

A NEW INTERPRETATION OF GUILDS, TARIFFS, AND LAISSEZ-FAIRE

by

Charles R. Hickson and Earl A. Thompson

University of California, Los Angeles

UCLA Dept. of Economics
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ABSTRACT

This paper theoretically derives and tests a new explanation of historically observed variations in guilds, tariffs and laissez faire policies. The traditional view, that of classical economics, is that guild and tariff policies have been monopolistic and inefficient, and that the political associations formed to effect such redistributive policies represent a net drain on society's resources. In contrast, our view, based on a new theory of political association formation and a couple of rather straightforward market failures, is that guilds and protectionist lobbies, and the corresponding policies of government-sanctioned entry-restrictions and protective tariffs, have existed in legislatively pragmatic states when and only when the policies have been in the collective interest of the members of the state.

INTRODUCTION AND POLITICAL THEORY

A. The Traditional View

The inefficiency of rent-seeking "special interest groups" has been the dominant political hypothesis of the world's most influential economists since Turgot and Adam Smith, working on 20th century thought through the influence of such diverse 19th century adherents as Marshall and Marx.¹ The two primary historical examples of allegedly inefficient, rent-seeking political associations have been entry-restricting guilds and tariff-seeking political lobbies. Nevertheless, the traditional monopoly interpretation of the actual economic policies generated by these associations is extremely difficult to accept.

1. The Traditional Economic Interpretation of Guilds: A Critique

The traditional interpretation of entry-restrictive guilds is that such guilds represented 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

¹See Turgot, pp. 269-70; Smith, pp. 99-118; Marshall's Principles of Economics, pp. 610-11, 619-20, 640, and Marx's Capital, vol. 3, pp. 800-01. In fact, as has been artfully developed by Tom Sowell, classical political economy largely represented a systematic attack on these special interest groups. In contrast, J.B. Clark's Philosophy of Wealth, probably the most penetrating and insightful discussion of rent-seeking inefficiencies in the entire economics literature, makes no mention of inefficient political rent-seeking or special interest lobbies. This omission reflects the mainline Protestant belief in the efficiency of government that implicitly dominated American policy thought through the institutionalist school until the American rent-seeking literature beginning in the late 1960s and early 1970s (Tullock, Stigler, Krueger, Posner). While the current paper suggests that Clark's implicit belief is much more empirically accurate than the now widely accepted classical view, our argument in support of political interest groups is based upon an explicit political and economic model and direct empirical testing rather than an act of faith.

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 quality-enhancing inputs (e.g., Renard, Chs. V-VII). As a result, virtually all of these institutionalist authors acceded to the classical monopoly view 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 first-best 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, the 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, 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). The only conceivable rationale for a short-run 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 interpretation of these short-run price regulations have indeed concluded that the regulations created essentially competitive short-run behavior (Thrupp, 1963, p. 246; Unwin, p. 92; Pirenne, pp. 181-188).

Therefore, the only way to interpret Western European guilds as monopoly institutions is to argue that these guilds worked mainly to reduce long run inputs through restricting the entry of labor or physical capital. This was Adam Smith's view. (Smith, in Ch. 2, argued that guild rules and practices 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 also work to establish anti-monopolistic short-run prices and

²As the regulators did not 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 transaction prices. Rather, the maximum real price 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 allowed free competition in the quality dimension to produce essentially competitive real prices.

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.)

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

Moreover, if the classical monopoly view were correct, surely the consuming landlords in Royal cities such as Paris, London, and Winchester -- where guilds and their members had relatively insignificant policy influence -- would not have regularly selected, as they did, fairly standard sets of guild regulations (Biddle, pp. 422-447; Johnson, pp. 20-27; and Van Werveke, p. 29, respectively). Similarly, late medieval towns politically dominated by merchant-traders (e.g., Leiden and Lille) would never have granted standard forms of capital and entry restrictions to their politically powerless artisan-suppliers (Duplessis and Howell) if the standard monopoly view of these restrictions were correct.

Proponents of the classical view also argue, following the implications of their theory, that guilds retarded economic prosperity and that increased economic growth was brought about by laissez faire policies (e.g., Pirenne, Nef, Postan, and North-Thomas on the right and Hobsbawm, E.P. Thompson, Tawney and the Webbs on the left). However, such a view is strangely inconsistent with the simple evidence on both the rise and fall of entry-restrictive European guilds.

Regarding the rise of entry-restrictive medieval European guilds, as detailed in B.3 below, early medieval guilds evolved among the more legislatively pragmatic city-states of Europe on the basis of the observed economic successes of neighboring regions experimenting with these new

institutions. Moreover, the rapid growth to maturity of craft as well as merchant guilds beginning late in the 10th 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 increases in economic growth immediately following a strengthening of guilds. They include 15th and 16th century Portugal and Spain, 17th and 18th century Denmark and Sweden and 18th and 19th century Russia (Kellenbenz, pp. 465-467, and Lyashchenko, p. 297, respectively).

The only way for supporters of the classical view to avoid these immediate empirical inconsistencies regarding the rise of European guilds is to argue that these guilds became seriously restrictive only an extremely long time after they became 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 is based in large part upon the commonly observed increases 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 the negative population shocks, the observed consumption boom (the Renaissance) and the correspondingly observed retardation in the rate of economic growth should both be interpreted as qualitatively efficient responses to an unfortunate series of population shocks. However, guild entry restrictions would have no reason to increase under the standard, quality-enhancement alternative to the classical monopoly argument. This inability to provide an efficiency rationale for the

late medieval increase in guild entry restrictions is, as we have already indicated, what ultimately converted most historians to some form of the classical view despite the inherent implausibilities of the view. However, suppose a social optimum required the equivalent of an externality-internalizing tax on real capital, as we shall argue below. Then, guild entry restrictions serving to induce the same quantity effects as a constant *ad valorem* capital tax would indeed have to 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 high entry restrictions long after the 15th and 16th century population recovery could, under a capital tax theory, also be easily rationalized due to the historically high defense expenditures, and correspondingly high rate of optimal capital taxation, characterizing the development of modern nation states. In short, perhaps economists and historians have been too quick in inferring that increases in entry restrictions mean increases in the degree of monopoly. Increases in entry restrictions could just as easily reflect increases imposed by efficient governments using investment restrictions to implement the policy equivalent of an efficient capital tax. Once this alternative is recognized, nothing appears to remain in the evidence prior to the demise of guilds to suggest the classical view.

Regarding the demise of guilds, the sudden widespread elimination of guilds accompanying the rise of laissez faire thought among the southern and eastern neighbors of France around the end of the 18th century was not followed by measurable increases in economic growth during the following half-century. In fact, virtually all of these legislatively ideological, non-pragmatic, experiments in internal laissez faire had negative effects on the incomes of the experimenting countries, as we should expect because the

experiments were based on the same economic ideology we are criticizing in this paper. Indeed classical theory itself emerged just prior to these costly laissez faire experiments largely as 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. Let us elaborate.

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

⁴This assertion is our inference from available 17th century Dutch histories rather than a commonly acknowledged fact. 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) 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 emphasized 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 who 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).

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 market, 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, Rowan, Ch. 19). But these policy pioneers, like subsequent free-market authors, failed to recognize that uniquely low defense costs -- such as those lying at the foundation of Amsterdam's early 17th century economic boom -- justify uniquely low effective capital taxes (Thompson, 1974) and therefore, as we shall develop in the text, uniquely low levels of guild capital restrictions and import tariffs. It was therefore a mistake for De Witt to impose such liberal economic policies on the rest of the Netherlands. De Witt's resulting inability to obtain significant guild support for his great War of 1672 (Blok, Ch. 14, Rowan, Ch. 29) spelled an end to Holland's great economic ascendance despite a highly beneficial influx of Huguenots and the development of a fortunate partnership with England in the subsequent half-century. For the even less democratic Dutch leaders that followed De Witt (Blok, Ch. 17, and Wilson, Ch. 1), failing to detect the substantial weakening in the Dutch institutional structure and thus the cause of the observed jump in defense costs (Blok, p. 480, Smit, p. 62), did little to change matters (Blok, p. 474, Wilson, p. 18).

