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Antichresis leases: Theory and empirical evidence from the Bolivian experience

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ABSTRACT

The antichresis lease in civil law countries requires a lump sum tenant payment which is returned when the lease ends. The custody of the lump sum is the property owner's compensation. We present a theory of leases that emphasizes tenant liquidity risk and owner input moral hazard. Monthly rent leases dominate when tenant consumption depends importantly on owner supplied inputs. However, the antichresis insulates owners from tenant liquidity risk while rent contracts do not, making antichresis leases more attractive for tenant populations with greater liquidity risk. The empirical evidence from Bolivian property leases is consistent with the main model predictions.

1. Introduction

Leases are fundamental tools in property markets. Economists and legal scholars view property rights as a bundle of prerogatives defined for a particular asset, including rights of use, exclusion, and disposition. Leases are the means by which property owners and users can unbundle these rights to their mutual advantage, the owner relinquishing to the tenant the right of use and the right to exclude others from using the property for a set period of time without relinquishing the right to ultimately dispose of the property by sale.

The antichresis lease, which appears in many civil law countries, requires a lump sum tenant payment that is to be returned in full at the end of the lease, where the custody of the lump sum is the property owner's compensation in the property lease.[1] For example, in our sample, the tenant pays the landlord a sum of $13,000 at the beginning of the lease on average and the landlord returns to the tenant the entire $13,000 at the end of the lease. The landlord's effective rent over the term of the property lease is the interest or investment earnings on this sum, which amounts to approximately $108 per month. In contrast, the average monthly rent paid by the tenant to the landlord under the familiar periodic rent lease is about $150.

This paper offers an explanation of why civil law countries, unlike common law countries, continue to allow property owners to choose either antichresis leases or monthly rent leases. The theory identifies key factors driving property owners' choices of lease type in order to explain the observed differences in the mix of antichresis and monthly rent leases across property types and market segments. The empirical analysis uses property lease data from Bolivia to test the model predictions.

There are several casual explanations for why the antichresis lease continues to be used, one popular notion being that antichresis contracts are motivated by high inflation or by large spreads in lending and borrowing interest rates. Other justifications for the antichresis are based on local institutional factors. For example, one argument is that lease taxes and fees create relative advantages or disadvantages of the antichresis for different types of property owners and tenants (Farfan, 2002, 2004; Durand-Laserve, 2006). Similarly, Ambrose and Kim (2003) argue that the attraction of the chonsei lease, the South Korean version of the antichresis, represents an attempt by property owners to avoid the rent controls that apply to periodic rent leases. Finally, some assert that the variety of contract types serve the different needs of high and low income tenants (Farfan, 2002; Payne, 2002a,b), although the source of the specific advantages have not been fully described. None of these rationales adequately explains why both antichresis and rent leases co-exist in the same market nor do they explain the existence of antichresis leases across a wide swath of civil law countries. These are the questions addressed in this study.

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[1] Briefly, in common law legal systems, court decisions are driven by precedent and legal rules are judge—made in the sense that decisions can establish new precedents that supercede previous doctrine when the previous doctrine does not adequately deal with new situations. In civil law legal systems, in contrast, court decisions strictly follow the written code established by legislation; there is no role for precedent hence no judge-made law. See Eisenberg (1989) and Merryman and Perez-Perdomo (1985) for in depth descriptions of common and civil law systems, respectively.

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Bolivia is one of the largest Latin American users of antichresis leases as an alternative to the familiar periodic rent lease. However, as shown below, the popular rationales for antichresis as responses to inflation, credit conditions, or taxes do not hold up empirically in Bolivia. Motivated by these results, this paper develops a theory of the antichresis lease emphasizing the countervailing effects of the tenant's liquidity risk and owner input supply moral hazard. The stylized framework focuses on the characteristics of the real estate technology defining how property is used in different applications as well as the incentives and implicit enforcement implications of the different types of leases. The model predicts that antichresis leases dominate for tenant activities that are largely independent of the owner's supply of inputs, like commercial uses or single family detached housing; periodic rent contracts dominate for tenant activities that are sensitive to the owner's supply of inputs, like multi-unit housing. At the same time, antichresis leases eliminate owners' consequences of tenant liquidity risks while rent contracts do not, making the antichresis more attractive in locales with a larger proportion of tenants with greater liquidity risk. The empirical evidence, using lease data from Cochabamba, Bolivia, generally supports the theoretical predictions regarding the prevalence of antichresis and rent contracts across property types and neighborhood population characteristics.

This study contributes to the growing urban and regional economics literature focusing on the economic role of property rights and legal institutions, with particular attention to how different types of leases affect or are affected by the pace and pattern of urban development (Hoy and Jimenez, 1991; De Meza and Gould, 1992; Brueckner, 1993; Miceli and Sirmans, 1995; Grenadier, 1995; Miceli et al., 2001, 2009; Ambrose and Kim, 2003; Cho and Shilling, 2007; Turnbull, 2008). Much of this literature is motivated by the fact that legal systems, whether common law or civil law systems, restrict the range of lease provisions that courts consider enforceable. As a practical matter, this eliminates the possibility that owners and tenants can structure complete contracts to efficiently deal with all contingencies. The self enforcement features of lease agreements structured to elicit credible commitments by both parties take on even greater importance in developing countries in which squatting and informal property rental markets leave participants with little or no access to legal redress in courts (Turnbull, 2008). The recurring lesson from this literature is that property and lease laws have real effects on resource allocation by systematically altering land use patterns and the pace of urban development.

