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## Are civil-law notaries rent-seeking monopolists or essential market intermediaries? Endogenous development of a property rights institution in Mexico

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### Abstract

As the fourth contribution in the ‘Land’ section, this paper forms a research ‘diptych’ with the next paper by Levy. Whereas she focuses on the notarial institution in mid-nineteenth century Mexico, this contribution examines it in a contemporary context. The notary is one of the chief components of property rights protection in civil-law systems, performing various public functions such as writing deeds for real estate property. Yet notaries are considered an ‘inefficient’ institution by many, due to the perception of rent-seeking behavior enabled by their near-monopoly over validating property rights claims. This study examines notaries in Mexico to unpack the apparent contradiction in the role of notaries in economic development. I use a combination of interviews with notaries and clients, and data on notarial practice and bureaucratic outcomes across the country, to examine notaries’ social function. The theoretical lens of endogenous development and institutional functionalism reveals an alternate explanation for their seemingly high-cost services, as well as their role in economic development. Mexican notaries have a dual social function: public representative and private service provider. They perform diverse and essential activities, which in other countries are performed by multiple actors such as real estate agents, escrow offices and title insurance companies. Thus, what is perceived as inefficiency by some can be interpreted as an efficient response to the context in which they operate, and their semi-privatized nature can overcome problems found in other bureaucratic arrangements.

### Keywords

property rights; notaries; Latin America; Mexico; endogenous development; institutional function; street-level bureaucrats; corruption

## 1. Introduction

Papel y tinta, y pocajusticia [Paper and ink, and little justice]

### Disclosure statement

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–Spanish proverb

The seventeenth-century proverb above (cited in Burns 2005) is still a common perception of Latin American notaries. Many characterize notaries in civil-law countries as a corrupt group of schemers exploiting their position of authority to extract rents from society (Medina Cervantes 2006; The Economist 2012). Others, and many scholars, argue that notaries are an example of an inefficient and archaic institution (Medina Cervantes 2006; Aliaga et al. 2007; Figueroa 2009; Gonzalez, Sánchez Mayoral, and Hernández Alva 2012). While this argument is often linked to the historical origin of notaries as witnesses to the claiming of land during the Spanish conquest of Latin America (Pohl 1968), recent scholarly work on notaries in Mexico echoes this popular sentiment and purports to provide statistical evidence of notarial monopoly and consequent negative impacts on property rights and housing markets (Gonzalez, Sánchez Mayoral, and Hernández Alva 2012). These negative characterizations of notaries fit with a common understanding of institutions and development – that some institutional forms are ‘inefficient’ and retard economic development (Easterly and Levine 2003; Acemoglu, Johnson, and Robinson 2005; Aghion and Howitt 2009).

Notaries have long operated as an integral component of civil legal systems. Although they are generally not government employees, they are representatives of the public faith –*publica fides* in Latin or *fépublica* in Spanish (Closen and Dixon 1992). This gives them a quasi-judicial character whereby their seal is equivalent to the verdict of a court, at least in matters pertaining to property ownership and contracts. Thus, notaries have historically been key figures in legal matters pertaining to economic activity, such as business creation, lending and contract protection, and in the verification of property transactions. As Figueroa (2009, 159) states, ‘hardly any legal act takes place in civil law countries without encountering the intervention of a notary public’.

Economic historians contend that notaries played a fundamental role in the economic apparatus of pre-capitalist societies through their function as financial intermediaries. Hoffman, Postel-Vinay, and Rosenthal (1999) present evidence to this effect for Paris, France, in the eighteenth century, and Levy (2010) makes a similar argument for nineteenth-century Yucatán. In those places, notaries essentially performed the function of bank and financial adviser and arranged contracts for lending money. They were able to do both because of their formal legal and administrative position as well as their informal knowledge of the social and financial positions of members of their society. In both places and markets where there is generally a dearth of information, the notary’s job is especially important. As Hoffman, Postel-Vinay, and Rosenthal (1998, 501, 503) assert: ‘as financial intermediaries, (notaries) resolved problems of asymmetric information in financial markets in Paris’, and ‘they created a mechanism to solve potential hold-up problems’.

In contemporary societies, banks and other financial institutions now carry out many of the roles historically occupied by notaries. The notary today performs three types of functions. They carry out some ‘lower-level’ functions that in other countries would be performed by another type of actor, for example registering property ownership documentation with the city property registries and tax assessors. Additionally, they are also responsible for many

activities that would be done through ex-post law enforcement or courts in countries that follow common law, such as verifying liens and the validity of the current title. Finally, notaries in civil legal systems also perform the duty of private representation and advising, which are generally undertaken by lawyers or financial advisors in common-law countries (Tirado 1996).

One distinguishing feature of notarial systems then, is their quasi-privatized organizational form. Notarial offices carry out duties that in common-law countries are performed by civil servants, yet they are essentially private businesses. Not only do they operate like private service providers, their guild generally strongly limits the number of notarial seals in a given city. State regulations often cap fees notaries can charge, but the notaries themselves influence what these caps are. This constraint on the supply of public agents authorized to provide services that protect property rights is argued by many to increase transaction costs and, in doing so, stifle economic activity and economic growth (World Bank 2004; The Economist 2012).

The theoretical lens of credibility – the idea that institutions persist because they perform a particular and necessary function for society – provides a useful approach to understanding the institution of notaries (Ho 2013, 2014). The approach suggests that instead of accepting that an institutional form can be inefficient or perverse, scholars should seek to provide a thick description of their function in society and its context (Geertz 1973), or an ‘institutional archaeology’, as it were (see the introduction to this collection). As Hoffman, Postel-Vinay, and Rosenthal (1998) argue, extra-governmental legal structures and services provided by notaries can be seen as complementary to formal institutions rather than a substitute for them. The reasons for their persistence can be uncovered by examining their social functions and the context in which they operate. All institutions evolve endogenously – in spite of their initial design – and they can play a beneficial role in the development of markets notwithstanding what might be considered an ‘inefficient’ form.

Thus, the present paper attempts to reconcile the two characterizations of notaries: as an inefficient institution or a core component of the property rights system. I do this by proposing and answering three specific research questions. Do countries that rely on notaries have a more costly and time-consuming property transfer process? Are there notarial monopolies in Mexico that lead to more housing informality? How should we understand the role of the notary in Mexico? I answer these questions separately using different sources of data. Before the three analysis sections, I connect this paper to debates on governance, land titling and property rights, corruption in public service provision, governmentality and the global land grab. Then, section three is a brief historical overview of the notary in Mexico.

The paper’s first analysis section is global in scope. In it, I use data from 185 countries to test the hypothesis that countries that use notaries for property transfers have a more costly and time-consuming process. The hypothesis is rejected. The second analysis section focuses on the role of notaries in the transfer of property in Mexico, through a critical examination of existing empirical work on the topic as well as an analysis of data on notarial activity across the country’s 32 states. I question the interpretation of correlations between

the number of notaries in a state, their incomes and the share of informality by Gonzalez, Sánchez Mayoral, and Hernández Alva (2012) as evidence of an inefficient monopoly. I propose alternative explanations for these associations, and test them by analyzing new secondary data. I do not reject these alternate hypotheses, thus drawing into question existing research.