It was over 70 years before another country stripped guilds of their power to restrict entry. A recently democratized England -- mindful of the Dutch failure in the area of emergency finance (Sherwood, p. 193) -- pragmatically delayed granting her large, politically powerful, merchants this favor until after it pioneered 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 reserve requirements (Thompson 1987). England's guild-destroying lifting of guild entry-restrictions, which occurred throughout the second quarter of the 18th century, therefore had nothing like the disastrous military consequence that it had for Holland. It also had little peacetime economic consequence. 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 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 either: (a) fortunate eliminations of monopolistic incentives toward output restrictions (peculiarly ignoring the simultaneous national imposition of capital taxes, or (b) perhaps that, but also unfortunate eliminations of the abilities of both consumers and common laborers to protect themselves from the quality-deteriorating effect of unregulated capitalism (peculiarly ignoring both the steady in-migration of "victims" into the industrializing areas and the prior national assumption of responsibility for regulating product quality and the independent trade associations of journeymen that simultaneously arose with the disappearance of guilds to enforce these regulations (Unwin, Ch. 18)). However, to repeat, once such peacetime policy replacements are

acknowledged, as detailed below in Section I.4.b, it is easy for us to see why the demise of European guilds had no really significant effect on peacetime economic welfare. More importantly, once the war-support role of guilds is acknowledged, it is easy for us to see why guild-elimination without a timely replacement of the guild's wartime contribution would quickly surrendered the country over to foreign domination. It is correspondingly easy for us to see, as detailed in Section I.4.c, why those parts of late 18th and early 19th century Europe most affected by the pure laissez faire ideology of the day, all eliminated their guilds without replacing them with convertible monies and, like late 17th century Holland, quickly lost their independence to their more legislatively pragmatic neighbors until themselves abandoning romantic laissez faire in favor of a more legislatively pragmatic approach which in turn gave them a convertible paper money a dramatic restoration of national independence.⁵ The

⁵ As a result of these oversights, while it was effective democracy that provided the basic source of the uniquely superior economic performances of both early 17th century Holland and 18th and 19th century England, the at-best incidental policies involving guilds ended up, given the relatively persuasive character of the new classical economists, getting the credit. The guild eliminations (and corresponding national tax reforms) by France's southern and eastern neighbor around the time of the French revolution therefore stuck while democracy could not maintain the support of their ruling classes. The predictable disappointment in these areas throughout the 1st half of the 19th century, along with the continuing success of democratic England, the similarly democratic United States, and the relatively democratic, Northwestern portion of the continent, finally led the local military leaders of France's southern and eastern neighbors to replace the previously romantic, laissez-faire-constrained, democratic revolutions of the 1st half of the century with ideologically unconstrained, politically pragmatic, democratic revolutions.

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

corresponding increases in economic growth in Western and Central Europe beginning in the third quarter of the 19th century and continuing on to this day were thus the result of finally following England in letting pragmatic empiricism, rather than economic ideology, be their legislative guide. Eastern European leaders, typically late, are only now in the process of learning the same lesson.

2. Critique of the Traditional Monopoly View of Observed Tariff Systems

Any monopoly view of observed tariff systems similarly fails to satisfactorily explain the salient features of commonly observed tariff policies. Observed tariffs have frequently been uniform across all traded goods of a given general type even though under a simple monopoly view, tariffs should be highly discriminatory across particular goods because they should vary with the widely varying degree of state patronage across particular industries as well as the widely varying demand and supply elasticities among these industries. Moreover, there are historically countless instances of tariffs on imports of goods having no clear domestic substitute, tariffs that substantially benefit no group of producers whatsoever. Famous U.S. examples are the high tariff rates placed on molasses, flax, and hemp in the "Tariff of Abominations" in 1828, and the high tariffs on tea, coffee, and sugar from 1860-1890 (Taussig, Ch. 2).

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 mind) as divinely inspired. In any case, the importance of effective democracy for economic success was certainly not appreciated at the time. Nor is it much appreciated by modern economists despite the enormous economic success of effective democracy. In contrast, the once-bitten leaders of Western and Central Continental Europe have long since abandoned economic ideology for a more pragmatic, effectively democratic, legislative approach.

According to the conventional approach, whenever such apparent inconsistencies arise, the tariff is automatically inferred to exist for "revenue purposes" rather than for simple monopolistic protection. Owners of fixed factors, such as landlords, are not taxed even though it would be more efficient because such individuals, like guild members, are presumably represented by powerful monopoly-type political interest groups able to impose inefficiencies on their economies. However, a broadly-based domestic tax such as a general excise or consumption tax would, under this theory, be both more efficient and more politically acceptable than the similarly broadly-based import tariff, especially in view of the frequent insignificance of total government revenue under a general tariff (Towle, p. 220). Furthermore, for the revenue view to be correct, there would have to be lengthy lists of tariff-free goods, goods with relatively elastic demands and no domestic producers. Such lists simply do not exist. Without the fallback of the revenue defense, traditional tariff theory becomes hopelessly inconsistent with real-world tariff observations.

Regarding the effect of higher tariffs on economic growth, we find only anecdotal evidence presented for the classical view, usually Great Britain during the latter half of the 19th century, when rapid growth did accompany exceptionally low tariff rates. Our theory will provide an alternative explanation for this coincidence. It will also explain the popularly cited contrary observations of modern Japan, the fastest growing and probably the most import-protected country in the 20th century, and, before that, the U.S. and Germany, which experienced the highest growth rates of the 19th century while maintaining some of the world's highest tariffs levels, and, before that, 18th century England, which experienced the world's highest growth rate of that century under similarly high tariff rates.

Finally, the classical monopoly view cannot adequately explain why domestic producers have continued to benefit from tariff protection over the past century, when consumer interests have dramatically grown in political influence, evinced by the growth of anti-producer regulation of product quality, health and safety. More generally, why should significant tariffs have persisted so universally and so long -- excepting the laissez faire era discussed below -- despite obvious variations in the political power of producer interest groups across both countries and historical periods.

3. General Political Critique

Part of the classical view is that the political pressures toward inefficient monopolistic favors to special interests is so strong that an economic ideology is a necessary ingredient to the efficient elimination of state-granted monopoly protection. However, with respect to guilds, quite the opposite is true. As we have already noted, the only early elimination of guilds that succeeded, that in early 18th century England, occurred in the absence of laissez faire thought, which emerged there only later in that century. With respect to external trade restriction, the only cases we know of in which there is an essentially simultaneous revolution in ideological commitment to free trade and imposition of laissez faire trade policies occurred early in the third quarter of the 19th century with the pragmatic spread of English-style trade-policy throughout Central and Western Europe. These relatively pure experiments in external laissez faire thought and policy produced little visible change in economic development and were quickly abandoned (Bastable, Ch. 9). (We shall indicate in Section II of the text the unique conditions whereby free trade was efficient for England in the century following the defeat of Napoleon while it was inefficient for the rest of Europe.)

Promoters of the classical view typically assert as impeccable evidence for their theory that areas with both relatively low tariffs and weak domestic capital restriction generate increased trade and better concurrent economic performance than neighboring areas with both high tariffs and heavy domestic capital restrictions. We have already discussed the early 17th century success of relatively free-trading Amsterdam. Similarly famous historical examples run all the way from the increasing distress of the increasingly regulated 3rd and 4th century Roman Empire to the modern success of free-trading Hong Kong. However, under the efficiency theory developed in the text of the paper, relatively high tariffs and heavy domestic capital restrictions simply reflect relatively high defense costs, which directly reduce economic welfare. Thus the 3rd and 4th century Roman Empire was obviously a case of dramatically rising defense costs, while modern Hong Kong's defense cost to Britain is essentially zero through its unique contract with China. Hundreds of related episodes could be recounted in view of the huge reduction in internal defense costs and corresponding internal trade barriers resulting from ex-post-successful investments in confederation. The regularity of such observations goes to further confirm our theory by showing that relatively high defense costs consistently produce relatively high tariffs and domestic capital restrictions, both of which are efficient policy responses in view of the economic theory in this paper.

To summarize the above critique, the classical view qualitatively fails in its predictions of the structure of both guild regulations and tariffs, the incidence of both entry-restrictive guilds and substantial tariffs under different external conditions and, most important, the effects on economic prosperity of both the rise and declines of both entry-restrictive guilds

and low-tariff policies. How could such a totally inaccurate theory have gained such widespread academic acceptance?

We believe that the classical view has predominated despite its gross empirical failure simply because it reinforces a convenient bias of activist intellectuals against the ability of common consumers to have their real economic interests represented in legislatively pragmatic, non-ideological, consensual political institutions. In particular, the traditional view -- that common consumers and their elected representatives substantially and systematically undervalue the real price-increasing effects of the output-reducing policies promoted by various political associations of producers -- amounts to a biased, profession-serving undervaluation of the political rationality of the common consumer and the corresponding economic efficiency of popular democracy.

The political-economic reason for this specific inference is simple: If, as may well be the case, consumers could not politically protect their economic interests from the deceptively redistributive policies systematically promoted by a certain producer interest groups, these potential victims -- assuming they were at least aware of their political bargaining weakness -- would rationally prevent the potentially pernicious political association from forming by buying off its key members. Or, in the case that the inefficient association had already formed, the victims' representatives would simply pay the benefiting members of the inefficient association to disband. This suggests a simple theory of efficient political associations.