The rest of this paper is organized as follows. Section 2 presents a brief history of antichresis contracts. Section 3 addresses several casual hypotheses regarding antichresis contracts—the roles of inflation, interest rate differentials, and contract taxes and fees. Section 4 offers a stylized model of lease form, focusing on the roles of moral hazard and tenant liquidity risk characteristics. Section 5 describes the empirical model and the data and presents the empirical tests of the theory. Section 6 concludes.

2. A brief history of the antichresis

The word "antichresis" is from the Greek "anti" (against) and "chresis" (use) denoting the action of giving a credit "against" the "use" of a property.[2] The antichresis is a mechanism through which an owner gives the rights of use of a property to a tenant in exchange for a fixed amount of money payable at the signature of the contract.[3] The antichresis establishes a tenant usufruct, the right to use the property for a limited term, usually for one required year and one optional year agreed by both parties, after which the owner returns the lump sum of money and the tenant returns the property.

Despite the Greek origins of its name, clay tablets from the 15th century B.C. establish that antichresis contracts were commonly employed in the Sumerian and Akkadian Mesopotamian cultures (Purves, 1945). Babylonian law, considered a main precursor of western law, incorporated the antichresis contract, modifying the basic form to combine it with the mortgage pledge; in Babylonian law a mortgage pledge could become an antichretic pledge if not promptly repaid (Lobingier, 1929).

We know little about how and to what extent the Greek culture used the antichresis except that it entered Greek law in the time of Demosthenes (Cohen, 1950). The antichresis was introduced into Roman Law toward the end of the classical period (Tulane Law Review, 1938). Roman Law adopted the convention that the tenant usufruct had to be exactly compensated by the interest on the lump sum payment (Silva, 1996).[4]

Canon Law repudiated the antichresis during the Middle Ages; Pope Alexander III forbad it in 1163, in part because the antichresis contract was considered a form of usury (Cohen, 1950). Silva (1996) attributes the emergence of contracts serving the same purpose of the antichresis contract in this period to the ban—for example, a contract to purchase with an agreement to resell at the same price.

In modern law, the antichresis contract reappears in the Napoleonic Code established in 1804, incorporating a practice popular in southern France at time the code was being drafted (Silva, 1996). Among others, Spain, Italy, and most Latin American nations were influenced by the Napoleonic Code and adopted most of its contents including the antichresis contract. In the United States, the antichresis contract only appears in the State of Louisiana, following the format established in the French code and the original Louisiana Code of 1808 (Slovenko, 1958).[5]

Today, the antichresis contract is represented in nearly all Latin American civil codes. Minor differences exist but the core provisions in all countries resemble the basic form from pre-Babylonian times. Table 1 summarizes key antichresis characteristics as specified in the civil codes of selected countries.

The fact that antichresis contract has a long history and appears in a wide variety of countries suggests that it effectively solves a problem inherent in leasing property. If it engendered pervasive disadvantages, it would have disappeared from use long ago. One interesting aspect is that antichresis contracts coexist with periodic rent contracts in many property markets.[6] Some authors argue that its current popularity in Bolivia is because it improves poor households' access to housing in markets that also use periodic rent contracts (Farfan, 2002; Payne, 2002a,b). We find, however, no attempts in the mainstream literature to uncover why certain individuals should prefer antichresis as opposed to other contractual agreements as well as why other individuals prefer other lease contract forms over the antichresis. This is a fundamental question that needs to be answered before we can claim to understand how the use of antichresis can benefit (or hurt) the poor much less understand how different policies affect its use and benefits. The next section explores this question, introducing a theoretical model to help explain the incentives characteristics inherent in antichresis agreements as well as why it coexists with the monthly rent contract in modern property markets.

3. The antichresis in Bolivia

As mentioned earlier, the antichresis contract appears in the civil codes of some European countries and most Latin American countries. Housing tenure statistics, however, show that Bolivia is one of the few countries where the contract is widely used for residential housing

[2] Some authors claim that chresis stands for "credit" (Payne, 2002a,b), but this is a faulty translation. Chresis or chrisi (in modern Greek) means "use."

[3] Property rights include the rights to use, exclude, and dispose. The antichresis contract gives the tenant the rights to use and exclude (which is a usufruct in civil law) for a limited period of time. The rights to dispose stay with the property's original owner. The usufruct resembles the interpretation of the lease as a "conveyance" rather than a contract in common law countries. See Miceli et al. (2001) for explanation of the factors that determine whether a common law lease is interpreted as a conveyance or contract.

[4] Civil codes today sometimes allow the property owner to take part of the lump sum as a part of his payment.

[5] The antichresis lease has seen only limited use in Louisiana (*Tulane Law Review*, 1959).

[6] The ability to choose whether leases establish property or contract relations is not available to owners and tenants in common law countries. In common law countries, the interpretation of leases is established by legal doctrine underlying court decisions (Epstein, 1986; Miceli et al., 2001).