Bills of Exchange, Interest Bans and Impersonal Exchange in Islam and Christianity*

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ABSTRACT

A vast economic history literature suggests that medieval institutions supporting contract enforcement were necessary for impersonal exchange to emerge. Yet this literature cannot account for the bill of exchange, an important financial instrument that had positive legal standing in both the medieval Islamic and Christian worlds but remained relegated to personal networks only in the former. This paper suggests that a seemingly innocuous difference – the involvement of currency exchange in European but not Middle Eastern bills, a difference resulting from the secular legalization of interest in Europe – encouraged divergent endogenous processes resulting in these distinct institutional arrangements.

* This paper is a much amended version of chapter four of my dissertation, completed at Stanford University. I am extremely grateful to Avner Greif, Timur Kuran, and Ran Abramitzky for helpful guidance, comments, and insight. I also wish to thank participants in seminars at Northwestern University and the all-UC Group Economic History Conference. Generous support was provided by the Mercatus Center and the Center for the Economic Study of Religion at George Mason University. All errors are mine.
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 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) has 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 which they cannot explain. One particularly significant historical feature unaccounted for in this literature is that long-distance financial instruments, particularly bills of exchange, remained confined to relatively small, personal networks in Islamic world¹ but precipitated broader

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¹ Throughout this paper, I use the terms "Christian world" and "Western Europe" to denote the pre-Reformation Christianized regions under the Church of Rome. I 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). I recognize that this terminology is overly general and may at times be misleading, but this is not intentional – instead, I view this as an unfortunate consequence of the breadth of the subject matter at hand.
impersonal institutions in Europe (such as joint-stock companies and banks). Bills of exchange, described by Edwin S. Hunt and James M. 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 in court wherever they were drawn. Hence, their relegation to 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 employs a two-tiered argument to help account for the differing breadth of the networks associated with these financial instruments and institutions. The first tier suggests that differences in the institutions supporting (and supported by) European and Middle Eastern bills of exchange arose in response to a seemingly trivial difference in the method through which exchange transactions transpired. In Europe, lenders profited off of exchange transactions by buying and selling bills in different regions at different exchange rates. This provided wealthy lenders a way of making profit while skirting the religious interest ban, and beginning in the fourteenth and fifteenth centuries, bills of exchange became an important financial instrument (rather than simply a means of decreasing transport costs). It was precisely because exchange transactions were closely tied with long-distance lending – due to the element of currency exchange – that they provided incentive for European businessmen to establish organizations capable of extending impersonal credit.

On the other hand, in the Islamic world, bills of exchange (suftaja, plural safatij) did not involve currency exchange, but instead were written in one region for payment in another of the same specie. A fee could be charged by the borrower (issuer) upon issue, but lenders could not profit off of the exchange transaction itself, as gaining off of differences in exchange rates was
considered usurious and hence illegal. Thus, bills of exchange 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, safatij were not employed as instruments of finance, and lenders were thus not provided incentive to expand their operations beyond their prevailing network of personal relations, thereby inhibiting the growth of institutions capable of facilitating impersonal exchange.

This argument 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 specific institutional elements determined whether individuals 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 cases where contracts are enforceable and the FPOE is not a problem (as the evidence suggests was the case with both European and Middle Eastern bills of exchange), divergent outcomes can still emerge as a result of differing institutional details.

The second tier of the argument addresses why European lenders were able to profit off of differences in exchange rates but Middle Eastern lenders were not. I suggest that this difference was a result of the type of sanctions imposed on those who lent at interest (usury).² In particular, I argue that the greater degree to which political authorities depended on religious authorities for legitimacy in the Islamic world entailed an equilibrium in which interest was prohibited by religious and secular authorities. On the other hand, I argue that a late thirteenth-century decrease in the dependence of European political authorities on religious authorities sparked a series of interactions – commencing with the secular legalization of moderate interest –

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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).
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, encouraging them to seek profit on exchange transactions (despite condemnation by religious authorities). On the other hand, the significant level of “dependence” in the Islamic world 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 capital-wealthy lenders to openly react to financial exigencies in such a manner, and they were thus discouraged from “pushing the envelope” and seeking profit on bills of exchange.

Before concluding, I provide a “robustness check” of this hypothesis by briefly analyzing the history of interest and bills of exchange in medieval Byzantium. I find that, as in the Western Christian and Islamic worlds, the legality of profiting on the exchange portion of the bill was related to the secular (and religious) acceptance of interest, which itself stemmed from the relationship between the political and religious authorities.

This argument is not a deterministic one. At no point do I argue that Islamic institutions had to form like Western European ones in order to facilitate impersonal exchange, nor do I argue that Islam or Islamic institutions are incapable of change. Instead, I argue that incentives which encouraged the formation of institutions capable of supporting impersonal lending were lacking in the Islamic world, in part due to the “double illegality” (secular and religious) of lending at interest, which discouraged institutional formation based on open, impersonal transactions.

This analysis suggests the existence of two different equilibria. One equilibrium, which pervaded the Middle East, consisted of economic transactions and interactions which were based largely on social-personal networks where lenders had little incentive to “push the envelope” of
the institutional structure. In the other equilibrium, which emerged in Western Europe, purely personal financial networks were undermined in favor of widespread, impersonal networks.

Bills of Exchange in Western Europe and the Middle East

The Mechanics and History of Bills of Exchange

Western Europe. Medieval European bills of exchange were debt instruments issued in one place and remitted in another, usually in a different type of currency payable at the market exchange rate (quoted in the locale of issue) with a stated maturity (usance) corresponding to a duration between one and six months. Bills of exchange 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 (payer) abroad. At maturity, the payer paid an amount in a foreign currency to the lender’s correspondent (payee) (de Roover 1963, Mueller 1997, ch. 8).