B. Theory of Efficient Political Associations

1. The Equilibrium Under Complete Political Information

The theory of this paper is based on the underlying proposition that groups of individuals -- say information-sharing victims of some common externality -- will, in a non-authoritarian, or "consensual" polity, join together into a political association to cooperate with one another when and only when it is efficient for the entire society that they do so. The proposition rests on three assumptions. First, it is assumed, realistically, that the society has inherited at least one political association. Second, it is assumed, fairly realistically, that some individuals in the pre-existing political associations can freely communicate any technologically feasible reaction to the behavior of other groups or individuals in the society. Finally, it is assumed, realistically only in some long-run setting conducive to objective economic learning, that all actual and potential members of political associations know the net welfare effects stemming from the existence of any given political association.

Under these conditions, a political association will form when and only when doing so is socially efficient. To see this, suppose that a group of individuals are considering forming a new political association, and that the association would generate a commonly perceived net loss in the society's economic welfare. Then, since the commonly perceived aggregate benefits to the gainers is less than the aggregate loss to the losers, individuals in the initial association would profit by offering to pay each of these gainers slightly more than their individual benefits from the would-be association as long as the association is not formed and the potential losers make their corresponding contributions to the bribe fund. All of these potential losers would rationally pay, and the would-be members

would then accept the payment and oppose the formation of the inefficient association. Thus an existing association will always prevent the entry of new, socially inefficient associations. Pre-existing associations will, by the same reasoning, permit the formation of associations that increase social welfare. Similarly, the exit of inefficient associations occurs under our three conditions because members of any one association or their agents will rationally commit themselves to compensate the losers from the disbanding of the inefficient association, an offer that none of these individuals or their agents will refuse.⁶

While the assumptions of costless strategic communication and complete political information generating the above statical efficiency conclusion are fairly reasonable in a "long run" setting in which key members of the various important associations come to know fairly well one another's strategic behavior and political preferences, in the short run, it is likely that some groups will make serious mistakes and be seriously inefficient. The predictive success of the above statical theory depends largely on how societies respond to these short-run mistakes. In particular, consensual societies initially dominated by a qualitatively incorrect economic ideology should take much longer to develop an efficient set of political associations than legislative pragmatic societies, which evaluate the successes and failures of others in an objective manner. Legislative pragmatism may itself have to evolve.⁷

⁶ A simple existence proof and more formal description and proof of this type of optimality theorem appears in Thompson-Faith (1981).

⁷ Note that a complete legislative ideology, such as classical economic theory, is inconsistent with the efficiency of any consensual, e.g., a democratic, system in that if the ideology is correct, the consensual system is an expensive superfluidity; and if the ideology is incorrect (i.e., it leads away from efficiency rather than towards it) then the society suffers

2. Dynamic Adjustment Under Incomplete Political Information

If, because of miscalculation, a significantly inefficient political association should form in some localities, other localities, at least those able to observe and objectively evaluate the resulting decrease in the prosperity of the localities with the new political association, would certainly not adopt the new institution. So the inefficient institution would not spread to these other, independently governed, localities. Similarly, if one of several pre-existing political associations suddenly becomes relatively inefficient, those localities without the association would become relatively prosperous. Seeing this, other, objectively oriented, consensual localities would disband the association. In this way, efficient institutions among objectively oriented, non-authoritarian societies are locally stable. Correspondingly, the diffusion of a more efficient set of political associations from one locality to another should be relatively rapid in societies with a relatively pragmatic, non-ideological, legislative philosophy.

3. Examples of Evolutionary Dynamic Adjustment: The Rise and Decline of Both Guilds and Laissez Faire in Western Europe

An example of the dynamic evolution of a presumably efficient political association is the development of the Western European guild. The popular 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 Empire. However, with the help of Byzantium late in the 6th century, the combination of Germanic rulers and Roman Catholic

when it affects legislation. Incomplete legislative ideologies may -- conceivably -- be consistent with efficient democracies. Referring to note 5 above, effective democracies may be inefficient in that the ideology hastens the achievement of an optimum. Our empirical results suggest that it is not easy to find such cases.

bureaucrats which was developing a dark age for Western Europe lost its suzerainty over large parts of Italy. Among the numerous freed-up towns and principalities in these new protectorates of Byzantium was the little republic of Naples, whose traditional independence from the church in Rome had left it an enclave of Greco-Roman culture. 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 financial role which we shall discuss later, a direct role in civil administration (Headlam).

The simultaneously forming, Byzantium-supported, oligarchies of refugee merchants 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 merchants (Hyde, pp. 20-22). The subsequent economic successes of these three little merchant-administered governments amid the general decline elsewhere (Sedgwick, Ch. 8, Hyde, Ch. 1) was not lost on their Northern neighbors of Pisa and Genoa, on the Lombard capital of Pavia, or, most 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 murders 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 trade associations (Staley, p. 36). The subsequent relative success of these guild towns (Sedgwick, p. 70), especially Florence (Staley, p. 6), the continued relative success of Naples, Venice, Amalfi, as well as the success by 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. Soon thereafter -- once

the increase in Italian prosperity was visible -- guilds spread to the 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 Leige, Paris, Ruen, Toulouse, and other trade-connected guild-run towns such as Marseille, resulted in a spread of merchant guilds into neighboring western Germany and England beginning around 1100. Finally, guilds began in eastern Germany with the hanse in the late 13th century and blossomed in the 14th century (Mundy, Ch. 1). With the coming of merchant guilds and guild-administered cities in the middle ages, Western Europe prospered for centuries in this quasi-long-run equilibrium.

While the above description of the spread of a political association based on economic success of similar regions accepting these associations does not reveal the underlying source of its economic success, it is apparent that guilds arose only when the typical merchant came to own significant amounts of trade capital. The subsequent, rapid spread of entry-restricting craft-guilds 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 stock of a typical craftsman had grown to an economically significant level.

Guild decline, like guild expansion, was similarly emulative in legislatively pragmatic regions relative to regions dominated by legislative ideology (economically liberal rather than Catholic) to the point that the only impressive economic performances were by consensual, legislatively pragmatic polities. These observations, which we have already sketched, are just what we would expect under our theorem on efficient political associations.

Complete laissez faire requires, in addition to the absence of domestic regulation through guilds or guild-like institutions, the absence of government interference in foreign trade through protectionist trade lobbies. The only European case we have found of a successfully sustained -- almost century long -- laissez faire policy developed during the second quarter of the 19th century in Britain on the heels of the rapid rise of the Second British Empire, which itself began near the end of the first quarter of the 19th century.⁸ As we have already mentioned, much of continental Europe soon began to follow the British example by moving toward a complete laissez faire philosophy and policy early in the third quarter of the 19th century but soon abandoned the policy as the genuinely democratic reforms of the late 1860s made such unsuccessful, ideologically inspired measures politically impractical. Britain too eventually discarded its own laissez faire policy after it was economically overtaken by the U.S. and Germany, both of which were politically dominated by both protectionist and newly regulatory special interest groups.

⁸While Britain maintained a free-trade policy all the way up to the 1920s, during the 1870s' Britain's industrial laws were changed. The new changes made it easier for unions to form closed shops and thereby monopolize whole industries. (While liberalizing changes in labor laws before the 1870s recognized the value of craft unions as "labelling institutions" (Hickson), they did not make it easier for unions to establish labor monopolies.) This served as a substitute, albeit an inferior one, for their privately optimal, export-monopolizing, tariffs, a substitution necessitated by the ideological constraint imposed by laissez faire teaching. Supporting this is the fact that union monopolies were achieved in, and only in, those sectors where England exported outside of her Empire and had a substantial effect on world price (viz., iron, ship-building, coal, and machine tools).

Note in this regard that our definition of laissez faire in this paper is a rather weak, undemanding definition. We say an area has a "laissez faire" policy if it is essentially free of tariffs and capital-restricting trade associations. There may, as in Britain, be all sorts of social legislation, governmental production, and extensive bureaucratic regulation in what we are calling a "laissez faire" economy.

C. Application of the Political Theory

What makes a set of costly political associations efficient is the efficiency of the economic policies induced by its existence. In particular, if guilds and protectionist lobbies represented an efficient set of political associations, the economic policies created by their existence would have had to be efficient. A direct test of our political efficiency hypothesis, at least as it regards guilds and protectionist lobbies, is therefore provided by evaluating the economic policies generated by these political associations. This test is the subject of the text of the paper. Section I proposes a new, efficiency-based rationale for entry-restricting guilds serving to explain the general structure of guild policies as well as the rise and decline of European guilds. Section II will then propose a new, efficiency-based rationale for protectionist lobbies serving to explain the rise and fall of laissez faire as well as the traditional structure of protectionist trade policies.

