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THE ECONOMICS AND LAW OF LEASING

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This paper is about a widespread and highly successful economic institution that has been largely ignored in both economic and legal literature: leasing. A lease is a transfer of an asset for a limited time in return for periodic payments called rent. Leases are used to acquire a very wide variety of assets. Resources that are commonly leased include agricultural land, mineral and timber rights, commercial office buildings, shopping centers, industrial and commercial equipment such as ships, aircraft, machinery and computers, residences including both freestanding houses and apartments, autos and other motor vehicles, and furniture, among other things. Other than ownership, leases are probably the most common legal form of holding assets throughout the world.

Although comprehensive data about leasing are not available, a brief glance at such data as exist confirms the very high frequency with which leasing is used, both in the U.S. and in other developed economies. A large percentage of households lease the dwelling in which they live, and the percentage leasing rather than owning has increased since the recession of 2007-08. In the first quarter of 2017, the United States Census Bureau reported that 32 percent of housing units were occupied by persons who lease, as opposed to own or live in units with others. In Europe, the percentages are generally similar, although in Germany and Switzerland roughly half the population live in leased dwellings.

Leases of personal property are also surprisingly pervasive. By one estimate, leases account for more than twenty-five percent of all new capital equipment in the U.S., and approximately 80 percent of all U.S. companies lease at least some equipment.[1] In 1987, a new article – Article 2A – was added to the Uniform Commercial Code, in recognition of "the exponential expansion of the number and scale of personal property lease transactions."[2]

Although also incomplete, the data suggest that the institution of leasing is expanding, both in the U.S. and elsewhere. The White Clark Group reports that equipment leasing is

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[1] Alessandro Gavazza, Asset Liquidity and Financial Contracts: Evidence from Aircraft Leases, 95 J. Fin. Econ. 62, 62 (2010).

[2] Foreword to Article 2A (adopted October 1, 1987), in Uniform Commercial Code 2014-15 Edition at 177.

growing internationally, in many countries by double digit rates annually.[3] Auto leasing, in particular, continues to march upward, to the point that it has become the dominant form of holding autos in many countries. According to Edmunds, in 2016, "leasing accounted for 32 percent of new retail vehicle sales in the U.S., representing an increase of 41 percent over a five-year period."[4] This is by far the highest rate in history, and "will likely see an even higher percentage" in the future.[5] European rates are similar and many countries appear to be growing by double digit rates annually.[6]

It also appears that leasing is an important tool of economic development.[7] The function of leasing in capital formation in many emerging market economies has received almost no attention in the academic literature. Instead, that literature has focused overwhelmingly on devising ways of financing ownership of capital assets, either through microfinance or formalization of possessory rights.[8] Leasing is especially important in countries with an Islamic background, as "Islamic banking and finance is regulated by Sharia which strictly forbids riba or interest charges on loans," whereas, leasing allows banks to escape the prohibition on taking interest.[9] Consequently, leasing "constitutes a large portion of the portfolios of Islamic banks."[10]

Larger trends in society suggest that leasing will continue to expand at the expense of ownership. Leasing entails the acquisition of assets for limited periods of time, whereas ownership entails the permanent acquisition of assets. If, as seems plausible, modern societies will be increasingly characterized by impermanence – of technologies, jobs, place of residence,

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[3] White Clarke Group, *2017 Global Leasing Report: Continuous growth and bright prospects for the global leasing industry*, in association with *World Leasing Yearbook*. http://www.whiteclarkegroup.com/wp-content/uploads/2017/04/WCG-Global-Leasing-Report-2017.pdf

[4] https://static.ed.edmunds-media.com/unversioned/img/industry-center/analysis/h1-2016-lease-report.pdf (page 3).

[5] Id.

[6] http://www.leaseurope.org/uploads/documents/LeaseuropeFF_15.pdf Leaseurope is a trade assoaction of the EU and represents 46 member associations of automotive rental industries in Europe. These members span 33 countries.

[7] See generally INTERNATIONAL FINANCE CORPORATION, LEASING IN EMERGING MARKETS (The World Bank 1996). Report, which unfortunately is now rather dates, reports that "leasing has expanded rapidly over the past 20 years in developing countries," to the point that "in 1994 over US$350 billion of new vehicles, machinery and equipment was financed through leasing."

[8] E.g., Hernando de Soto, The Mystery of Capital (2000).

[9] Delwin A. Roy, Islamic Banking, 27 Middle Eastern Studies 427 (1991).

[10] Zamir Iqbal & Abbas Mirakhor, An Introduction to Islamic Finance: Theory and Practice (2007).

and housholds – then the acquisition of assets for limited time periods will likely continue to become, in many contexts, more appealing than that acquiring them permanently.