Lenders made profit on bills by having the payee reverse the process (rechange) and buy a new bill, payable in the lender’s home land, from another borrower. Because the second transaction took place in a distant land, the second bill was purchased at a different exchange rate than the first one. The rate differential permitted lenders a chance to profit on exchange transactions. Profit was not assured, however, as wild fluctuations in the exchange rates – which were subject to the local supply and demand of specie and credit, the borrowing habits of the

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3 Merchants eventually adopted bills quoted in fictitious units of stable value (in order to escape the dramatic changes in exchange rates resulting from currency debasement and speculation), but their adoption of this measure instead of discounting suggests that currency exchange maintained its important role in the exchange transaction (Einzig 1970).

4 Another way that bills were employed to simulate interest-bearing loans was through non-repayment by the payer. In this case, it was tacitly understood by all parties that a dishonored bill would be protested in court (for appearances) and returned to its place of issue, after which the taker was obligated to pay the deliverer back at the current rate of re-change, which acted as an interest payment (Einzig 1970).
political authority, and so forth – could entail a loss for the lender, although most bills provided positive profit (de Roover 1963; Mueller 1997, ch. 8).  

Bills of exchange thus performed three functions: currency exchange, short-term credit-extension, and trade facilitation. They originally emerged in order to support the latter, enabling merchants to avoid the costs (armed guards) and risks (robbery) associated with moving specie (Kohn 1999). Such costs were far from trivial – for example, the charge for moving bullion from Naples to Rome ranged between eight to twelve percent of the value being moved (Hunt and Murray 1999, p. 64).  

The earliest forms of bills of exchange arose in Genoa in the mid-twelfth century, but bills did not become widespread until the following century, when they were employed by merchants at the Champagne fairs (Hunt and Murray 1999). They became ubiquitous in subsequent centuries, primarily in Italy, evolving into financial instruments which enabled lenders to make profits via differences in exchange rates (de Roover 1963, p. 13). They carried many advantages which were valuable for extending credit (regardless of usury theory): they were self-liquidating (after usance), easily renewable (through rechange), and the rates of interest were largely predictable within certain parameters (Meuller 1997, ch. 8). Such characteristics

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5 Other types of exchange existed in the high-medieval period, such as ‘petty exchange’ and dry exchange. The former simply involved the exchange of one coin for another, while the latter dealt fictitiously in bills of exchange, involving no currency exchange and thus no risk for the lender (de Roover 1944). The existence of other types of exchange does not detract from the argument made in this paper.

6 In interregional transfers, bills of exchange also incurred a much lower time cost than specie. For example, Einzig (1970, p. 67) relates an instance (quoted by Yves Renouard) in which it took twenty-one days to deliver coins collected in Rouen to Avignon, whereas a courier could deliver a bill in eight days.

7 Bills of exchange evolved further in the late-sixteenth and seventeenth centuries when they became negotiable and endorsable (the first examples of endorsement dates from the 1570s). As endorsable instruments, bills were similar to convertible money (Kohn 1999). This paper focuses on the pre-endorsement period, as bills of exchange served a much different function post-endorsement.
encouraged their use by Italian bankers both as a safe means of short-term lending and as an alternative to discounted debt instruments, which were forbidden by the Church.\(^8\)

Despite their usurious nature, bills of exchange were enforced by merchant courts, and the deliverer could sue the taker if the latter’s correspondent (the payer) refused the bill (de Roover 1963, ch. 6; Kohn 1999). The legal standing of bills of exchange was established by their being written in the hand of the taker, whose handwriting was known to his correspondents (Kohn 1999).\(^9\)

**Middle East.** Like in the Europe, numerous credit instruments were employed in the Islamic world. These included transfers of debt (*hawāla*), orders of payment (*sakk* and *ruq’a*),\(^10\) and bills of exchange (*suftaja*, plural *safatij*). The latter was known since the eight century C.E. (Lieber 1968; Udovitch 1979) – well before similar credit instruments were employed in Europe.\(^11\)

*Safatij* were written obligations that were issued by and drawn upon well-known merchants for repayment in the *same type* of currency paid to the issuing agent (Goitein 1967, p. 242; Udovitch 1975, 1979). *Safatij* were generally employed in trade, but were also used for other purposes – for example, the ‘Abbāsid financial administration used *safatij* to transfer funds

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\(^8\) Their use as a financial instrument is exemplified by the Covoni family of Florence, who between 1336 and 1340 registered a total of 443 exchange transactions: 70 were trade related and 373 were financial (Mueller 1997, p. 317-18).

\(^9\) The following correspondence between a factor of the Davanzati company and the Datini company is typical: “We are taking note of your handwriting, and you take note of ours. Tell us what is available in Pisa, and here you will be well served.” (Mueller 1997).

\(^10\) The *sakk* and *ruq’a* 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. 240-41; Udovitch 1975).

\(^11\) Though it is certain that the *suftaja* pre-dates the European bill of exchange, there is considerable debate concerning the Middle Eastern origins of the European bill. Early twentieth-century scholars, such as Usher (1914) believed Western bills to be of Italian origin, while later “Orientalist” scholars such as Schacht (1964) and Lieber (1968) believe that European bills owe a great deal to the Islamic world. Ashtor (1973) reconciles the two viewpoints, noting that while Europeans were aware of *suftaja* and even dealt in them, the difference in the economic setting in which they emerged, which (as emphasized in this paper) permitted an exchange transaction to be included in the European but not the Islamic bill, suggests that the European bill was a fundamentally different and unique credit instrument.
between provincial treasuries and Baghdad, bribes were paid via safatij, and tax farmers used safatij to pay the royal treasuries (Lieber 1968, p. 233; Ashtor 1973, p. 556-57; Ray 1997, p. 71).

Unlike European bills of exchange, which involved four parties, safatij involved only three parties and worked as follows. A lends a sum of money to B in return for a suftaja, which is given to C, who resides elsewhere and pays A the same sum in the same currency (Ashtor 1973, p. 556). A typical suftaja was written as follows: “Abū Mansūr asked me to take from him 25 dinars and 2 qīrāts, which I did and for which I wrote him a bill drawn on you” (Goitein 1967, p. 243). Similarly, a characteristic “blank” suftaja read: “Give ____ all that he may demand, obtain a receipt from him, and debit the sum to me” (Mez 1937, p. 476).