I. AN EVALUATION OF THE ECONOMIC POLICIES GENERATED BY GUILDS

A. Socially Optimal Guild Policies

This paper considers two primary efficiency arguments for guilds. The first applies when law-respecting (i.e., "civilly reverent") bureaucrats are unavailable. The argument recognizes that investors in fixed capital are, in the short run, subject to domestic, bureaucratic expropriation. To prevent such expropriation, intentional or not, when bureaucrats are not civilly reverent requires the steady political-administrative input of the potential victims. Political associations of the potential victims, such as guilds, may perform this administrative function. Civilly reverent bureaucrats, when available -- obviate these highly costly administrative inputs (Thompson 1988).

The second efficiency argument has two parts. The first recognizes that, because the leaders of large cities or nations defend the fixed capital stocks of their regions from foreign aggression, investors must pay some kind of effective peacetime tax on fixed capital if they are to internalize the defense cost they impose on their area's leader (Thompson, 1974). Secondly, efficient taxation requires that certain members contribute substantial net benefits to emergency war efforts so that efficient tax systems also provide these members with peacetime tax breaks (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 emergency contributions from certain classes of investors, evolutionary competition among economies will result in economic policies that both tax investors in fixed capital and provide war-supporting investors with peacetime tax breaks corresponding to their net wartime contributions. Thus, for example, competing trading towns in the

early middle ages, finding tradesman-investors contributing heavily to emergency local defense, should have competed for such investors by offering them corresponding peacetime favors while still discouraging the accumulation of coveted capital by the favored investors. Guilds were organizations of such investors. The favored investors were granted the right to collectively restrict capital inputs into their industries in exchange for their net military contributions.

The same tax-defense analysis holds for the city's human capital. Both masters and journeymen, as well as apprentices, paid fixed fees for entering the city's labor force. Masters and journeymen typically paid successively higher rates, largely reflecting their successively higher coveted capital stocks, and inferior statuses as potential draftees, relative to suitable apprentices.⁹

Apprentices were particularly valuable as potential draftees because of their suitable fighting age. (They typically served as an apprentice to at least 25 years of age (Thrupp, p. 193).) This high potential as a draftee is

⁹This contrasts with a modern tax on labor income in part because it did not induce an unjustifiable substitution towards leisure. It is equivalent to a proportional tax on wage rates, which is an efficient tax on human capital, rather than a proportional tax on wage incomes, which is not.) Also, the tax was largely collected as the worker enter the labor force (a guild's registration fees were typically much larger than the guild's annual dues). An obvious rationale for this policy, despite its strain on the liquidity of the medieval economy, is that the emergency defense contributions of a city resident were highly insecure, relative to the later contributions of the citizen of a nation state. In most cases, the worker's family lived outside the citadel and could provide a convenient place of refuge during raids, sieges, or city wars generally. Since cities also could easily refuse to deliver future favors to workers fleeing military emergencies, cities withheld favors from their workers until a fairly distant future, one in which other attachments (viz., a shop) would serve to keep the man around. This also rationalizes the much-maligned practice of allowing a master to pass on his position only to his own sons (who are especially valuable to the city because they are especially likely to meet the challenge of future military emergencies because of their special affinity for that city.

probably what made the city require that apprentices serve as dependent residents of a master, such residences making the youth readily available to the city during local defense emergencies. It also led cities to encourage the existence of a pool of trained apprentices, which they almost universally responded to with laws substantially lengthening the apprentices years of service with his master long beyond that which free contracting would produce. It is important to note that this particular defense externality, like the resulting law, is quite independent of the existence of guilds. Guilds, we are arguing, 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 physical 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 7 year apprenticeship on all towns in 1563 -- whether or not the towns had guilds -- and then maintained the restriction all the way to 1813, long after her guilds had substantially disappeared.

What has been overlooked in the traditional literature¹⁰ is that apprentices, being natural draftees, in efficiently providing for a city's local defense, have a natural incentive to avoid providing these high-risk

¹⁰ Adam Smith (Ch. 2) considers the long guild apprenticeship term to be labor-restrictive. Most other authors similarly regard these lengthy apprenticeships as part of a set of purely redistributive institutions facilitating the aristocratic exploitation of labor in the same way that serfdom or debt-peonage aids in the exploitation of labor. However, given that freely bargained, up-front lump-sums were involved in the hiring of new apprentices, the length of an apprenticeship couldn't have significantly affected the net opportunity cost of labor. Artificially long apprenticeships must have simply produced a higher average quality of the laborers in this skill category and therefore higher effective wages, with no substantial effect on the real cost of labor and therefore no significant internal allocational effect.

services. Accordingly, the master -- whether or not he was a guildsman -- was induced to carefully watch over what the labor law had induced to become his personal investment. Indicating the extent to which masters incurred early sacrifices in training apprentices, masters typically insisted on their cash payments for training a youth (usually from the apprentice's family) within the first year of the apprenticeship; and guild records abound with examples of masters retrieving runaway apprentices (see, e.g., Thomas). 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 (Thompson, ibid.)

By delaying an apprentice's ability to join the city's free labor force until after his prime fighting days were over, the medieval and early-modern city was efficiently aiding its ability to carry out its survival-determining defense commitment in the same way that modern governments register their potential soldiers for the draft (Thompson, 1979). Thus, it was during the Napoleonic era, when continental countries began to rely on nationally drafted, registered, armies that apprenticeship laws came to an end.

Property and income tax systems serve the ordinary capital-tax function for modern economies (Thompson, 1974, 1979), and the resource costs of such a tax system would appear to always be substantially lower than would the resource costs of organizing and controlling entry-restricting guilds. However, with the guilds organized to provide the first function, one of preventing inefficient civil administration, it becomes relatively inexpensive to have them provide their second function, one providing an

efficient system of capital taxation and military aid. Of course, once guilds lose their first function, it is presumably much more efficient to employ a more modern system of capital taxation and military aid, one which entails much less short-run anti-monopoly regulation.

We proceed now to argue that 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.

B. Actual Guild Policies

1. The Ancient Societies of Greece and Rome

Since early Greek and Roman tradesmen were mobile 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. Thus, as our theory predicts, there were in our sense, no "guilds" 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 p. 155-56, Moore p. 164, Finley, p. 158), apparently established to locally disseminate and protect technological information. As our empirical information is insufficient to evaluate the efficiency of these technological operations, we shall simply ignore the issue.

In the later Roman Empire the typical tradesman's fixed capital investment grew to where it was likely somewhat vulnerable to the internal expropriation and, correspondingly, guilds developed from the 2nd century onward. Craftsmen organizations, known as *collegia sodilitia*, 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).¹¹ Correspondingly, as our efficiency theory predicts, the collegia restricted neither entry nor the use of capital by their members (Burford, Finley, *ibid.*).

2. The Dark Ages

From the end of the Roman Empire to the 7th century, free craftsmen essentially did not exist in the West. Merchants, who retained some independence, suffered large reductions in their capital stocks and, corresponding to our theory, discarded their guilds (Black, p. 4). These merchants, and semi-independent craftsmen were, since the closing years of the Roman Empire, each represented by "fraternities", which were a non-autonomous part of the Church (Black, p. 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 internally disseminating trade information among their members.¹²

¹¹The 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. Moreover, membership in the collegia, in the later Empire, was compulsory.

¹²The high defense costs characterizing the Western European dark age meant that high capital tax rates were still in order. The relatively stationary Germanic invaders, the Ostrogoths and Visigoths, the Burgundians and Lombards, and the Saxons and Danes, all set up property tax systems, known in England through the Saxon Chronicles as the "Scutage" and "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 invaders, those remaining closer to their ancient homelands, viz., the Franks, Normans and Suebians, gradually developed "feudal systems", which simply substituted direct, lump-sum military contributions for property taxes while generating about the same investment incentives by granting the local lords only temporary property rights. (The fact that

3. Middle Ages

As outlined in the Introduction, the 7th through the 10th centuries saw a gradual evolution of a new form of commercial organization centered around the guild. The towns adopting this new form were uniformly towns experiencing large increases in foreign trade. These trading towns grew up not as centers of production but rather as storage and trading centers for traveling 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 made it relatively difficult for the old Church bureaucracies to monitor the qualities of merchant deliveries. To effect laws reducing the extent of bureaucratic expropriation (Thompson, 1988), investors in these towns were given new political rights. In particular, the emerging *communes* and *Firma Burghi* typically granted voting rights to merchants, who organized into separate merchant guilds to politically represent the interests of their trade. Merchant guilds first appeared in Italy and, as described in the Introduction, then rapidly spread northwards. With appropriable capital stocks of the cities during this period predominantly in the form of inventory holdings, city regulations were administered by

temporary rights serve as a substitute for an efficient capital tax has been pointed out, and applied to the case of the Spanish *economienda*, by Batchelder and Sanchez.) The French *taille* was introduced only after the area was stabilized under the decreasingly Frankish Capetian dynasty.