Finally, I present the results of semi-structured interviews of notaries and their clients conducted across Mexico, in which I examine notaries' dual role as public representative and service provider. This analysis suggests that although the majority of their work is bureaucratic, in some cases their advisory capacity is extremely important through their ability to serve as advocates for clients. Moreover, the evidence suggests that there is competition between notary offices, and that their extra-governmental nature serves as an important counterbalance to sometimes less-credible local governments. Notaries ensure legal security for property by verifying existing claims to property on behalf of buyers, ensuring there are no liens, and providing a protection of ownership with their seal, not to mention advising clients and protecting against fraudulent sales. This means that property sales in civil-law countries do not involve as many institutions as they do in common-law countries, where real estate agents, title insurance companies, and escrow play an important role. Not only are notaries essential to the functioning of the market economy in Mexico, the semi-privatized institutional form allows them to overcome problems of corruption found in other bureaucracies, and provide additional services to clients.

## 2. Situating the notary in current debates over governance and development

The questions this paper addresses can be situated in four strands of literature: debates over land titling programs, and the global land grab. These can be broadly characterized as governance in developing countries, and all flesh out details within the larger debate over the relationship between institutions and development (Rodriguez-Pose 2013). The credibility thesis (Ho 2013) elaborates on this dilemma in its theorization of endogenous development of institutions, arguing that their functions adapt to play a beneficial role in economic growth in spite of what might appear to be an 'inefficient' form or design. The work of scholars in this area ought to focus on understanding institutional function. Tandler's (1997) research on Brazil, for example, was seminal in this vein. She challenges the emphasis on emulating institutional forms from developed countries, and argues for policy-oriented research to focus on improving the actual functioning of bureaucracies. Similarly, research by Grindle (2009) illustrates how changes in governance structures occur, in particular how decentralization in Mexico led to improvements in local governments in some cases and failures in others. Her emphasis on the importance of leadership and politics in the impacts of changing institutional form reflects many aspects of the endogenous development theory.

The first strand of literature is that focused on land and property rights regimes, and debates about the importance of land titling programs. Scholars have long argued for the importance of complete and simple systems of land records and cadastral systems (Williamson 1986), and more recent research on the topic purports to demonstrate clear benefits to providing

title (e.g. Galiani and Schargrodsy 2004). Others argue that land titling programs do not reduce poverty and that alternative forms of tenure effectively provide property rights security (Payne 2002). More recently, the temporal nature of land titling has been increasingly highlighted with reversion to informality in many cases after governments have granted title (Molina 2014). The notary is clearly a major component of the titling system in Latin America, and a better understanding of the function of the notary will contribute to the quality of this debate.

A second body of work is research focused on the actors in service delivery in developing countries and their daily practice. Issues of corruption and the power of ‘street level’ bureaucrats (Lipsky 2010) are highly relevant to questions about the institutional structure of the notarial profession in Mexico. As Lipsky (2010) points out, public service workers are actually a kind of policymaker, with substantial discretion in their implementation of programs and enforcement of rules. The question of how to organize their activity under intense resource constraints means that while sometimes their decisions favor clients, they often adopt practices that can be interpreted as corrupt and uneven. Thus, the management structure and style, the motivations and the responses of street-level bureaucrats are key elements in how well a public service system functions.

Some kinds of public services, like water or other public utilities, will be easier to provide with a bureaucracy or to privatize and monitor, though there are still challenges there (Crook and Aye 2006). Other kinds of public services, such as property rights protection, are very hard to implement fairly or to privatize. As discussed in this paper later, the partial privatization of the Mexican notary might actually avoid many of the problems with civil servant bureaucracies, such as corruption under payment (Crook and Aye 2006) and their agency to organize labor in a bureaucracy as compared to their own notarial office. Scholars such as Davis (2004) have documented how other efforts to address corruption, such as rotating bureaucrats through different posts, also do not solve this problem. Bureaucratic positions are often sold, with the price determined by the amount of rent someone can extract in that role. Further, as work by Mason (2014) on microfinance demonstrates, personal connections and the individual characteristics of actors on both sides of a transaction can be important in understanding effectiveness and efficacy in public servants.

A third area of literature is work on the role of bureaucracy and written records in governmentality, or the way in which the state exercises control of its people. Gupta’s (2012) seminal work on bureaucracy in India makes arguments about the diversity of the state’s agents and their agendas. His discussion about purposeful use of arbitrariness for control resonates closely with work on the ‘deliberate institutional ambiguity’ around property rights to land in China (Ho 2001). Gupta’s most relevant discussion to the present work is that focused on bureaucratic writing. He argues that state forms of writing such as files and records are not simply records of actions, but rather constitutive of actions. He highlights how lower level bureaucrats are very concerned about what gets written as records make visible their governmentality, as well as how poor people, even if illiterate, understand the power of official documents and are knowing participants in their use. Although governance in India is based on a common-law bureaucracy and not the civil law system of notaries, there are strong similarities in the roles of writing and record keeping. Their juxtaposition

raises the question of whether notaries' role as paid service providers means they will be more likely to work on behalf of their clients and thus provide better results than actors in a bureaucratic system.

Finally, research on notaries is relevant to the growing body of work on the 'global land grab' as an institution that could serve as a mitigating or compounding factor. Although the discussion of the global land grab has focused primarily on agricultural land (Borras and Franco 2013), there are important – and increasing – connections to urban land as the world's population becomes more urbanized. In this vein, Castellanos-Navarette and Jansen (2015) highlight the role of the Mexican *ejido* in shaping land acquisition patterns. The notary is also worth direct consideration in this context.

### 3. Notaries and property registration in Mexico

The notarial profession spread across the Americas with the expansion of the Spanish empire during the sixteenth and seventeenth centuries. Levy (2010) notes they are sometimes considered to have played the simple role of record-keeper, and were commonly known as scribes or *escribanos*. In the act of recording names and deeds, they served the function of legitimating the conquest and colonization of the Americas. Columbus' scribe was part of the first landing party in the 'New World' in 1492, and Hernan Cortes began his career as a scribe (Téllez and Mario 2011).

In Mexico, notarial practice was profoundly shaped by this Spanish legacy after independence. Early constitutions and governments of Mexico maintained a majority of rules already in place (Castillo and del Pérez 1979). Governments throughout the nineteenth century continued to update regulations of the profession with both practical goals (regulating the number of notaries) and idealistic goals (ensuring their 'moral rectitude'). For example, a law in 1840 set fee limits for various activities on the part of scribes. A major change was later undertaken during the brief reign of the Emperor Maximilian in 1865, when the term 'notary' was adopted along with a law heavily influenced by existing European norms. This law distinguished notaries from scribes by the type of actions they could perform, with the emphasis on carrying the 'public faith' (Castillo and del Pérez 1979). The history of the notarial practice in Mexico has been used to demonstrate the resilience and adaptability of the institution more generally (Téllez and Mario 2011).

