Interest Bans, Impersonal Exchange, and Endogenous Institutional Change in Islam and Christianity*

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Abstract

Numerous economic historians have suggested that institutions which supported contract enforcement were necessary for impersonal exchange to emerge in medieval Europe. Yet this literature cannot account for the bill of exchange, an important financial instrument that was legally enforced in both the medieval Islamic and Christian worlds but remained relegated to personal networks in only the former. This paper suggests that differential enforcement of interest restrictions can account for this phenomenon. Religious bans existed in both regions, but secular restrictions were relaxed only in Europe, encouraging international credit extension (via bills of exchange) and endogenous institutional changes which did not occur in the Islamic world.

JEL Classifications: B15; D02; E49; F31; G21; K29; K42; N20; N40; N70; O43; P45; Z12

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Introduction

The emergence of impersonal exchange has long been identified by economic historians as a central feature of the “rise of the West”. Yet, there is no clear consensus on why institutions which supported impersonal exchange emerged in Europe in the medieval period and not in other regions, such as the Middle East. A view championed by Douglass C. North, amongst others, is that the rise of political and legal institutions which ensured contract enforcement and property rights was the essential force driving the growth of impersonal exchange (North and Thomas 1973; North 1990, 1991). Avner Greif, on the other hand, argues that impersonal exchange was possible in an earlier period due to the “community responsibility system”, an institution that supported such exchange through self-enforcing mechanisms (Greif 2004b, 2006, ch. 10). Elsewhere, Greif (and others) have argued that the spread of impersonal exchange was facilitated in certain contexts by institutions (formal and informal) that mitigated the “fundamental problem of exchange” – the problem that individuals only enter into exchange relationships when the other party can *ex ante* commit to fulfill obligations *ex post* (Milgrom, North, and Weingast 1990; Greif 1992, 1993, 2000, 2004a; Greif, Milgrom, and Weingast 1994; Clay 1997a, 1997b).

While each of these explanations shed significant light on the emergence of institutions that made Western economic hegemony possible, there are many important historical phenomena for which they can not account. One particularly significant historical feature unaccounted for in this literature is that international financial instruments, particularly bills of exchange, remained confined to relatively small, personal networks in Islamic world\(^1\) but precipitated broader

\(^1\) Throughout this paper, I will use the terms "Christian world" and "Western Europe" to denote the pre-Reformation Christianized regions under the Church of Rome. I will also use the term "Islamic/Muslim world" somewhat broadly, comprising North Africa and the "Middle East" (that is, the entire Arab world, Iran, Turkey, the Balkan peninsula, and Spain up to the Reconquista).
impersonal institutions in Europe (such as joint-stock companies and banks). Bills of exchange, described by Hunt and Murray (1999, p. 65) as “the most important financial innovation of the High Middle Ages”, were known and employed in both the Islamic and Christian worlds and were generally accepted and enforced wherever they were drawn. Hence, the fact that they remained relegated to more personal networks in the Islamic world but not in the Christian world cannot be explained solely by differences in enforcement of property rights or institutions supporting community responsibility.

This paper helps account for these and other institutional differences by suggesting that the differing breadth of the networks associated with these financial instruments and institutions were intimately related with differing sanctions imposed on those who lent at interest (usury), which was considered a mortal sin in both Islam and Christianity throughout the medieval period. Utilizing a model elaborated in Rubin (2008a), I suggest that these differing sanctions were a result of differences in the respective institutional complexes. In particular, I argue that the greater the degree to which political authorities depended on religious authorities for legitimacy in Islam entailed an equilibrium in which interest was prohibited by religious and secular authorities. On the other hand, I show that a late thirteenth-century decrease in the dependence of European political authorities on the Church sparked a series of interactions – commencing with the secular legalization of moderate interest – which gradually resulted in a complete alleviation of the interest ban. In this economic setting, lenders were permitted to respond to financial exigencies without fear of legal consequences, though spiritual sanctions still applied. On the other hand, the significant level of “dependence” in the Islamic world

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2 Though the terms interest and usury have different meanings in their modern context, in pre-modern times they were largely synonymous, and will thus be used interchangeably throughout the paper (Divine 1959; Persky 2007).
supported an equilibrium in which the ban was never fully alleviated du jure (even though it was practically non-existent de facto). Under such conditions, it was quite costly for lenders to openly react to financial exigencies or lend on an extensive, impersonal scale.³

One upshot of this argument is that the trajectory of organizational forms and innovations supporting and supported by transactions involving interest – especially bills of exchange – differed drastically in the Islamic and Christian worlds. In the latter, lenders were permitted by secular authorities to profit on exchange transactions by taking advantage of differences in exchange rates. This provided merchants a way of skirting the Church’s interest ban, and beginning in the fourteenth and fifteenth centuries, bills of exchange became important means of capital extension (rather than simply a means of decreasing transport costs). Indeed, it was precisely because bills of exchange were international instruments that they provided incentive for European merchants to establish widespread organizations capable of extending credit – a key step in the broader institutional build-up that resulted in institutions supporting impersonal lending.

On the other hand, in the Islamic world, lenders were forbidden from profiting on the exchange transaction itself by both secular and religious authorities. Thus, bills of exchange (suftaja) were rarely used for any purpose beyond their original intent – avoiding the costs and risks associated with moving specie in international trade. Unlike in Europe, merchants were not provided incentive to expand their operations beyond their prevailing network of personal relations, thus inhibiting the growth of institutions capable of facilitating impersonal exchange.

³ For other economic accounts of interest bans and laws, see Nelson (1949), Posner (1980), Brenner (1983), Ekelund, Hébert, and Tollison (1989), Glaeser and Scheinkman (1998), Reed and Bekar (2003). While each of these works provides an explanation for interest restrictions in certain environments, none explain the ubiquitous nature of interest restrictions or their persistence under different economic settings.
This argument thus differs somewhat from Greif’s analysis of impersonal exchange, which concentrates on institutions that mitigated the “fundamental problem of exchange” (FPOE). Instead, I suggest that the broader complex of institutions determined whether agents had incentive to enter into exchange agreements in the first place – even ones in which the FPOE was not a problem. This argument is complementary to Greif’s – I propose that in some cases where contracts were enforceable and the FPOE was not a problem (as the evidence suggests was the case with bills of exchange), divergent outcomes still emerged as a result of differing sanctions derived from the broader set of institutions.