While these effective capital taxes probably sufficed as long as the local lord was the only substantial investor and capital owner, once medieval towns began to spring up and other investors appeared, a new type of defense externality began to appear, that from the town investor to the local overlord. The king still collected his various property and income taxes from the local investors, and with it he financed his overall military efforts. But the local overlord, who provided local defense, had now to somehow collect for the new, local, defense externality. This problem provides a context for our discussion of taxation during the late middle ages.

merchants as well as defense-providing local lords (Martines, p. 47). In return for these political rights, investors were obliged to pay the king and local lords occasional lump-sums.

As the *raison d'être* of these towns was trade, all that was needed for this organizational form to fully blossom throughout western Europe was a new economic reason for large commercial towns. This was, as we have indicated, provided by the dark-age evolution of chivalry and feudal orders, and a corresponding increase in the security of key western European trade routes late in the 10th century.

C. The Late Middle Ages

1. *The blossoming of medieval guilds.* A rapid decrease in transportation costs in western Europe in the 10th and 11th centuries produced the rapid growth of trading cities observed throughout the 11th century (Pirenne pp. 25-38, and Hibbert, pp. 164-168). Significant production in the medieval cities began late in the 11th century. From that time onward, medieval trading cities experienced a high and steady growth in fixed production capital and a rapid rate of technological advance (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, the first administratively and politically influential craft guilds appeared late in the 11th century. Like the merchant guilds, these new guilds spread rapidly from their Northern Italian birthplaces in the course of the 12th century throughout Western Europe (e.g., Black, p. 6).

Our analysis differs according to the number of competing landlords residing in the city and according to the political autonomy of the city.

2. *Late Medieval cities with many landlords.* The large 12th century increase in guild-owned fixed capital stocks (Thrupp, 1971) substantially increased the defense cost to the lords protecting the city (van Werveke, pp. 9-15, p. 37). Without some form of capital taxation, as we have noted, private investors in fixed capital in medieval cities with many landlords would not internalize the city's increased defense cost as part of their private cost.¹³ This would lead them to over-invest in fixed capital. Corresponding to our theory, restrictions as to the maximum amount of fixed capital each investor could own quickly evolved into an essentially universal guild policy. 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 actions of their members. For example, English and French guilds were required to elect wardens who were responsible directly to the city government. It was

¹³In contrast, fixed capital in the countryside was directly owned by the local lord, who provided most of the area's defense. As a result, the only capital taxes appropriate in the countryside were Royal taxes on fixed capital.

Now essentially all of a medieval king's tax collectors were tax-farmers, a reflection of the general lack of civil reverence among medieval bureaucrats. For more detail see Templeman's "The Sheriff's of Warwickshire in the Thirteenth Century". Because tax-farmers, even when officially entitled only to lump sums, collected more readily from wealthy taxpayers, a partial wealth tax was implicit. This served to complement the traditional capital taxes, such as England's scutage and tallage and France's taille, resulting in an effective property tax on local governments, appropriate because of the defense externality their wealth accumulations imposed on the king.

the wardens' job to monitor 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 regulations of quality minima 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 requiring members to purchase raw materials in higher quality markets rather than from streethawkers (Renard, pp. 34-35; Johnson, pp. 116-117). Similarly, typical of quality minima on sellers of perishable goods were the restrictions on the London poulterers requiring members to purchase their inputs at times of the week when the average quality of the produce was abnormally high (Jones, Ch. 7).¹⁴

Guilds had many regulations serving to reduce the capital stock in addition to simple entry fees. The long minimum apprenticeship periods, normally 7 years in England and 5 in France, indirectly reduced the stock of capital because masters were the only guild members allowed to own capital. There were also rules against the ownership of multiple shops by masters, rules requiring masters to be present during the operation of a workshop, and rules requiring all work performed by any guild member to take place

¹⁴Such facts, 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, social thinkers who were understandably unhappy with the traditional story but blissfully ignorant of the fact that effective anti-monopoly price regulation requires quality minima as well as nominal price maxima, to believe that guilds existed despite their facilitation of monopoly conduct primarily to induce the otherwise freely competitive sellers to supply an efficient product quality. We have already criticized this quality assurance rationale for guilds, a rationale unable to explain the systematic, government-sponsored, restrictions on the use and entry of high-quality capital inputs.

only at a master's shop. Most directly, guilds requiring relatively large amounts of machinery, like weavers guilds, had rules directly restricting the maximum number of machines a single master could employ. The complexity of these regulations over and above that of simple capital tax can be rationalized by acknowledging their value in effecting the quality minima discussed in the Introduction.

c. *Late medieval cities with few landlords.* A few local lord-protectors were often, along with the church, the only landlords in small medieval cities. These local lords and the church were also the principle customers of the guilds.¹⁵ Although the classical monopoly argument for the persistence of allegedly inefficient guilds is especially implausible in such consumer-dominated environments, the defense externality also becomes smaller and smaller as the individual lord internalizes more and more of the additional defense cost created by new investments, which naturally occurs as he becomes more and more important in the city's decisions with respect to constructing new buildings and attracting new tradesmen into the area. Although the defense externality shrinks, another problem in market inefficiency 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

¹⁵ In London there were 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. There were numerous other landlords who were primarily members of the merchant and cloth guilds (Biddle). In Coventry, in contrast, 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.

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 in his long-term rental agreements with existing tenants. Given that existing tenants have fixed long-term rental agreements in order to protect their specific investments, the landlord would always offer sub-competitive rents to future, extra-marginal craftsmen, because doing so will drive down previous investors' product prices.¹⁶ 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.

d. *Autonomous cities.* Guilds in the middle ages may still have been somewhat monopolistic in that guild cities may have extracted monopoly rents

¹⁶This 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 required of such conspiracies.

from 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 theory because the central authority would internalize the welfare loss resulting from the monopoly. Indeed, the 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 as a result of 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 strongly independent cities might efficiently allow pure monopoly guilds to form simply because they may well serve to efficiently extract consumer surplus from foreigners, including their own countryside. The potential wealth transfers to the city from foreign consumers would induce it to adopt either a simple export tax to restrict production in an optimally monopolistic fashion or, for export-specialized industries, both capital and labor restrictions would approximate pure monopoly restrictions. However, the monopoly-inspired capital restrictions of such guilds would generally be insufficient because they would not include the capital restrictions necessary to internalize the defense externality to the city as a whole. Such cities should therefore also have a property tax on the capital in these export industries.

Therefore, in Germany and Northern Italy, where there was no strong central authority as in France, England, or even the province of Southern

Italy, it almost certainly was efficient for some cities to adopt both property taxes and monopoly guilds in their most export-oriented industries. Indeed, during the late middle ages, most large Northern Italian and German cities, such as Florence, Augsburg and Hamburg, had both monopolistic guilds and selective municipal property taxes. Cologne, which had no property taxes, achieved the same result by restricting fixed capital while allowing simple monopoly pricing and outputs in their chief export industry (Irsigler). A similar pattern appeared in Nuremberg (von Stromer).

4. The Modern Period: The Decline of Guilds

a. *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, 1988), northern European states developed civilly reverent bureaucracies at the end of the 16th century through Protestantism, while southern European states did not begin to develop such bureaucracies until the pragmatic democratizations of the continent in the 3rd quarter of the 19th century. Early 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 toward the poor, than Catholics, which made Protestant bureaucrats less likely to expropriate investors. Later, southern European bureaucrats were converted from either self-interested Machiavellianism or Church-based morality to a pragmatic professionalism in the execution of the rules of the state.

With central governments in early Protestant countries more able to effectively execute a particular legislative policy, northern European governments removed the administrative role of guilds just after the Reformation. This is illustrated in Table A. The policy was implemented by placing guilds under the supervision of either local magistrates (England) or state bureaucrats (Denmark, Norway and the Netherlands). In contrast, the administrative power of guilds remained strong in states that remained Catholic.¹⁷ While some Catholic states codified existing local guild rules into national systems similar to Protestant states, these states maintained, or even strengthened, the administrative role of guilds. For example, while the French Edicts of 1581 and 1582 made guilds part of a national bureaucracy controlling all changes in 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 increased in influence and number while the English guilds decreased in numbers and influence during the Protestant Reformation.¹⁸ More generally, it was quite common for Catholic states to simply prohibit policies strengthening local

¹⁷This raises the alternative hypothesis that guilds were an extension of Catholic religious institutions. However, most other non-civilly reverent urban societies have also been dominated by guilds. Examples are Indian, Egyptian, and Turkish guilds. See Sjoberg's "The Preindustrial City". Moreover, as we are about to see, guilds completely disappeared when the property tax appeared even though Catholicism remained. A similarly naive hypothesis is that guilds, which generally disappeared with the introduction of modern democracy, is that guilds are an authoritarian, non-democratic institution. Such a hypothesis would fail to explain the simple facts that guilds were originally introduced in the predominantly democratic northern European city states in the 12th century and that guild decline was initiated by the quite authoritarian regime of Elizabeth.