Safatij were neither transferrable nor negotiable (similar to pre-sixteenth century European bills) and were immediately redeemable upon presentation (Goitein 1967, p. 244-45). The issuer (borrower) generally charged a fee, which was sometimes significant and other times as small as 1 percent of the suftaja’s value (Goitein 1967; Udovitch 1975). If the agent upon whom the suftaja was drawn delayed payment, he incurred a steep penalty which, if not paid, could be claimed by the suftaja holder via lawsuit in an Islamic court (Goitein 1967, p. 243). The enforceability of such late penalties are exemplified in a case noted by S.D. Goitein (1967, p. 243): “The bill arrived on the holiday [and, therefore, was not paid; it was payable it seems, to a government office]. Immediately mounted police were sent out carrying an order for a fine of 6 dirhems per day.”

Like a European bill of exchange, safatij were written documents which extended credit and helped merchants avoid risk in transport. However, unlike European bills, safatij did not involve a currency exchange – the bill merely permitted merchants in one region to make payments in the same currency in another region. Indeed, while safatij were permitted by some
Islamic jurists (the Hanafi) – and were thus enforceable in court – lenders were forbidden from profiting on the exchange transaction itself. Instead, only borrowers could profit from dealing in safatij (through the issue fee).

Consequences
Both European bills of exchange and safatij were employed to facilitate trade and extend credit. However, the additional element of currency exchange associated with the former allowed wealthy European lenders to profit off of the exchange transaction. Since this profit was derived from two transactions which exploited variations in exchange rates, lenders who purchased bills of exchange were necessarily involved in interregional (and hence inter-currency) commerce with multiple agents. This seemingly innocuous element of European bills encouraged the formation of institutions capable of supporting interregional finance, such as the fifteenth-century fairs in Lyons and Besançon, which were organized by merchants in Florence and Genoa, respectively, in order to provide opportunities for credit transactions (Einzig 1970). It likewise spurred the emergence of organizational forms suited for impersonal lending, a process 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 interregional 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 Medici and Datini to extend their networks over long distances in the context of exchange transactions. This was important to their success (and ultimate decline), as purely 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 emerged as a response to the economic exigencies imposed by the broader financial institutional complex. The enforceability and profitability of bills of exchange encouraged enterprises like the Medici and Datini to establish interregional branches to 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 an era before credit scores and international finance laws, these complex networks permitted capital-rich entrepreneurs in Italy to invest in all of the major financial centers of Europe. 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 less personal credit relations to arise: from the viewpoint of the primary capital holders (the Medici family in Florence), most financial activities were conducted with unknown relations.

However, nothing resembling these organizational forms emerged in the Islamic world – instead, safatij were employed only where direct and permanent business connections existed between well-known, closely-knit groups of merchants and bankers (Goitein 1967, p. 244-45; Udovitch 1975). The reason underlying this difference was not differential enforceability – bills were enforceable in court in both regions. Indeed, the large, enforceable fees imposed on late repayment of safatij (along with their convertibility upon delivery) discouraged most bankers from issuing large safatij – if the issuer did not have complete confidence that his partner could pay the loan, he risked incurring such fees (charged to his partner) upon delivery (Goitein 1967; Udovitch 1975, 1979). In a world of personal business relations dependent on repeated interaction, entering into such a contract without assurance that the bill could be paid was a risky proposition. For this reason, the Geniza documents (analyzed in detail by Goitein [1967, p. 243-45]) reflect numerous instances of merchants unable to procure safatij and “great bankers” unwilling to issue safatij, encouraging them to instead carry purses of gold specie in order to conduct their business.

The crucial difference between European bills of exchange and safatij lies in how profit accrued through their use. In the Islamic world, borrowers could charge a fee for writing a bill, which was payable in a distant land. Without the element of currency exchange, there was little incentive for wealthy lenders to employ safatij as an instrument of finance. Instead, merchants –
not investors – remained the primary lenders (purchasers), and safatij remained relegated to facilitating trade. Foreign agents were unnecessary as long as the borrower-banker had confidence in his business partner (through whom he was generally connected via some social-personal relationship), and capital-rich Muslims could not earn returns by buying safatij, thus providing little incentive to establish networks dealing in safatij.12

On the other hand, although European commerce at one point consisted primarily of networks of personal relations, the mechanics of bills of exchange encouraged the formation of less personal arrangements. The currency exchange element permitted lenders to profit from the transaction, which in turn provided capital-rich entrepreneurs incentive to employ bills as an instrument of finance. Because currency exchange was generally associated with long-distance commerce, lenders were encouraged to form organizations such as the Medici bank, which extended credit networks via branching, allowing for less personal credit relations to emerge.

**Accounting for Differences in Bills of Exchange**

The previous section suggested that a seemingly innocuous difference between Western European and Middle Eastern bills of exchange – the inclusion of an exchange transaction in the former – entailed distinct institutional consequences. But should this difference be viewed as

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12 Theoretically, bankers could have extended their networks in order to increase their confidence in the partner on the other end of the transaction (who would have been a part of the same ‘business’), which would have encouraged the writing of larger safatij at greater fees. Yet, in this case the incidence of personal exchange is even greater, as both the borrower and his agent are part of even a closer (business) network. It is also possible that Muslim lenders could have learned the potential benefits of adding exchange to the suftaja through contact with Christian minorities. Indeed, Kuran (2004) notes that the Pact of Umar permitted Christian minorities (dhimmis) in Islamic lands to utilize Christian courts in transactions involving non-Muslims. Yet, it is unlikely that European bills of exchange were commonly employed as financial instruments in Muslim lands for two reasons: 1) bills of exchange were enforceable only in merchant court (Kohn 1999); 2) the viability of bills of exchange as financial instruments depended on the existence a critical mass of (in this case, Christian) borrowers and lenders in more than one region – at least before the advent of transferable bills. In fact, Kuran (2004) notes that Christian minorities generally abided by Islamic law until the eighteenth century (by which time much more advanced financial instruments were available to European lenders).
exogenous to the broader economic and institutional structures? If so, why did no instrument emerge in the Islamic world tying currency exchange with credit-extension, thus allowing for commercial opportunities like those that pervaded late-medieval Europe?\footnote{Money-changing existed in the medieval Islamic world just as it did in medieval Europe. The point stressed in this paper, however, is that these two transactions remained separate in the former, thus diminishing opportunities for profit.}