Mexico is a federalist country, but has had a centralized political system at various points in its history. It is not surprising that the regulation of the notarial profession has been subject to periodic changes associated with fluctuations between federalism and centralism. Castillo and del Pérez (1979, 34) argue, 'when the system has been more federalist notarial matters are local, when the regime has been centralized, notarial functions are general, applied in the whole country'.<sup>1</sup> Under Article 40 of the Mexican Constitution of 1917, the power to regulate notaries was assigned to the states. Pedraza (2004) analyzes the diversity of state laws governing notarial practice in Mexico and argues that there are three components of

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<sup>1</sup>Translation by author; original text reads, '*cuando el federalismo ha sido el sistema, la materia notarial es local, cuando el régimen ha sido el centralismo, las disposiciones notariales son generales, de aplicación en todo el territorio*' Castillo and del Pérez (1979, 34).

notarial regulation consistent across states: first, that notarial activities are related to public order; second, that the notary is a trained lawyer; and third, that the government can intervene in appointing notaries.

There is a notable diversity across states in Mexico with respect to the supply of notaries, the fees they charge for services and outcomes such as processing times. Gonzalez, Sánchez Mayoral, and Hernández Alva (2012) report on the variation in the rate of notarial penetration across Mexican states and find there is less than one notary per 100,000 people in Tlaxcala and more than 10 per 100,000 people in Campeche, despite similar levels of variation in their earnings in each place. Additionally, survey data show substantial variation in the outcomes that depend in part on notarial practice; for example, it takes less than a week to register a property transfer in Colima and more than two months in Mexico City (World Bank 2009).

Some of the diversity in the cost and time to register a property transfer stems from differences in context, such as demand for services, land rents and the share of property that has contested ownership. Mexico's land-tenure system has a long and complicated history, and in a review of this history, Assies (2008, 37) describes the period under colonial rule as an "agrarian mosaic" in which a variety of "interstitial" forms of land tenure also played a role'. The Spanish crown distributed large numbers of different sorts of deeds to land in addition to recognizing some indigenous land ownership systems. *Haciendas* – large estates that employed controlled labor – were a defining characteristic of the Spanish colonial period and one that was fought against by leaders of the 1810 independence movement. Their importance varied dramatically across different regions (Knight 2002), and the *hacienda* system was not abolished after independence. Up to and during the regime of Porfirio Díaz, which ended in 1911, landownership in Mexico became increasingly concentrated.

The *ejido* system created under Article 27 of the Mexican Constitution of 1917 is one of the most well studied social land-tenure systems. It was modeled after an Aztec system of village land ownership and was adopted in the twentieth century in order to address centuries of inequality in the distribution of land (Perramond 2008). The *ejido* is intended to be a communal agricultural resource holding whereby *ejido* members have individual use rights on what is communally owned land. Given that half of Mexico's land area is considered to have been designated as *ejido* in the middle of the twentieth century, it is not surprising that many cities have expanded onto *ejido* land. This process is challenging for urbanization in Mexico, as communally owned *ejido* lands are divided into lots and sold in a quasi-legal manner to non-*ejido* members. Public effort to regularize land developed in this way started in the early 1970s (Monkkonen 2012). The controversial reform of Article 27 that intended to facilitate the privatization of *ejido* land – and was accompanied by a new regularization effort – does not appear to have resulted in massive changes in land markets or agricultural productivity (Jones and Ward 1998; Nuijten 2003).

A number of studies within Mexico argue that notaries are an archaic and monopolistic institution. One piece of evidence in this regard is the tendency of sons and brothers of notaries to become notaries. Medina Cervantes (2006) argues that this leads to institutional

inefficiency and monopolistic control. He claims that, '*Las familias que se encuentran dentro del Colegio de Notarios forman una red clientelar consanguínea y un monopolio del mercado de trabajo*' [Families in the College of Notaries form a clientalistic network of blood relations and have a monopoly over the labor market] (Medina Cervantes 2006, 92). He provides evidence of the familial relations between many notaries, though he does not demonstrate that the market for their services is a monopoly.

Similarly, Arellano Ríos (2011) provides detailed information about the numerous political offices that notaries in Jalisco have held, as well as the deep networks of familial relationships between notaries. He states, '*El cargo de notario público en Jalisco representa el culmen de una carrera en el campo jurídico local ... se traduce en beneficios económicos y relaciones de mayor reconocimiento social*'. [The position of notary public in Jalisco is the culmination of a legal career ... it translates into economic benefits and relationships with high social standing] (484). The author repeatedly points to the strong family connections between notaries. For example, when discussing these connections, he notes that '*hay alrededor de 38 casos en los que la relación más evidente es padre-hijo ...*' [there are around 38 cases in which the most evident relationship is father-son...] (487).

The inherited control of companies (scions) shows that nepotism hurts company performance by limiting competition for jobs and thus yielding less competent employees (Pérez-González 2006). Yet the practice can have an 'efficient' function, in spite of its rent-seeking motivation. Nepotism is likely to reduce transactions costs between notaries by ensuring a high level of trust within the group of individuals (Simon 1991). This is important for a group with the chief responsibility to guarantee the validity of ownership claims, and is consistent with the central requirement of 'moral rectitude' imposed on notaries throughout Mexican history. Moreover, the primary goal of notaries is not one of maximizing returns as in a private-sector setting or even an equivalent of administrative effectiveness, but rather one of serving the public faith. Mexico is rife with nepotism and it is often associated with corruption (Lomnitz 2000). But cross-industry nepotism and corruption is different from the case of family control among notaries.

#### 4. Property registration and the role of notaries internationally

The registration and transfer of ownership of land and landed property is complicated by many factors, such as disputes over ownership, illegal squatting, irregular sales, conflicts during an inheritance, or historical claims overlapping with contemporary ones (Oestereich 2000). In most industrialized nations, governmental institutions give transparency to property transactions. In many developing countries, real estate transactions are more opaque. The question of who owns land and whether it has encumbrances is one aspect of this opacity. Even when information about ownership or liens is publically available, it can be costly to access. Real estate is notoriously asymmetric, and sellers generally know much more about the property being transacted than buyers do (Levitt and Syverson 2008). These factors are magnified in countries like Mexico where a tumultuous political history and changes in governments are associated with reforms, redistribution and a resulting set of conflicting claims to land.



Transferring property from a seller to a buyer requires at least two steps. First, an agent of the buying party must verify that the existing ownership claim is valid and that the property is free from liens or encumbrances such as back property taxes. Second, the new owner's name must be set down in a public record of some sort. Since the action of the transfer of ownership is an easy point at which the property can be reviewed by public agencies, many additional actions are often imposed at this point. For example, regulations can require environmental review, zoning review, urban design review, or a certificate of the structural integrity and safety of the building. In some places an appraisal of the property's value is required in order to transfer title.

I use responses to detailed surveys from the World Bank's *Doing Business* project to illustrate the complexity of typical property transfers. I compare the procedures required to transfer ownership in New York City and the Federal District of Mexico. The *Doing Business* project has been collecting data on the procedures required as well as the time and cost of various transactions (including property transfers) in every country in the world since 2006. Surveyors conduct focus groups of participants in the process. In the case of property transfers, developers, local government officials, financial-sector representatives, notaries and lawyers are all represented. To control for the potential influence of the type of property transferred and the entity buying or selling,<sup>2</sup> a hypothetical case is presented to the group: a two-story, 900-square-foot warehouse being bought and sold by local companies.

The *Doing Business* project is emblematic of the 'getting institutions right' approach of some international development policy. It is often used by international organizations to promote regulatory reform, with countries getting positive feedback for reducing delays and costs of transactions such as starting a business or registering property (World Bank 2009). This effort was inspired by the methodology of Hernando De Soto, who began efforts to document the time and cost of regulations around business formalization in Peru (1989). Thus, while it provides a useful source of comparative data, it is based on debatable assumptions about institutional form and development.