This line of reasoning can also account for other phenomena associated with credit extension in the Christian and Islamic worlds. For one, it provides an explanation for the timing of secular relaxations of interest restrictions in both regions, suggesting that they coincided with diminishing “dependence” of the political authority on the religious authority. In turn, it helps account for the timing of the employment of bills of exchange as a credit-extending mechanism. It also helps explain the curious historical fact that when secular interest restrictions were slightly relaxed in the early Ottoman period, Muslim lenders employed a relatively rigid institution, the cash waqf, to facilitate relatively impersonal lending. The logic of the argument suggests that because interest had been relegated to a network of semi-personal relations in previous centuries, the dearth of institutional forms which could facilitate impersonal, institutionalized lending encouraged lenders to employ the waqf, a pre-existing institution, for such purposes. Yet, because the waqf system emerged to meet other types of exigencies, it contained restrictive elements that greatly limited its efficiency and ultimately inhibited the further development of Middle Eastern credit-extending institutions.
This argument is not a deterministic one. At no point do I argue that Islamic institutions had to form like European ones in order to facilitate impersonal exchange. Instead, I argue that impersonal lending was less likely to emerge in the Islamic world because the “spiritual” and secular illegality associated with lending at interest discouraged institutional formation based on open, impersonal transactions. This suggests the existence of two different equilibria, emerging in part from the differential secular legality of interest in Europe and the Middle East. One equilibrium, which pervaded the latter, consisted of economic transactions and interactions which were based largely on social/personal networks where merchants had little incentive to “push the envelope” of the institutional structure. In the other equilibrium, which emerged in Europe, purely personal financial networks were undermined in favor of widespread, impersonal networks.

**A Theory of Inhibitive Law Persistence**

In Rubin (2008a), I present a theoretical analysis of the forces driving the persistence of economically inhibitive laws in Islam in Christianity. Examples of such laws include prohibitions on taking interest and printing, suppression of women, and laws against mass education, all of which persisted for much longer in Islam than in Christianity. In that paper, it is suggested that this differential persistence is a consequence of the greater degree to which Islamic political authorities are dependent on conforming to the dictates of religious authorities for legitimacy, a difference which stems from the birth of these religions and is thus exogenous to the specific doctrines in question.  

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4 I argue that this difference is exogenous because of the circumstances surrounding the births of the two religions. Early Christians were forced to live under Roman authority, where it was both unnecessary and infeasible to create a
The logic underlying this result is as follows. When dependence on religious authority is large, it is costly for political authorities to permit religiously-prohibited actions, so they are unlikely to do so. In turn, only a small portion of the laity transgresses the prohibition, since this entails worldly costs (jail, contract non-enforcement) and other-worldly costs (hell). With few individuals breaking its dictates, the religious authority has little incentive to enact a costly reinterpretation. Thus, the players’ interactions entail that no player has incentive to “push the envelope”, and the institutions upholding the law are self-enforcing, a term defined by Greif (2006, p. 15-16) as an institution in which “each individual, responding to the institutional elements implied by others’ behavior and expected behavior, behaves in a manner that contributes to enabling, guiding, and motivating others to behave in the manner that led to the institutional elements that generated the individuals behaviors to begin with.” However, when the level of dependence is small, the reverse is true, and the institutions undermine the related laws, thus encouraging endogenous institutional change. That is, the outcomes emanating from players’ actions entail that the set of institutions constraining their behavior changes over time.

In this paper, I apply Rubin (2008a) to Christian and Islamic interest restrictions. In the following section, I show that it does indeed shed light on differences between and within these histories. This analysis, in turn provides the framework necessary for exploring the broader consequences of these laws.

**Interest Theory and Practice in Christianity and Islam**

legal system based on religious principles, and early Church leaders advocated a separation between political and religious institutions. On the other hand, Islam was formed at a time of weak centralized power and tribal feuding in the Middle East, and consequently, Islamic ideals quickly became those of the state. For more on the exogeneity of the difference in institutional structures, see Lewis (1974, 1995) and Rubin (2007).
Christian Interest Theory and Practice

The Christian ban on taking interest emerged in the fourth century C.E., officially becoming doctrine in 325 when it was included in Canon 17 of the first Ecumenical Council (Nicæa). The ban was supported by subsequent Church councils, establishing the basis for the Church's vigorous anti-interest campaign in the medieval period.

With European commerce stagnating until the Commercial Revolution (beginning in the eleventh century), there was little need for the Church to re-consider the interest prohibition. Even during the early stages of the Commercial Revolution (which allowed for profitable investment lending), secular regents found it costly to permit religiously-banned transactions, as the (early twelfth-century) Investiture Controversy established significant power for the papacy. Indeed, in this period the Church was able to strengthen the interest ban, with the Second and Third Lateran Councils (1139 and 1179) proscribing excommunication for usurers, refusing usurers burial in Christian grounds, and interdicting usurers' offerings (Le Goff 1979). By the end of the twelfth century, the Church's stance on interest-bearing lending had crystallized into a staunch prohibition in any form, and the money-lender was linked with the worst type of evil-doers.

Yet, when papal power declined in the mid-thirteenth century (due to, amongst other things, the growth of secular power into national kingdoms, new theories of the state based on Aristotelian foundations, and movements of criticisms within the Church [Tierney 1988; Feldman 1997]), secular rulers regained suzerainty over their lands and were thus less dependent on the papacy for legitimacy. In turn, welfare-enhancing (yet religiously-prohibited) transactions

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5 For more on the fourth century emergence of the Christian interest ban as an equilibrium outcome in the context of a pre-modern economy, see Rubin (2008b).
were permitted throughout the continent, a phenomenon manifested in the ubiquitous allowance of moderate interest (see Table 1). Beginning in the late-thirteenth century, permissions were not only granted to the Jews, who were amongst the primary money-lenders of the time, but also to select groups of Christian pawnbrokers (the lombards). On such loans, interest caps of $43\frac{1}{3}$ percent were common throughout Western Europe, being established in Bruges and the rest of the Low Countries, Northern France, Western Germany, Castile, and Aragon (de Roover 1948; Grice-Hutchinson 1978, ch. 1).