This paper suggests that the first-order difference between the Middle East and Western Europe responsible for this distinction is that transactions involving guaranteed interest were permitted by secular authorities in the latter (beginning in the late-thirteenth century) but not in the former. This, in turn, permitted an environment in which profiting off of differences in exchange rates – which was viewed as usurious by both the Roman Church and Islamic law – was discouraged to a lesser extent. That is, despite other-worldly and social sanctions associated with transactions involving profit off of exchange, bills were enforceable in European secular courts. On the other hand, the ban on guaranteed interest in Islam prevented usurious financial instruments similar to the European bill of exchange from emerging in the Middle East – though, as noted below, the multifarious mechanisms for evading the ban permitted the employment of numerous substitutes for lending at interest.

The argument concludes by taking one more step back and answering the question: why were secular interest restrictions relaxed in the Christian world but not in the Islamic world? To this end, I discuss these interest histories in the context of the model proposed by Rubin (2008), which argues that economically inhibitive laws, such as interest restrictions, are more likely to persist the greater the degree to which political authorities depend on religious authorities for legitimacy. This upshot of this argument is that interest restrictions are more likely to be self-enforcing in the Islamic world than in Christendom. It also provides a theoretical framework
which helps account for changes in interest theory over time in both religions. Of particular importance to the present argument, it suggests that a thirteenth-century decrease in the dependence of European political authorities on religious authority encouraged the former to permit interest, which in turn encouraged lenders to employ bills of exchange as financial (and not just trade) instruments.

Theoretical Background: “Church-State” Relations and Interest Restrictions

I begin this part of the analysis by summarizing the logic of the model in Rubin (2008), which helps explain why economically inhibitive religious laws – such as interest bans – have generally persisted for longer in Islam than in Christianity. That model suggests that this phenomenon results from 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.

This difference is exogenous because it is a result 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 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 (Lewis 1974, 1995). The relationship between political and religious authorities varied over time and place in both regions, but rarely did the degree of dependence in Western Europe approach that of the Middle East (Schacht 1964; Lewis 1974, 1993, 1995).14

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14 Lewis (1974, p. xviii) argues that “the dichotomy of regnum and sacerdotum, deeply rooted in Western Christendom, does not exist in Islam, and indeed, such pairs as spiritual and temporal, lay and ecclesiastical, and
The logic underlying the 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 (such as contract non-enforcement) and other-worldly costs (such as 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. 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.\textsuperscript{15}

Two predictions relevant to the present analysis arise from this model. First, the greater degree to which political authorities derive legitimacy from religious authorities in Islam relative to Western Christianity should entail that secular and religious interest restrictions are more likely to persist in Islam. Second, it suggests that secular relaxations of interest restrictions may result from a decrease in “dependence”, with religious relaxations following subsequently. Indeed, I exploit the temporal variation in dependence to shed light on changes in the actions of both types of authorities. For example, I argue that secular relaxations of the ban commenced in

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religious and secular have no equivalents in the classical languages of the Muslim peoples.” Likewise, Schacht (1964, p. 2) claims that in Islam, “there merely existed a discordance between the sacred Law and the reality of actual practice of which the regulations framed by the state formed part, a gap more or less wide according to place and time, now and then on the point of being closed but continually reasserting itself.” Such dependence is still present in many modern Islamic polities; state mufti's were appointed in the twentieth century in Egypt, Saudi Arabia, Lebanon, Malaysia, Yemen, and Indonesia, and twentieth century constitutions in Egypt, Syria, Kuwait, Morocco and Iran include provisions making the Shari’a the law of the land (Schacht, 1964, p. 107-110; Masud, Messick, and Powers, 1996, p. 27).

\textsuperscript{15} 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).
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Western Europe after a thirteenth century decline in the power of the papacy and they
commenced in the Ottoman Empire after the sultans brought the religious authority into the state.

In the following sections, I provide evidence supporting these predictions by briefly
summarizing the history of interest restrictions in both religions. I then tie these histories to the
differing features of Western European and Middle Eastern bills of exchange.

*Western European Interest Theory and Practice*

The Church’s 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).\(^{16}\) The ban was supported by subsequent Church councils, establishing the basis for the
vigorous anti-interest campaign in the medieval period.

With European commerce stagnating until the commercial revolution (which commenced
in the eleventh century), there was little need for religious authorities to re-consider the interest
prohibition. Yet, as commerce revived at the turn of the millennium, the Investiture Controversy
(1075-1122) established significant power for the papacy. An increase in dependence on
religious authority discouraged secular authorities from permitting religiously-banned
transactions (such as lending at interest) in spite of the fact that investment lending was more
feasible in Europe than at any time since the fall of Rome. Indeed, the power attained by
religious authorities over secular authorities in this period permitted the strengthening of the
interest ban, exemplified by the Second and Third Lateran Councils (1139 and 1179), which
proscribed excommunication for usurers, refused usurers burial in Christian grounds, and
interdicted usurers' offerings (Le Goff 1979). By the end of the twelfth century, the Church's

\(^{16}\) 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 (forthcoming).
stance on interest crystallized into a staunch prohibition in any form, and the money-lender was linked with the worst type of evil-doers.

When papal power declined in the mid-thirteenth century (due to, amongst other things, the territorial growth of secular power, 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 their degree of dependence on religious authorities for legitimacy diminished. In turn, moderate interest was permitted by secular authorities, who themselves needed access to credit (which was often obtained through forced loans), primarily in the guise of interest caps (see Table 1).