The ubiquity and utility of leasing as mode of acquiring assets calls for an explanation, both in terms of the economic functions it performs, and in terms of the legal features that differentiate a lease from other forms of holding assets.

I. VARIETY AND UNIFORMITY IN THE WORLD OF LEASING

Leasing is a very flexible mode of holding assets. Not surprisingly, therefore, leasing is used with a wide range of assets and performs wide variety of funtions. This Part begins (in Section A) with a brief overview of the types of assets which are frequently leased. It will then note (in Section B) some of the tax and accounting reasons for leasing, which generate some types of transactions that are labeled leases but which, from an economic perspective, should probably be categorized as a form of owership. These "untrue" leases have generated regulatory responses (discussed in Section C), which in turn provide some insight into the defining characteristics of a lease. The Part concludes (in Section D) by offering a distillation of the salient features of true leases, as manifested in all asset categories. This will set the stage for the discussion of the economic reasons for leasing in Part II.

A. The Variety of Leases

Leases are an important mode of holding assets in the context of both immovable resources (land and fixtures) and movable resources (personal property).

With respect to land, one occasionally encounters ground leases, in which bare land is leased for a long period of time with the expectation that the lessee will construct one or more structures on the land and will own these structures (at least for the term of the lease). The motivation for executing a ground lease may be that the owner of the land is interested in a stable return without the management responsibility of constructing and managing one or more structures, or the owner may face large capital gains taxes if the land were sold, or may face impediments to seling the land in trust instruments or positive law.[11]

Far more common are leases of land for exactive or agricultural purposes, which can be found in nearly all legal systems. Roman law recognized an interest called the usufruct, which gave the usufructuary the right to plant and gather fruits or crops on land owned by another but no right to alienate the land. In modern civil law systems, the usufruct has been largely displaced by the lease (*contrat de louage*), although vestiges of the usufruct remain in some legal

[11] See generally Neil S. Hecht, Variable Rental Provisions in Long Term Ground Leases, 72 Colum. L. Rev. 625, 626-39 (1972).

systems.[12] In England, courts began to recognize the term of years and other forms of agricultural leases in the Thirteenth Century. These were not regarded as freehold estates, but soon gained judicial protection as interests in land. Modern legal systems recognize variations on the full blown agricultural lease, such as leases limited to the pasturing of animals.

Leases permitting extraction of resources are especially important with respect to government-controlled land. The United States Government effectively owns one-third of the land mass of the United States, as to which public sentiment has for some time opposed any further disposition by sale.[13] In order to obtain some value for taxpayers from this vast domain, the government enters into leases of various kinds, such as for extracting oil and gas, mining surface minerals like coal and gravel, timber harvesting, and grazing livestock. At the state level, land protected by the public trust doctrine, said to prohibit sales, has also been developed by long-term leases.[14] Private landowners, of course, also frequently enter into timber, mineral, and oil and gas leases, primarily to take advantage of the superior expertise of specialized lessees.

Leases of land improved by inhabitable structures are of course ubiquitous, with the rights to occupy all or part of the structure usually more important to the parties than any interest in the underlying land. Leases of space for commerical offices, for retail space in shopping centers, and for warehouse and light industrial space are extremely common and of great economic significance. Leases of space for residential occupancy, including apartments, townhouses, and free standing homes are familiar and obviously economically very important.

Very short term occupancy of physical space – which we can call "rentals" – are usually regarded as purely contractual arrangements rather than leases. Examples range from rentals of hotel rooms or Airbnb lettings to rentals of luggage lockers in bus or train stations. The line of division between rentals and leases is somewhat indistinct, and turns on factors such as the duration of the occupancy, the degree of control the occupant exercises over the space, and the level of services provided by the rental agency. A a month-long occupancy of a hotel room would presumably fall on the rental side whereas a month-to-month occupancy of a furnished apartment probably falls on the lease side of the line.

Leases of personal property also have a very old pedigree. In Roman law these arrangements were called *locatio-conductio*, which in the civil law eventually evolved into the

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[12] See Robert Joseph Pothier, Contract of Letting and Hiring (Contrat de Louage) (G.A. Mulligan trans. 1953) [date].

[13] The Taylor Grazing Act of 1934, Pub. L. 73-482, closed the federal public domain to homesteading and other claims of private ownership except for hard rock mining claims.

[14] See Friends of the Parks v. Chicago Park District, 786 N.E. 2d 161 (2003) (upholding long-term lease of a stadium to the Chicago Bears on what was assumed to be public trust land which could not be sold).

contract of lease. Early English treatises called these arrangements "letting and hiring."[15] The decisional law considering these types of leases was extremely thin up through the middle of the twentieth century, with the result that treatises were the primary source of understanding their legal statutus. Judging by the examples given in treatises from this era, the most common type of personal property lease was the hiring of a horse or some kind of horse-drawn vehicle. Starting in the 1950s and accelerating ever since, personal property leasing has exploded in volume and significance, and now covers a wide array of movable equipment – everything from office furniture to autos to jumbo jets.