In New York City, transferring a building takes 12 days, costs USD86,000,<sup>3</sup> requires four steps and six documents, and involves four actors in addition to the buyer and seller. In Mexico City, this transfer takes 74 days, costs USD25,600, requires seven steps and 19 documents, and involves six actors in addition to buyer and seller. This comparison shows that it is more time consuming and bureaucratically cumbersome to transfer property ownership in Mexico City than in New York City. Even in the United States there are a number of costly bureaucratic procedures. Table 1 shows the main steps in the process of property transfer for these two cities.

A close inspection of the differences between the two cities reveals multiple causes for the more cumbersome process in Mexico – none of which are the notaries themselves. First, some of the procedures required in Mexico to transfer ownership are not required in the United States to transfer ownership, but are requirements for obtaining financing. Because a

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<sup>2</sup>Large companies are treated differently than small firms or individuals in many contexts.

<sup>3</sup>The *Doing Business* data report costs as a percentage of the value of the property, but also list the estimated value of the hypothetical property.

much higher percentage of property transactions occur with financing in the United States, the system has various requirements to obtain a mortgage to purchase property but not to record the change of ownership. This means that in practice these requirements are almost always fulfilled in both countries. For example, an appraisal or valuation of the property is not required to transfer ownership in the United States, but it is required to obtain financing.

Additionally, some of the procedures in Mexico take more time and cost more than in New York because more documentation is needed. For example, obtaining a certificate that the water bill is paid requires paperwork, such as proof of address and a copy of the photo ID of the seller. This is because of higher levels of non-payment of water bills in Mexico. Lastly, when archives are not available online or computerized, everything takes longer and requires more person-hours to carry out. It is not surprising then, that notary fees are higher in places where people are responsible for many more activities.

In spite of the vast contextual differences between Mexico City and New York City, the idea that reducing bureaucratic requirements will stimulate economic development persists. Chang (2010) documents this for several areas and various reports use *Doing Business* data to argue that where reforms have been undertaken to reduce steps and lower the costs of registering property, increases in the rate of property registration have followed (World Bank 2010).

Research on notaries' role in the 'cost of doing business' presents a more complex picture. In a study of Latin American notaries, Malavet (1998) argues that a lack of understanding of fundamental differences between legal systems permeates comparative academic work on the topic. An example of this is the study of Amin and Haidar (2011), who analyze the differences in costs of property registration between countries with common law and those with civil law systems, controlling for other characteristics. They purport to find a significantly lower cost to register property in common-law countries.<sup>4</sup> Yet when they separate notarial costs from non-notary costs in their analysis, they find that the difference is driven by non-notary costs. This highlights the importance of context, as there are many regulations that can be and are imposed at the point of sale. They mention that there is a greater tendency to obtain revenues from fees and assets in civil-law countries as compared to taxes on income flows in the common-law tradition (Amin and Haidar 2011); thus, their findings do not directly address the efficiency of notarial systems.

#### 4.1 Are property transfers in notary countries more costly?

In this section, I test the simple hypothesis that countries that use notaries to register property transfers have a more costly and time-consuming property transfer registration process. The conventional wisdom, from scholars who study differences between countries based on their legal system, would predict those countries using notaries would have a more costly and cumbersome property registration process. I test this hypothesis using data from the *Doing Business* project for 185 countries. For each country, I examine detailed

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<sup>4</sup>One drawback to the methodology is that they do not consider city-level characteristics, such as population, which can impact the often-localized bureaucracy of property registration. In a similar analysis, Monkkonen and Ronconi (2013) find no difference between common- and civil-law countries.

information on the steps required to transfer property, and then group countries into three categories: those that require the use of notaries, those that do not, and those that mention notaries as an optional agent.<sup>5</sup> In 98 countries, participation of a notary is required. In 23 countries, a notary is mentioned as an optional agent in some steps (a lawyer is usually the other option). A notary is not mentioned in the property registration process for 64 countries.

After categorizing countries, I examine differences in the three outcome variables gathered by the *Doing Business* project: the number of procedures, the average time to carry out the process, and the cost as a percentage of property value (to control for differences in levels of economic development) for these three groups of countries. Table 2 presents a summary of this comparison. It is clear that on all three measures of regulatory ‘cumbersomeness’, the difference between countries requiring a notary and those that do not mention a notary is minimal. In fact, countries requiring the participation of a notary have an average cost that is almost a full percent lower and a time period almost one month shorter than countries that do not require a notary; this is the opposite relationship to what conventional wisdom suggests.

To test whether the differences in time and costs between these three groups are statistically significant, I perform a *t*-test of the difference of means. Countries where notaries are an *optional* agent in the process have significantly lower costs, fewer steps and a quicker property registration system than countries that either require the use of a notary or do not use notaries at all. But the observed difference between countries that do and do not require notaries is not statistically significant.

The level of economic development of countries that use a notary as part of the property transfer process varies widely. Notaries are required in high-income countries like France and Spain, but also lower income countries like Yemen and Angola. Other research on the costs of property registration (Monkkonen and Ronconi 2016) has shown that there is a strong correlation between economic development and the costs of property registration. Including the log of gross domestic product (GDP) per capita as a control variable in the statistical test of a difference between notary and non-notary countries presented here does not affect the outcome (full results available upon request).

## 5. Are notaries in Mexico an inefficient institution?

The argument about nepotism and monopoly as a bottleneck to development is made and apparently substantiated with data in an early *Doing Business* report (World Bank 2004) as well as later reports that assess subnational variation in Mexico (e.g. World Bank 2007, 2014). The report in 2004 presents a statistical analysis showing that notaries make starting businesses more difficult by imposing increased costs and delays. Specifically, it states that ‘notary costs are \$875, almost 80 percent of the total costs’ (World Bank 2004, 26–27 [USD]). These numbers should be interpreted with caution. They are not analyzed according to the services rendered for this cost. Notaries perform many functions that other entities perform in other countries, and thus costs should be considered accordingly.

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<sup>5</sup>A list of countries in the three categories is available in Appendix 1.

More systematic empirical work<sup>6</sup> by Gonzalez, Sánchez Mayoral, and Hernández Alva (2012) across Mexican states appears to support the argument by testing the hypotheses that fewer notaries per capita leads to higher earnings per notary, and that this makes formalization of property inaccessible and less prevalent. They argue that notaries intentionally limit the expansion of notarial seals (licenses to practice) in order to reduce supply and extract more earnings. By doing so, they reduce the prevalence of formal property ownership. To test their hypotheses, they model (1) notary earnings and (2) the probability of a property having a title as a function of the number of notaries in a state, along with control variables such as average property characteristics and attributes of the different Mexican states. The models show that in states with more notaries per capita, their earnings are lower and there is a higher likelihood of property having a title.

There are some problems with the econometrics in the paper and the interpretation of results. First, the regression models fail to account for a significant degree of endogeneity. There is likely a multi-directional relationship between notarial efficiency, earnings and formality in property. As Rodriguez-Pose (2013) elegantly describes, disentangling the relationship between institutions and economic development is near impossible. In this particular case, more efficient notaries would earn more money because they can process more transactions, so there might be less of them. This superior service would be conducive to economic development but also a product of it, as notaries in more developed regions will likely be better educated and more accountable to their better educated clients. There will be more formality in these regions for multiple reasons, and this might be spuriously correlated to the number of notaries.