¹⁸See Nef (Chs. 1 and 2), who also points out that the guild decline took place in England despite attempts by the king to protect them. English magistrates decreasingly enforced guild regulations, and the statutes became only applicable to crafts specifically mentioned in the statutes.

TABLE A

State	Development of Professional Local Bureaucracy	Loss of Guild Administrative Roll
England ¹ Holland ₃ & Zeeland ² Denmark Norway Sweden Germania	Late 16th Century	Late 16th Century
France ⁴ Italy Spain Flanders Bavaria	Mid-19th Century-Present	Late 18th and Early 19th Century

NOTES: ¹ English 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).

² Dutch guilds quickly lost their administrative role early in the second quarter of the 17th century, after they gained their independence from Spain. Following independence, guild regulations in Holland and Zeeland were administered by provincial authorities which were dominated by large merchants (Unger p. 83, Kellenbenz pp. 464-467).

³ Danish and Norwegian guilds were abolished by a decree of King Christian IV. When they were later restored, they did not regain their administrative role (Kellenbenz, *ibid.*) The advent of government regulation of German and Swedish Craft Guilds in the late 16th century is described by Hecksher (p. 73).

⁴ France outlawed guilds in 1793 and Napoleon and his allies outlawed guilds soon after in Italy, Spain, Belgium and the German Rhine states (Godechot, et al., Ch. 1).

governmental control over guilds. One such policy is that of the old Spanish-dominated Dutch regime. Under the 1531 Buitennering order, this regime granted Dutch guilds continued administrative control by prohibiting industry from locating outside cities. Guilds also grew and gained influence in 17th- and 18th century Portugal and Spain through the encouragement of their respective governments (Merino). However, in the same period there is evidence of substantial declines in the administrative role of guilds in all Protestant states (Kellenbenz, pp. 464-467). As indicated in Table A, it was not until much later that southern Europe also stripped guilds of their administrative role, which, unlike the North, it did at the same time that it was abolishing its guilds completely. While the French bureaucracy developed an "Enlightened", democracy-respecting form of civilly reverence, such as ethic developed more slowly in the other, more Catholic regions, where the pragmatic, emulative, philosophy of "realpolitik" in the late 19th century spread to produce a strong of somewhat viable, ideologically unconstrained, democratic revolutions with professional bureaucracies to replace the old combinations of economic ideologues, churchmen, and aristocrats.

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

Guilds in Protestant areas typically hung on long after losing their administrative role, still serving 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 taxes when guilds were finally eliminated, either by decree or by removing their ability to restrict entry. Table B illustrates the results. Given the timing of the various guild 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. Despite the impressive efficiency

TABLE B

State	Development of the Modern Tax On Fixed Capital	Elimination of Guilds
Holland ¹ & Zeeland	17th Century	Late 17th Century
England ²	18th Century	1st Half of the 18th Century
France ³	1789-1800	1793
So. Italy Spain Belgium ⁴	1st half of 19th Century	1st quarter of 19th Century
Denmark and Norway ⁵	1813	1800
Sweden and ⁶ Finland	1840-1870	1840-1864
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, 1947, 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 Dowell pp. 81-98).

Table B (cont.)

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.

³ France 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).

⁴ The French tax system was also implemented shortly after in Italy (DeRosa), Spain, and Belgium. All these states abolished guilds at the same time. This is because the French guild reforms were spread by the autocratic Napoleon to Italy, Spain and Belgium. Guilds never successfully returned there after Napoleon left. The new property taxes were also maintained.

⁵ Denmark and Norway abolished guilds through free trade legislation in 1800 (Barton, p. 213).

⁶ Sweden 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).

⁷ Prussia, 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, and Burckhardt, pp. 3-4), but nevertheless maintained strong entry-restrictive guilds until the late 18th and 19th centuries. 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.

⁸ Russian guilds, after struggling through the modernization period of the 1880s and 1890s, were formally abolished in 1900 (Lyashchenko, p. 553). Russia's subsequent imposition of a tax on capital may have been somewhat overdone.

of this pattern, Subsection C will show that many of these modern replacements of guilds with property taxes were, under the influence of laissez faire ideology, premature in view of wartime financial problems.

An apparent exception to the pattern in Table B is Germany and Northern Italy, whose various provinces and city states from the early middle ages onward, maintained both selective property taxes and influential, entry-restricting guilds up until the 19th century. The case is, however, quite consistent with, and even implied by, our theory, once we recognize that these old German 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.¹⁹ As we have noted, local governments should grant simple monopoly rights to their export-oriented industries to exploit terms-of trade effects, with capital taxes being called for in addition because monopolistically chosen capital stocks are still too large, given the presence of a defense externality within the locality. The entire welfare argument stays relevant until the centralizations of the late 19th century when guilds were, at least in the case of Prussia and Austria, in fact, eliminated. The timing of guild elimination in the other parts of Germania is discussed near the end of the following subsection.

c. *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

¹⁹ See Staley, Chs. IV and V for a description of the Florence input restrictions, including taxes on variable inputs. Our best information on the thoroughly labor-restrictive character of the export oriented German guilds comes from a conversation with Professor Claus P. Clasen.

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. Medieval European kings had regularly 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 (see, 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' in order to force each investor to bear the marginal local defense cost of his capital because medieval guilds were already present, justifiably organized as producer collectives in order to protect their investments 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 direct guild monopolization to acceptable, capital restrictions and rely on guilds for lump-sum support, especially during military emergencies. This produced an equivalent to a local capital tax, which was first-best efficient in the presence of a local defense externality. Now the growing military power of the European kings in the early modern nation-state period, being based in large part on their ability to employ gunpowder to destroy local fortresses (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 chief 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 an increasing military obsolescence and corresponding impoverishment of their old local nobilities. With the previously local defense externality from guild capital now part of a growing national defense externality, was correspondingly internalized through national rather than local regulation, guilds were correspondingly making larger and larger 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, their guilds were, as predicted, already 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 over two centuries. Why did they wait so long to replace their guilds with simple property tax systems? 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 use convertible money-supply and bond expansions to adequately finance their costly defensive

emergencies -- which occurred first in England at the end of the 17th century, and only in the 19th century in the rest of Europe -- 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.

But then why were these Protestant regions, and the rest of Europe for that matter, 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, which, while incapable of financing a really substantial emergency war effort (against Russia), 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. The Swedish failure suggested that a successful democracy required a precious-metal standard, with which they immediately began to experiment. By the end of the 1st quarter of the 19th century, the Scandinavian countries had introduced a flexible, precious-metal-based, monetary system. All of these relatively successful countries 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 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. While relatively democratic France was relatively quick to introduce a convertible money to replace the guilds that were eliminated in the Revolution, and had a

relatively successful century, their less democratic neighbors to the immediate south and east were led along the garden path of laissez faire ideology through the Napoleonic reforms and did not abandon it even after Napoleon left (Godechot, et al., Ch. 8). In sharp contrast, the more distant Southern Italy, Prussia, and Austria, like Scandinavia, did not really buy the new economic ideology and returned to their own, economically pragmatic, efficient paths after Napoleon lost his hold over them. The resulting pattern is illustrated in Table C.

The Table illustrates, first, a fairly close relationship between the introduction of a flexibly convertible currency and the beginning of the demise of guilds, thereby indicating the importance of guilds as a substitute source of emergency finance. Second, Table C tells us that while the relatively non-ideological countries efficiently waited until after they had introduced a convertible currency to protect their finance-sensitive systems before phasing out their guilds, the more economically ideological nations first outlawed guilds and then, only after suffering Holland-type military disasters due to their losses of emergency financial capability -- introduced English-type convertible currencies.

Thus, consider, in view of Table C, the four regions (other than Holland, which we have already discussed) that abandoned guilds for significant periods of time before adopting convertible currencies: Spain, Northern Italy, Switzerland, and Western Germania. Following our theory, each of these areas suffered dramatic losses in territory during this period. Spain lost her extensive empire in the Americas. The previously prosperous Italian, Swiss, Western German, and Northern Italian provinces and city states all completely lost their traditional abilities to maintain their military and economic independence from the notoriously non-liberal,

TABLE C

Country	Introduction of Convertible Currency	Beginning of the Accelerated Elimination of Guilds
Holland and Zeeland ¹	1810's	1650's
England ²	1690's	1730's
France and Belgium ³	1803	1790's
So. Italy ^{4a}	1860's	1860's
Spain ^{4b}	1830's	1790's
Switzerland ^{4c}	1870's	1790's
Denmark and Norway ⁵	1810's	1800's
Sweden ⁶	1820's	1840's
Western Germania ^{7a}	1850's	1810's
No. Italy ^{7b}	1850's	1780's
Austro Hungary ^{7b}	1790's	1800's
Prussia ^{7c}	1850's	1860's
Russia ⁸	1890's	1890's

NOTES: ¹The United Provinces first issued a convertible paper currency in 1813 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 denominated 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).