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Although lending at guaranteed interest was legal, it carried significant social and spiritual penalties. From the twelfth century forward, the Church explicitly prohibited manifest usury, or low-risk credit extended on collateral. The associated sanctions, which were generally not imposed on the merchant-bankers who dealt in bills of exchange and other instruments with non-guaranteed interest, were far from trivial: some of the most colorful medieval exempla (popular moral folklore) tied usurers to hell, and both Christian and Jewish usurers were frequently persecuted and expelled from towns at the behest of the populace (Gurevich 1990).

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17 Forced loans, which were obligatory to all citizens of wealth, were known in Venice beginning in 1262 and were funded at five percent per annum until 1380. These loans, which were also known in Genoa and Florence, were uncontestable and received relatively small interest (Lane 1966, ch. 6; Mueller 1997, ch. 10-14). Larger loans made by entrepreneurs (which were also often forced) to secular authorities were risky and default was common, and this was reflected in the interest rate they received. For example, Emperor Frederick II (1211-1250) usually paid between thirty and forty percent interest. In 1221, the Countess Jeanne borrowed at 18% to ransom her husband, Frederick the Fair of Austria (1286?-1330) borrowed at eighty percent interest, and the Anjou King of Naples (Robert of Anjou) paid thirty percent in 1319 to his Florentine lenders (Cipolla, 1967, p. 64; Homer and Sylla, 1991, p. 94-95, 99). The high incidence of default on such loans discouraged the Medici from lending to secular authorities – the eventual drafting of such loans is cited as one of the reasons for its decline (de Roover 1963).
Since this condemnation applied primarily to pawn-brokers and lombards, who lent for consumption, it left the door open for religious authorities to permit (through theoretical manipulation) commercial practices which were in spirit similar to lending at interest but were not riskless and hence not considered manifest usury. Indeed, Frederic Lane (1966, p. 67) suggests (in an argument supporting the one presented here) that the upshot of the interest ban was to divert funds away from relatively unproductive consumer credit to commercial credit.

The harsh sanctions associated with manifest usury were a primary reason that credit instruments which concealed interest were employed by capital-wealthy lenders. Early alternatives to guaranteed loans at interest included partnerships (societas or commenda) and the census, an annuity on a fruitful good. These contracts had features implicit in interest-bearing loans, and were justified by religious authorities yet in the thirteenth through fifteenth centuries as legitimate within the context of Christian thought after they were permitted by secular authorities and grew deeply embedded in commercial relations (Noonan 1957, ch. 6-7).

Likewise, bills of exchange incited controversy amongst the Scholastics as they became entrenched in European finance in the thirteenth and fourteenth centuries. However, religious authorities were willing to accept their validity (based on their risky nature) in the fifteenth century after their secular legality was assured and it was clear that they were essential to European finance (Noonan 1957).

Other substitutes to interest-bearing loans emerged in subsequent centuries, including the triple contract, mortgage, and fictitious sales. These contractual forms were eventually justified

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18 Raymond de Roover (1963) suggests that the Medici (and other major lenders) utilized bills of exchange to lend while avoiding social stigmas, which, despite the transparency of the intentions of those who dealt in bills, were generally reserved for pawnbrokers and lombards who openly lent at guaranteed interest.

19 Despite the eventual acceptance of bills of exchange as a legitimate credit instrument, the practice of discounting bills was not adopted in Protestant countries (who were generally more lenient regarding usury) until the seventeenth century and was delayed even longer in Catholic countries (Einzig, 1970, p. 84).
by Christian religious authorities, often by resolving them into other, lawful contracts (Noonan 1957, 1969; Divine 1959; Gilchrist 1969). 20 A final blow to anti-usury doctrine occurred at Lateran V (1512-17), when the Church officially sanctioned the monte di pietà, or pious pawn bank. Montes were originally charitable, religious institutions (introduced by Franciscans in Perugia in 1462) that collected funds to provide loans to the poor (Gilchrist, 1969, p. 115; Gelpi and Julien-Labruyère, 2000, p. 42-43). The rate they charged (6-15%) was well below the one offered by other pawnbrokers, but still high enough to initially receive condemnation from the Church (de Roover, 1948, p. 130; Noonan, 1957, p. 295). However, the montes spread quickly throughout much of Europe (there were eighty-seven in Italy alone), and the Church eventually sanctioned them in Lateran V (Gilchrist, 1969, p. 115). The montes, being the first institutions which lent openly at interest that the Church sanctioned, brought about the virtual disappearance of publicly licensed pawnbrokers.

By the end of the seventeenth century the ban was a dead letter.21 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). A stylized chronology of Western European interest practice and philosophy is summarized in Table 2.

[INSERT TABLE 2 HERE]

20 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).

21 The Protestant Reformation likely catalyzed the further relaxation of religious 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 prohibition of interest (ribā) has always been a cornerstone of Islamic doctrine. The Qur'an 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).

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). This significant degree of dependence permitted an environment in which transactions openly involving interest were legally voidable – indeed, Haim Gerber (1999, p. 129, 141) notes that such illicit transactions could be brought to court, where they were generally voided without further legal consequence. This did not entail, however, that any transaction involving (veiled) interest was forbidden by political and religious authorities. Instead, straight-forward devices (hiyal) designed to evade the ban, most of which were not just permitted by religious authorities, but were created by them, were common in the early Islamic period (Khan 1929; Schacht 1964, 2006; Coulson 1969; Grice-Hutchinson 1978; Ray 1997). 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 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.

Documentary evidence reveals that overt, guaranteed 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, 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."\(^22\)

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 sharī‘a” (Berkey 2003, p. 264). This decrease in dependence permitted an environment in which more straightforward interest-bearing lending was permitted. For instance, Ronald Jennings (1973) shows 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 (kādī) court, the religious scholars (‘ulamā’), and the sultān. These records indicate that 20% per annum was considered acceptable and in accordance with the sharī‘a.\(^23\) 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

\(^{22}\) Goitein also 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. The most common form of credit extension – partnerships – was widespread within the first few Islamic centuries. They most frequently took the form of the sleeping partnership (mudāraba, or “mutual loan”), or ‘inān, in which both partners invested some capital (Goitein 1967; Udovitch 1970; Labib 1969). For an extended analysis of partnerships in the medieval Islamic world, see Udovitch (1970).