[INSERT TABLE 1 HERE]

However, the popularity of contractual alternatives to interest provides evidence that the religious ban carried some practical weight. Pawn-broking may have been legal, but it still carried significant social and spiritual condemnation. Thus, other credit-extending mechanisms were employed by lenders seeking to avoid such sanctions. These included partnerships (*societas* or *commenda*) and the *census*, an annuity on a fruitful good. These contracts had features implicit in interest-bearing loans, yet in the thirteenth through fifteenth centuries they were justified by Church authorities as legitimate within the context of Christian thought, as they had gained customary status and were essential to commerce (Noonan 1957, ch. 6-7).

While the *societas* and the *census* were generally employed for legitimate purposes, other contractual forms that were closer and less costly substitutes to interest-bearing loans emerged in subsequent centuries. Examples include the bill of exchange, which is discussed in greater detail in the following section, the triple contract, the mortgage, and fictitious sales (Noonan 1957,
1969; Divine 1959; Gilchrist 1969). The Church found ways to justify such openly usurious practices, often by resolving them into other, lawful contracts.6

The upshot of these justifications is that the institutions supporting the interest ban were undermined, and by the end of the seventeenth century the ban was a dead letter.7 A stylized chronology of Christian interest practice and philosophy is summarized in Table 2.

[INSERT TABLE 2 HERE]

Islamic Interest Theory and Practice

The prohibition of interest (ribā) has always been a cornerstone of Islamic doctrine. The Qur'ān contains numerous injunctions forbidding ribā, which in pre-Islamic times was a usurious process in which the principal sum was doubled and re-doubled (Rahman 1964; Schacht 1995).

Yet, in personal transactions the ban has had little practical effect. Although loans where interest was openly taken have been considered legally voidable (Gerber 1999), merchants have been able to borrow or lend at interest with a "ruse" (hiyal) since the first few centuries of Islam. A popular example of a hiyal is the double sale (mukhātara), in which the prospective debtor sells to a creditor some commodity for cash, then immediately buys it back for a greater sum

6 The scholastics permitted these practices by appealing to theoretical concepts such as lucrum cessans (literally "profit ceasing", a pre-Smithian term for the opportunity cost of lent money), damnum emergens (loss occurring due to not having lent money), and interesse (originally a penalty paid for late repayment), all of which quickly gained currency in theological circles and presaged the Church's official relaxation of the ban (Noonan 1957, ch. 5, 12).

7 The Protestant Reformation likely catalyzed the further relaxation of the Church’s interest doctrine, but the forces underlying the broader relaxation were in motion well before the Reformation. For more on the early Protestant views on interest, see Noonan (1957, ch. 18), Gelpi and Julien-Labruyère (2000, ch. 4-5), and Kerridge (2002). The ban was officially lifted in a series of decisions between 1822 and 1836 in which the Holy Office publicly declared moderate interest legal to everyone, and in 1917 the Church offered the Codex iuris canonici, which replaced all earlier collections of canon law and allowed a legal title to interest (Noonan 1957).
payable at a later date. This essentially amounts to a loan at interest, with the interest being the difference between the two prices. This simple stratagem was known in Medina as early as the eighth century. Other straight-forward evasive devices, most of which were not just permitted by religious authorities, but were created by them, were also common in the early Islamic period (Khan 1929; Schacht 1964, 2006; Coulson 1969; Grice-Hutchinson 1978; Ray 1997).

Documentary evidence reveals that overtly usurious practices were not a common means of extending commercial credit in early and medieval Islam (Udovitch 1979). For example, in a detailed study of the early twelfth century Cairo Geniza, S.D. Goitein (1967, p. 170) observes that although credit and commerce flourished in Egypt, "even a cursory examination of the Geniza material reveals that lending money for interest was not only shunned religiously, but was also of limited significance economically ... therefore, the economic role of financial investment today was then fulfilled by various forms of partnerships." Indeed, partnerships were widely employed as a means of credit extension within the first few Islamic centuries. They most frequently took the form of the sleeping partnership (mudārabā, or “mutual loan”), where a group (often one) of investors lends capital to agent(s) who worked until the completion of the partnership, or ‘inān, in which both partners invested some capital (Goitein 1967; Udovitch 1970; Labib 1969).9

In the face of a powerful religio-legal class, early Islamic political leaders had little choice but to comply with Islamic law – otherwise, the philosophy underpinning their legitimacy would have been undermined (Masud, Messick, and Powers 1996; Berkey 2003; Hallaq 2005).

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8 Likewise, Goitein shows that by the mid-twelfth century, contracts stipulating interest can be found, but they were either derived from another type of contract or concealed in another way.

9 For an extended analysis of partnerships in the medieval Islamic world, see Udovitch (1970).
Under these conditions, an “inhibitive equilibrium” emerged in which merchants were able to extend capital via *hiyal* and partnerships, yet there was little incentive to further “push the envelope” and lend openly at interest, as doing so would entail worldly and other-worldly costs.

However, under the Ottomans, the religious authorities became a part of the state as a result of broad socio-political changes including increased demographic heterogeneity (which limited the coordinative ability of the masses) and lack of external threats (Coşgel, Ahmed, and Miceli 2007). This change enabled a “limited but significant expansion in the ruler’s prerogatives in relation to the *sharīʿa*” (Berkey 2003, p. 264), and consequently, more straightforward interest-bearing lending was permitted. For instance, Ronald Jennings (1973) has shown convincing evidence, in a study of seventeenth-century judicial records in Anatolian Kayseri, that interest was regularly charged on credit in accordance with the Islamic law and “secular” law (*kanun*) and with the consent and approval of the judge’s (kādi) court, the religious scholars (‘ulamā’), and the sultān. These records indicate that 20% per annum was considered acceptable and in accordance with the *sharīʿa*.