Table C (cont.)

³ National 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).

^{4a} 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 1964 (Unwin, p. 1).

^{4b} Spain first issued convertible paper currency, through the newly established government owned Bank of Spain, in 1829 (Del Mar(b), p. 117). However, guilds in Spain were abolished over 20 years before under the French dominated liberal regime (Godechet, et al. p. 228).

^{4c} 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).

⁵ Denmark and Norway first issued convertible paper currency in 1803 (Del Mar(a), p. 304), and had officially abolished guilds in 1800 (Barton, p. 213).

⁶ Sweden 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} An imperial convertible paper currency was first issued in Western Germany in the late 1840's through various state owned banks. Samples of such banks are the Mortgage and Acceptance Bank of Bavaria and the Bank of Leipzig (Flink, p. 2). Guilds were eliminated for good in the Western German states soon after the area was invaded by Napoleon (Holborn, v. 2, p. 390).

^{7b} 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).

^{7c} 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 beginning in 1793 (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).

Table C (cont.)

^{7d} While Prussia first issued small amounts of 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 significant (Flink, pp. 1-2). Prussian guilds remained strong until the industrial freedom decree of 1868, which removed the legal ability of guilds to restrict entry (Holborn, v. 3, p. 201).

⁸ Russia first issued a convertible paper currency through the state-owned Bank of Russia, in 1890 (Lyashchenko, p. 557). Guilds were officially abolished soon after in 1900 (Lyashchenko, p. 553).

guild-retaining states of Eastern Germania, Austria and Prussia.²⁰ With the most ideologically inspired countries failing and the contemporary Enlightenment democracies continuing their impressive growth rates, late 19th century Europe predictably saw a wave of pragmatically inspired, finally successful, democratic revolutions, supported by belatedly established convertible currencies and pragmatic, professional bureaucracies.

More generally, then, the long delays in the European implementation of England's efficient policy set was caused largely by the ideological adoption of the very theory we are criticizing in this paper, a theory that 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, democracy of early 17th century Holland and 18th century England that accounted for their great successes and that England's guild elimination had uniquely succeeded only because she, being unencumbered by a strong economic ideology, could clearly see the source of the Dutch failure in the late 17th century and therefore pioneered a sound emergency financial system before replacing guilds with a more modern system of capital taxation.

Most generally, we have seen that those consensual European societies remaining free from economic ideology have behaved with exemplary economic efficiency, while those captured by some economic ideology have not. Thus, the early Christian theocracies, late 17th and 18th century Holland, the early-mid 19th century southern and eastern neighbors of France, and 20th

²⁰ Similar losses were not seen again in Western Europe until a century later, when these countries systematically abandoned their convertible currencies and were only saved by the one country that did maintain a convertible currency (the U.S.).

century Russia, each under the influence of some fashionable, anti-political-interest group, economic ideology rather than legislative pragmatism, adopted policies that were in fact highly inefficient under a more accurate economic theory, and suffered greatly as a consequence.

II. AN ANALYSIS OF THE ECONOMIC POLICIES GENERATED BY PROTECTIONIST LOBBIES

Applying the same political theory developed above, price-increasing foreign trade intervention in the form of the universal adoption of some sort of tariff system could not have evolved to where it is now universally employed if it were inefficient. In particular, removing the ignorant-consumer bias, wherein consumers or their chosen representatives are traditionally assumed to grossly underestimate the price-increasing effects of various quantity-reducing government policies and the political lobbies that promote them, from the traditional analysis of foreign trade, leads us to again allow domestic quantity-reducing individual choices to confer real external benefits on the rest of society. The most plausible such externality is again the defense externality. Using this externality, we were able to rationalize the rise and fall of guilds as well as the salient features of actual guild policies. We shall now see that the same externality provides us with an efficiency rationalization for the rise and fall of laissez faire along with the salient features of commonly observed tariff policies.

A. Optimal and Actual Tariff Patterns for Small Countries

1. Structure of Import Duties

We now open up our economy, considering first the case of a small country. Suppose the country is importing a consumer durable. Since taxes on the ownership of purchased consumer goods have rarely been significant in history, probably because of concerns about bureaucratic violations of basic personal freedoms, and since the proportion of consumer goods that are imported cannot be taxed through an ordinary income tax simply because they are produced abroad, imported consumer durables generate a defense

externality that can only be internalized through an import tariff.²¹ The magnitude of the optimal tariff is the present value of the future defense liability created by the imported consumer durable. Assuming the annual property tax rate reflects the annual defense liability of a unit of coveted capital, the tariff should represent the present value of the unlevied future property taxes on these imports. For example, if we assume an interest rate of 10%, and an annual property tax rate of 2.5%, the importation of an infinite-lifespan consumer durable should be taxed at 25%.

Of course, imports of consumer perishables generate no substantial defense cost and should not be taxed, at least in the absence of large-country, terms-of-trade effects. Considering semi-durable consumer goods, since low-priced consumer goods are normally much less durable than high-priced consumer goods of the same general type, an efficient tariff system is progressive, concentrating its highest tariff rates on the luxury end of the market for a given type of good.

Considering imports of fixed capital goods, such as industrial equipment, since such goods are generally taxed by the importing country through an ordinary income or property tax, they, like consumer perishables, should be tariff-free in small countries.

²¹ Defense externalities also arise when a consumer good is domestically produced. However, domestically produced consumer durables create much less of a net external diseconomy. This is mainly because domestic producers are, and have been, relatively monopolistic. During the middle ages, domestic production of consumer goods was reduced because of imperfectly regulated guilds. In more modern times, domestic producers are relatively monopolistic because they produce relatively unique heterogeneous goods. This is because certain consumers are willing to pay a premium for tailored heterogeneous goods over homogeneous goods and nearby, domestic, producers have a comparative advantage, based on both transportation and information factors, in supplying these consumers. Local producers will therefore rationally concentrate on the production of goods tailored to suit local tastes, leaving foreign producers to specialize in relatively homogeneous goods.

Finally, consider the case of imports of intermediate inputs, or circulating capital. Even though personal freedoms are seldom relevant here, an extension of the domestic property tax to inventories will not suffice to internalize the defense externality from such capital. This is because a significant part of the circulating capital stock is imported, processed and re-exported all within successive dates of property tax assessment. (While defense externalities would be partially internalized by an inventory tax on those intermediate inputs held across tax-collection dates, the optimal inventory tax rate is below the optimal capital tax rate because real avoidance costs lowers the optimal inventory tax rate below the optimal capital tax rate.) Nor will an income tax work to tax such capital. Regardless of when the domestic producer sells his output from an imported raw material, the expected present cost of his future income tax liability equals his current tax writeoff from purchasing this material. To see this, consider a manufacturer who imports a raw material for a dollar. The income tax rate is again 25% and the interest rate 10%. The manufacturer immediately writes off the raw material expense and receives a credit on his income tax of \$0.25. If he waits a year to use up his material, he sells the good for \$1.10 and pays \$0.275 in taxes. If he waits two years, the taxes are \$0.3025. However long he waits, the present value of the future income tax equals the initial \$0.25 writeoff on the good. Thus, the income tax completely fails to discourage accumulations of circulating capital. With no tariff and no inventory tax, a completely non-internalized defense externality would be clearly present.²² An optimal tariff on circulating

²²The same kind of externality does not generally exist for domestically produced circulating capital. Defense externalities from imports of circulating capital exist because imported inputs are typically located in ports (hence the term "imports"), which makes them vulnerable to

capital is nevertheless typically much less than an optimal tariff on consumer durables. Assuming an average holding period of three years, and the complete absence of an inventory tax, the optimal tariff on a circulating capital import would be less than 7%. The optimal tariff on a circulating capital market is somewhat lower in case there is an inventory tax, which again is usually below the ordinary property tax rate because of the inefficient incentive to move inventories just prior to tax time.

Just as our theory predicts, consumer goods have historically received much higher tariffs than raw material inputs, which, in turn, have typically received higher tariffs than fixed capital goods, which are typically insignificant. Moreover, observed tariffs have been typically progressive for a given commodity-type in that the high-priced imports of a given type have been typically taxed at significantly higher rates, even in particularly non-egalitarian societies such as mercantile Europe and early 19th century America (Grey, Taussig, pp. 92, 247-48, 268).