\(^{23}\) 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 şeriyye. Yet, ribh merely entails an annual return or earning on capital while mu'amele-i şeriyye is a general terminology covering various methods – synonymous with hiyal – by which money could be lent within a legal framework. See Çağatay (1995, p. 62-64) and Çizakça (1995, p. 325-33).
sale, but actually as a pawn) (Gerber 1988, ch. 7). Other scholarly works indicate that lip-service paid to sharī'a was not relegated to Kayseri, but prevailed 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 Middle Eastern interest practice and philosophy is summarized in Table 3.

[BEGIN TABLE HERE]

Bills of Exchange and Interest Bans in Broader Perspective

The bill of exchange differed in the Islamic and Western Christian worlds largely because lending at interest was (secularly) legal in the latter, even if Christian religious authorities did not recognize the validity of bills until the fifteenth century. Because European lenders could take a legally enforceable return on exchange transactions, they were encouraged to employ bills of

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24 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.

25 For example, in a study of seventeenth-century Bursa, 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"). Plenty of registered cases exist where interest is given and taken openly by both Muslims and non-Muslims, but in only one of approximately 9,000 cases is the Turkish word for interest (faiz) employed (similarly, the term usura was avoided in the West). 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.
exchange as substitutes for guaranteed interest-bearing loans, in turn avoiding social sanctions associated with manifest usury. Bills of exchange became a widespread financial (and not just trade) instrument in the late-thirteenth and early-fourteenth centuries, soon after secular authorities relaxed interest restrictions (following a decrease in the “dependence” of political authorities on religious authorities). This paper suggests that these phenomena are interrelated: that is, the decreasing “dependence” of Western European secular authorities on religious authorities encouraged the relaxation of secular interest restrictions, which in turn encouraged lenders to employ bills of exchange in a usurious manner, which itself encouraged the formation of interregional, impersonal organizational forms (such as the Medici enterprise) suited for dealing in bills of exchange.

On the other hand, Middle Eastern lenders were forbidden by both religious and political authorities from profiting on the exchange transaction itself, and safatij, where legal, remained confined to their original purpose – facilitating long-distance transport without the use of specie. While profiting off of exchange transactions was not illegal in Islamic law – otherwise, money-changing would not have been a viable profession – profiting off of exchange in conjunction with lending was forbidden by Islamic religious and political authorities. Islamic law considered profit (beyond fees) stemming from exchange transactions to be usurious, and hence only borrowers were able to profit from issuing safatij (through issue fees). Wealthy lenders could not

26 Of course, the commercial revolution commenced before the decline of religious authority and before it was possible for bills of exchange to be involved in financial transactions. This thesis presented in this paper does not deny that the commercial revolution was a necessary pre-condition for bills to be employed in this manner (or even for the secularization of Christianity) – it merely suggests that incentives for profiting off of the exchange part of transaction were established by the secular (and eventual religious) legalization of interest. Indeed, bills were used for finance beginning in the late-thirteenth century, after religious power began to wane.
profit by using instruments similar to European bills of exchange, as such transactions were voidable in Islamic courts.27

Though the “double illegality” (secular and religious) of interest was not initially an impediment to Middle Eastern commerce – religious authorities permitted certain types of evasive practices (hiyal) that facilitated micro-level credit extension – the secular illegality of guaranteed interest discouraged the employment of safatij (and other well-known trade instruments) in long-distance credit extension, especially in transactions involving individuals outside the existing, social-personal networks. Unlike in Western Europe, where the religious acceptability of profiting off of exchange was questionable but the secular legality was certain, both religious and legal sanctions were incurred by Muslims attempting to profit off of differences in exchange rates. These duel sanctions were a result of the greater degree of dependence of political authorities on religious authorities in the Islamic world: the former incurred too significant of a cost from diverging from the latter, and an equilibrium arose in which openly taking guaranteed interest was forbidden. As a result, institutions like those which arose in Europe in response to the potential profit afforded by dealing in bills of exchange did not emerge in the Islamic world, and most exchange operations remained confined to the prevailing set of self-enforcing institutions which supported contractual forms based on personal interactions between acquaintances and families (Goitein 1967; Labib 1969; Udovitch 1975, 1979).

Numerous scholars have employed the widespread presence of interest-bearing lending (via ruses) in the Islamic world as evidence that the ban had no practical effect (Labib 1969; 27 Safatij could have been considered usurious because of the 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). Two schools of Sunni Islam (Maliki and Shafi’i) explicitly forbade safatij, 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.
This analysis suggests that such arguments suffer from focusing on first-order, micro-level observations. It sheds light on an avenue through which religious interest bans carried macro-level, institutional consequences – outcomes which 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.

Employing Joel Mokyr’s (1990) terminology, this analysis suggests that 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 structures different than those in the Islamic world.28 One of these microinventions was the inclusion of currency exchange in the bill transaction. While this microinvention was not sufficient for interregional, impersonal lending to emerge in Europe (certainly this outcome would not have come about without improved standards of weights and measures, advances in bookkeeping, and the like), the secular legality of profiting off of exchange transactions provided incentives which encouraged the growth of institutions supporting such actions in Western Europe.

A “Robustness Check”: Interest Bans and Bills of Exchange in Medieval Byzantium

Medieval Byzantium provides an ideal setting for a “robustness check” of the theory presented in this paper. For one, Eastern political and religious authorities were intimately related since the time of Constantine. Moreover, the Christian legacy of banning interest pre-dated the East-West schism – the ban emerged in 325 at the Council of Nicæa (which was held in modern-day Turkey and accepted by all of the Eastern churches) – thus providing a similar

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28 This argument is intimately related with the literature stressing the importance of historical events and path dependence on the evolution of institutions. For more, see David (1994), Kuran (2005a), and Greif (2006, ch. 5, 7).
“initial condition” for religious authorities in the two Christian regions. Theoretically, then, the causal linkages established in this paper should shed light on the history of interest restrictions and bills of exchange in medieval Byzantium.

