st half of the 19th century, as described in Section III.D.3, along with the continuing successes of democratic England, the similarly democratic United States, and the relatively democratic Northwestern portion of the continent, finally led military leaders in most of late 19th century Central Europe to non-laissez-faire-constrained, politically pragmatic, democratic revolutions. The corresponding increase in the Central European economic growth beginning in the third quarter of the 19th century and continuing on to this day was the

⁵ Effective democratic rule-making provides an exceptional method of protecting investor rents despite the traditional, essentially classical, economic argument that democracy induces rent-seeking, rather than rent-protecting, behavior (Thompson, 1988). What an observed democracy requires to be "effective" is (a) a degree of political competition sufficient to eliminate non-pragmatic legislation such as that due to an economic or religious ideology and (b) a principled commitment to its strange laws by a loyal, or "civilly reverent" bureaucracy. What made the early Dutch and English bureaucrats particularly civilly reverent was the protestant value (the Pauline ethic) treating the laws of one's government (rather than the opinions of a single person) as divinely inspired. In any case, the importance of effective democracy for economic success was certainly not appreciated at the time. Classical economic ideology won the day in the less democratic regions so that and the success of England and Holland was incorrectly attributed mainly to their anti-guild policies.

direct result of following the early successes of their North-western neighbors by letting pragmatic empiricism, rather than economic ideology, be their normal legislative guide. Southern and Eastern European military leaders are only now in the process of learning the same lesson.

C. Summary

The traditional monopoly theory of Medieval European guilds, probably the most entry-restrictive guilds on record (Black, Ch. 1), clearly fails in its central predictions regarding: (i) the particular policies of these guilds, (ii) the incidence of the guilds across different political regions, and (iii) most important, the effects on economic prosperity of both the rise and decline of these guilds. There is, however, an alternative, efficiency-based, theory of the social function of entry-restricting guilds that appears to consistently explain their observed policies, incidence, and economic effects.

This paper is an attempt to apply this more empirically accurate economic theory to the problem. In the process, we show that guilds consistently rose and fell -- in those legislatively pragmatic states not driven by an economic ideology -- according to whether or not the guilds were economically efficient. Before elaborating upon our specific efficiency theory, a more detailed outline of the rise and fall of European guilds will perhaps indicate that economic efficiency was indeed the driving force behind the spread of guilds and that the timing of the final elimination of guilds was -- as long as some economic ideology did not arise to prematurely hasten the elimination -- also economically efficient.

I. THE RISE AND DECLINE OF MEDIEVAL EUROPEAN GUILDS

The compulsory, tax-paying trade associations, or *collegia*, of the classical Roman Empire were either absorbed by the church or disbanded by the Germanic Invaders during the closing years of the Western Empire. However, through the colonizing efforts of Byzantium late in the 6th century, the combination of Germanic rulers and Roman Catholic bureaucrats which was developing a dark age for Western Europe lost its suzerainty over large parts of Italy. Among the numerous new protectorates of Byzantium was the oligarchic republic of Naples, whose traditional independence from the church in Rome had left it an enclave of Greco-Roman culture (Headlam). Naples quickly took advantage of her emancipation by reintroducing a strengthened form of *collegia* in which independent groups of tradesmen were granted, in addition to their classical political and tax-paying role, which we shall discuss later, a direct role in civil administration (Mickwitz, Headlam).

The Byzantium-supported oligarchies of refugee merchants forming at about the same time at nearby Amalfi and at Venice were similarly administered by merchants rather than counts or clerics and similarly financed by the lump-sum contributions of the merchants (Hyde, pp. 20-22). The subsequent economic successes of each of these three little merchant-oligarchies amid the general decline elsewhere (Sedgwick, Ch. 8, Hyde, Ch. 1) was not lost either on their Northern neighbors of Pisa, Genoa, and Pavia (Mickwitz), or, more significantly, on the Frankish Emperor Lothar I, who was kept regularly informed of Venician activities (Scholz, p. 116). Lothar reacted quickly to an 824 Papal forgiveness of the torturers and murderers of his two chief representatives in Rome by imposing his "Constitutiones Olonenses" on the succeeding Popes, thereby permitting seven inland centers for the formation of independent associations of both merchants and

craftsmen (Staley, p. 36). The subsequent relative successes of these guild towns (Sedgwick, p. 70), especially Florence (Staley, p. 6), the continued relative successes of Naples, Venice, Amalfi, as well as the successes of the subsequently formed coastal merchant oligarchies of Pisa and Genoa (Hyde, p. 29, Sedgwick, *ibid.*), created the conditions for a guild boom beginning late in the 10th century. In particular, once the Germanic conquerors finally learned how to secure inland towns and trade routes,⁶ guilds spread to the oligarchic Flemish and French cities with which they traded at the Champagne fairs (Mundy, Chs. IV and V). The increased prosperity observed in these cities, such as Liège, Paris, Rouen, Toulouse, and other trade-connected, guild-run towns such as Marseille, resulted in a spread of merchant-run guild towns into neighboring Western Germania and England beginning in the 1st quarter of the 12th century, then to various Northeastern coastal Spanish trading centers around the middle of the 13th century (R. Smith, Ch. 1), and, finally, to Eastern Germania with the Hanses in the late 13th century and blossomed in the early 14th century (Mundy, Ch. 1). With the coming of merchant guilds and guild-administered cities in the middle ages, Western and Central Europe greatly prospered in this quasi-

⁶The accelerated guild expansion from the 11th through the 13th centuries followed on the heels of an area-wide military strengthening concentrated in Western Europe, where there had been a similarly evolutionary maturation of feudal orders and a corresponding chivalric ideology. The resulting increase in security of both internal and external trade routes (often attributed to incidentals such as the military victories over the Moors (esp., Pirenne)) fostering the substantial increases in trade and wealth in Western Europe was, we shall argue, both a cause and an effect of the blossoming of Western European guilds.

While no scholar concentrating on guilds has failed to note the highly military, often noble, function of these guilds, our contribution in this regard will be to explain the economic function of particular guild institutions that have previously been misinterpreted by failing to consider the efficient institutional responses to problems of military protection.

long-run equilibrium.⁷

Although legislatively ideological scholastic writers consistently criticized guilds for their monopolistic practices (de Roover, 1958, p. 431), the remarkable economic success of the guild-run towns was normally sufficient to overcome the frequently overt church opposition to guild independence.

While the above description of the spread of guilds based on their observed economic success in neighboring regions does not reveal the underlying source of their economic success, the description does serve to reveal a strong likelihood that the spread of guilds was based not on any ideology but on interregional observation and pragmatic imitation of the overall economic success of neighbors experimenting with the new institution.

The beginnings of guild decline in the various regions of Europe, which typically began with the elimination of the regional role of guilds in administering laws were similarly emulative in legislative pragmatic regions. And again, while fairly impressive economic performances followed such bureaucratic changes, economic disaster systematically followed whenever the loss in the administrative function of guilds was ideologically inspired. These observations will be discussed in detail in Section III.D.1.

The complete collapse of guilds occurred whenever guilds lost their entry-restricting power as well as their bureaucratic role. Accompanying this demise of guilds, as will be detailed in Section III.D.2, was the introduction of some kind of national capital tax. Although the financial

⁷Regarding craft guilds, the subsequent, rapid spread of these entry-restricting political associations from Italy in the 12th century follows a similar pattern (e.g., Black, p. 6; Pirenne, p. 180), the trend similarly beginning only after the capital stocks of a typical investor had grown to economically significant levels.

pressure of the loss of government revenue from the guilds no doubt created a corresponding fiscal pressure to raise taxes, it is quite revealing that the replacement taxes consistently came in the form of taxes on industrial and commercial capital, rather than more neutral, head taxes, land taxes, or simple consumption taxes.

Regarding the timing of the demise of guilds, and the corresponding introduction of broadly based, national capital taxes, the pattern of experimentation and emulation is much more complex. As outlined in the Introduction, and more fully elaborated in Section III,D.3, the country-by-country sequence was based upon experimentation and informed imitation only among the more legislatively pragmatic countries. Thus, after the disaster of the late 17th century in which the ideologically inspired Dutch pioneered a phase-out of most of her guild entry-restrictions without a corresponding phase-in of a freely convertible government money, the other, more pragmatic, European countries firmly retained their guild entry restrictions. Legislatively pragmatic England, in clear view of the Dutch failure, therefore made no move to eliminate her guilds until first pioneering a convertible money system, a gold standard with a flexible money supply that could expand in national emergencies through suspended gold payments but contract thereafter based on the governmental ability to resume gold payments at the original conversion rate. Having established this financial system in the 1st quarter of the 18th century, England then quickly moved to eliminate her guilds and their corresponding source of emergency finance in the 2nd quarter of the 18th century. The other countries of Europe soon responded to England's continuing and obvious economic success. As detailed in Section III.D.3 below, the neighboring European states followed suit by similarly abolishing guilds and introducing general capital taxes, or income

taxes serving as peacetime capital-tax-substitutes (Thompson, 19974), some time around the turn of the 19th century. However, only relatively democratic France, Netherlands, and Denmark also adopted English-style, government-controlled, convertible currency systems around this time and, correspondingly succeeded, in sharp contrast to the other, more legislatively ideological neighbors of France, who failed to introduce any kind of government-controlled, convertibility system. Substantial losses in both national sovereignty and income were quickly suffered in all of these naturally less democratic regions. Western Germania (which includes Northern Italy) began a sustained recovery soon after they too effectively democratized and correspondingly adopted convertible national monetary systems in the third quarter of the 19th century. Eastern Germania pragmatically followed suit by adopting similar economic policies and, in ultimately relatively successful Prussia, a relatively democratic political system.