As in the case of occupancy of immovable spaces, very short term procurements of movable resources are regarded as rentals rather than leases. Thus, renting a car from Hertz is regarded as contractual arangement, whereas leasing a car through a new car dealer for a term of three years is regarded as a lease.

Certain types of movable property have a more robust history of leasing that pre-dates the modern personal property lease, and consequently these leases are governed by specialized bodies of law. Leases of ships are called charter-parties, and are governed by the law of admiralty.[16] Charter-parties come in three types: voyage charters, time charters, and demise or bare-boat charters. The main difference is that in voyage and time charters both the vessel and the crew are supplied by the vessel owner; in a demise or bare-boat charter the owner supplies the vessel and the charterer procures the crew.[17] Although the terminology and details differ from the law that applies to other types of movavbles, voyage and time charters roughly correspond to what are here called rentals and demise charters correspond to full-blown leases.

Railroad freight cars constitute another specialized mode of leasing that pre-dates the rise of the modern personal property lease. In the early days of railroading, each carrier built and owned its own cars. Soon, however, the practice developed of routing cars that originated on one line over one or more interconnnecting lines if this was the most efficient way of providing through service. These were in effect leases of cars, and railroads agreed to pay each other "per diem" charges for the use of rail cars on their lines owned by another carrier. Starting with the Esch Car Service Act 1917, the Interstate Commerce Commission was given authority to regulate these charges.[18] Today, rail cars are variously owned by operating railroads, shippers, large car leasing companies, and individual investors. Bar codes painted on the sides of cars

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15 [Granville and Bracton]

16 Grant Gilmore & Charles L. Black, Jr., The Law of Admiralty 193-97 (2d ed. 1975).

17 Id. at 240-41.

18 See 24 Stat. 379 (1917). The current version is at 49 U.S.C. §11122. For a prominent dispute over setting per diem rates, see United States v. Florida East Coast Ry., 410 U.S. 224 (1973).

identify the car owner and the applicable lease rate, which can be scanned electronically with the information fed into computers. A sophisticated accounting system then nets out the lease charges among the various actors.

B. Transactions That Are Not True Leases

I am concerned in this paper with what accountants call operating leases and tax and bankruptcy lawyers call true leases. It will nevertheless be useful briefly to take note of some other types of arrangements that are often denominated leases but do not conform to what is considered a true lease. These arrangements are called leases in an effort to take advantage of some of the accounting and tax features of leases. This requires a brief excursion into the accounting and tax treatment of leases.

The conventional tax and accounting treatment of leases is relatively straightforward.[19] As far as the lessee is concerned, a lease appears on its income statement but not on its balance sheet. The payment of rent is an expense, which is an offset against income. But the lease is not regarded as either an asset or a liability that must be reflected on its balance sheet. From the perspective of the lessor, the lease makes an appearance on both the balance sheet and income statement. The lessor is regarded as the owner of the leased asset, and it appears on the lessor's balance sheet as an asset. If the lessor has borrowed money to purchase the asset (this is common, and is called a leveraged lease), the principal value of the loan appears on the balance sheet as a liability. The lease also makes an appearance on the lessor's income statement. The rents the lessor receives will be shown on the income statement as income. Typically, the lessor is allowed to take a charge against income for depreciation of the asset, which is shown as an expense. If the lessor has borrowed money to purchase the asset, the income statement will also show the interest it is obligated to pay under the loan as an expense.

1. Installment Sale Contracts.

One type of transaction that is sometimes characterized as a lease in an effort to take advantage of these accounting rules is an installment sales contract. These come in many variations. Sometimes the vendor retains title to the property until the full purchase price is paid; sometimes title passes upon execution of the contract. Sometimes financing is provided by the vendor; sometimes by a third party; sometimes there is no explicit financing and the opportunity cost of the deferred payments is embedded in the periodic installment payments. One reason to characterize the transaction as a lease is to keep the asset off the books of the vendee, and on the books of the vendor, either for accounting or tax purposes. For example, by keeping the asset off the books of the vendee, the vendee's accounting statements will show a higher return on assets, which may be important to investors. Alternatively, the vendor may want to keep the asset on its

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[19] For as suscint summary, see, e.g., Peter W. Schroth, Financial Leasing of Equipment in the Law of the United States, 58 Am. J. Comp. L. 323, 341-42 (2010).

books to record depreciation as an expense, which may be of more value to the vendor if it has more income to offset. Another reason to characterize such transactions as a lease is to avoid regulatory requirements associated with secured lending. In the real property context, these include various legislated protections for borrowers associated with conventional real estate mortgages. In the personal property context, these include the filing requirements and other limitations imposed by Article 9 of the UCC.