Tariff rates can either be assessed on an ad valorem or on a per unit basis. Almost any formulation of the monopoly view predicts ad valorem tariffs because such tariffs automatically adjust the actual monopoly mark-up to the optimal monopoly mark-up whenever the industry price or price-

takeover by foreign aggressors. In contrast, domestically produced inputs are generally located in the hinterland, where at least until the current century, there was sufficient time for inhabitants to convert such into consumer perishables or capital not beneficial to a foreign aggressor. In the current century, the increased ability of developed countries to impose rapid, widespread destruction on a victim has eliminated the natural security of circulating capital in the hinterland of most countries. Therefore, the historic tax-free status of domestic production of circulating capital has been generally eliminated in relatively wealthy countries. Through the introduction of a corporate income tax, these countries have introduced systems of taxing all domestically produced capital goods which, like capital, are written off as current expenses when they are produced. In any case, until the current century, domestic production circulating capital warranted little taxation.

level changes. Given the high political cost of changes in tariff rates, ad valorem tariffs are strongly suggested by the monopoly view. Nevertheless, the historically observed pattern is dominated by per unit tariffs. Our theory explains this. Note that the present tariff cost to an importer of an appreciating import does not change with the date of import if the tariff is ad valorem. Thus there is no incentive to delay importing such a good. However, if the tariff on an appreciating import is assessed on a per unit basis, the present cost of the tariff to the importer decreases the longer the good is kept abroad. The value of an imported good can be expected to appreciate most of the time if the production or use of the good has a substantial seasonal component. According to our theory, such a good should receive a per unit rather than an ad valorem tariff. In fact, goods which have highly seasonal use or production patterns, for example, raw material inputs and food, have almost always received per unit rather than ad valorem tariffs. In contrast, tariffs on imports of finished manufactured goods, whose production and use is much less seasonal (probably because of their higher values relative to transport costs) are, as predicted by our theory, much more likely to receive ad valorem rather than per unit tariffs (see, e.g., Taussig, p. 161, Bastable, p. 74). For example, our theory explains why imported raw materials should have systematically received per unit tariffs, while the same goods in finished form received ad valorem tariffs. (Typical is the 19th century British per unit tariff on raw silk and ad valorem tariff on finished silk (Bastable, p. 92) and the French per unit tariff on unfinished cotton but ad valorem tariff on finished cotton (M. Smith, p. 258).) Regarding modern consumer goods, the decreasing importance of the seasonal factors responsible for periodic price appreciation have substantially reduced the incentive advantages of per unit tariffs.

Correspondingly, they have been increasingly replaced with ad valorem tariffs.

Our efficiency theory also helps explain various historically unexplained trade policies. For example, the typical medieval and early modern trading city had effective laws against engrossing, which imposed maximum restrictions on the storage time of imports (see Tuma, p. 91 and Hibbert, pp. 172-179). Such laws substitute for property or inventory taxes in taxing imports that are held in ports for exceptionally long time periods. The theory also explains why pure trading centers, where manufacturing does not occur, have typically imposed extremely low, often zero, tariffs. Such areas or ports have relatively short storage intervals for both imports and exports. The low or zero tariffs observed in these ports reflect their comparatively low defense costs. Famous historical examples are the periodic Champagne fairs of the 12th century and the later medieval free German and Scandinavian ports serving as entrepots for cross-Baltic trade.

Moreover, the efficiency theory explains the dominant financial policies of colonizing European governments. In the earlier colonial period of the 16th and 17th centuries, European explorers invested in their colonies through gaining official, state-granted, protection by forming investment companies such as joint stock companies giving the state a return for being an investment partner even though it did not directly contribute other than to overhead defense costs. Thus, by appropriating various types of investor interests for themselves, colonizing nation-states were able to tax for the defense externalities imposed on them as protectors by their resource-rich

colonies.²³ Colonial governments introduced tariffs and colonial property taxes only as it became increasingly difficult to monitor the increasingly complex activities of the investor-managers.

Lastly, and perhaps most importantly, our efficiency theory explains laissez faire policy. Any collectively defended confederation of non-autonomous states, say the modern U.S., will have no reason to impose tariffs on interstate trade simply because the confederation's defense externality is no different whether a good is located in one state or another. Hence, non-autonomous confederations are regularly observed to outlaw tariffs between member states. For the same reason, confederate property and income taxes should be, and typically are, on area-wide income to reflect the fact that the defense externality is the same regardless of the location of the asset within the confederation. The same argument applies to colonial empires. This explains the relatively unique free trade policy of Great Britain from approximately the mid-19th century to the First World War, when the British empire was so widespread that England scarcely imported from anyone other than one of her own colonies. There was little point to a tariff under such conditions because her defense cost was the same whether or not she imported the good. Nevertheless, colonial capital should have been taxed. To efficiently achieve this, Britain during this period introduced a unique tax, called a "wealth tax", as a substitute for her previous national property

²³As we have already noted (footnote 7), Batchelder and Sanchez have pointed out that the much-maligned capital-consuming system of temporary property rights employed by early Spain in exploiting her lucrative American colonies can be rationalized by noting that the system internalized a defense externality. Combining this with our related rationalization of feudalism in footnote 7, whenever an overlord can neither evaluate a local lord's holdings nor observe the activities under the local lord's control, an overlord wishing to discourage the local accumulation of coveted capital has no choice other than to artificially limit the lord's tenure and collect unconditional, lum-sum taxes.

tax and broadly based tariff system. A wealth tax differs from a property tax in that it also taxes the value of citizens' overseas properties. Thus, after Britain's second Empire quickly grew to maturity following the defeat of Napoleon, she soon introduced her wealth tax (part of the 1842 Income Tax Act (Taxation in the United Kingdom)) and, correspondingly, steadily reduced her extraordinarily high tariffs of the early 1820s to insignificance by the early 1850s. Britain began to reintroduce broadly based tariffs only after World War I, when the proportion of its imports purchased from its own colonies began to rapidly decline.

2. The Structure of Export Duties

Inefficient accumulations of exportables within a country can be discouraged through a correct level of domestic income or property taxes. Traders, to avoid the efficient income or property tax on domestic exportables, would appropriately export their goods when and only when the assets are more productive, net of defense costs, in other countries. In such cases, optimal export taxes are zero.

However, if the income or property tax were to be set at too high a level, goods would then be exported simply to avoid the property tax. Such over-taxation is possible when part or all of the property tax, because some goods are expropriated by a non-civilly-reverent bureaucracy, is hidden. If the government knew which goods were exported to avoid the hidden property tax, it could simply impose export taxes on those goods. But, since the government is unlikely to know this information, it must impose a tariff on all exports. Although such a broadly based export tariffs, by discouraging exports, might facilitate bureaucratic expropriation, a rent-extractive bureaucracy largely incurs only overhead investments in developing its ability to legally expropriate resources. It follows that some export tariff is

efficient. Our efficiency theory thus may help explain why medieval states imposed selective export tariffs on the outputs of industries where guilds were weak. A famous example is the English export tariff on wools and hides, goods whose prices England could hardly have affected. Our efficiency theory also may help explain why export tariffs declined in Protestant Europe after the mid-17th century and were finally abandoned in all of Europe by the late 19th century. It may similarly help explain why high export tariffs are still prevalent today in many lesser-developed countries. Similarly, because domestic investment subsidies are justified by the same argument, we should, and do, observe export taxes and domestic investment subsidies working together as policy complements in selective sectors of modern lesser-developed countries.

Finally, since consumer goods have seldom been subject to any form of bureaucratic expropriation, the efficiency theory also explains why export duties have concentrated almost exclusively on exports of producer goods (Towle, p. 233).

3. Transit Duties

Our theory predicts tariffs should be imposed on goods originating in one country and passing through another to get to a third. Such tariffs, known as transit duties, were common in Europe until the advent of the railroad in the mid-19th century. By shortening the time spent in transit within the intermediate country, rail travel made the optimal level of such duties insignificant. Correspondingly, the duties generally disappeared in countries soon after they introduced national rail systems (Bastable, p. 219).

POLICY CONCLUSION

Eliminating the ignorant-consumer bias from traditional 19th and 20th century political economic thought leads us to a political theory in which the basic long-run institutions of a rational political society are efficient. Correspondingly, the traditional economic arguments against observed price-increasing policies such as tariffs and guild-like capital restrictions, arguments stemming from this profession-serving view of the common consumer, appear to be misplaced. The traditional theory can, and probably should for the long-run good of the profession, be replaced with a theory of political economy in which the underlying political system is efficient so that a given policy proposal has positive value only if the policy has not been already tried and found to be politically unacceptable.

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