Spain, although recovering in the 2nd quarter of the 19th century soon after introducing a convertible currency, maintained a largely authoritarian state. As a result, Spain, along with similarly legislatively ideological Southern Italy, remained a slow-growth area until the past couple of decades, when they too eventually succumbed to the philosophy of *Realpolitik* and effectively democratized. Finally, Russia, the most easterly European country, and also the last to introduce entry-restrictive guilds, was last to eliminate her guilds and modernize her financial system, a task completed only at the turn of the 20th century. But Russia, probably the most legislatively ideological country in Europe, went overboard in her anti-producer-interest-group ideology, both by eliminating the bureaucratic function of guilds and by subsequently imposing a prohibitive national capital tax. Predictably late, she has only recently begun to reduce her capital tax rate and, more importantly, to

effectively democratize under the growing philosophy of *realpolitik*.

The above sequences, reinforced by observations to be described in Section III, indicate that medieval guilds, and related European institutions, have evolved largely on the basis of pragmatic experimentation and rational imitation, rather than economic ideology. Although economic ideology was, in non-democratic settings, frequently employed to prematurely hasten the demise of guilds to the severe detriment of the public at large, such non-pragmatic legislative ideologies have themselves been gradually evolving out of the system through their observed economic failures. Our general inference is thus that overall European institutions have both risen and fallen according to a broad process of pragmatic experimentation and objective imitation. The remaining questions for our paper concern the theoretical sources of the revealed economic efficiency of guilds and how observed variations in these sources explain the successful rise and fall of guilds in economically pragmatic regions.

II. ECONOMICALLY EFFICIENT GUILD POLICIES

We consider two primary efficiency arguments for guilds. The first applies when highly law-respecting (i.e., "civilly reverent"), bureaucrats are unavailable. The argument recognizes that investors in fixed capital are, in the short run, subject to bureaucratic expropriation. To prevent such internal expropriation, intentional or not, when bureaucrats are not civilly reverent requires the steady political-administrative input of the potential victims. Associations of the potential victims, such as guilds, may perform this bureaucratic function. Civilly reverent bureaucrats -- when available -- obviate these highly costly administrative inputs

(Thompson 1989).^{8,9}

The second efficiency argument concerns external appropriation. It has two parts. The first recognizes that, because the leaders of large cities or nations defend the coveted capital stocks of their regions from foreign aggression, investors must pay some kind of effective peacetime capital tax if they are to internalize the defense cost they impose on their area's leader (Thompson, 1974). Secondly, efficient taxation requires that certain citizens make substantial net contributions to emergency war efforts and be correspondingly compensated with peacetime tax favors (Thompson, 1979). Looking at the policy effects of these defense externalities from an evolutionary perspective, when competing economies have their fixed capital coveted by foreign aggressors and defended during wars with forced emergency contributions from certain classes of investors, evolutionary competition among economies will result in economic policies that both discourage

⁸Optimal governmental policy in the face of a redistributive bureaucracy is described in Faith-Thompson (1981). Although the optimum is only second-best, not a pure Pareto optimum, that paper shows that such imperfections do not call for violations of familiar, first-best, optimality conditions in those areas of the economy where bureaucracies are unable to redistribute. This theoretical result rationalizes the conventional, piecemeal, policy approach adopted throughout the present paper.

⁹Roman Catholicism -- being founded upon the infallibility of an independent, morally inspired, foreign source -- is far from a civilly reverent religion. Mainline Protestantism -- being founded upon a replacement of this source with a civil leader, or domestic process, as the legitimate rule-making source -- is a civilly reverent religion. As a result, we shall assume that investors in regions with otherwise predominantly Catholic or noble bureaucracies should, for efficiency, actively participate in the rule-enforcing as well as the rule-making process while investors in regions with otherwise mainline Protestant bureaucracies should not. (Our interpretations of these religions certainly should not be taken to represent any assertion as to the net social values of the religions, just as our negative policy appraisal of all existing economic ideologies should not be taken to represent an assertion concerning the net social value of economic ideology. Such thought systems may obviously serve society in ways that we have not considered in this paper.)

investment in coveted fixed capital and provide war-supporting investors with peacetime tax favors corresponding to their wartime net contributions. Thus, for example, competing trading towns in the middle ages, finding tradesman-investors contributing relatively heavily to emergency local defense, should have competed for such investors by offering them corresponding peacetime tax favors, while still discouraging the accumulation of coveted capital by the favored investors. Thus, after paying fixed initial fees for their original investments in coveted fixed capital, guild investors were granted the right to collectively restrict, in cooperation with the city, one another's additional investments in coveted capital in exchange for their wartime contributions (e.g., Unwin, Chs. III and IV, and R. Smith, Chs. I-V; Coornaert, Chs. II and III; Thrupp, 1963, pp. 263; Staley, Ch. II, esp. pp. 44 and 59).

Human capital was too potentially mobile between cities to be substantially coveted by the potential foreign aggressors of medieval cities. Rather, young men were significantly valuable as potential future draftees. This high potential as a draftee is probably what made the city require that trained apprentices serve as dependent residents of a master, such residencies making the youth readily available to the city during local defense emergencies. It also led medieval and early-modern cities to almost universally establish laws substantially lengthening an apprentice's years of service with his master way beyond that which free contracting would produce. Particularly revealing is the fact that although minimum local apprenticeship periods differed significantly across different industries, essentially all apprenticeship rules kept a young man bound to his master until he was at least 25 years of age (Thrupp, p. 193), an age limit encountered numerous modern systems of military conscription.

Since cities could easily refuse to deliver future favors to workers fleeing military emergencies, cities withheld favors from their workers until a fairly distant future. Fleeing apprentices, and journeymen as well, would obviously surrender their initial entry fees, leaving behind their accumulated rights to become a master (open a shop) at a substantially reduced tax rate. Such bonding was no longer required once the attachment of a shop served to keep the man around during emergencies. This also rationalizes the much-maligned practice of allowing a master to pass on his privileged position only to one of his own sons (people who are especially valuable to a city because they are especially likely to meet the challenge of future military emergencies because of their special familial attachment to that city).

Note that this military-manpower-type of defense externality, like the resulting apprenticeship law, is independent of the existence of guilds. Guilds had only a supportive role in administering these laws. Guilds existed largely because of their social value as: (1) participants in the formation and administration of the commercial laws of the city and (2) collectors and payers of efficient taxes on non-human capital. Governments could -- and frequently did -- administer stringent laws providing for minimum apprenticeship periods even in the complete absence of guilds. England, for example, imposed, minimum, 7 year apprenticeships on all towns in 1563, whether or not the towns had guilds. And she maintained this restriction all the way to 1813, long after her guilds had substantially disappeared. And Russia, for example, had apprenticeship laws long before she had guilds (Kellenbenz, p. 468).

What has been overlooked in the traditional literature on apprenticeship¹⁰ is that apprentices, being natural draftees in efficiently providing for a city's local defense (Thompson 1974, 1979), have a natural incentive to avoid providing these under-compensated, high-risk services. Accordingly, the apprentice's master was induced to carefully watch over what the labor law, by "artificially" inducing extended periods of servitude, had induced to become his long-term personal investment. Indicating the extent to which masters incurred early sacrifices in training apprentices, the typical master was sure to collect his cash payment for training the youth (usually from the apprentice's family) within the first year of the apprenticeship (see, e.g., Thomas). And, indicating the extent to which masters received a later net return on their investments, guild records abound with examples of masters going to great lengths to retrieve runaway apprentices (Thomas, *ibid.*) Moreover, both the master and city alike were regularly careful to look into the "quality" of the prospective apprentice's family (its feudal nobility, chivalric character, etc.), sometimes rejecting the applicant for his unsuitability for future military combat, but never rejecting the applicant for his unsuitability for learning the trade (Thomas, *ibid.*) In any case, by first delaying an apprentice's "freedom of the city", his freedom to enter the city's free labor force and

¹⁰ Adam Smith (Ch. 2) considered the artificially long apprenticeship terms to be substantially labor-, and therefore output-restrictive. Most other authors, under similar inspiration, regard these lengthy apprenticeships as redistributive institutions facilitating the exploitation of politically unenfranchised labor, akin to serfdom and debt-peonage. However, given that bargained up-front lump-sums were involved in the hiring of new apprentices, the length of an apprenticeship could not have significantly affected the total opportunity cost of labor. Artificially long apprenticeships produce a higher average quality of the laborers in this skill category and therefore a higher average wage, with no substantial effect on the real cost of labor and therefore no significant internal allocational effect, other than through the defense considerations discussed in the text.

then inducing him to stay on as a journeyman through the near-term prospect of opening his own shop at a substantially sub-market entry fee, the medieval and early-modern city was greatly enhancing its supply of emergency draftees and thereby greatly facilitating its survival-determining defense commitment. Modern nation states have similarly trained, withheld substantial benefits (the vote, subsidized advanced education, subsidized housing, etc.) from, and registered potential conscripts, with similar efficiency. Thus, it was only during the Napoleonic era -- when Western Continental countries began to rely on nationally educated, registered, and drafted armies -- that Western European apprenticeship laws came to an end.