2. Sale-and Leaseback Transactions.

Another variation on the true lease is the sale-and-leaseback. This is a transaction which one party that owns an asset sells it to another party and then immediately leases it back, paying rent to the transferee. Given that a sale-and-leaseback results in no change in the possession and use of the asset, tax and accounting considerations loom large in explaining the reasons for engaging in such a transaction. One common reason is when the owner of an asset cannot take full advantage of a depreciation allowance or an investment tax credit with respect to the asset, either because the owner does not have enough income to offset, or the owner has exhausted its ability to take depreciation or a credit under applicable IRS regulations. By transferring title to another entity, the transferee can resume taking depreciation or a credit on the asset. The tax savings generated by the transfer can then be shared between the transferor and the transferee, either in the form of a higher sales price for the asset or lower payments of rent. Another reason to engage in a sale-and-leaseback is if the transferee is a wholly or partially tax-exempt entity, such as a university or charity. For example, the transferee may be exempt from paying property tax on the asset or may be exempt from paying tax on the rental income it receives.[20] Again, the tax savings can be shared under the terms of the transaction. A third reason might be that the transferor has exhausted its ability to borrow because it has already accumulated large amounts of debt and is constrained by regulation or indentures on previous loans from borrowing more. The transaction yields an immediate infusion of cash for the transferor, and the obligation to make rental payments (under conventional accounting rules) would not be booked as an additional liability on its balance sheet, thereby avoiding the restriction on further debt.

3. Finance Leases

A third type of transaction that takes the form of a lease but for most economic purposes can be regarded as a sale is what the UCC calls a finance lease. This is a three-party transaction in which (i) the lessee selects an asset it wishes to acquire from a supplier, (ii) title to the asset is transferred by the supplier to a financing company; (iii) the financing company then leases the asset to the lessee, and (iv) the lessee agrees that it will look to the supplier rather than the

[20] See, e.g., Symphony Space, Inc. v. Pergola Properties, Inc., 669 N.E. 2d 799 (N.Y. 1996) (describing a sale and leaseback to a nonprofit entity exempt from paying property tax on the subject property).

financing company/lessor for any warranty claims, maintenance issues, returns, and so forth.[21] In effect, the sole purpose of a finance lease is to provide financing for the transaction; in other respects, the relationsip between the lessee and the supplier is one of buyer and seller. It follows that the only reason to enter into a finance lease, as opposed to purchasing the asset with a purchase money loan, is because of some tax or accounting advantage to structuring the transaction as a lease.

C. Regulatory and Legal Responses to Untrue Leases

Each of the foregoing examples can be said to reflect efforts to exploit the tax and accounting advantages of leases by calling something a lease that in economic reality is the sale of an asset. The accounting profession first responded to the challenge of distinguishing between true leases and sales in its Statement of Financial Accounting Standards No. 13 adopted in 1976. This divided the world of leases into "capital leases" and "operating leases."[22] Capital leases were treated like sales of assets (and thus had to be recorded on the lessee's balance sheet as an asset and a liability); operating leases were treated like leases and made no appearance on the lessee's balance sheet. Capital leases were distinguished from opeating leases by a series of bright line tests designed to identify transactions in which ownership of the asset was effectively transferred to the lessee. For example, if the lease term was for 75 percent or more of the estimated economic life of the asset, it was a capital lease; similarly, if the present value of the rental payments was equal to 90 percent or more of the fair market value of the asset it was a capital lease.

The bright line tests of SFAS 13 led to much gamesmanship, with firms manipulating lease terms to fall on the "operating lease" side of the divide in order to avoid booking lease obligations as a liability on their balance sheet. In the Sarbanes-Oxley Act of 2002 Congress created a new Finanacial Accounting Standards Board (FASB) under the authority of the SEC, and directed it to consider rules dealing with "off balance sheet" financial liabilities, including leases. After much controversy, the Board adopted new rules for accounting for leases that go into effect in 2019 and 2020.[23] The rules apply to all types of leases, both of real and personal property, with exception of those lasting one year or less. The new rules feature a new definition of "lease" that changes the focus from whether the lessee has obtained effective "ownership" of the underlying asset to whether the lessee has obtained control over *the use of the asset*.

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[21] See E. Carolyn Hochstadter Dicker & John P. Campo, FF&E and the True Lease Question: Article 2A and Accompanying Amendments to UCC 1-201(37), 7 Am. Bankr. Inst. L. Rev. 517 (1999).

[22] See generally Richard Dieter, John E. Stewart and Michael L. Underwood, Accounting for Leases in Equipment Leasings—Leveraged Leasing (Bruce E. Fritch and Albert F. Reisman eds. 2d ed. 1980).

[23] See Donald J. Weidner, New FASB Rules on Accounting for Leases: A Sarbanes-Oxley Promise Delivered, 72 Bus. Lawyer 367 (2017).