Additionally, there is a significant threat of omitted variables in their models. Regions with more irregular land development have fewer notaries per capita, but also more poverty, an underdeveloped governance system and likely more political monopoly. To the credit of Gonzalez, Sánchez Mayoral, and Hernández Alva (2012), they include some municipal-level controls<sup>7</sup> such as an index of marginality from the National Population Council (CONAPO), but their modeling does not demonstrate causality or the direction of influence. This is a problem with much of the cross-sectional empirical work on institutions, as discussed by Chang (2010) – cross-sectional analysis of historical processes is not causal.

With regards to interpretation, there is a missing discussion about the number of notaries and the number of employees they have. In states with fewer notaries per capita, each notary has more employees. Moreover, the number of workers per notary is highly correlated with the log of earnings per notary, and variation in the former explains nearly two thirds of the variation in the latter. This suggests another plausible explanation for the higher earnings of notaries in places where they are less prevalent: they organize their business differently. Thus, the higher earnings can be interpreted as a more efficient use of human resources rather than as ‘constrained supply’.

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<sup>6</sup>No other similar empirical research on this topic was found for Mexico. Arruñada (1996) analyzes Spanish notaries but has very different findings, as discussed later.

<sup>7</sup>But the size of the metropolitan area, an extremely important factor in any analysis of property markets, is not included. Instead they include a variable describing the size of the house’s ‘locality’, which is like a neighborhood and basically irrelevant for properties in medium or large cities.

Last, and perhaps most important, the argument about the relationship between the supply of notaries and their ‘effectiveness’ can be turned around if viewed within a broader perspective of regional economic development. Using the costs of property registration as evidence of inefficiency ignores the fact that some property rights contexts are more challenging than others. Higher costs can result from there being many land parcels with multiple claimants due to historical events. Notaries in these areas play a larger role in promoting development by overseeing a historically more complicated property rights landscape (Villaseñor Pujol 2009).

I examine this issue empirically by correlating the cost of property registration and time delays with the number of notaries per capita. I combine data from Gonzalez, Sánchez Mayoral, and Hernández Alva (2012) with World Bank survey data (2012). Table 3 reports summary characteristics, including the number of notaries per 100,000 residents, the number of employees per notary and average earnings per notary by state. There is a wide variation in the rate of notarial penetration across Mexican states – less than one notary per 100,000 people in Tlaxcala, to more than 10 per 100,000 in Campeche – as well as their earnings. Table 3 also includes data on the number of steps, time and costs to register property for the largest city in each state in Mexico (World Bank 2009).

There are 31 states in Mexico, plus a Federal District that functions like a state. Table 4 reports pairwise correlation coefficients that assess the correlation between variables describing notary organization and property registration processes, and the economic development characteristics of states and their largest cities. Richer states have larger cities and more notaries per capita; the correlation coefficients are 0.47 and 0.30, respectively, and statistically significant. Notaries in larger, richer cities earn more money (correlation coefficients of 0.40 and 0.47), and do so for multiple reasons.

It is probable that the agglomerative forces that lead some regions to develop a stronger economy than others (Storper 2013) also lead to more notaries per capita. What does this mean for the findings about lower numbers of notaries per capita being associated with a smaller share of houses having a title? The explanation that fewer notaries make it more difficult to obtain a title is a possibility. There is a plausible alternate explanation, however. Places where fewer properties have title are also less likely to develop for a number of reasons, such as the type of governance that includes low numbers of notaries. This second hypothesis is not tested by Gonzalez, Sánchez Mayoral, and Hernández Alva (2012). Importantly, the strong correlation between more notaries and a strong economy suggests they are an important feature of economic development rather than an impediment to it.

If the analysis is expanded to include outcomes related to how ‘cumbersome’ property registration is, then the relationships are more complicated. The speed and cost of the process of property registration are not correlated with the number of notaries in a state. In fact, the only statistically significant relationships with the ‘ease’ of property registration are for city size and the proxy for economic development. Larger, richer cities have more ‘cumbersome’ processes of property registration, though this partly reflects the fact that there is simply a higher volume of activity in this area. In sum, the analysis of data on notary organization and fees do not clearly indicate that notaries are a drag to economic

development. The relationship is endogenous and more concentrated effort is needed to disentangle the direction of causality.

## 6. Why do notaries in Mexico persist?

To understand the persistence of notarial writing of deeds in Mexico – a seemingly superfluous property rights institution – it is important to examine the credibility of the practice through an understanding of its social function (Ho 2013, 2014). The thesis that institutions persist due to their credibility seeks to explain the contradiction of ‘inefficient’ institutions facilitating development. Credibility in this sense refers to the belief that an institution is not subject to arbitrary change. The Mexican notary has persisted through major transformations of the political system – independence from Spain, a revolution, civil war, and several democratic transitions occurred in relatively recent decades (Margadant 1969).

The function of the notary has evolved over time. Levy (2010) documents their role as financial intermediary in the nineteenth century in the absence of banks. Not only did they authorize contracts and provide legal protection for property rights, they advised clients and connected lenders with borrowers. Notarial activity today revolves around property transfers and deeds; yet, as the subsequent discussion of interviews with notaries and their clients demonstrates, their dual role as legal authority and adviser remains.

In order to answer my research questions in more depth and to develop a deeper understanding of their dual role as an extra-governmental legal authority and service provider, I conducted interviews with notaries and their clients. I contacted the presidents of all 32 colleges<sup>8</sup> of notaries in Mexico via email and telephone in July of 2014 and interviewed 10 of them over the phone during the following two months.<sup>9</sup> Interviews lasted roughly one hour and were conducted in a semi-structured manner. I asked notaries questions in the following areas: the services they provided to clients and the varying importance of services such as writing property deeds and advising on financial matters, common problems encountered when writing deeds, the relationship between the college of notaries and the state government, the control that state colleges had over the number of notary licenses issued, the impact of changes in technology on their practice, the social function of notaries and examples of cases where they provided more than straightforward services.

I also interviewed notaries’ clients. A large-scale survey was not feasible, but during the month of September 2014, I reached out to a number of large and small housing developers in the city of Tijuana, Baja California, via telephone and email. I also interviewed 12 homeowners. Short interviews were conducted over the telephone and in person to assess the market for notary services and to identify moments of conflict over property where a notary played a key advisory role. The majority of interviewees had nothing to report about the role

<sup>8</sup>Every state in Mexico and the Federal District has a college of notaries that serves as their association and leadership.

<sup>9</sup>Baja California, Campeche, Chihuahua, Hidalgo, Nayarit, Nuevo León, Sinaloa, Tabasco and Veracruz.

of the notary in their property transactions, presumably because for them the notary practically functioned as a bureaucrat.

Almost everyone I interviewed recognized that the fees for a given service varied among the different notary offices in the city. Some offices charged as much as two times the price that others did, for simple services. From these discussions, two cases of conflict stood out (discussed below), both of which give rich evidence of the role of the notary as both adviser and legal authority.