Regarding mastership, a city's defense effort was obviously improved by strongly encouraging masters to own shops rather than working for other masters, the potential loss of one's shop serving as a significant extra incentive to participate in battle. Guild rules strictly limiting the size of each shop-owner's operation, along with correspondingly "fraternal" guild rules tending to keep masters in business despite the relative inefficiency of their shops, provided such an encouragement (e.g., Unwin Ch. 1, Black, Ch. 10). While "mutual insurance" is usually offered as a possible efficiency justification for this producer-egalitarianism, efficient insurance payoffs come in the form of lump-sums, not entrepreneurial rights. Thus, again in accord with our efficiency theory, soon after standing national armies began to obviate the direct military role of guilds -- which began in the militarily most advanced countries of Spain and Portugal early in the 16th century and then quickly spread throughout Western Europe during the next century (e.g., Black, p. 144) -- the traditional fraternal structure of these guilds was correspondingly replaced through a sociologically dramatic switch to a new system of state acceptance of large-scale enterprise (e.g.,

Black, Chs. 12 and 13, Supple, pp. 438-457). Although this switch to a non-fraternal policy is popularly regarded as the birth of some sort of "capitalism" (e.g., Unwin, Ch. 1, Commons), the change actually represents little more than a predictably efficient policy response to a reversion to the specialization of the society's trading and defense functions characteristic of the decidedly non-fraternal Ancient Roman Empire. Thus, early modern England, Holland, Prussia, Switzerland, Sweden, and Northern Italy -- which were relatively quick to follow Iberia in developing specialized national or provincial militaries -- were correspondingly quick to allow high degrees of inequality between their masters; in contrast, Southern and Western Germania including its several prospering Protestant centers -- which happened to be exceptionally slow to develop specialized provincial militaries -- was correspondingly stubborn in its "non-capitalistic" maintenance of high levels of guild fraternity throughout the early-modern period (e.g., Black, Ch.10).¹¹

Property and income tax systems, which serve the peacetime capital-tax function for modern economies (Thompson, 1974), have resource costs that appear to be substantially lower than the resource costs of organizing and controlling entry-restricting guilds. However, with the guilds organized to provide the first function, one of preventing highly inefficient civil

¹¹Following the above argument, it is tempting to hypothesize that European guilds rose and fell with the social efficiency of local militias. However, there is no reason for local militias to be organized along industrial lines. Wholly integrated local militias could easily supply this military function, as they have throughout U.S. history, in the complete absence of guilds. Also, as we have already noted, European guilds were often strengthened for extended periods following the development of standing national armies in the early nation-state period. Hence, the direct military role of guilds must be regarded as purely ancillary to their primary functions. Nevertheless, as we have already stressed, the primary functions of guilds include emergency military support of some kind, financial if not direct.

administration, it becomes relatively inexpensive to have them provide their second function, one providing an efficient system of capital taxation and emergency military aid. All that is involved in doing so is allowing the administratively active investor-organizations to restrict the entry of only capital inputs into their industries. Once guilds lose their first function, which occurs with the development of civilly reverent bureaucracies, it is presumably much more efficient to employ a more modern system of capital taxation and emergency military aid, one which entails much less short-run anti-monopoly regulation.

We proceed now to argue how the broad historical pattern of rise and decline of European guilds, and the structure of actual guild operations, can be substantially explained using the above, two-part, efficiency theory.

III. THE HISTORY AND ECONOMIC EFFICIENCY OF ACTUAL GUILD POLICIES

A. The Ancient Societies of Greece and Rome

Since early Greek and Roman tradesmen, producers and merchants alike, were typically transient and had small fixed investments because of their simple production methods, the cost of defending their physical capital stocks from both foreign aggressors and local bureaucrats must have been of minor importance.¹² Our efficiency theory therefore predicts an early absence of guilds. And indeed, there were no "guilds", in our sense of the word, in early antiquity. Although there were organizations of craftsmen, they were neither administratively active nor entry-restrictive; these organizations were involved only in the "mysteries" of their craft (Burford

¹² While tradesmen frequently had several slaves, the low capital value of these slaves (Finley, Ch. IV), implying a near-equality of wages to subsistence meant that a craftsman's tax-relevant, or "coveted", capital stock in the form of slave capital was typically insignificant.

p. 155-56, Moore p. 164, Finley, p. 158), apparently established to locally disseminate and protect technological information.

In the later Roman Empire the typical tradesman's fixed capital investment grew to where the capital was likely significantly vulnerable to internal expropriation; correspondingly, guilds developed from the 2nd century onward. Craftsmen organizations, known as *collegia sodalita*, became actively involved in selecting Roman city officials, in particular the *Aediles*, to help protect investments from bureaucratic expropriation. However, guild members, as others, paid the general property tax (Seligman, pp. 36-37).¹³ Correspondingly, as our efficiency theory predicts, the *collegia* restricted neither entry nor the use of capital by their members (Burford, Finley, *ibid.*).

B. The Dark Ages

From the end of the Roman Empire to early in the 7th century, free craftsmen essentially did not exist in the West. The exceptionally high defense costs stemming from Rome's collapse caused merchants to suffer large reductions in their capital stocks and, corresponding to our theory, to transform their relatively complex, expensive, capital-protecting guilds into simple, church-dependent "fraternities" (e.g., Black, pp. 4-5). These Church fraternities, as well as the fraternities stemming from Germanic tradition, engaged mostly in ceremonial communal feasting and mutual oaths (Coornaert, p. 34), thus existing mainly to mutually insure one another against unexpected hardships and carry out their ancient function of

¹³The Roman property tax on trade capital was collected through the *collegia*. Through the *collegia*, craftsmen were required to use their skills and tools to undertake certain prescribed public works. This arrangement can be considered a form of property tax since the public works required that craftsmen used their capital. Moreover, membership in the *collegia*, in the later Empire, was compulsory.

internally disseminating trade information among their members.¹⁴

As outlined in Section I, the 7th through the 10th centuries saw the gradual evolution of a new form of commercial organization centered around the guild. The Byzantium-supported Italian coastal towns adopting this new form were uniformly towns experiencing large increases in foreign trade. These towns grew up not as centers of production but rather as storage and trading centers for travelling merchants. Because of the positive correlation between transportation distances and the optimal qualities of the traded goods, most of the goods traded by the merchants of these towns were of relatively high quality. This, and the increased volume of trade, made it relatively difficult for the old Church bureaucracies to monitor merchant deliveries. To effect laws efficiently reducing the relatively high degree of potential bureaucratic error or expropriation in these towns, investors were given new political rights (Thompson 1988). In particular, the

¹⁴The high defense costs characterizing the Western European dark age meant that high capital tax rates were still in order. The relatively church-dependent Germanic invaders, the Ostrogoths and Visigoths, the Burgundians and Lombards, and the Saxons, all set up property tax systems, known in England through the Saxon Chronicles as the "Fumage" (hearth tax), and known through the Church to be essentially continuations of the old Roman property tax systems throughout southern Europe. The less church-dependent conquerors, those remaining closer to their ancient homelands, viz., the Angles, Franks, Danes, Normans and Suebians, developed "feudal systems", which substituted direct, lump-sum military contributions (e.g., England's "Scutage") for property taxes while generating about the same investment incentives by granting the local lords only temporary property rights. (The fact that temporary rights serves as a substitute for an efficient capital tax has been pointed out, and applied to the case of the Spanish *encomienda*, by Batchelder and Sanchez.) The French property tax, or *taille* was introduced only after the area was stabilized under the decreasingly Frankish Capetian dynasty.

Once medieval towns began to spring up, a new type of defense externality began to appear, that from the town investor to the local lord-protectors. The area-wide protector, the king, still collected his various property and income taxes from the local investors, and with it he financed his overall, area-wide, military efforts. But the local protector, had now to somehow collect for the new, local, capital externality. This problem provides the context for our discussion of taxation during the middle ages.

emerging merchant oligarchies, who organized into separate merchant guilds to politically represent the interests of each trade, appointed responsible guild members rather than counts or clerics to their town bureaucracies. Thus, with appropriable capital stocks of the cities during this period predominantly in the form of merchant inventory holdings, city regulations were administered by merchants as well as defense-providing local lords. In return for these political rights, investors were obliged to pay the king and local lords occasional lump-sums or specific services, usually during local defense emergencies (e.g., Black, Ch. IV). As discussed above, these prospering trading towns efficiently spread along the Italian coast during the 7th-10th centuries.

Because the *raison d'être* of these towns was trade, all that was needed for this new organizational form to fully blossom was a new economic reason for commercial towns. This was provided by the dark-age evolution of chivalry and feudal orders, and a corresponding increase in the security of property and key European trade routes starting late in the 10th century (e.g., van Werveke, pp. 8-14).

C. The Later Middle Ages

1. *The blossoming of medieval guilds.* This rapid decrease in defense costs in Western Europe in the 11th and 12th centuries produced the rapid growth of trading cities observed throughout the period (e.g., van Werveke, pp. 12-13). As mentioned above, this trend, which began even earlier in the inland, merchant-guild-dominated, Northern Italian communes, rapidly spread Northwards throughout the 11th and 12th centuries. Significant production in various medieval cities began late in the 11th century. From then until early in the 14th century, medieval trading cities experienced a high and steady growth in fixed production capital and a rapid rate of technological

advance (e.g., White, pp. 153-171). Because of the sophistication of the production technology, it was probably similarly optimal for the earlier ruling oligarchy of merchants and landlords to extend property and political rights to the craftsmen. In fact, as we have already observed, the first administratively and politically influential craft guilds appeared early in the 12th century; like the earlier merchant guilds, these new guilds spread rapidly from their Northern Italian birthplaces throughout Western Europe throughout the 12th and 13th centuries.

Our analysis of efficient local taxation differs according to the number of competing landlords residing in a given city and according to the political autonomy of the city.¹⁵

2. *Later medieval cities with many landlords.* The large 12th and 13th century increases in guild-owned fixed capital stocks (e.g., Thrupp, 1971) substantially increased the total defense cost to the local landlords collectively protecting the city (e.g., van Werveke, pp. 9-15, p. 37). As we have argued, without some form of capital taxation, private investors in fixed capital in medieval cities with many landlords would not internalize the city's correspondingly increased defense cost as part of their private cost. This would have led them to over-invest in fixed capital. Therefore, in accord with our theory, restrictions as to the maximum amount of fixed

¹⁵ Royal taxes on fixed capital, reflecting the king's cost of defense from area-wide, or multiple-city attacks, were appropriately maintained throughout each mature medieval kingdom. Now essentially all of a medieval king's tax collectors became some sort of tax-farmer, a reflection of the general lack of civil reverence among medieval bureaucrats. (For a detailed example see Templeman.) Because tax-farmers, even when officially entitled only to lump-sums (e.g., "scutages"), collected more readily from wealthy taxpayers, a kind of wealth tax was implicit. This served to complement the traditional royal capital taxes, such as England's and tallage and France's taille, producing, in effect, a general property tax on local governments.

capital each investor could own quickly became a universal guild policy.¹⁶ Thus, craft guilds, soon upon obtaining political representation during the 12th century, became entry-restrictive much more than had the earlier, less fixed-capital-intensive, merchant guilds (Thrupp 1963, pp. 92-102, Hibbert pp. 193-194, Coornaert, Ch. 2, Postan pp. 214-218). Some merchant guilds in the same period also introduced capital restrictions, in particular, those whose fixed capital stocks had grown to significance (Thrupp, 1963, p. 207).