Specifically, a lease is defined as a contract "that conveys the right to control the use of… an identified asset…for a period of time."[24] All leases so defined that last more than one year must now be recorded on the lessee's balance sheet as an asset (the asset being the right to use the asset) and a liability (the liability being the requirement to pay future rents). With respect to income statements the distinction between capital leases (now called finance leases) and operating leases is retained, so that lessees that have operating leases may continue to deduct rental payments as expenses as they come due. At this point, of course, it is impossible to know whether the new accounting rules will depress the ardor for using leasing rather than ownership as a means of acquiring.

The UCC, for its part, was revised in 1987 to distinguish more clearly between personal property subject to security interests (including personal property acquired by an installment sale contract or purchased with a loan) and true leases.[25] The clarification was necessary because of the frequency with which creditors of insolvent parties argued that the debtor had entered into a lease rather than a security agreement (as discussed in Part II, leases generally receive more favorable treatment from the creditor's perspective in bankruptcy). The critical distinction adopted by the Code is whether transaction in question is for a term "equal to or greater than the remaining economic life of the goods."[26] If the entire "economic life" is transferred, the transaction is deemed to be a sale and hence to create a security interest. If less than the economic life is transferred, the transaction is deemed to be a lease. Thus, whereas the FASB emphasizes the transfer of control over the use of the asset for a period as the defining aspect of a lease, the UCC emphasizes a transfer for a period less than the economic life of the asset as the critical variable.

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[24] Au 2016-02.

[25] UCC § 1-203.

[26] Id. § 1-203 (b)(1). The provision is more complex, creating four alternative conditions that cause the transaction to be characterized as a security interest, but each of the conditions functionally equates to creating a right to use the asset for its full economic life. The full provision reads in relevant part:

> A transaction in the form of a lease creates a security interest if the consideration that the lessee is to pay the lessor for the right to possession and use of the goods is an obligation for the term of the lease and is not subject to termination by the lessee, and:
>
> (1) The original term of the lease is equal to or greater than the remaining economic life of the goods;
> (2) The lessee is bound to renew the lease for the remaining economic life of the goods or is bound to become the owner of the goods;
> (3) The lessee has an option to renew the lease for the remaining economic life of the goods for no additional consideration upon compliance with the lease agreement; or
> (4) The lessee has an option to become the owner of the goods for no additional consideration or for nominal consideration upon compliance with the lease agreement.

Both the new definition of lease adopted by the FASB and the UCC's definition of a lease as distinct from a security interest are important pieces of data in determining the practical, everyday understanding of what constitutes a lease. These definitions emerged out of extensive deliberation by accountants (in the case of the FASB) and lawyers (in the case of the UCC) who have dealt extensively with transactions in which the question whether something is a lease as opposed to something else has been critical. The understandings they have distilled thus presumably capture important aspects of what the participants in these transactions regard as true leases. One can say they constitute important precedents, albeit different from what we ordinarily think of as a legal precedent. Given the economic stakes in these efforts, and the intensity of the scrutiny given to the authorities' proposals by interested parties,[27] these precedents may be particularly persuasive in developing a more general understanding of the defining features of a lease.

D. The Common Features of True Leases

We are now in a position to state, at least in a preliminary fashion, the common features of leases, drawing on the characteristics of leasing in all of the various markets in which leasing (by one name or another) is a significant mode of holding assets, as well as on the efforts of the FASB and the drafters of the UCC to distinguish leases from sales or security interests. To be clear, the following definition is not a legal definition – that is the subject of Part III. It should be regarded as a distillation of the defining features of a lease as drawn from practice. This is the common definition: *A lease is a transfer of possession and use of a physical asset for a time less than its expected useful life in return for periodic payments of rent.* A brief word about certain features of the definition.

Transfer of possession. A lease is generally differentiated from short term rights to use assets we will call rentals. Typical rentals include auto rentals, hotel room rentals, luggage locker rentals, or renting a carpet cleaner from an equipment rental store. Rentals share many economic features with leases, including having a duration less than the useful life of the asset and transferring the residual rights associated with the asset to the renter for the duration of the rental.[28] The difference is that rentals do not transfer any possessory interest in the asset to the renter, and are commonly regarded as purely contractual in nature. The rental agency is the one who determines who may use the asset and for what purposes and has the right to bring legal actions to protect the asset against interference by third parties.[29] In effect, the rental agency is

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[27] The proposal to require lessees to book lease obligations on their balance sheet was subject to a major challenge by the U.S. Chamber of Commerce, which in turn spurred a major counter-attack. See Weidner, supra.

[28] On the concept of residual rights, see infra at notes XX-XXX.