Unlike in Western Christianity or Islam, however, the Byzantine religious authority “depended” on the political authority for legitimacy. This stemmed from the concept of caesaropapism – the combination of secular and religious authority, with the former generally superior to the latter – which entailed that religious authorities incurred a “cost” from diverging from the dictates of secular rulers. This concept of dependence is the reverse of that studied in Rubin (2008), which examined the situation in which political authorities depended on religious authorities for legitimacy. The model can account for the Byzantine case, however: reverse dependence implies that political authorities incur little cost from permitting religiously banned actions and are thus likely to do so, with religious authorities following suit. In turn, the institutions supporting economically inhibitive actions are quickly undermined.

A cursory historical overview supports this prediction. In 528 C.E., Justinian enacted a law capping interest at 12.5% per annum, only prohibiting the promise of interest on loans (Grice-Hutchinson 1978, p. 28-29). This law remained valid throughout the early medieval period and was supported by Byzantine clergy, who formulated no new exegeses on interest until the twelfth century (Laiou 1996). In fact, the only anti-usury legislation in the East during this period was promulgated by non-Byzantine churches, which “did not have the reverence for imperial law that the Byzantine church by necessity held” (Laiou 1996, p. 448).

Later medieval Byzantine religious views on interest were also much more lenient than their Western counterparts – except for brief periods, lending at moderate interest was permitted to laymen by Eastern religious authorities. Although some fourteenth-century religious
authorities railed against usury – a view seconded by some in the imperial court after a series of
economic crises – the Byzantines (along with the Syrian church) were the only religious
authorities of the Judeo-Christian tradition to permit interest (Laiou 2003, p. 216). Instead,
religious authorities condemned only immoderate interest, which was also forbidden by civil
law. This history accords with the logic presented in this paper: despite the early Christian legacy
of banning interest, the “dependence” of Byzantine religious authorities on political authorities
entailed a situation in which the latter openly permitted interest with the support of the former.29

The secular legality of interest affected the type of exchange contracts permitted in
medieval Byzantium. Though few records of commerce in Constantinople survived its fall in
1453, numerous Italian records of transactions conducted with Byzantine businessmen suggest
that Italian-style bills of exchange were widely employed in Byzantium. Currency was easily
convertible in Byzantium, and Italian merchants took advantage of differences in local exchange
rates to conceal interest, as they did throughout Europe. For example, several exchange contracts
involving Byzantine and Greek businessmen analyzed by Angeliki E. Laiou-Thomadakis (1981)
involved bills purchased in one currency in one location payable in a different currency in
another location.30

The Byzantines were borrowers, not creators, of these financial instruments. In fact, the
very region most likely to support indigenous Byzantine exchange institutions – the eastern
Mediterranean – was heavily dominated by the Italians, who profited greatly from the
extraterritorial privileges granted to them by Byzantium. As Laiou-Thomadakis (1981, p. 211)

29 For a more in-depth analysis of the Byzantine canonists views on usury, see Laiou (1991).
30 Also see Peragallo (1977), who analyzes the account book of Jachomo Badoer, a Venetian merchant who had
extensive dealings in Constantinople. Peragallo argues that interest was not a hidden factor in the exchange rates, but
this is likely because Bodoer was employing bills as an instrument of trade, not finance. For more on Badoer, see
Meuller (1997, 316-17).
notes, “the greatest disability of the Byzantines was that they could not participate in the primary forms of international trade, for the Italians controlled the most important prerequisites for this: communications through their fleets, the money markets through their elaborate banking and financial techniques, and the information mechanisms through their system of representatives in all important trade centers.”

Thus, endogenous processes like those in Europe which facilitated the growth of impersonal exchange – exemplified by the Medici “hub-and-spoke” system – did not emerge in Byzantium. The reason for this is simple: the commercial revolution materialized in nearby Italy well before any such phenomena took place in the East. Western bills of exchange were readily accepted in the Eastern Christian world, suggesting that – unlike in the Islamic world – religious and civil law would not have been an impediment to the emergence of complicated transactional forms in which guaranteed interest was openly taken. Yet, as suggested in the introduction, the argument in this paper is not a deterministic one – institutions supporting impersonal exchange do not necessarily arise when earning profit on exchange transactions is legal. Instead, this argument is one about relative incentives and the broader, path-dependent consequences of seemingly innocuous institutional differences. The emergence of institutions supporting impersonal exchange in Western Europe was dependent on a complex web of interrelated political, economic, and social events (such as the commercial revolution, advances in transportation, and stricter standards of weights and measures), one of which was the inclusion of a currency exchange transaction in the bill of exchange.

Conclusion
This paper analyzes one of many avenues through which institutions that supported impersonal exchange emerged in Western Europe but not in the Middle East. It explores the consequences of the differing relationships between political and religious authorities in the Islamic and Western Christian worlds, arguing that these distinctions entailed differing enforcement of interest restrictions, which affected the method through which exchange transactions transpired, which resulted in divergent endogenous processes essential to the build-up of institutional complexes supporting impersonal exchange in the two regions. Figure 1 summarizes this argument.

[INSERT FIGURE 1 HERE]

Middle Eastern institutions did not need to evolve like Western ones in order to promote economic development. Yet, the incentive structures imposed on capital-wealthy entrepreneurs by religious and secular interest laws as well as the broader institutional structures had a practical economic effect – manifested in the relegation of long-distance Middle Eastern finance to networks of personal-familial relations – and were among the many factors contributing to the relative underdevelopment of the Middle East over the last seven centuries.