City governments typically held guilds responsible for the monopolizing attempts of their members. For example, English and French guilds were required to elect wardens responsible to the city government who monitored the compliance of individual members with the city-approved guild regulations, particularly those as to minimum product quality. In this way, guild members were not able to collusively lower quality and thereby effectively adopt a monopoly price. Typical of the minimum quality regulations for raw material inputs were the restrictions on the London clothing guilds of the 14th century prohibiting the sale of "patched up work" passed off as new by their members and the general restrictions requiring members to purchase raw materials in higher quality markets rather than from streethawkers (Renard, pp. 34-35; Johnson, pp. 116-117). Regarding perishable-good inputs, typical of the minimum quality regulations were the restrictions on the London poul-

¹⁶In the countryside, where a single local lord both owned and protected capital from specifically local attacks, capital accumulation could efficiently be, and in fact, was, contractually discouraged through normal share-tenancy agreements. Local capital taxes or capital restrictions through guilds would have been redundant.

The "countryside" differs from "cities with few landlords", in our analysis in that the "countryside" contains both a small number (possibly one) of protecting lords and local outputs produced independently of the local lords that are either not consumed by lords or exportable. When there are only a few lords, but they consume or use significant amounts of independently produced local outputs, a unique type of monopsony problem arises. This is discussed in our next subsection.

ters requiring members to purchase their inputs at times of the week when the average quality of the produce was abnormally high (Jones, Ch. 7).¹⁷

Guilds had many regulations serving to reduce the capital stock in addition to simple entry fees. The long minimum apprenticeship periods rationalized above indirectly reduced the stock of capital because one could not set up a shop without first becoming a master. Similarly, the master-egalitarianism rationalized above -- through rules against the ownership of multi-shops by masters, rules against producing outside of a master's shop, and rules against producing in the absence of a master¹⁸ -- also worked to reduce the city's coveted capital stock. Finally, for guilds requiring relatively large amounts of machinery, like weaver's guilds, there were rules directly restricting the maximum number of machines a single master could employ. The complexity of all of the above producer regulations, over and above a theoretically more simple, albeit progressive, capital tax, can be rationalized by acknowledging their added value in effecting the anti-

¹⁷These minimum-observable-quality regulations, along with the obviously antimonopolistic nature of the short-run nominal price regulations, is what led the school of social historians mentioned in the Introduction to believe that guilds existed, despite their facilitation of monopoly conduct, primarily to induce deceptive, but otherwise freely competitive, sellers to supply an efficient product quality. We have already noted that this dubious quality-assurance rationale for guilds has appropriately been discarded because of its inability to explain either the systematic government-sponsored, restrictions on the entry of high-quality capital inputs or the sudden increase in entry restrictions that arose during the late middle ages. These social thinkers were understandably unhappy with the traditional story but blissfully ignorant of the fact effective anti-monopoly regulation requires quality minima as well as nominal price maxima.

¹⁸There were also rules limiting the use of labor of various qualities in a given shop. Although these restrictions also served to internalize a small defense externality in that part of the labor force represents coveted capital, these restrictions similarly served the added function of enforcing the minimum-quality restrictions necessary to effect anti-monopolistic real price regulation.

monopolistic quality minima discussed above.

3. *Later medieval cities with few landlords.* A few local lord-protectors were often, along with the church, the only landlords in small medieval cities.¹⁹ These local lords and the church were also the principle customers of the guilds. As we have already noted, the classical monopoly argument for the persistence of allegedly inefficient guilds is especially implausible in such consumer-dominated environments. However, the defense externality also becomes smaller and smaller as the individual lord internalizes, through his role as a freely contracting landlord, more and more of the additional defense cost created by new investments. Although the defense externality shrinks, another problem in market efficiency simultaneously expands, a problem correctable by the same guild-type entry-restrictions that corrected the defense externality problem in the many-landlord case. In particular, as individual consumer-landlords become increasingly economically significant, they have an increasing incentive to encourage over-investment in guild capital by charging subcompetitive rents to marginal entrants into local trades.

For example, consider a hypothetical guild city with a single landlord, who is also the principal guild customer. This landlord is also, realistically, assumed to be unable to make future rent-commitments other than

¹⁹ In Coventry, for example, the great majority of craftsmen, and some merchants, paid rent to either the local earl or to the prior, although, a few of the more wealthy merchants were landlords themselves (Harris and Adams). A 1553 survey of Birmingham shows that even at that late date nearly all the city merchants paid rent to Lord Birmingham (Holt). Palliser and Creswell tell us a similar story about York and Exeter, respectively.

In contrast, London had many great merchant landlords, as well as numerous aristocratic landowners (Thrupp, 1948). Also, in the relatively large Royal City of Winchester, the rent of the seven great fiefs, which were the king and six church officers, accounted for only 30% of the total rents in the city (Biddle). There were numerous other landlords, primarily members of the merchant and cloth guilds (*ibid*).

through long-term rental agreements with existing tenants. Given that existing tenants have fixed long-term rental agreements in order to protect their specific investments from discriminatory rent increases, the landlord would always offer sub-competitive rents to future, extra-marginal craftsmen, because doing so will drive down previous investors' product prices.²⁰ To remove the resulting threat of jointly inefficient over-investment, landlords and guilds could cooperatively agree to reduce investment in that city by introducing guild entry-restrictions.

Capital-restrictive guilds thus served the smaller medieval cities by counteracting the above tendency toward substantial over-investment. The result, of course, was that entry-restrictive guilds were a universal feature of medieval city governments, both large and small.

4. *Autonomous cities.* Certain guilds may have been efficiently monopolistic in that monopoly guilds in export industries in politically independent cities may have provided the best method of extracting monopoly rents from the foreign customers, especially the customers residing in the surrounding countryside. However, where there was a well-informed central authority over the entire region, such a possibility is not consistent with our general political efficiency hypothesis because the central authority would internalize the welfare loss resulting from the monopoly. Indeed, the

²⁰This analysis does not include the usual, textbook, consumer monopsony effect, an effect that would lower factor entry below the efficient level. The exclusion of this effect is justified because the medieval city typically contains more than one large consumer-landlord. While it is plausible that a few landlords would conspire to collectively induce over-entry, it is not plausible that they would be able to collude to effect a monopsony over their purchases of the product. In order for the monopsony to work against any guild-seller, the buyers would have to collude to continually keep the product quality at an artificially high level. But, this would have in turn required buyers to know the actual qualities of the many outputs regularly received by the other buyers. It is probably safe to rule out the extremely high levels of information.

evidence shows that both English and French kings frequently stepped-in to lower the prices negotiated between the guild and the city. (See, e.g., Jones pp. 109-111, and Renard, p. 49, for English guilds; and Coornaert, p. 93 for French guilds.) Both English and French kings had assumed the right to revoke the charters of both cities and guilds, and exercised this right in response to unauthorized price increases. The French king's monitoring of guilds was extremely comprehensive. He placed his own representatives in the guild cities and soon the approval of these representatives was needed by French guilds for any price increase.

But, for strongly independent cities, the potential wealth transfers to the city from foreign customers would induce the internally efficient city to either: (1) adopt a simple export tax to restrict production in an optimally monopolistic fashion or, (2) for sufficiently export-specialized industries, allow guilds to impose both capital and labor restrictions to effect a pure monopoly solution, thereby saving the city the substantial cost of computing and collecting optimal export taxes. Since the monopoly-inspired restrictions in either case would fail to include the capital restrictions necessary to internalize the defense externality to the city as a whole, strongly independent cities should also have a separate local capital tax.

Therefore, in medieval Germania, i.e., Germany, Austria, Switzerland and Northern Italy, where there was typically no strong central authority, it almost certainly was efficient for the many city-states or provinces to adopt both local capital taxes and monopoly guilds in their export-oriented industries. Indeed, during the late middle ages, most large Northern Italian and German cities, such as Florence, Augsburg and Hamburg, were unique both in their frequent support of monopolistic, all-input-restricting,

guilds and in their selective municipal capital taxes. Cologne and Nuremberg, which had no property taxes, achieved the same result by restricting fixed capital in all significant industries while supporting simple cartel outputs in their chief export industries (Irsigler and von Stromer, respectively).

D. The Modern Period: The Decline of Guilds

1. *Explaining the loss of the guilds' administrative role.* Our efficiency theory predicts that the administrative role of guilds would decline within city governments as the result of the development of civilly reverent, professional bureaucracies. As developed elsewhere (Thompson, 1989) and reflected in Table 1, northern European states developed civilly reverent bureaucracies by the end of the 16th century through mainline Protestantism.²¹ Then, through the popularization of "Enlightenment" philosophy, this anti-elitist, state-respecting, bureaucratic ethic spread to France, Flanders and Switzerland in the late 18th and early 19th centuries. The Southern Germanic states of Northern Italy, Bavaria, the Rhineland, and Austria, did not develop such bureaucracies until their pragmatic revolutions under the professionalist philosophy of *Realpolitik* during the 3rd quarter of the 19th century largely converted them from either Church-based moality, Hellenistic humanism, or economic libertarianism, to a pragmatic professionalism in the execution of the rules of the state. Southern and Eastern European states are only now in the process of developing similarly

²¹Early Protestants believed that men served God by being dedicated to their profession. This belief made Protestant bureaucrats less inclined to follow either their church's or their own preferences and more inclined to follow the intent of the civil legislators. Protestants could thus, for example, be less benevolent, less redistributive, than Catholics, which made Protestant bureaucrats less likely to redistribute away from successful investors.