Almost all interest-bearing transactions Jennings observes involved some sort of ruse, the most popular of which was *istiğlal* (which involved the debtor giving his creditor a piece of real estate, supposedly as a sale, but actually as a pawn) (Gerber

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10 While Jennings takes this as evidence that *hiyal* or other "frauds" were not necessary to conceal interest, he also notes that the most common terms used for interest in legal documents were *ribh* and *mu'amele-i şer'iyye*. Yet, *ribh* merely entails an annual return or earning on capital while *mu'amele-i şer'iyye* is a general terminology covering various methods, much like *hiyal*, by which money could be lent within a legal framework. See Çağatay (1995, p. 62-64) and Çizakça (1995, p. 325-333).
1988, ch. 7). Other scholarly works indicate that lip-service paid to the *sharī'a* was not relegated to Kayseri, but was common throughout the Ottoman Empire. Yet, the interest ban has never been fully alleviated in Islam. Direct breaching of the interest prohibition has always been considered a deadly sin and remains so in modern times, even if, as a practical matter, interest has been legalized for centuries. A stylized chronology of Islamic interest practice and philosophy is summarized in Table 3.

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11 It is unlikely that most lenders actually resorted to such tricks, and the fact that *waqf* trustees required borrowers to deposit a pledge suggests that they lent at interest directly (Imber 1997). Likewise, Çizakça (1995) shows that the instruments used by the cash *waqfs* in Bursa were approved by the courts, but their relatively constant returns suggest that economic interest prevailed.

12 In a study of seventeenth-century Bursa, Haim Gerber (1988, ch. 7) shows that interest ranging between 10 to 15 percent was considered legal, but such transactions were primarily conducted via ruses (mainly *istiqlal*). Other common ruses, such as the "wool-sale" (where a piece of wool is purchased with the price being an interest payment) and resale with a stated profit (*murabaha*), attest that transactions conformed with the letter of the law in this period, even though interest-bearing lending was de facto legitimate. Indeed, Timur Kuran has informed me that this assertion is supported in a data set he is currently building of sixteenth and seventeenth century Ottoman financial records. In the records, interest was usually given and taken in concealed form (as the price of a "sword" or a "piece of broadcloth" or hidden in currency exchange). Plenty of registered cases exist where interest is given and taken openly by both Muslims and non-Muslims, but in only one of approximately 6000 cases is the Turkish word for interest (faiz) employed. Instead, the expression most frequently used is "I lent him x akce for two years, treating 11 for 10 annually". This seemingly innocuous method of expression likely had an important effect on the legality of the contract. By using such an expression, a contract could easily have been resolved as a *hiyal* (in this example, as a double sale), whereas those employing the term "faiz" explicitly violated the law. Though I do not know of any evidence that such contracts were resolved as *hiyal*, this may simply be because the legal ramifications of this type of wording were understood by all parties. I am deeply indebted to Professor Kuran for sharing this aspect of his data with me.
Institutional Consequences: Bills of Exchange

The historical relationship between religious theories of interest and their practical application have thus been at best irreconcilable and at worst non-existent. Since the early Islamic period, lenders easily evaded the interest ban – with the consent of Muslim religious authorities – using stratagems which followed the letter, but not the spirit, of the law. Likewise, interest-based contracts and related organizational forms arose in Western Europe throughout the medieval period, permitting merchants and bankers to evade the Church’s usury ban. Does this entail, then, that interest restrictions had no practical effect on economic outcomes in the two regions? Were they no more than assemblages of empty words decried by religious authorities hanging onto some antiquated doctrinal relics?

Some scholars have answered “yes” to both of these questions. For example, Labib (1969), Udovitch (1975), Rodinson (1973), and Jones (1988) employ the widespread presence of interest-bearing lending in the Islamic world as evidence that the ban had no practical effect. But is it possible that such arguments suffer from focusing on first-order, micro-level observations? Could the ban have carried macro-level, institutional consequences? Such outcomes are unlikely to be observed at any one point in time but can accumulate over time on the margin, and are thus likely to be ignored by scholars analyzing the micro-level ramifications of actions and institutions.

In this light, it is instructive to analyze the effects of interest restrictions on financial instruments. For example, in both the medieval Islamic and Christian worlds, the extension of credit over long distances was essential to the growth of trade and commerce. To facilitate such
credit extension within the context of religious and secular interest restrictions, merchants and lenders in both regions employed bills of exchange. Yet, due to the differing punishments associated with interest laws, the form that these bills took differed drastically in these two regions. In this section, I explore the causes and consequences of these differences.

*European Bills of Exchange*

Medieval European bills of exchange, studied extensively by Raymond de Roover in a series of articles and books, were financial instruments issued in one place and payable in another, usually in a different type of currency (de Roover 1963). They emerged primarily as a means of avoiding the costs and risks associated with moving specie. Such costs were far from trivial – for example, the charge for moving bullion from Naples to Rome ranged between eight and twelve percent of the value being moved (Hunt and Murray 1999, p. 64).

The earliest version of the bill of exchange was known in Genoa in the twelfth century, but they did not become widespread until the following century (Hunt and Murray 1999). They were originally employed in order to facilitate trade at the Champagne fairs of the thirteenth century, but they became even more widespread in subsequent centuries, primarily in Italian commerce (de Roover 1963, p. 13)

Bills of exchange involved a credit and an exchange transaction and worked as follows. A lender (known as a deliverer, normally a banker) bought a bill for ready cash from a borrower (known as a taker), who drew on one of his correspondents (payor) abroad. At maturity, this correspondent paid an amount in a foreign currency to the lender’s correspondent (payee) (de Roover 1963). Lenders could make a profit based on differences in the exchange rate, which acted as an interest rate reflecting the slow pace at which information traveled (thus allowing for arbitrage opportunities) and the time delay between issue and maturity. This profit was not
assured, and wild fluctuations in the exchange rate (before a bill reached maturity) could mean that the lender lost money on the transaction, although most bills provided profit for the lender (de Roover 1963).

Since instruments of debt which employed discounting were absolutely forbidden by the Church, bills of exchange became intimately tied with banking (as an alternative to such instruments) in the fourteenth and fifteenth centuries.\footnote{Even though interest was concealed in the price of the loan, bankers as well as some Churchmen justified them based on their risky nature. They incited controversy amongst the Scholastics in the thirteenth and fourteenth centuries, but more Churchmen were willing to accept their validity in the fifteenth century as it became clear that they were essential to European finance (Noonan 1957).} Precisely because bills of exchange were an instrument of international commerce, lenders who employed them as a low-risk means of lending at interest were necessarily involved with long-distance lending. This aspect of the bills encouraged the formation of organizational forms suited for impersonal lending, a process best exemplified by the Medici enterprise.