[29] In legal terms, the rental company has a right to possess the asset which is superior to the renter's actual but temporary possession of the asset. In rentals of real property (hotel rooms, AirBnb rentals) the

regarded as remaining in "constructive possession" of the asset for the duration of the rental (or more accurately, has the right to possess the asset notwithstanding the rental). There is a gray area between rentals and leases, involving things like rentals of furnished vacation homes for the season, where the distinction is blurred. I am concerned here with transfers that are unambiguously leases, meaning the lessee is regarded as the one in possession of the asset for the duration of the lease.

Transfer of use. A lease entails not just the transfer of possession of the asset to the lessee but also the right to control the use the asset for a range of discretionary purposes as determined by the lessee. A lease allows the lessee to control the use the asset in essentially the same way an owner would. In this respect, a lease differs from a typical bailment in which possession of an asset is transferred from bailor to bailee for a purpose such as repair, storage, or transportation. In such a bailment the transferee has possession of the asset but does not have the right to use the asset except for the specific purpose designated by the bailor.

Physical asset. Leases always entail the transfer of physical (tangible) assets. When rights to use intangible assets are transferred this is regarded as a license. It may be that certain exclusive licenses of intellectual property are functionally similar to leases, but I will confine the inquiry here to leases, which exist only in the world of physical assets.

Time less than the expected useful life of the asset. Leases are always for a finite duration, as distnguished from ownership, which lasts for an indefinite time. The limited duration of a lease, as a matter of practice, is always for a time less than the expected life of the asset. The functional significance of this is that the owner who creates the lease – the lessor – retains a residual interest in the asset called a reversion. Leases therefore always entail divided rights in the asset. The lessee has a present possessory interest and the lessor has the reversion.

Periodic payments of rent. Leasing is a commercial institution. Even if in theory one could make a gift of an asset in the form of a lease, one never sees this in practice.[30] Under a lease, the asset is transferred in return for the payment of rent. This is nearly always in cash, although in times past when currency was scarce the payment was often in kind such as a share of crops. Rent is also invariably paid periodically, typically but not invariably monthly. Again, one could in theory create a lease in return for a single lump sum payment at the beginning of a lease. But one does not see this in practice. Leases nearly always take the form of a relational

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renter's interest would be characterized as a license. In rentals of movable assets (autos, carpet cleaners), the renter's interest would be characterized as a bailment.

[30] If one makes a gratuitous transfer of real property – such as telling a friend he can use your apartment over the winter holiday season – this would be classified as a license rather than a lease. If one makes a gratutitous transfer of personal property – such as telling a friend she can use your bicycle for the summer – this would probably be classified as a gratuitious bailment rather than a lease.

exchange in which the lessor transfers possession and use of an asset to the lessee for a limited time and the lessee during that time periodically pays rent to the lessor.

For purposes of considering the economics of leasing (Part II), I draw no distinction between real property leasing and leasing of personal property (movables). I assume that the economic logic of leasing is sufficiently similar in both contexts that leasing can be examined as a unitary institution. The legal understanding of leasing, in contrast, differentiates in certain ways between real property and personal property leasing, as discussed in Part III.

Also, no assumption is made at this point that leasing should be regarded as a properry form or merely as a specialized type of contract. As we will see in Part III, leasing is a mixed institution which partakes in part of property features but is otherwise mostly contractual. For purposes of considering its economic functions, leasing can be considered a unique institution that partakes of the features outlined above, without delving into where these features place it along the contract/property spectrum.[31]

II. WHY LEASE?: ECONOMICS

Leases, like other forms of holding interests in assets such as full ownership (called the fee simple in Anglo-American law the case of land), the trust, and the license, perform multiple economic functions. Sometimes the parties will enter into a lease, rather than structure their relationship using some other form, because they are interested in only one of these functions. Other times they will be motivated by multiple functions. Understanding the economic functions performed by leases is of intellectual interest in explaining why leasing is such a widespread and growing phenomenon. Such an understanding is also of practical value insofar as it can help guide courts in resolving lease disputes and inform legal reformers in developing proposals to clarify or revise lease law.[32]

A. The Lease as Financing Device

The first function of leases is as a financing device. One can think of a lease as an arrangement in which one party – the lessor – loans some asset to the other party – the lessee—in return for periodic payments. The periodic payments are designed to compensate the lessor for

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[31] See generally, Thomas W. Merrill & Henry E. Smith, The Property/Contract Interface, 101 Colum. L. Rev. 773, 820-33 (2001).

[32] The best functional analysis of the reasons for leasing I have discovered in the existing literature, which is limited to the context of real estate leasing, is John D. Benjamin et al., Rationales for Real Estate Leasing versus Owning, 15 J. Real Estate Res. 223 (1998). See also Terry A. Isom & Sudhir A. Amembal, The Handbook of Leasing: Techniques & Analysis 1-17 (discussing factors affecting the "popularity of leasing"); Thomas W. Merrill & Henry E. Smith, Property: Principles and Policies 643-45 (3d ed. 2017) (offering an abbreviated account of some of the factor discussed herein).

the opportunity cost of the resource, just as in the case of any type of commercial loan. In a loan of money, we call the charge for the opportunity cost of the funds interest. In a lease of physical assets, we call it rent.