References


Table 1: Interest Laws in Medieval Western Europe

<table>
<thead>
<tr>
<th>Location</th>
<th>Date(s)</th>
<th>Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalonia</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></td>
<td></td>
<td>Loans at 20% regarded as custom, courts enforced rates between 5-12%</td>
</tr>
<tr>
<td>Venice</td>
<td>12th-14th centuries</td>
<td>Only immoderate interest subject to persecution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jews and Moors limited to 20%, Christians limited to 12%</td>
</tr>
<tr>
<td>England</td>
<td>12th-15th centuries</td>
<td>Following a financial crash, the Republic stopped all usury prosecution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crown authorized interest up to 15% for fairs at Champagne and Brie</td>
</tr>
<tr>
<td>Aragon</td>
<td>1241</td>
<td>Usury prosecution became sole jurisdiction of civil authorities</td>
</tr>
<tr>
<td>Cordova</td>
<td>1241</td>
<td>Legal max rate of 12.5%</td>
</tr>
<tr>
<td>Seville</td>
<td>1250</td>
<td>Legal max rate of 12.5%</td>
</tr>
<tr>
<td>Murcia</td>
<td>1266</td>
<td>Legal max rate of 12.5%</td>
</tr>
<tr>
<td>Florence</td>
<td>1345-1346</td>
<td>Following a financial crash, the Republic stopped all usury prosecution</td>
</tr>
<tr>
<td>France</td>
<td>1349</td>
<td>Crown authorized interest up to 15% for fairs at Champagne and Brie</td>
</tr>
<tr>
<td>London</td>
<td>1363</td>
<td>Usury prosecution became sole jurisdiction of civil authorities</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Location</th>
<th>Date(s)</th>
<th>Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milan</td>
<td>End of 12th century</td>
<td>Legal max rate of 15%</td>
</tr>
<tr>
<td>Verona</td>
<td>1228</td>
<td>Legal max rate of 12.5%</td>
</tr>
<tr>
<td>Sicily</td>
<td>Mid-13th century</td>
<td>Legal max rate of 10%</td>
</tr>
<tr>
<td>Modena</td>
<td>1270</td>
<td>Legal max rate of 20%</td>
</tr>
<tr>
<td>Genoa</td>
<td>13th century</td>
<td>Legal max rate of 15%</td>
</tr>
<tr>
<td>England</td>
<td>13th century</td>
<td>Legal max rate of 43½%</td>
</tr>
<tr>
<td>Provence</td>
<td>13th century</td>
<td>Legal max rate of 300%</td>
</tr>
<tr>
<td>Germany</td>
<td>13th-14th centuries</td>
<td>13th: legal max rate of 173%; 14th: legal max rate of 43½%</td>
</tr>
<tr>
<td>Bruges</td>
<td>1306, 1404, 1432</td>
<td>Legal max rate of 43½%</td>
</tr>
<tr>
<td>France</td>
<td>1311, 1361</td>
<td>1311: legal max rate of 20%; 1361: legal max rate of 86%</td>
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<tr>
<td>Lombardy</td>
<td>1390</td>
<td>Legal max rate of 10%</td>
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<td>Burgundy</td>
<td>End of 14th century</td>
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<tr>
<td>Florence</td>
<td>15th century</td>
<td>Legal max rate of 20%</td>
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</table>

Sources: de Roover (1948, p. 104); Lane (1966, p. 61-63); Cipolla (1967, p. 65); Gilchrist (1969, p. 112-113); Grice-Hutchinson (1978, p. 36-41, 48); Helmholtz (1986); Le Goff (1988, p. 72); Homer and Sylla (1991, p. 97, 103, 110); Gelpi and Julien-Labruyère (2000, p. 27)
<table>
<thead>
<tr>
<th>Time period (century C.E.)</th>
<th>Institutional &quot;dependence&quot;</th>
<th>Interest practice</th>
<th>Interest philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td>late 11th - mid-13th</td>
<td>Significant dependence: papal authority reaches zenith after Investiture Controversy, religious authorities gain 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 of interest in any form</td>
</tr>
<tr>
<td>mid-13th - mid-15th</td>
<td>Little dependence: papal authority diminishes, powerful lay authorities reclaim suzerainty</td>
<td>Moderate interest legal throughout much of Europe; forced loans and high-interest loans to secular authorities common; bills of exchange widespread; lombards granted charters to lend at guaranteed interest</td>
<td>Alternatives to loans at guaranteed interest, such as census and societas permitted; bills of exchange eventually accepted; ban on open interest still intact</td>
</tr>
<tr>
<td>mid-15th - 19th</td>
<td>Close to zero dependence: Reformation further cripples Church's secular power</td>
<td>Guaranteed lending at interest ubiquitous; contracts involving interest common (mortgage, exchange banking); montes pietatis spread throughout Italy</td>
<td>Commercial practices simulating guaranteed loans, such as the triple contact, legitimated; montes pietatis permitted; ban on moderate interest eventually eliminated</td>
</tr>
</tbody>
</table>

Sources: See the text.
Table 3: Chronology of Middle Eastern Interest Practice and Philosophy

<table>
<thead>
<tr>
<th>Time period (century C.E.)</th>
<th>Institutional &quot;dependence&quot;</th>
<th>Interest practice</th>
<th>Interest philosophy</th>
</tr>
</thead>
<tbody>
<tr>
<td>7th - mid-15th</td>
<td>Very significant dependence: philosophy underpinning legitimacy of political authorities dependent on coherence with religio-legal class</td>
<td>Contractual ruses (hiyal) and partnerships common; credit instruments (such as debt transfers, safatij) 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</td>
<td>Significant dependence, but less than in previous periods: incorporation of mufīt's office into apparatus of the state</td>
<td>Interest charged more openly in accordance with sharī‘a and support of political and religious authorities; most transactions conducted with ruses (such as istiğlaf), with lip-service paid to sharī‘a</td>
<td>Restrictions relaxed; more open institutionalized lending at interest (such as cash waqf); direct breaching of ribā ban still a sin</td>
</tr>
</tbody>
</table>

Sources: See the text.
Figures

Figure 1: Overview of the Argument

Islam

‘High Dependence’

Openly taken
interest never permitted
(du jure)

No profit permitted on
advances in exchange rates;
only *borrowers* could profit

*Safatij* relegated
to facilitating trade only;
confined to personal
networks

‘Low Dependence’

Secular interest restrictions
relaxed when dependence
decreased in 13th century

*Lenders*
permitted to profit on
advances via differences in
exchange rates

W. Christianity

Interregional, *impersonal*
institutions employing bills
of exchange emerged