### 6.1 Monopoly, competitive market or cartel?

State governments set fees for different notary services, but in many states, notaries stated that these official fees do not actually govern practice. Moreover, several of the notaries interviewed framed the variation in their fees for the same service in terms of a social contribution. More than one interviewee stated they charged people what they were able to afford in order to help those with fewer resources, rather than to extract money from those with more. Another way to frame this is that they charge as much as they can to each client, in a form of price discrimination.

A majority of notaries' work is in property registration – several estimated the property registration share of business as 80 percent. When asked why many people do not have deeds for their property or do not change deeds to their name when purchasing property, most notaries emphasized a lack of understanding and information rather than the cost of the transaction. Many of the homeowners interviewed, on the other hand, did note the high cost of registering a property transfer. More than one mentioned delaying the notarized transfer of deed after purchasing a property because of the cost, for as long as a decade. The property owners interviewed were not a random sample so this information should not be taken as representative. Only one low-income homeowner was interviewed, and it is more likely that the middle-income homeowners I spoke with are relatively well informed about legal rules governing property.

The notary college presidents were also asked about their relationship with the state government, especially in terms of its regulatory function. Many of them dismissed the importance of fee-setting by state law and the role of state governments in allocating notarial licenses. In fact, not all state governments are vested with the power to allocate licenses. All 10 notaries interviewed thought their states fees were lower than the national average, even when this did not seem to be true according to other sources of data. One did mention the state government's policy on notarial licenses as a problem, and allowed that there had been some tension between the governor's office and the college of notaries. The notaries interviewed also highlighted their role in facilitating the development of low-income housing through discounts on deeds written for housing built through the quasi-governmental finance system (Monkkonen 2011).

Clearly, the market for notarial services in any given state or city is not a monopoly, given that there are multiple notaries operating. It could be characterized as a cartel<sup>10</sup> to the extent that there is collusion between notaries on the supply and price of different services. Notary fees are usually regulated by the state government and fees are published in official

newspapers. Interviews revealed that these official prices did not correspond to actual prices and notaries were able to charge more or less depending on their reputation and their expectations about the ability of clients to pay. When asked about variation in prices, notaries used the metaphors of fruit and medical services to point out that although they technically provide identical services, there is variation in the quality or reliability of notaries. Their office locations imply different costs and they provide different levels of attention to clients depending on client needs.

The merging of public and private services in notarial practice is one of the reasons for such contradictory views of notaries. The fact that different notaries charge different prices for the same service is frequently cited as evidence of the notarial institution being monopolistic and rent-seeking. A newspaper article from Saltillo, Coahuila, points out that the cost of a letter from parents permitting their underage child to travel outside of the country can vary between 250 and 500 pesos (Olinda Morán 2013). For private services such as financial advising, education or medical practice, it is standard for different professionals to charge different amounts for a very similar service. The reason this variation is controversial for notaries is that their services have a public or governmental quality, even if in fact the quality of their service differs.

Nonetheless, price was not mentioned when clients were asked about the way they chose their notary. Rather, almost all homeowners and developers interviewed mentioned word of mouth from friends or relatives as the way they selected a notary. Clients did complain about prices but when asked about shopping around for a different notary the unanimous response was that the most important thing was being able to trust the notary to do a good job, not the price.

## 6.2 Extra-governmental authority

One theme that emerged regarding the credibility of notaries was their status as a legal authority separate from the government bureaucracy. Developers mentioned the advisory services of notaries and the importance of the fact that their legal authority can be hired. They were seen to protect the interests of their clients as a lawyer would. Local governments in Mexico can change dramatically with every new administration and there is often potential for corruption at this level (Fox and Hernández 1992). Therefore, extra-governmental authority is often more credible as an objective judge of disputes.

There is an important difference between the public or governmental services (such as providing legal certainty to ownership or verifying a transaction with the public faith) notaries provide in Mexico – functions that courts undertake in other countries – and the private services (such as advising and business support services) (Arruñada 1996). Arruñada (1996) argues that there are economies of scope in having the same person provide both types of services. For example, the intervention of one notary can replace both parties' lawyers and a judge as required in a common-law system. Several notaries mentioned that they saved money for all involved in cases of conflict by reducing litigation because they

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<sup>10</sup>The Oxford English Dictionary defines a cartel as 'An association of manufacturers or suppliers with the purpose of maintaining prices at a high level and restricting competition'.



could represent both sides and mediate disagreements. As the President of the College of Notaries for the state of Campeche stated, '*El notario es un mediador*. [The notary is a mediator]'. He explained that because notaries help both parties to a transaction, they reduce costs by not engaging the courts and facilitate parties coming to an agreement.

The fact that notaries work outside the governmental bureaucracy also lends credibility to the functions they serve around property rights for land and housing. The tumultuous history of land ownership in Mexico has resulted in much of the land area in cities being developed in a technically illegal manner. For example, research on land regularization in the city of Tijuana shows that almost two thirds of the parcels were originally irregular (Monkkonen 2012), as was a large share of the metropolitan area of Mexico City (Ward 1997). While in comparison to some places notaries seem to charge higher rates for registering a property, this registration has a higher value. Governmental power is likely more arbitrary than notarial power in this context, and being able to hire a notary as a representative is therefore worthwhile.

### 6.3 Advisers and advocates

One of the most salient features of the notary interviews was the emphasis they placed on their role as an advisor and advocate for their clients. When asked about their social function, almost all notaries first offered a statement about providing legal security for property rights generally and then asserted that a major function was to assist clients in figuring out what to do with their property and businesses for their own legal security. The President of the College of Notaries for the state of Baja California confirmed the understanding of the dual function of notarial practice outlined previously, when she explained:

Los asesoramos. Ellos vienen aquí con su problemática. Nosotros asesoramos jurídicamente como proteger su patrimonio. Hay muchas personas que no entienden y no saben, y a veces hay personas o abogados que los pueden enredar. Vienen a nosotros, le damos una explicación amplia, incluso no les cobramos la asesoría. [We advise them (the clients). They come here with their problem. We give them advice on how to legally protect their property. Many people do not understand and do not know, and sometimes there are people or lawyers who can confuse them further. They come to us, we give them a thorough explanation, and we do not even charge for our advice.]

The two personal stories of conflict over property that came from client interviews – one from a homeowner and one from a property developer – best demonstrate the importance of notary advisory and advocacy. The first case is of a woman whose husband had recently passed away. The husband had various properties, some of which were warehouses. These warehouses were in the name of his wife, but the husband's lover got an unscrupulous notary to falsify a document giving her legal claim to the warehouses. In this case, the wife's notary represented her claims in a court case and demonstrated that her documentation was in fact the valid one. In this case, the notary acted as a lawyer would in other countries in that they represented their client as advocate and adviser.

In the second case, a young couple sought to purchase a house. They found one they liked and agreed on a price with the seller. As in most property transactions in Mexico, a contract for deed was written where ownership is not transferred until the full price is paid, and payment is not instantaneous but occurs over some period of time. The couple paid the seller the down payment and made an arrangement to pay the remainder after some months after obtaining financing from their family and a bank loan. When they sought out the seller to make the final payment, he began evading them. At that point they sought counsel from a notary. After some investigation, the notary determined that this seller had a history of conducting these scams. If buyers did not make the final payment by a certain date, the contract for purchasing the property was invalidated and the seller would keep the down payment. In this case, the notary exerted legal influence to force the seller to accept the final payment and the couple purchased the house.