1. The Irrelevance Theorem.

The function of the lease as a financing device is highlighted in a small (and now rather outdated) literature in finance economics on the lease-or-purchase decision of business firms in acquiring business equipment. Borrowing from the Millier-Modigliani theorem in corporate finance,[33] this literature posits that under a rigorous set of assumptions, the costs to a firm of leasing an asset will be the same as the cost of borrowing money to purchase the asset.[34] The assumptions that yield the irrelevance theorem in the lease-or-purchase context, in a fasion analogous to the assumptions underlying the original Miller-Modigliani theorem, are quite heroic. They include the assumptions that: (i) capital markets are accessible to all lessors and lessees and function perfectly, (ii) there are no transaction costs associated with acquiring or disposing of assets either by lease or purchase, (iii) there is no risk of default under either leases or secured lending, and (iv) tax laws create no distortions that affect the return to firms depending on whether assets are acquired by lease or purchase.[35] The assumptions are obviously unrealistic. The irrelevance theorem is a thought experiment designed to highlight possible reasons why a firm would acquire assets by lease as opposed to purchase, namely, that one of or more of the assumptions is not met.

Before saying some critical things about the irrelevance theorem it is necessary to praise it for what it establishes. The most important thing the theorem establishes is that leasing is a method of financing the acquisition of assets. The decision to lease an asset is an alternative to borrowing funds to purchase the asset. Indeed, if the assumptions of the theorem hold, they are an exact substitute. The theorem also tells us that leases inevitably contain an expected return or

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[33] Franco Modigliani and Merton H. Miller, The Cost of Capital, Corporation Finance and the Theory of Investment, Am. Econ. Rev. (1958).

[34] See, e.g., Merton H. Miller and Charles W. Upton, Leasing, Buying, and the Cost of Capital Services, 31 J. Finance 761 (1976); S. Myers et al., Valuation of Financial Lease Contracts, 31 J. Finance 799 (1976).

[35] Miller and Upton, supra, offer a slightly different version of the asumptions that yield the irrelevance theorem: (1) the “machines in question” are produced by a perflectly competitive industry at a constant cost per unit per time period; (2) maintenance and repair is handled by mandatory service contracts offered by a competitive services industry in both markets; (3) “[s]econd-hand machines can be bought, sold, or sublet by leasing companies in unlimited quantities in perfect markets”; (4) leasing companies can borrow or lend indefinitely in a perfect capital market at a known one-period rate of interest; and (5) leasing is a business that anyone is free to enter and requires the use of no real resources.

profit for the lessor, reflecting the opportunity cost of transferring possession and use of an asset to another person or entity.

Here, it is important to clarify the nature of this expected return. It is often said that leases include an "embedded" or "implicit" interest rate, but this is not exactly correct. It is true of course that lessors make some kind of internal calculation of the required return in deciding whether to enter into a lease. But the target return is based on the opportunity cost of doing something else with the asset, such as consuming it or selling it, not the opportunity cost of investing cash, as in the case of loan. The target return will be based on a host of assumptions about the asset, most notably assumptions about its future value, which will be a function of the assumed rate of depreciation and assumed future demand for the asset. Moreover, there is no clear benchmark for setting an expected rate of return. The risk of leasing an asset is surely greater than the risk of selling it and investing the proceeds in Treasury bills or investment grade bonds. But as explained in Section B, the risk to a leasing company from leasing an asset is less than the risk of holding the asset and seeking to earn a profit by using the asset itself. So leasing companies undoubtedly set target rates of return, but requiring disclosure of these targets would not necessarily provide any meaningful information to potential lessees, certainly not if the relevant question is to lease or borrow money to purchase the asset.

All of which helps explain why one never sees a rate of interest stated in a lease. Leases always set forth a periodic rental charge stated as a single number (or formula that generates a number). In contrast, a loan of money to purchase an asset will as a matter of convention (or by regulatory requirements) differentiate between the portion of the periodic payment that is interest and the portion that is repayment of principal. This makes sense because cash is a totally fungible asset and disclosing interest rates allows borrowers to make meaningful comparisons among different potential lenders. The fact that the interest charge is transparent in the case of the loan and is missing in the case of a lease is not just a product of convention or regulatory lassitude.[36] It reflects the fact that the expected return from leasing is based on the opportunity costs of using a tangible asset, which is highly idiosyncratic to the nature of the asset, as opposed to the opportunity costs of holding cash, which is not.[37]