Headquartered in Florence, the Medici “bank” expanded in the fifteenth century into a decentralized matrix of partnership branches throughout Europe, all dealing to some extent in international finance and bills of exchange (de Roover 1946b, 1963). The Medici enterprise differed from the “super-company” organizations of the fourteenth century (such as the Peruzzi, Bardi, and Acciaiuoli companies), which were centralized under one partnership that controlled foreign branches. Instead, the Medici house – much like the network controlled by its contemporary Francesco Datini – consisted of a series of partnerships that were separate legal entities, much like a modern day holding company (de Roover 1946b, 1963).

These branches all dealt in exchange operations. For example, in the preamble of the Medici contract with the Bruges branch (which can be taken as indicative), the purpose of the
partnership was defined as one which would “deal in exchange and in merchandise in the city of Bruges in Flanders” (de Roover 1963, p. 87). To take advantage of opportunities afforded by dealing in bills of exchange, branches of the Medici banks acted as both principals and agents of other branches. Like the other leading bankers of the time, the Medici had branches or correspondents in all of the major financial centers of Europe, allowing the network to stay informed of fluctuations in the exchange rate and the money market (de Roover 1946a, 1963).

The branch system was effective because it permitted the Medicis and Datini to extend their networks internationally in the context of exchange transactions. This was important to their success (and ultimate decline), as impersonal lending was a dangerous proposition in this period – it is no coincidence that the Medici bank thrived when restrictions on whom partners could lend to were enforced (by the center in Florence) and declined when such restrictions were relaxed (de Roover 1963, ch. 5).

The Medici “hub-and-spoke” system thus emerged as a solution to the problem of lending at interest within the context of the legal and religious views on interest at the time. Because bills of exchange were legal and permitted by some religious authorities, they encouraged enterprises like the Medici to establish international branches which could take advantage of exchange rate fluctuations and capital scarcity – thus implicitly lending at interest – while at the same time diversifying portfolios to shield against risk. In turn, this encouraged the formation of organizations which facilitated credit-extension on a broader level. Though the Medici conducted transactions primarily with semi-personal relations (that is, those who were known to be good credit risks), the extension of the credit network achieved by the branching system allowed for “virtual” impersonal credit relations – from the viewpoint of the primary capital holders (the Medici family in Florence), most financial activities were conducted with
unknown relations. The establishment of networks capable of facilitating such impersonal transactions was an important advance in European financial organization, as it permitted an environment in which even more complex institutional forms, such as the joint-stock company and the larger banking system, could emerge.

*Middle Eastern Bills of Exchange*

Like in the Christian world, numerous techniques were employed in the Islamic world to extend credit without violating interest restrictions. These included various forms of partnership, transfers of debt (*hawāla*), orders of payment (*sakk* and *ruqʿa*), and bills of exchange (*suftaja*). The latter was known since the eight century C.E. (Lieber 1968; Udovitch 1979), centuries before similar credit instruments were employed in Europe. *Suftajas* were written obligations that were issued by and drawn upon well-known merchants for repayment of the same type of currency paid to the issuing banker (Goitein 1967, p. 242; Udovitch 1975, 1979). No currency exchange ever took place – the bill merely permitted merchants in one region to make payments in the same currency in another region. A typical “blank” *suftaja* read: “Give ____ all that he may demand, obtain a receipt from him, and debit the sum to me” (Mez 1937, p. 476). That is, *suftajas* were more similar to a check used to avoid risk in transport than they were to the European bill of exchange.

*Suftajas* were payable upon delivery and were thus much sought after. For this reason, merchants were reluctant to offer them, as their convertibility and penalty for delayed payment meant that the issuer had to have complete confidence in his partner upon whom it would be drawn (Goitein 1967; Udovitch 1975, 1979). Indeed, for this reason, the Geniza documents

14 The *sakk* and *ruqʿa* acted like checks (indeed, the word ‘check’ is derived from the former) and were employed primarily in short-distance trade for relatively small sums (Goitein 1967, p. 240-241; Udovitch 1975).
(analyzed in detail by S.D. Goitein [1967, p. 243-245]) reflect numerous instances of merchants unable to procure suftajas and “great bankers” unwilling to issuing suftajas, which encouraged many merchants to carry purses of gold specie in order to conduct their business. This evidence suggests that where suftajas were issued, they were enforceable and collectable. Though a suftaja writer was able to charge a small fee, usually around one percent of the loan, it was insignificant when compared with the harsh penalties imposed for late payment (Ray 1997).\(^{15}\) This aspect of the suftaja discouraged their use in impersonal transacting and relegated their employment to well-known, closely-knit groups of merchants where permanent business connections existed.

**Bills of Exchange in Broader Perspective**

The bill of exchange differed in the Islamic and Christian worlds largely because lending at interest was (secularly) legal in the latter, even if it was not always approved by the Church. In Europe, and especially in Italy, bills of exchange were likely to be enforced by secular courts despite their obviously usurious nature (de Roover 1963, ch. 6). Because lenders were given a monetary return on their investment, they had greater incentive to establish branches that facilitated foreign exchange, especially since openly extending credit at interest was considered a mortal sin.