TABLE 1

State	Development of A Civilly Reverent Local Bureaucracy	Loss of Guild Administrative Roll
Holland ² and Zeeland ¹ England ² Denmark and Norway ³	Late 16th Century	Late 16th Century
France & Flanders ⁴	1st half of the 19th Century	End of the 18th Century
Southern Italy ⁵ Spain	Present	Second and Third Quarters of the 19th Century
Sweden and Finland ⁶	Late 16th Century	Late 16th Century
Northern Germania ^{7a}	Late 16th Century	Late 17th and Early 18th Century
Switzerland ^{7b}	Late 18th Century	Late 18th Century
Northern Italy and Bavaria ^{7c}	1860's	<u>Two Steps</u> : Late 15th Century/Late 18th Early 19th Century
German Rhineland ^{7d}	1860's	First quarter of 19th Century
Austria ^{7e}	1860's	1850's
Russia ⁸	Present	1900

NOTES: ¹ Dutch guilds lost their administrative role early in the second quarter of the 17th century, soon after they gained their independence from Spain. Following independence, guild regulations in Holland and Zeeland were administered by provincial authorities at the frequent expense of guild interests (Unger p. 83, Kellenbenz pp. 464-467).

Table 1 (cont.)

²English guilds lost their administrative role under the Elizabethan Statutes which were passed at the end of the 16th century. The statutes were enforced by local magistrates (Nef, pp. 35-57).

³Danish and Norwegian guilds were abolished by a decree of King Christian IV. When they were later restored, these guilds did not regain their administrative role (Kellenbenz, ibid.)

⁴France outlawed their previously administratively active guilds in 1793 while Napoleon outlawed guilds soon thereafter in Flanders (Godechot, et al., Ch. 1). An enlightened, professional bureaucracy was one of the chief reforms of Napoleon (Godechot, ibid.).

⁵Spain although eliminating guild entry restrictions in the 1780's retained guilds for their judiciary and bureaucratic services all the way up to 1829 (R. Smith, pp. 16, 116). Southern Italian guilds remained strong until the 1860's (Unwin, p. 1).

⁶The advent of central government regulation of Swedish Craft Guilds in the late 16th century is described by Heckscher (p. 73).

^{7a}The elimination of the guild's administrative role in late 17th and early 19th century Northern Germania is described by Bruford, Part III Chs. II and III. This apparently late elimination, late in that civilly reverent, Lutheran trained bureaucrats were available in the late 16th century, was probably due to the fact that the naturally monopolistic export position of the typical 17th century Germanic city-state made it better for such states to allow their relatively informed guildsmen to set prices than to extend such decision power over to relatively uninformed city officials. A further implication of the relative appropriateness of export monopolization by the typical 17th century Germanic city-state is discussed in the following subsections.

^{7b}Under heavy French influences, the Swiss eliminated the bureaucratic function of their guilds in the late 18th century, the same time that they eliminated the monopolistic privileges of their various cantonal churches (Oechsli, Ch. 23, and pp. 326-27).

^{7c}As discussed in the text, Renaissance thought led to an essentially complete replacement of guild bureaucrats with ideologically inspired, Hellenistic bureaucrats in late 15th century Lombardy and a similar, but subsequently partially reversed, bureaucratic replacement in late 15th century Tuscany. Austrian hegemony imposed a final, laissez-theory-inspired, guild elimination on Tuscany in the mid-1780s (Woolf, Ch. 7).

The same two ideologies caused a similar, only slightly delayed, two-step decline in Bavaria, whose Counter-Reformed cities (e.g., Augsburg), replaced guild with magisterial control throughout the 16th century (Janssen, Vol. 15, Ch. III) while it was again only three centuries later that Bavaria completely eliminated the administrative role of guilds through new, laissez-faire-ideology-inspired, central governmental regulation in 1825 (Holborn, v. 3, pp. 4-5).

Table 1 (cont.)

^{7d}The German Rhine states, under Prussian influence, maintained the guild-elimination laws of Napoleon even though Napoleon was long gone (Godechot, *ibid.*; Holborn, v. 3, p. 5). As discussed in the text, the pragmatic professionalism reflected in the philosophy of "*Realpolitik*" took over from both laissez faire ideology and Catholicism throughout Southern Germania in the 1860s (e.g., Strayer and Gatzke, pp. 604-606, May, Ch. 3).

^{7e}Although the "enlightened despotism" of Joseph II introduced somewhat professional bureaucracies to Austria (Woolf, *ibid.*), these bureaucracies were heavily imbued with the laissez faire spirit of the day or Catholic morality (Schenk) and were therefore not civilly reverent. The introduction of civilly reverent bureaucracies to Austria was delayed to the late 1860s, when experience finally converted her to the philosophy of *Realpolitik* (e.g., May, Ch. 3). Austrian guilds remained strong through the 1st half of the 19th century (Holborn, v. 2, p. 451), and were not eliminated until the late 1850s (Unwin, p. 1).

⁸While Russia suddenly eliminated her guilds in 1900 (Lyashchenko, p. 553), she is only now beginning to replace her extreme legislative ideology with a more legislatively pragmatic approach under the same political philosophy of *Realpolitik* that came to dominate her Central European neighbors over a century ago (Strayer and Gatzke, pp. 604-06).

non-ideological, pragmatically professional, bureaucracies.

With central governments in early Protestant countries more able to effectively execute a particular legislative policy, these northern European governments commenced to completely remove the administrative role of guilds just after the Reformation. This is illustrated in Table 1. The policy was implemented by placing guilds under the supervision of either local magistrates (England) or state bureaucrats (Holland, Denmark and Norway). In contrast, the administrative power of guilds remained strong in neighboring, similarly centralizing, Catholic states.²² While some of these neighboring states codified existing local guild rules into national systems similar to

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This raises the alternative hypothesis that early modern guilds were an extension of traditional Catholic religious institutions. However, as we are about to see, the Hellenized Catholics of the Northern Italian counter-Reformation, were quite successful in replacing guild bureaucrats with their own Jesuit magistrates. Also, guilds eventually disappeared even where Catholicism remained. Moreover, most non-Catholic, but also non-civilly reverent, urban societies have also been dominated by administratively active guilds. Ready examples occur in India, Egypt, and Turkey (e.g. Sjoberg).

A somewhat more justifiable hypothesis is that guilds, which generally disappeared soon after the introduction of modern democracy, served as part of a set of authoritarian, non-democratic institutions. The theoretical rationale underlying such a hypothesis is that guilds may serve a political role; one of transmitting the economic interests of various trades to legislators, such a role being relatively important in relatively authoritarian areas, where many of the guild members had no vote with which to express their policy preferences. However, such an argument would have to account for the obvious possibility of simple organizations of similarly situation investors, i.e., political lobbies. That is, the political function of guilds was easily replaceable by pure trade lobbies. The fact that such lobbies did not systematically appear in either authoritarian or democratic areas after the demise of the guilds is strong evidence against any political function hypothesis. In other words, the political function of historic guilds was at best ancillary. Correspondingly, a political-function, authoritarian-role hypothesis would fail to explain several elementary facts. In particular, guilds were originally introduced in relatively democratic European city-states, and guild decline was initiated by the quite authoritarian regime of Elizabeth and soon thereafter extended to the Scandinavian monarchies (see Table 1.) Finally, guilds were successfully eliminated late 19th century Austria even though their relatively authoritarian political system was not significantly altered.

Protestant states, these states maintained, or even strengthened, the administrative role of guilds. For example, while the French Edicts of 1581 and 1582 elevated guilds to a place in a national bureaucracy controlling all guild rules and prices, the Elizabethan statutes of the same period placed English guilds under the jurisdiction of local common law magistrates. Correspondingly, the French guilds maintained, and even increased, their influence and number while the English guilds substantially decreased in bureaucratic influence during the Protestant Reformation.²³ More generally, it was quite common for neighboring Catholic states to simply prohibit policies strengthening local governmental control over guilds. One such policy is that of the old Spanish-dominated Dutch regime. Under the 1531 Buitenmering Order, this regime granted Dutch guilds continued administrative control by prohibiting industry from locating outside cities. Guilds also grew and gained administrative influence in 17th century Catholic Portugal and Spain through the encouragement of their respective governments (Merino).

At the same time that France was eliminating her guilds at the end of the 18th century, she, as indicated in the table, was also producing a democracy-respecting, civilly reverent bureaucracy through the Enlightenment and therefore suffered no internal efficiency loss from the elimination.

But professional, civilly reverent bureaucracies developed more slowly in the other, more southern and eastern parts of Europe. Some of these areas, as the Table indicates, prematurely abandoned their guilds before developing civilly reverent bureaucracies. In particular, this inefficiency

²³See Nef (Chs. 1 and 2), who also points out that the decline in the administrative role of guilds through the loss of influence of the king's courts took place in England despite attempts by the king to protect it from local professional bureaucracies.

occurred in Bavaria, Italy, Spain, and Russia. What sharply distinguishes these countries from their more fortunate neighbors was their early Hellenization. Let us elaborate.