In countries such as the United States, many of these advisory and advocacy services would be provided by a real estate agent.<sup>11</sup> Real estate agents charge a non-trivial percentage of the transaction cost for their advisory services (five percent in the United States). The fact that the notary performs many functions equivalent to a real estate agent— in addition to those of an escrow agent and title insurance company – means that their commission could be considered relatively low for the services rendered. Also, by concentrating various functions into one office, they can achieve some economies of scale and reduce overall transaction costs in the property market.

## 7. Conclusions

This paper addresses an apparent contradiction in the role of the notary in the Mexican property rights system using the lens of credibility to analyze the social functions that the notary performs. Contrary to the view of notaries as ‘inefficient’ bottlenecks to economic development, they play an important role in maintaining property rights systems within the context of the country’s legal, political and economic systems. They provide legal security for property transfers to households without going through courts or using title insurance, as occurs in other countries. In a context with unreliable public bureaucracies, this semi-private service can be a great advantage. In addition, they provide a number of advisory services related to property in places without a formal real estate profession.

This paper examines the role of notaries internationally and in Mexico in three sections. In the first, I show that registering a property transfer is not more costly or time consuming in countries that use notaries as a major actor in this process. In the second, I evaluate claims that notaries in Mexico are rent-seeking monopolists with an empirical analysis of notarial activity across the country’s 32 states. I reinterpret the state-level associations between the number of notaries, their incomes and the share of housing informality put forth by Gonzalez, Sánchez Mayoral, and Hernández Alva (2012). I propose and test alternative

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<sup>11</sup>Real estate agents do exist in Mexico but most residential property transactions do not use one. Although there is an association of real estate professionals (*Asociación Mexicana de Profesionales Inmobiliarios* (AMPI)), it is not a similarly organized group to those in countries like the United States. Their fees are not the well-established five percent that they are in the United States, partly because they provide fewer advisory services and partly because they are less well organized and thus do not have the wealth of information about property markets to which agents in the United States have access.

explanations, and find that notaries' use of larger offices and more staff in the more economically dynamic regions of Mexico can explain both their higher earnings and the lower levels of informality.

Rather than acting as a retarding influence on economic development, then, the regional variation across Mexico shows a positive correlation between notarial activities and economic growth. Of course, this does not demonstrate a causal relationship. In order to more directly evaluate this connection, models need to pay more attention to city-level factors. For example, using fixed-effects time-series models to controls for time-invariant characteristics of cities would be especially useful. One notable possibility in this vein would be to analyze occasions when state governments issue new notarial seals, as natural experiments. The data requirements of these efforts are substantial. Another approach would be to use large-scale surveys of notaries' clients to gather data on their functions and costs.

The paper's third section presents the results of semi-structured interviews of notaries and their clients, conducted across the country. Based on these interviews, I argue that notaries are important market intermediaries in Mexico. They serve a number of key functions in property transaction and have credibility beyond that of the local government. For some developers, this is because of their advisory nature and because they carry legal authority and can be hired, and are thus seen to protect the interests of their clients as a lawyer would. In this context, the evidence to date also suggests that there is competition between notary offices and great variation in the abilities and credibility among notary offices within a city. It might be the case that notary colleges do lobby the state government to reduce the number of licenses in order to charge higher prices, but there is by no means a monopoly in effect.

In addition to better empirical analysis of the role of notaries within Mexico, future research in this area might benefit from examining how credibility reacts to the meeting or overlap of two different systems through migration or at international borders. An example of this overlap in credibility systems relevant to the present paper is found in the growing number of people from the United States who purchase property in Mexico (Schafran and Monkkonen 2011). Cases of evictions of people from the United States from properties thought to be purchased through fully legal channels (Gordon 2002) have led to an increasing demand for recognizable title insurance in Mexico. Clemm (2007) analyzes this clash of two systems, and argues that because of differences in legal systems, title insurance does not actually fulfill the same function in Mexico that it does in the United States. First, in Mexico notaries do a title search and verify title, and, second, there are many protections for the buyer under Mexican law. Because of these steps, most actual insurance policies do not cover many of the deficiencies in title that actually arise in Mexico because of these existing checks on the process. In fact, Clemm (2007) argues that the main reason to purchase title insurance in Mexico is to simplify the process of claiming retribution from the seller.

Another way to examine the question of the role of notaries in development through this same lens of credibility is to consider their importance in periods (or places) in which political power and arbitrary changes would be more likely to undermine property rights.<sup>12</sup> A salient example is provided in this volume's next paper, which takes the analysis back in

time, more particularly to mid-nineteenth century Mexico. Despite the socio-political turmoil of the Mexican revolution, the state of Yucatan experienced a marked economic boom in the absence of formal credit and banking institutions. The following paper ascertains that notaries fulfilled a critical role in that respect: facilitating access to credit.

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<sup>12</sup>Similarly, with technological changes, the importance of a deed written by a notary might become less (or more) important. What happens when there are exogenous political or technological changes? How does the institution adapt? For instance, currently, the Mexican government’s management of cadasters and land registration records is undergoing changes, though at different rates in different states. The property registry, which is modeled after the Spanish system, has long experienced improvisational changes at the local level, and ‘these improvised modifications of registry techniques have, in many cases, become permanent, resulting in diverging practices even within the same state’ (Salas 1984, 6). Efforts to modernize record-keeping systems seem to have magnified differences between states. Notaries interviewed in states where records have been digitalized and placed online – usually richer states – unanimously agreed that this has made their work faster and cheaper.

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## **Appendix 1. Countries with and without requirements for notary participation in property registration**

### **Countries without notary participation in property registration**

Afghanistan, Australia, Bangladesh, Barbados, Belarus, Belize, Bhutan, Botswana, Brunei Darussalam, Cambodia, Canada, China, Cyprus, Denmark, Dominica, Ethiopia, Fiji, The Gambia, Ghana, Guyana, Hong Kong SAR, Iraq, Ireland, Israel, Japan, Jordan, Kenya, Kiribati, Korea, Rep., Lesotho, Liberia, Malawi, Malaysia, Maldives, Myanmar, Namibia, Nepal, New Zealand, Nigeria, Norway, Oman, Pakistan, Papua New Guinea, Qatar, Serbia, Sierra Leone, Singapore, South Africa, South Sudan, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Swaziland, Syrian Arab Republic, Taiwan, China, Thailand, Tonga, Trinidad and Tobago, Uganda, United Kingdom, United States, Vanuatu, Zambia, and Zimbabwe

### **Countries with required notary participation in property registration**

Albania, Algeria, Angola, Argentina, Azerbaijan, The Bahamas, Bahrain, Belgium, Benin, Bolivia, Bosnia and Herzegovina, Brazil, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Chile, Colombia, Dem. Rep.Congo, Rep. Congo, Costa Rica, Cote d'Ivoire, Croatia, Djibouti, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, France, Gabon, Germany, Greece, Guatemala,

Guinea-Bissau, Haiti, Honduras, India, Indonesia, Iran, Italy, Kazakhstan, Kosovo, Kuwait, Lao PDR, Latvia, Lithuania, Luxembourg, Macedonia, Madagascar, Mali, Malta, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Morocco, Mozambique, Netherlands, Nicaragua, Niger, Palau, Panama, Paraguay, Peru, Philippines, Poland, Puerto Rico (U.S.), Romania, Rwanda, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Seychelles, Slovenia, Solomon Islands, Spain, Sri Lanka, Suriname, Switzerland, Tajikistan, Togo, Turkey, Ukraine, United Arab Emirates, Uruguay, Uzbekistan, Venezuela, Vietnam, West Bank and Gaza, and Yemen

### **Countries with notary participation in property registration as an option**

Antigua and Barbuda, Armenia, Austria, Comoros, Czech Republic, Finland, Georgia, Grenada, Guinea, Hungary, Iceland, Jamaica, Kyrgyz Republic, Lebanon, Montenegro, Portugal, Russia, Samoa, Slovak Republic, Sudan, Sweden, Tanzania, and Tunisia



**Table 1**

Steps for transferring property in New York City, USA, and Mexico City, Mexico.