\(^{15}\) *Suftajas* could have been considered usurious because of the small fee charged (though this transfer fee was legally considered payable for services, not the use of money) or because the seller enjoyed the use of funds while the *suftaja* was in transit (Kuran 2005b). Indeed, two schools of Sunni Islam (Maliki and Shafi’i) explicitly forbade of *suftajas*, one school (Hanbali) permitted them as long as no fee was charged, and they were disapproved of, though permitted, by the Hanafi school (Dien 1995). In all schools, it was illegal for lenders to make a (non-trivial) profit on the bill itself.
It is precisely because foreign exchange was a necessary element in the transaction that lenders were encouraged to set up throughout the continent, as this instrument could not legitimately be employed on a local scale. In turn, incentives were provided for credit houses like Medici and Datini to establish “hub-and-spoke”-style organizations, where groups of subsidiary partnerships specialized in bills of exchange. In an era before credit scores and widespread international finance laws, these complex networks permitted capital-rich entrepreneurs in Italy to invest throughout the continent. Though many of the larger borrowers were known on a more personal level to the subsidiary managers, this organizational form represents a vital step in the broader emergence of impersonal exchange in Western Europe. By expanding the exchange network to include businessmen many steps removed from the original capital holders, an environment was established in which further innovation was encouraged (seen, for example, in the appearance of negotiable bills in the early seventeenth century). In combination with the emergence of stronger property rights analyzed by North (some of which may have been the result of phenomena described in this section) and other institutions (studies by Greif and others) which mitigated the “fundamental problem of exchange”, the organizational forms spurred by the secular legality of bills of exchange provided the elements necessary for international, impersonal lending to emerge in Europe.

Yet, no institutional form resembling the Medici organization ever emerged in the Muslim world. Because overtly usurious lending was discouraged by both religious and political authorities, long-distance lending took on a different form than in Europe. Suftajas were permitted by Hanafi jurists, but lenders were forbidden from profiting on the exchange transaction itself; thus dampening incentive to establish branches specializing in trading bills of exchange. Instead, suftajas, where legal, remained confined to their original purpose –
facilitating long-distance transport without the use of specie. Though this was also the original purpose of European bills of exchange (as used by merchants at the Champagne fairs), later European lenders were able to take advantage of secular relaxations of interest laws in order to establish organizational forms which employed bills as a means of extending credit in a more impersonal manner. Yet, the “double illegality” (secular and religious) of interest in the Islamic world discouraged such developments, and for this reason, most exchange operations – indeed, most investment transactions – remained confined to personal interactions between acquaintances and families (Goitein 1967; Labib 1969; Udovitch 1975, 1979).

**More Institutional Consequences: The Cash Waqf**

When the early Ottoman sultāns brought the religious authorities within the realm of the state and consequently relaxed interest restrictions, there were no institutional structures which permitted impersonal lending at interest on a widespread scale. Since this change increased incentive to lend at interest, Ottoman lenders turned to pre-existing institutions in order to facilitate such transactions in a more impersonal manner.

As noted in Kuran (2005b), one institution particularly conducive to such lending was the waqf (pious trust), which emerged in the first Islamic century and was always regarded as sacred. The waqf helped alleviate both other-worldly and worldly costs associated with lending at interest – its sacred nature insulated waqf founders from sin normally associated with usurious transactions while also encouraging contract enforcement (especially since kādīs, who often doubled as supervisors of waqfs, had pecuniary incentive to promote their legality [Kuran 2001; Kuran 2005a]). Originally, the assets of waqfs had to be immovable, but this requirement was relaxed beginning in the eighth century, and primarily during the Ottoman period, in order to
obtain privileges for holders of liquid (cash) wealth (Mandaville 1979; Çizakça 2000, ch. 3; Kuran 2005b).

Cash waqfs functioned as follows: capital endowed to the waqf was distributed as credit to a number of borrowers and the return on the investment was spent for social and religious purposes (Çizakça 2000). The cash waqf earned returns without violating the sharī‘a ban on interest by lending in one of three ways: sleeping partnership (mudāraba), collaboration in which one party entrusts capital to another, who returns the proceeds to the original owner without profit (bida‘a), or legal ruse (mu’amele-i şer’iyye or hiyal, the most popular of which was istiğlal) (Çizakça 2004, p. 10).16

However, numerous elements of the cash waqf prevented it from facilitating efficient lending. For one, its inclusion in the broader waqf system necessitated that it have a fixed mission, meaning that the nominal interest rate at which it lent was set by its founder and could not be adjusted by the manager (mutawalli) in response to market forces (Çizakça 1995, 2000). Moreover, the laws of static perpetuity prevented cash waqfs from pooling their resources, and thus, unlike Western banks, waqf resources were generally limited to the initial endowment of the founder (Kuran 2001, 2005b). A further inhibitive aspect stemmed from the lack of a concept of legal personhood in Islamic law, which prohibited the cash waqf from becoming a legal entity (Kuran 2005a) – indeed, this legal feature helped Western banks raise the capital necessary to lend on a widespread, impersonal level. As a whole, these impediments were far from trivial –

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16 Because they earned income primarily through interest-bearing loans, cash waqfs incited great controversy amongst Ottoman jurists. They were accepted de facto after an episode known as the “cash waqf controversy” (1545-1547), in which they were justified due to their customary status and necessity in business transactions (Mandaville 1979).
Çizakça (1995, 2000) argues that they eventually led to the cash waqf’s demise, and Kuran (2005a) suggests that they prevented cash waqfs from transforming into banks or corporations.

Yet, soon after Ottoman rulers relaxed restrictions on openly usurious transactions, cash waqfs became enormously popular throughout the Ottoman Empire. Cash waqfs made up only a small portion of all waqfs until the late fifteenth century, but they multiplied rapidly (in Istanbul) during the reign of Bayezid II (1481-1512) – in 1505, more cash waqfs than land waqfs were established, and by 1533, the cash waqf became the rule, not the exception (Mandaville 1979).17 Even though the amount of capital that the cash waqfs were responsible for injecting into the economy varied greatly over time and space, by the sixteenth century they had become widespread throughout Anatolia and the European provinces of the Ottoman Empire (Çizakça 2000).18

The rapid ascension of the cash waqf thus presents a set of historical mysteries. Why did such a rigid organizational form become a popular means for extending credit in the Ottoman Empire? Moreover, why did endogenous institutional change like the type that occurred in medieval Europe not transpire in the Islamic world? Indeed, mechanisms for evading the ban were well-known in the early Islamic period – even suftaja were employed in the first Islamic centuries. Why, then, did Islamic and Christian institutional histories diverge so dramatically?

17 The cash waqf was legalized primarily in the Turkish speaking parts of the Ottoman Empire (although new research has revealed their more recent existence in Syria, Egypt, Sudan, and Aden), see Mandaville (1979) and Çizakça (2000).