Hellenism is the distinctively Occidental Ideology first born in classical Athens and spread by the subsequent conquest of Alexander and the Ceasars throughout the Ancient West. Hellenism gives social thinkers a hubristic, unrealistically positive, self-image, and a similarly unrealistic image in the eyes of a similarly educated employer (Thompson, 1989). As explicitly reflected in the conclusions of its original pioneers (Socrates, Plato, and Aristotle), Hellenism gives its adherents a correspondingly negative image of the efficiency of popular democratic legislation. Regarding bureaucratic decision making, Hellenistic ideology thus gives the bureaucrat a license to interpret facts so as to benefit the classes of people that he considers the most deserving. In particular, a bias against successful investors is observed among Hellenists, a bias reflected in the explicitly negative attitudes of the school's pioneers towards wealthy tradesmen. A correlated egalitarianism has therefore also characterized Hellenistic judgments. The upshot is that Hellenism works against effective democracy by significantly increasing the administrative cost of enforcing efficient democratic legislation.

While it is beyond the scope of this paper to inquire into the psychological and intellectual basis, social role, or rise of Hellenism (attempts made in Thompson, 1987, 1989), it is not beyond our scope to describe the effects of the rapidly emerging Hellenism of 15th century Northern Italy on the bureaucratic function of guilds. In particular, the increasing abundance and influence of Hellenistically educated urbanites led both Florentine and Milanese guilds to finally surrender essentially all of

their autonomy to oligarchies of centrally directed, Hellenized bureaucrats in the 1480s (e.g., Ady, pp. 136-138, for Milan; and Trevelyan, p. 265, for Florence). The consequence for Florence was an immediate -- theretofore unprecedented -- loss in both government revenue and market confidence in governmental liabilities (Becker, vol. 2, pp. 239-240) and dramatic subsequent declines in both investment and output at the end of the 15th and early 16th centuries (Luzzatto, pp. 181-82). The subsequent threat of popular insurrection led the increasingly desperate Hellenistic despots to withhold both training and arms from their potentially rebellious artisans during the various French and Spanish sieges of the late 15th and early 16th centuries (Trevelyan, p. 344). By preferring instead expensive and frequently disloyal condottieri, these leaders quickly led the brilliant parents of the Renaissance into two tragic centuries of foreign enslavement (Symonds, p. 51; Trevelyan, Chs. 19-24; Bayley).

The somewhat more democratic Florence was able to restore a partial administrative and political input for guilds despite their similar foreign domination and, correspondingly, somewhat outperformed unfortunate Milan (e.g., Carpanetto and Ricuperati, Ch. 1). Further in the same direction, Venice, who was almost completely immune to the Renaissance, completely retained her guilds, albeit in their narrowly oligarchic form, and, correspondingly, retained her sovereignty and significantly outperformed both Florence and Milan throughout the early-modern period (e.g., Carpanetto and Ricuperati, op. cit.)

As indicated in the Table, as Renaissance thought spread North into Bavaria, largely through the Counter-Reformation, the administrative role of guilds was largely surrendered to Jesuit-trained, Hellenistic, state bureaucrats. Predictably, this movement left in its wake a string of failed

local economies, most notably Augsburg and Cologne.

Finally, it was only during the decade of the 1780s, under the fashionably liberal Austrian despot, Leopold, that Florence completely eliminated her guilds, which up to then had stubbornly retained a substantial level of administrative influence. What ensued was a rapid -- seemingly perverse -- depression in Florence as many of the old craft guildsmen abandoned their investments while newcomers did not arise to replace them (Cochrane, Ch. 4; Woolf, Ch. 7). Our explanation, of course, is that many old Florentine masters simply abandoned their fixed investments because they knew they could no longer protect them from the nobles, clerics, and ideologues in the remaining bureaucracy. After all, the same experiment had occurred there 300 years earlier, with similar results.

Russia suffered a similarly paradoxical, extended depression immediately after her sudden, ideologically inspired, guild elimination in 1900. Her 1907 Revolution followed. What resulted after the reaction of 1909, which substituted monopolistic cartels, with their attendant monopoly welfare losses, for many of the old guilds, was a disappointing recovery up to until WWI and a devastatingly shortage-ridden wartime performance just prior to the 1917 Revolution. We have found no plausible alternative explanation for the sudden, widely acknowledged (e.g., Lyashchenko, Part II, esp. p. 674; and Nutter), decrease in Russian economic growth from 1900 to 191.

2. *The replacement of the guild's peacetime tax-collecting role.*

Guilds in Protestant areas typically hung-on long after losing their administrative role. This, according to our efficiency-based theory, is to be expected as long as these guilds continued to supply a valuable tax-function to their governments. Indeed, guilds continued to serve as entry-restricting, tax-paying trade-associations. A simple test of the

significance of our simple, peacetime, tax theory is to see what happened to other peacetime taxes when guilds were finally eliminated, either by decree or by removing their ability to restrict entry. Table 2 illustrates the results. Given the timing of the various demises of guilds, Europe appears to have been behaving in close accord with our simple peacetime efficiency theory by almost simultaneously replacing guilds with modern property tax systems. The timing of these essentially simultaneous policy replacements is another matter. Subsection 3 will show that many of these modernizing replacements of guilds with property taxes were, under the influence of laissez faire ideology, grossly premature in view of wartime taxation problems.

An exception to the pattern in Table 2 is Germania (i.e., modern Germany, Austria, Switzerland, and Northern Italy), whose various provinces and city states from the early middle ages onward maintained both selective property taxes and entry-restricting guilds up to the end of the 18th century. The case is, as we have already noted, quite consistent with, and even implied by, our general theory. We need only recognize that up until the 18th century, Germania was mostly composed of autonomous city-states. Correspondingly, their foreign-trade-oriented guilds, like the export-oriented Dutch shipbuilding guilds of the 18th century (Unger), had extensive work rules, making them unusually labor-restrictive as well as capital-restrictive.²⁴ Again, autonomous local governments should grant simple monopoly rights to their foreign-trade-oriented industries to exploit terms-of trade effects, with the observed local capital taxes being called-for in addition because such monopolistically chosen capital stocks are

²⁴ See Staley, Chs. IV and V for a description of Florentine input restrictions, including taxes on variable inputs. Our best information on the thoroughly labor-restrictive character of the export oriented German guilds comes from conversations with Professor Claus P. Clasen.

TABLE 2

State	Development of the Modern Tax On Fixed Capital	Effective Elimination of Guild Entry Restrictions
Holland ¹ & Zeeland	17th Century	Late 17th Century
England ²	18th Century	2nd Quarter of the 18th Century
Denmark and Norway ³	1813	1800
France and Flanders ⁴	1790s	1790s
So. Italy Spain ⁵	1st quarter of the 19th Century	1780-1865
Sweden and ⁶ Finland	1840-1870	1840-1865
Germania ⁷	13th Century	Late 18th and 19th Centuries
Russia ⁸	1917	1900

NOTES: ¹On the various 17th century Dutch property taxes, see Tracy, Ch. VI. Seligman similarly reports various irregular general property taxes throughout 17th century Netherlands. While entry-restricting shipbuilding guilds remained late in the 18th century (Unger), other such guilds in Holland and Zeeland had severely declined to insignificance by the end of the 17th century (Kellenbenz, p. 466).

²In 1692 England introduced a general property tax known as the "land tax". The tax assessed not only land rents but also urban property rents and capital stock interest (World Tax Series, Taxation in the United Kingdom, Houseman). While the tax initially failed to account for increased property values, a series of 18th century acts updated property values for tax purposes and finally produced the automatic updating characteristics of an ordinary general property tax system (Houseman, Seligman pp. 53-75, and

Table 2 (cont.)

Dowell pp. 81-98). English guilds declined slightly in the 17th century, but then declined much more rapidly until they were essentially extinct by the middle of the 18th century (e.g., Kramer, pp. 139-161).

³Denmark and Norway abolished guilds through free trade legislation in 1800 and introduced a national tax on movable property in 1813 (Barton, p. 213, and p. 329 respectively).

⁴France introduced its first property and a substantial inheritance tax in 1789 and an income tax in the 1790s (World Tax Series, Taxation in France, pp. 79-86). The inheritance tax, known as the Registration Tax Law, taxed all capital as a proportion of its value when it changed ownership. France formally abolished her guilds after the Revolution in 1793 (Godechot, et al., Ch. 1).

⁵The French tax system was also implemented shortly after in Italy and Spain (DeRosa and Godechot, et al. p. 265, respectively) The new property taxes were maintained after Napoleon left. As elaborated later in this section, Spain eliminated the entry-restricting role of guilds in the 1780s (Olivera, Ch 5; Godechot, p. 228) while Southern Italy restored their guilds after Napoleon left and kept them until 1864.

⁶Sweden and Finland, while experimenting with property taxes in 1840, did not introduce a regular income and property tax until the 1860s (World Tax Series, Taxation in Sweden, pp. 71-73). Their entry-restrictive guilds while weakened around 1840 were not abolished until their "Freedom of Trade Act" in 1864 (Schmidt).

⁷Prussia, as well as numerous Germanic city states all the way down to and including the Northern Italian city states in the Po Valley, had an extensive property and income tax system by the mid-14th century (World Tax Series, Taxation in Germany, pp. 6-11, Staley, pp. 192-193, and Burckhardt, pp. 3-4), but nevertheless maintained strong entry-restrictive guilds until the late 18th and 19th centuries (Berner, p. 19, Godechot, Ch. 1, Holborn, v. 2, p. 414, vol. 3, p. 210). The apparent contradiction is discussed at length in the text. On the gradual development of a general property tax in medieval Germania, see, e.g., Seligman, p. 39.

⁸Russian guilds, after struggling through the modernization period of the 1880s and 1890s, were suddenly abolished in 1900 (Lyashchenko, p. 553; Clarkson, pp. 303, 355-56). Russia's subsequent, belated (Lyashchenko, p. 556), imposition of a national tax on fixed capital may have been somewhat overdone.

still too large in the presence of a local defense externality. The entire welfare argument stays relevant until the national centralizations of the late 18th and 19th centuries, when these cartelizing guilds were, in fact, eliminated.