<u>Mexico City</u>		<u>United States</u>	
No.	Procedure	No.	Procedure
1	The notary obtains a certificate of good standing with the water service	1	Obtain a title report, typically from one of many competing private companies
2	The notary obtains the Zoning Certificate of the property from the Ministry of Urban Development and Housing	2	Conduct an environmental review, typically conducted by a private firm
3	The notary obtains a non-encumbrance certificate from the Public Registry	3	The buyer (usually through an agent or attorney) completes forms needed for transfer such as title insurance, safety compliance and general insurance
4	The notary checks the good standing of the seller on the property tax with the Treasury	4	The title is recorded with the County Clerk (with the applicable tax forms and proof of payment)
5	The notary requests a commercial valuation of the property		
6	The notary formalizes the sale purchase agreement (seller will also have to pay the income tax and the value added tax)		
7	Registration of the transfer of title at the Public Registry of Property of the Federal District		

Source: World Bank (2013).

**Table 2**

Average number of steps, time and cost to register property transfers for countries with and without requirements for notary participation in property registration.

Variable	Mean	SD	Minimum	Maximum
<i>Countries without notary participation (N = 64)</i>				
Steps	5.8	2.4	1	13
Time (days)	60.2	81.4	1	513
Cost <sup>a</sup>	6.6	5.1	0	28
<i>Countries requiring notary participation (N = 98)</i>				
Steps	6.2	2.1	2	14
Time (days)	51.5	51.2	2.5	312
Cost <sup>a</sup>	5.7	4.7	0	21
<i>Countries with notary participation as an option (N = 23)</i>				
Steps	4.4	2.2	1	8
Time (days)	25.4	19.9	1	70
Cost <sup>a</sup>	4.6	3.4	0	11

SD: standard deviation.

<sup>a</sup>Cost is measured as a percent of the value of the property. Source: Author, and World Bank (2010).

Table 3

Notaries per 100,000 people; employees per notary; average notary earnings; and the steps, time and cost to register property for 32 cities/states in Mexico.

City, state	Notaries/100,000 people	Employees (per notary)	Average earnings <sup>a</sup>	Steps	Time (days)	Cost <sup>b</sup>
Aguascalientes, Aguascalientes	4.3	8.1	307.6	5	12	1.7
Tuxtla Gutiérrez, Chiapas	2.8	5.4	199.4	5	19	1.7
Colima, Colima	4.4	7.9	591	5	5	2.8
Campeche, Campeche	10.1	3.1	-	4	22	2.7
Veracruz, Veracruz	2.7	7.6	446.9	6	17	1.8
Morelia, Michoacán	2.5	6.3	143.2	6	13	3.2
Celaya, Guanajuato	8.0	4.8	194.6	7	18	1.8
Hermosillo, Sonora	5.4	7.7	572.9	6	12	3.7
San Luis Potosí, San Luis Potosí	2.6	8.8	309	6	33	2.4
Culiacán, Sinaloa	3.1	5.9	229.7	5	15	4.3
Zacatecas, Zacatecas	2.7	5.2	114.6	6	22	3.3
Ciudad Juárez, Chihuahua	2.3	9.6	667.7	5	27	3.3
Monterrey, Nuevo Leon	3.6	11.2	878.3	6	25	3.2
Pachuca de Soto, Hidalgo	3.3	6.8	342.1	4	27	4.1
Villahermosa, Tabasco	3.5	5.7	-	6	34	3.1
Oaxaca de Juárez, Oaxaca	1.7	6.1	107.4	5	46	3.2
Tlalnepantla, Edo. de México	1.2	12.4	936.8	6	46	2.8
Querétaro, Querétaro	7.0	15.8	1996	6	25	4.2
Puebla, Puebla	1.9	8.4	699.6	7	40	2.6
Tlaxcala, Tlaxcala	0.9	9.2	168.3	4	34	4.3
Tijuana, Baja California	1.7	12.3	2120	8	22	3.6
Torreón, Coahuila	9.0	6.1	326.8	6	33	4.3
Mérida, Yucatán	4.1	5.4	349.2	10	33	2.6
Cuernavaca, Morelos	1.3	14.1	3303	8	15	6.0
Acapulco, Guerrero	1.2	9.3	182	10	30	3.2
Matamoros, Tamaulipas	6.3	5.0	220.4	9	29	3.5
Tepic, Nayarit	6.2	6.3	153.7	7	37	4.1

City, state	Notaries/100,000 people	Employees (per notary)	Average earnings <sup>a</sup>	Steps	Time (days)	Cost <sup>b</sup>
La Paz, Baja California Sur	6.4	8.3	1713	8	44	3.4
Guadalajara, Jalisco	4.9	8.5	581.4	8	38	4.0
Durango, Durango	3.1	5.8	250.7	9	30	5.1
Benito Juárez, Quintana Roo	3.1	10.1	353.7	8	64	4.3
Ciudad de México	3.0	19.6	2741	7	74	5.3

<sup>a</sup>In thousands of 2009 Mexican Pesos.

<sup>b</sup>Cost is measured as a percentage of the value of the property. Sources: Gonzalez, Sánchez Mayoral, and Hernández Alva (2012); World Bank (2009).

Table 4

Correlations between notary presence, property registration procedures, and economic development among Mexican states and their largest cities.<sup>a</sup>

	Notaries per 100,000 people	Employees per notary	Avg. notary earnings (Ln)	Steps to register property	Days to register property	Cost to register property <sup>b</sup>	Households in city (Ln)
Employees per notary	-0.23						
Avg. notary earnings (Ln)	-0.01	0.80					
Steps to register property	0.10	0.05	0.17				
Days to register property	-0.09	0.39*	0.17	0.26			
Cost to register property <sup>b</sup>	-0.03	0.43**	0.34***	0.19	0.31*		
Households in city (Ln)	-0.01	0.50**	0.40**	0.27	0.39**	0.08	
State GDP per capita (Ln)	0.30	0.39*	0.47***	0.12	0.37*	0.32*	0.47***

GDP: gross domestic product.

<sup>a</sup>Excludes the state and city of Campeche because it is an extreme outlier in terms of GDP per capita as a result of oil extraction and refining.

<sup>b</sup>Cost is measured as a percentage of the value of the property.

\*, \*\*, and \*\*\* indicate statistical significance at the 0.1, 0.05 and 0.01 level.

Sources: World Bank (2010), INEGI (2010), Gonzalez, Sánchez Mayoral, and Hernández Alva (2012).