18 Çizakça (2000, p. 51-52) shows that the amount of capital injected into the economy by the cash waqfs was nearly ten times the amount withdrawn by the state through the tax-farm of the silk press. On the other hand, Gerber (1988, p. 132-140) provides data showing that the waqfs role in providing credit in Bursa was relatively minor, and only 11% of all entries concerning credit were provided by waqfs in Jennings' (1973, p. 176) study of Kayseri sicils.
The crucial difference is that European lenders could *openly* lend without fear of legal consequences. In this economic setting, the murkiness associated with Muslim attempts to circumvent the ban was unnecessary, and lenders faced a more robust choice set for dealing with financial exigencies. Thus, financial innovations such as the Medici international “hub-and-spoke” system were permitted to flourish even though they were employed largely as a means for transacting usuriously in bills of exchange. Little incentive existed to adopt institutions with rigid requirements (such as trusts, which were well-known in medieval Europe) to facilitate lending at interest, and it is highly improbable that an institution that entailed as many long-term costs as the cash *waqf* would have emerged in this setting.

On the other hand, Muslim lenders could not openly react to exigencies. Openly usurious transactions, such as those similar to European exchange dealings, were prohibited by both political and religious authorities, dampening incentives for lenders to employ or build organizational forms similar to those found in Europe. As a result, the prevailing set of self-enforcing institutions only supported contractual forms based on personal relations. It was in this institutional vacuum that the cash *waqf* emerged. In the early Ottoman period, no other organizational form insulated interest-based operations from sinfulness while supporting enforcement of long-distance, impersonal contracts. Yet, the attributes of the cash *waqf* which made it conducive to lending at interest did *not* emerge in order to meet a specific financial exigency, but were already imbued within the *waqf*’s institutional structure.

The omnipresence of cash *waqfs* in the Ottoman Empire despite the inefficiencies associated with its use supports the assertion that despite the fact that individual, micro-level transactions were little affected by the interest ban in both the Islamic and Christian worlds, the ban still entailed drastically different institutional structures in the two regions. Indeed,
institutions do not emerge in isolation, but are contingent on historical events and path dependence.\textsuperscript{19} Employing Mokyr’s (1990) terminology, the interaction of the Christian interest ban with the Western European politico-legal institutional structure encouraged a series of financial "microinventions" which led to institutional elements different (and in many ways more efficient) than those in the Islamic world. Meanwhile, such microinventions were suppressed in the Islamic world, thus permitting the entrenchment of inflexible financial institutions like the cash \textit{waqf}, itself the result of microinventions designed to accommodate different economic problems.

\textbf{Conclusion}

This paper analyzes one avenue through which institutions that supported impersonal exchange emerged in Europe but not in the Middle East. It explores the broad effects of the differing relationships between political and religious authorities in the Islamic and Christian worlds, arguing that these distinctions entailed differing enforcement of interest restrictions, which in turn affected the endogenous processes essential to the build-up of institutional complexes supporting impersonal exchange in the two regions.

In particular, I argue that the actions and behaviors supported by the Christian institutional structure undermined the interest ban in the thirteenth century, when secular authorities were able to reassert their independence from the Church and subsequently relax (secular) interest restrictions. As a result, merchants were encouraged to employ usurious

\textsuperscript{19} For more on the importance of historical events and path dependence on the evolution of institutions, see David (1994), Greif (2006, ch. 5, 7), and Kuran (2005a). The latter notes that "new institutions do not emerge individually, independently of other developments. Because the feasibility of any given institution depends on the available institutional matrix, institutions develop as clusters, or ‘institutional complexes’."
financial instruments, such as the bill of exchange, which permitted endogenous change resulting in the formation of institutions that supported impersonal transactions. On the other hand, the “dependence” of Islamic political authorities on religious authorities for legitimacy discouraged the former from alleviating interest restrictions (de jure). This provided an environment in which transactions openly involving interest were illegal and merchants were not allowed to profit off of the exchange component of exchange transactions. Thus, incentives to formulate international credit-extending organizations (like those that existed in Europe) were dampened, and commerce remained relegated to networks of personal relations. By the time that secular interest restrictions were (slightly) relaxed in the early Ottoman period, no institutions were available to support lending on a widespread, impersonal scale. In this setting, Muslim lenders turned to a pre-existing institution to facilitate lending at interest – the waqf. This institution emerged in a different economic context and was ill-equipped to meet the type of financial exigencies that Western financial institutions were subsequently able to accommodate.

Thus, one way that the interest ban had an impact on the economic development of Western Europe and the Middle East was in the institutions that it supported (or undermined). Due to the relaxation of the ban in Europe, the financial system underwent a series of endogenous institutional changes – that is, the outcomes emanating from lender’s reactions to financial exigencies caused the set of institutions constraining their behavior to change over time.\(^{20}\) Indeed, the modern Western banking system and related organizational forms are largely a result of these processes. On the other hand, the fact that the ban was never fully alleviated du

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\(^{20}\) For more on the theory of endogenous institutional change, see North (1990, ch. 9-11), Greif and Laitin (2004), and Greif (2006, ch. 5-6).
jure in the Islamic world encouraged lenders to employ institutions which were *exogenously* imbued with elements that facilitated lending at interest yet also inhibited institutional growth.

Islamic institutions did not need to evolve like Western ones in order to promote economic development. Yet, the systematic inflexibilities resulting from the Islamic interest ban and the broader institutional structure had a practical economic effect – manifested in the inefficiencies associated with the financial institutions of the region – and were among the many factors contributing to the relative underdevelopment of the Middle East over the last seven centuries.