This is not to say that export monopolies were irrelevant to the more centralized states in the West. However, the optimal form of monopolization against foreigners in a nation state -- owing to the total impracticality of national cartelization -- is selective export taxation. Export taxation was, of course, the established policy of late Medieval England, Denmark, France, and Spain (e.g., Miller, Coornaert, Ch. I, and R. Smith, Chs. IV and V). Export taxation was also frequently observed in medieval Florence, which often negotiated the degree of monopoly with the surrounding countryside states and therefore found it useful to adopt a monopolizing technique that would facilitate flexible contracting over the degree of monopoly (Staley, Chs. IV and VII).

3. *The timing of the demise of the guilds.* A simple question arises as to why guilds were kept by the early modern Protestant states in Scandinavia up to their 19th century introductions of modern property or income tax systems. Why didn't they behave like England by relatively quickly replacing guilds with property taxes?

These long, 50-125 year, lags in emulating the English success are especially puzzling because capital taxation was no stranger to Europe. As we have already noted, late Medieval European kings systematically employed capital taxes, presumably to collect for the defense externalities investors imposed on them as protectors of the entire kingdom. (The English tallage and later their "10th's and 15th's", the traditional French *taille*, and similar taxes throughout Western Europe all were levied against both real

and personal property (e.g., Dowell, p. 70, Seligman, pp. 43-56)).

Reviewing to help clarify the question, it was only within the medieval trading city, a citadel often defended without the help of the king and with disproportionate military aid from the relatively immobile investors in fixed capital (e.g., Black, Ch. 1, Thrupp, p. 43), that guilds were first evolved. Medieval cities did not simply impose their own capital tax similar in form to the kings', such a policy sufficing to induce each investor to internalize the marginal local defense cost of his capital, because medieval guilds were independently justified as producer collectives protecting capital from internal bureaucratic expropriation. But such organizations obviously have a built-in monopolizing incentive. To convert this potential problem into a social benefit, the medieval city had only to limit guild monopolization to acceptable, viz., capital, input restrictions and rely on guilds for lump-sum support, especially during military emergencies. This produced an equivalent to a system of local capital taxation, a first-best-efficient policy in the presence of local defense externalities. Now the growing military power of the European kings in the early nation-state period, being based in large part on their ability to employ gunpowder to destroy local fortresses (e.g., Batchelder and Freudenberger), steadily reduced the relative military strength of local lords and correspondingly produced an increasingly confiscatory tax burden on these lords. This worked through a gradual slippage of the "movables" and "personalities" out of the kings' tax bases (Dowell pp. 81-98, Seligman pp. 53-73, Smith pp. 801-809), leaving the realty of the lords the main object to be taxed to finance the increasingly expensive national governments. Guilds were increasingly welcomed as tax sources by the 16th and early 17th century kings, who were confronted with militarily obsolete and correspondingly

impoverished local nobilities. With the previously local defense externality from guild capital now part of a larger, national defense externality, correspondingly internalized through national rather than local regulation, guilds were correspondingly making large defense contributions to kings (Jones, pp. 144-152 and Renard, pp. 101-106).

But, the question is, why didn't these early modern Protestant kings immediately increase their pre-existing, national taxes on personal property and simply scrap the guilds? After all, guilds in Protestant countries were already appropriately stripped of their administrative role. Even England waited for over a century, essentially the entire 17th century, between the time it stripped guilds of their administrative role and the time it started to replace guilds with property taxes. And Scandinavia waited for over two centuries.

The answer, as indicated in our Introduction, lies in the fact that guilds provided a much more reliable source of emergency taxation than ordinary capital tax systems. Thus, only after these regions financially developed to where their leaders could alternatively rely on convertibility commitments to adequately finance their costly defensive emergencies was their financial dependence on the liquidity and borrowing power of guilds eliminated. Only after the introduction of such a financial system was it appropriate to replace guilds with a modern system of capital taxation. It was therefore highly inappropriate for the countries of Protestant Europe to imitate England and Holland by abandoning their guilds until they first introduced convertible money systems. Indeed, as indicated in Table 3, Scandinavia and similarly legislatively pragmatic and Protestant Northern and Eastern Germania successfully resisted the ideological temptation to abandon their guilds; rather they waited until they were at least close to

the introduction of a convertible monetary system.

But a more basic answer would explain why these Protestant regions, and the rest of Europe for that matter, were so slow to imitate England's financial system? In fact, Protestant Sweden did, from 1719 to 1772, promptly follow England with both a democracy and a flexible convertible money of her own. However, the convertible money system was a copper standard. While storage and transportation costs made the copper standard incapable of financing a really substantial emergency war effort (against Russia), the standard was still capable of producing a gold-standard-type, post-war depression (Thompson, 1987) in the 1760s and 1770s and an eventual end to both her convertible money and her democracy (Heckscher). The Swedish failure suggested that a successful democracy required an English-type precious-metal standard, with which they immediately began to experiment. Thus, once the Swedish lesson was learned, that an effective convertibility system required a precious metal backing for money, legislatively pragmatic Denmark, and newly democratized France as well, were relatively quick to introduce effectively convertible monies to replace the guilds that were being eliminated in both areas during the 1790s. By the end of the 1st quarter of the 19th century, all of the Scandinavian countries, and France as well, had introduced some sort of flexible, precious-metal-based, monetary system. Soon thereafter, they would all be guild-free. These relatively successful countries, like Northern and Eastern Germania, were sufficiently non-ideological to keep their guilds as a source of emergency finance until the same quarter-century that they introduced alternative means of both wartime and peacetime finance.

But the emerging classical theory led the more legislatively ideological southern and eastern neighbors of France to the alternative,

incorrect, inference that it was simply internal laissez faire policy, mainly guild elimination, that was responsible for the remarkable success of England. These countries were led, with the encouragement of Austria, along the garden path of laissez faire ideology and became easy prey for these ideologizing aggressor-states in the first half of the 19th century. Thus, while the relatively ideologized, immediate neighbors of France failed to abandon the path even after Napoleon left (Godechot, et al., Ch. 8, Holborn, v.2, Ch. 15, Walker, Ch. 9), and paid dearly, the more distant states did not really buy the new economic ideology and fortunately returned to their own, economically pragmatic, efficient paths soon after Napoleon lost his hold over them (Holborn, Godechot, op. cit.) The entire pattern is detailed in Table 3.

Table 3 illustrates, first, a close relationship -- among the non-ideological countries -- between the birth of a flexibly convertible currency and the beginning of the accelerated demise of guilds, thereby indicating the importance of guilds as substitute sources of emergency finance. Second, Table 3 tells us that the more economically ideological nations first outlawed guilds and then -- after suffering Holland-type military disasters due to their losses of emergency financial capability -- introduced English-type convertible currencies.

In particular, consider, in view of Table 3, the four regions (other than Holland, which we have already discussed) that abandoned guilds for significant periods of time before adopting convertible currencies: Spain, Switzerland, Northern Italy, and Southwestern Germany. Following our theory, each of these areas suffered dramatic losses in territory during this period. Spain lost her extensive empire in the Americas. Switzerland completely lost her traditional ability to maintain military and economic

TABLE 3

Country	Introduction of Convertible Currency	Beginning of the Accelerated Elimination of Guilds
Holland ¹ and Zeeland	1810's	1650's
England ²	1690's	1730's
Denmark and Norway ³ France and Belgium ⁴	1803	1790's
So. Italy ^{5a}	1860's	1860's
Spain ^{5b}	1830's	1790's
Sweden ⁶	1820's	1840's
Northern ^{7a} Germany	<u>Two Steps:</u> 1770's/1850's	<u>Two Steps:</u> 1800's/1860's
Switzerland ^{7b}	1870's	1790's
No. Italy ^{7c}	1850's	1770's
Bavaria and the Rhineland ^{7d}	1850's	1810's
Austro-Hungary ^{7e}	1790's	1860's
Russia ⁸	1890's	1900

NOTES: ¹The United Provinces first issued a convertible paper currency in 1813 through the newly established, state-regulated Bank of the Netherlands (Conant, p. 289). However, guilds in Holland and Zeeland began to decline rapidly in 1652 (see footnote 4).

²National convertible paper currency was first issued in England, though the government dominated Bank of England in 1696 (Vilar, p. 207). However, the accelerated decline of guilds occurred later during the 1730s when guilds lost their legal and political power to maintain their entry-restrictions (Kramer, pp. 139-61).

³Denmark and Norway first issued convertible paper currency in 1803 (Del Mar(a), p. 304), and had officially abolished guilds in 1800 (Barton, p. 213).

Table 3 (cont.)

⁴National convertible paper currency, through the newly established government-owned Bank of France, was first issued in 1803 (Del Mar(b), p. 204). However, French guilds were abolished through legislation in 1793 (Godechot, p. 11). These dates also apply to Belgium since during this period Belgium was under French jurisdiction (Godechot, et al., p. 228).

^{5a}Convertible paper currency was first issued in Southern Italy during the period 1850-1870 through the various state banks. Examples of the first issuance of such convertible paper are: in the Papal states in 1850 through the Bank of Naples; and in the Kingdom of Sicily in 1870 through the Bank of Sicily, (pp. 21-26, Canovai). Guilds in Southern Italy, although temporarily disappearing during the Napoleonic era, remained relatively strong until they were abolished in 1864 (Godechot, et al., Ch 1; Unwin, p. 1).

^{5b}Spain first issued convertible paper currency, through the newly established government owned Bank of Spain, in 1829 (Del Mar(b), p. 117). However, the entry-restricting role of guilds in Spain was first attacked over 20 years before under the French dominated liberal regime (Godechot, et al. p. 228; Olivara, p. 375). Guild entry restrictions returned to Spain in the early 1800s, fitfully coming and going until the final demise of Spanish guilds in 1835 (Olivara, Ch. 5).