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### Table 1: Interest Laws in Medieval Europe

<table>
<thead>
<tr>
<th>Location</th>
<th>Date(s)</th>
<th>Law</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legal maxima, general laws</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catalonia (h)</td>
<td>10th century; 1235</td>
<td>10th Century: Legal max rate of 12.5%; 1235: Christians permitted to lend at 12%</td>
</tr>
<tr>
<td>England (e)</td>
<td>12th-15th centuries</td>
<td>Only immoderate interest subject to persecution</td>
</tr>
<tr>
<td>Aragon (d)</td>
<td>1241</td>
<td>Jews and Moors limited to 20%, Christians limited to 12%</td>
</tr>
<tr>
<td>Cordova (d)</td>
<td>1241</td>
<td>Legal max rate of 12.5%</td>
</tr>
<tr>
<td>Seville (d)</td>
<td>1250</td>
<td>Legal max rate of 12.5%</td>
</tr>
<tr>
<td>Murcia (d)</td>
<td>1266</td>
<td>Legal max rate of 12.5%</td>
</tr>
<tr>
<td>Florence (c)</td>
<td>1345-1346</td>
<td>Following a financial crash, the Republic stopped all usury persecution</td>
</tr>
<tr>
<td>France (d)</td>
<td>1349</td>
<td>Crown authorized interest up to 15% for fairs at Champagne and Brie</td>
</tr>
<tr>
<td>London (c)</td>
<td>1363</td>
<td>Usury prosecution became sole jurisdiction of civil authorities</td>
</tr>
<tr>
<td>Venice (c,f)</td>
<td>15th century</td>
<td>Loans at 20% long regarded as custom, 5-12% regarded as legal and just</td>
</tr>
<tr>
<td><strong>Legal maxima, pawnshops</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Milan (b)</td>
<td>End of 12th century</td>
<td>Legal max rate of 15%</td>
</tr>
<tr>
<td>Verona (b)</td>
<td>1228</td>
<td>Legal max rate of 12.5%</td>
</tr>
<tr>
<td>Sicily (b)</td>
<td>Mid-13th century</td>
<td>Legal max rate of 10%</td>
</tr>
<tr>
<td>Modena (b)</td>
<td>1270</td>
<td>Legal max rate of 20%</td>
</tr>
<tr>
<td>Genoa (b)</td>
<td>13th century</td>
<td>Legal max rate of 15%</td>
</tr>
<tr>
<td>England (g)</td>
<td>13th century</td>
<td>Legal max rate of 43½%</td>
</tr>
<tr>
<td>Provence (g)</td>
<td>13th century</td>
<td>Legal max rate of 300%</td>
</tr>
<tr>
<td>Germany (g)</td>
<td>13th-14th centuries</td>
<td>13th: Legal max rate of 173%; 14th: Legal max rate of 43½%</td>
</tr>
<tr>
<td>Bruges (a)</td>
<td>1306, 1404, 1432</td>
<td>Legal max rate of 43½%</td>
</tr>
<tr>
<td>France (b,g)</td>
<td>1311, 1361</td>
<td>1311: Legal max rate of 20%; 1361: Legal max rate of 86%</td>
</tr>
<tr>
<td>Lombardy (b)</td>
<td>1390</td>
<td>Legal max rate of 10%</td>
</tr>
<tr>
<td>Burgundy (g)</td>
<td>End of 14th century</td>
<td>Legal max rate of 87%</td>
</tr>
<tr>
<td>Florence (g)</td>
<td>15th century</td>
<td>Legal max rate of 20%</td>
</tr>
</tbody>
</table>

Sources: (a) de Roover (1948, p. 104); (b) Cipolla (1967, p. 65); (c) Gilchrist (1969, p. 112-113); (d) Grice-Hutchinson (1978, p. 36-41, 48); (e) Helmholz (1986); (f) LeGoff (1988, p. 72); (g) Homer and Sylla (1991, p. 97, 103, 110); (h) Gelpi and Julien-Labruyère (2000, p. 27)
Table 2: Chronology of Christian Interest Practice and Philosophy

<table>
<thead>
<tr>
<th>Time period (C.E.)</th>
<th>Institutional &quot;dependence&quot;</th>
<th>Interest practice</th>
<th>Interest philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th -- mid-13th centuries</td>
<td>Before Investiture Controversy (early 12th century), little dependence: Powerful secular leaders appoint clerics; After Investiture Controversy, significant dependence: Papal authority reaches zenith, Church gains suzerainty over secular lands</td>
<td>Interest banned by Holy Roman Empire; Rudimentary interest-bearing transactions</td>
<td>Strong restrictions strengthened in 12th century (Lateran II, III); Staunch prohibition in any form</td>
</tr>
<tr>
<td>mid-13th -- mid-15th centuries</td>
<td>Little dependence: Papal authority diminishes, powerful lay regents reclaim suzerainty</td>
<td>Moderate interest legal throughout much of Europe; Bills of exchange ubiquitous; Lombards granted charters to lend openly</td>
<td>Cumbersome alternatives, such as <em>census</em> and <em>societas</em> permitted; Bills of exchange eventually accepted; Ban on open interest still intact</td>
</tr>
<tr>
<td>mid-15th -- 19th centuries</td>
<td>Close to zero dependence: Reformation further cripples Church's secular power</td>
<td>Open lending at interest ubiquitous; Many types of contracts involving interest common (mortgage, exchange banking)</td>
<td>More openly usurious practices, such as the triple contact, legitimated; Ban on moderate interest eventually eliminated</td>
</tr>
<tr>
<td>Time period (C.E.)</td>
<td>Institutional &quot;dependence&quot;</td>
<td>Interest practice</td>
<td>Interest philosophy</td>
</tr>
<tr>
<td>--------------------</td>
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</tr>
<tr>
<td>7th -- mid-15th centuries</td>
<td>Very significant dependence: Some judges (kādīs) appointed by the state, but scholars (muftīs) largely independent of the political authority</td>
<td>Contractual ruses (hiyal) and partnerships common; Credit instruments (such as debt transfers, bills of exchange) employed for long-distance transactions</td>
<td>Interest (ribā) ban emerged; Hiyal (such as the double sale) and partnerships permitted, but no further relaxations</td>
</tr>
<tr>
<td>mid-15th -- 18th/19th centuries</td>
<td>Significant dependence, but less than in previous periods: incorporation of the muftī’s office into the apparatus of the state</td>
<td>Interest more openly charged in accordance with Islamic law and with support of political and religious authorities; Most transactions conducted with ruses (such as istiqlal), with lip-service paid to Islamic law; Cash waqf’s ubiquitous</td>
<td>Restrictions relaxed; &quot;Cash waqf controversy&quot; enabled more open institutionalized lending at interest; Direct breaching of ribā ban still a sin</td>
</tr>
</tbody>
</table>