⁶Sweden first issued a workable convertible paper currency in 1829 through the state owned Bank of Sweden (Del Mar(a) p. 297). However, guilds did not rapidly decline until 1846 when by statute they lost most of their entry-restriction rights (Heckscher, p. 236).

^{7a}While Prussia first issued a convertible paper currency in 1765 through the state owned Royal Deposit and Loan Bank, it was not until the Royal Bank was reorganized as the Bank of Prussia in 1848 that the amount of convertible paper became highly significant (Flink, pp. 1-2). Prussian guilds remained until the industrial freedom decree of 1868, which removed the legal ability of guilds to restrict entry (Holborn, v. 3, p. 201), but were weakened substantially from 1798-1806 (Holborn, v. 2, p. 378), just prior to their sudden military defeats at the hands of the French. This ignominious collapse of the proudly militaristic Prussians was achieved, consistent with our theory, because of a simple lack of Prussian emergency funds (Holborn, v. 2, p. 417). Prussian guilds were substantially restored after the death of the reforming Hardenberg in 1822 (Holborn, p. 458). Correspondingly, Prussia reverted to her traditional role of a successful aggressor-state.

^{7b}Switzerland first issued a national convertible paper currency in 1875 when it placed the various privately owned banks under federal legislation (Conant, p. 303). However, Swiss guilds were abolished in 1798 under the French dominated liberal Helvetic regime (Oechsli, p. 326).

Table 3 (cont.)

^{7c} The Northern Italian Piedmont state first issued a convertible paper currency in 1848, through the newly established state owned National Bank (Conant, p. 19). However, guilds in Northern Italian cities were being dismantled as early as 1778 under a liberal regime (Berner, p. 20; Woolf, Ch. 7).

^{7d} An imperial convertible paper currency was first issued in Southwestern Germany in the late 1840's through various state owned banks. Sample of such banks was the Mortgage and Acceptance Bank of Bavaria (Flink, p. 2). Guilds were permanently eliminated in the Western German states soon after the area was invaded by Napoleon (Holborn, v. 2, p. 390).

^{7e} Although the Austro-Hungarian Empire first issued a small quantity of convertible paper in 1762 (Del Mar(b) p. 329), the quantity of such paper only became significant early in the Napoleonic era (Del Mar(b), pp. 329-30). Austrian guilds remained strong and were protected by the government until the 1850's (Holborn, v. 2, p. 451). The guilds were finally abolished during the period 1859-60 (Unwin, p. 1).

⁸ Russia first issued a convertible paper currency through the state-owned Bank of Russia in 1890 (Lyashchenko, p. 557; von Lave, p. 113) and a conventional gold standard in 1897 (Riasanovsky, p. 441). Guilds were suddenly abolished soon after in 1900 (Lyashchenko, p. 553; Clarkson, pp. 303, 355-56).

independence. And Northern Italian and Southwestern German provinces and city states all similarly lost their partial autonomy to the less internally liberal, guild-retaining states of Eastern Germania, Austria and Prussia.²⁵ With the most ideologically inspired countries failing and the contemporary Enlightenment democracies continuing to exhibit exceptionally high growth rates, late 19th century Europe predictably saw a wave of pragmatically inspired, finally successful, democratic revolutions, supported by belatedly established convertible currencies.

The long delays in the Southern and West-Central European implementation of England's efficient policy set was thus caused largely by the mistaken ideological adoption of the very theory we are criticizing in this paper. This traditional theory misattributed the early success of Holland and the continuing success of England to their anti-guild policies rather than recognizing that it was the effective, legislatively pragmatic, democracies of early 17th century Holland and 18th century England that accounted for their great successes. England's guild elimination had uniquely succeeded only because she, unlike neighboring Holland, was unencumbered by a strong economic ideology and could therefore clearly see the value of establishing a reliable emergency financial system before replacing guilds with a modern system of capital taxation.

²⁵ Similar losses were not seen again in Western Europe until a century later, when these countries systematically abandoned their convertible currencies and were saved by the one country that did maintain a convertible currency (the U.S.).

IV. GEOGRAPHICAL EXTENSIONS

A. European Colonies

Freshly settled European colonies -- those in the Americas, Australia, New Zealand, and Africa -- have never been granted broadly entry-restrictive guilds. This is usually considered to be peculiar because the settlers have, most frequently, been citizens of a mother country in which guilds were concurrently quite popular (see, e.g., Commons). Moreover, under the conventional monopoly view of guilds, it would be especially appropriate to reward these information-providing pioneers with monopoly rights. (Indeed, monopoly rights have been regularly granted to large trading firms, who have both an ability to defend the relevant parts of the acquired territory and a strong tie to the mother country.) But strong colonial guilds are a rarity.

Our theory easily explains this anomaly. A mother country has a negative interest in the ability of politically inferior territories to independently defend themselves. Once a colony can independently defend itself, it becomes rational for the colony to choose independence by establishing a local defense commitment, the parent being unwilling to risk making such a commitment, as revealed by its refusal to grant the colony political equality. Of course, once the colony becomes independent, it is no longer available for rent extraction, and the return to colonization is eliminated. Therefore, under our defense-oriented theory of guilds, significant colonial guild systems would, by hastening colonial independence, be undesirable to the mother country. Guild systems would make it more difficult for the mother to hold onto her profitable offspring and would correspondingly reduce the rent she could extract from the offspring.

For the same reason, colonial governments have traditionally been forced to depend on the currencies of their mother country despite their

frustrated pleas for some financial autonomy and complaints of "shortages of money" (e.g., Bolino, ch. 2). We don't know of a single case in which a central colonial government has ever been allowed to issue its own flexibly convertible, paper money. Moreover, once freed from their mother countries, successful ex-colonists typically have immediately introduced convertible currencies of their own. Experience, again in spite of the prevailing classical ideology, has again been the teacher, at least in the case of the United States (e.g., Bolino, p. 71). For example, the U.S. abandoned their central bank in 1811, immediately began steadily losing a war to an already-busy England in 1812, and could not regain stability until abandoning principle and restoring a central bank in 1816 (Sheiber, et al. pp. 105-106).

B. Historical Eastern Centers

Byzantium, in contrast to the West, continued, and even strengthened, the *Collegia and Corpora* of the Ancient Roman Empire (e.g., Mickwitz, Ch. 1; pp. 77-78) and, of course, dramatically succeeded until faltering during the 11th century and then suddenly and permanently falling to the reawakening West during the Fourth Crusade early in the 13th century (e.g., Jenkins, p. 79; Lindsay, Chs. 16 and 17). Like the *Collegia*, Byzantine guilds were politically active, making a substantial contribution to Byzantium's unique form of democracy (Guerdan, Ch. I). But they were administratively inactive. The highly detailed guild rules in Constantinople, although fairly democratic, were administered by the prefect's bureaucracy with almost no input from the guilds (e.g., Lindsay, pp. 158-159). According to our theory, this would be efficient only if the bureaucracy was civilly reverent, which it clearly was under their initially Caesaropapistic, orthodox form of state Christianity, at least up until the middle of the 11th century (e.g., Vasiliev, pp. 334, 469-475). Up to this point, Byzantine guilds had

been highly successful, all-input-restrictive, guilds of the Germanic type, efficiently imposing selectively restrictive, cartelizing controls on their large foreign trade sector (Mickwitz) while charging uniformly high entry fees and periodic license fees and collecting substantial emergency contributions (Rice, pp. 101, 124; Cameron, p. 119; Lindsay, p. 157).²⁶

The great early success of the Byzantine Empire brought with it a gradual return of Hellenism (e.g., Jenkins, p. 823). This trend was held in check up to the death of Basil II in 1025, whereafter it greatly accelerated under the influence of Michael Psellus and the later Macedonian Emperors (e.g., Rice, pp. 91, 102; Jenkins).

Although the military and financial disasters of these late Macedonian Emperors resulted in a conservative return of the Byzantine bureaucracy to Orthodox Ceasaropapism, there was also a continued growth of Hellenistic humanism (e.g., Vasiliev, pp. 469-472, 478-479). The only way to simultaneously satisfy both of these ideologies was to surrender the urban-democratic rule-making process over to authoritarian Hellenistic idealogues, which clearly occurred (e.g., Finlay, pp. 270-271). With popular insurrection the only means of political expression left to the guilds by the mid-11th century (Vryonis) and the subsequent emperors adopting personally highly protective bureaucracies so as to make themselves impervious to insurrection (Finlay, Ch. 1), the natural result was the sudden emergence of Hellenistic

Byzantium did not have the long periods of apprenticeship characteristics of the West (Mickwitz). This is due, applying our theory, to the absence of large feudal countryside from which to recruit new members. With recruitment into the guilds of Constantinople therefore largely from the families of existing guild members (Lindsay, p. 160; Rice, p. 122) there was little call for the state, even one as hyperactive as the Byzantine state, to impose institutions serving to tie potential soldiers to the city.

despotism. Peacetime urban taxation under the Comneni and Angeli thus continued the rise begun under the similarly Greekophilic Macedonians. In the end, the hopelessly overtaxed common guildsmen, rather than filling their traditional role of defending the walls of Constantinople (Rice, p. 124) during the infamous Norman seige of 1204, cheered on the enemy (e.g., Lindsay, pp. 165-67).

V. CONCLUDING OBSERVATION

While those European countries remaining free from economic ideology have behaved, given our economic model, with exemplary economic efficiency, those countries captured by an economic ideology have consistently adopted myopic financial policies. In particular, the early Christian theocracies, the Byzantine Empire, High-Renaissance Northern Italy, Counter-Reformation Bavaria, late 17th century Holland, the early-mid-19th century southern and eastern neighbors of France, and early 20th century Russia, each under the influence of a fashionable economic ideology rather than simple economic pragmatism, each adopted a prematurely anti-guild policy and promptly suffered predictably disastrous economic consequences.

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