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[36] Even in today's world of consumer protection laws and mandatory disclosure, U.S. law does not require disclosure of the implicit rate of interest in consumer leases. The regulations promulgated under the Consumer Leasing Act (CLA), enacted in 1976, do not require the disclosure of an implicit interest charge. See 12 CFR § 213.4 (2017) (requiring, for motor vehicle leases, that "lessors must provide a mathmatical progression showing how the scheduled periodic payment is derived…. In addition, lessors must disclose information about certain lease contract terms such as the penalty for terminating the lease early, maintenance responsibilities, and whether the lessee has the option to purchase the leased property.") https://www.federalreserve.gov/bankinforeg/regmcg.htm

[37] Several commentators have observed that lessors are resistant to disclosing any "implicit rate of interest" is included in their leases. The resistance may be due not to the fact that this is a proprietary secret so much as that any particular number would be artificial.

In the finance literature, the most commonly discussed source of deviation from the irrelevance theorem is tax law.[38] In the standard commercial lease, there is no tax advantage to leasing as opposed to owning an asset. Suppose a firm would like to acquire space in a small office building. If the firm borrows money to construct the building which it will occupy, it can deduct as a business expense the interest payments on the loan and depreciation on the building – one interest deduction and one depreciation deduction. Alternatively, the firm can create separate entity ("Bildco") to borrow money to construct the building, which Bildco will then lease to the firm. Bildco can deduct the interest payments on the loan and depreciation on the building. In addition, the firm can deduct the rental payments made to Bildco. But Bildco will have to declare the rental payments as income. So the deduction of the rental payments and declaration of the rental payments as income exactly offset each other. The result is one interest deduction and one depreciation deduction – just as under the ownership option.

Leasing will generate tax advantages only under special circumstances. For example, a firm may not have enough income to take full advantage of the deductions for interest expense and depreciation. In such circumstances, it may be to the advantage of the firm to identify another entity that can take full advantage of these deductions, which will then lease the asset to the firm. Assuming the leasor shares some portion of these tax savings with the lessee in the form of lower rent, the lessee may be able to acquire the asset by leasing at a lower cost than it would effectively pay if it purchased the asset.

These sorts of tax considerations undoubtedly have an important influence on decisions to acquire assets by lease or purchase. As stated in Part I, however, I am interested in this paper in the more-or-less enduring non-tax reasons for entering into leases. Tax laws differ from one category of asset to another, from one era to another, and from one legal regime to another. For example, Henry Hansmann has discussed how U.S. tax law has at different times favored leasing apartments and at other times has favored owning them as condominiums.[39] Yet even in eras when tax laws favor ownership, leasing of apartments persists, even at the upper end of the residential housing market. And leasing is growing throughout the world, notwithstanding significant diversity in the tax treatment of different types of assets. So tax laws cannot be the whole explanation for leasing. This paper seeks to understand the enduring economic reasons for leasing, other than tax law.

2. Get Less/ Pay less

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[38] See, e.g., Mark A. Wolfson, Tax, Incentive, and Risk-Sharing Issues in the Allocation of Property Rights: The Generalized Lease-of-Buy Problem, 58 J. Business 159 (1985); Craig M. Lewis and James S. Schallheim, Are Debt and Leases Substitutes?, 27 J. Financial and Quantitative Anal. 497 (1992).

[39] Henry Hansmann, Condominium and Cooperative Housing: Tansactional Effficiency, Tax Subsidies, and Tenure Choice 20 J. Legal Stud. 25 (1991).

The major advantage of leases as a financing device is that they allow assets to be acquired at lower cost. The irrelevance theorem takes as its implicit model a well-capitalized business firm deciding whether to acquire equipment by lease or purchase. This makes its stringent assumptions more plausible, but equipment leasing by well-capitalized firms represents only a small subset of the world of leasing. If we extend the inquiry to encompass other types of leases, such as residential leases, consumer product leases, agricultural leases, and leases of real estate and equipment by small businesses, the assumption that all persons have ready access to perfectly functioning capital markets is obviously implausible. Leases have always been, and continue to be, a type of financing device preferred by persons who are constrained by their lack of access to capital markets. This can be either because they have not accumulated enough savings or investment capital to satisfy the conditions required to obtain a purchase-money loan, or because they do not anticipate future cash flows sufficiently large to repay a loan, or both.

The basic reason why leases are favored by those who lack access to capital markets is obvious on reflection, but makes only a rare appearance in the finance literature. When one leases an asset, one gets less than when one purchases an asset.[40] Leases entail the acquisition of an asset for a limited time less than the useful life of the asset. A purchase entails the acquisition of an asset for its full useful life. When one gets less, one pays less. Thus, persons who are constrained by a lack of savings or investment capital, or who have limited cash flows, may prefer to lease rather than purchase *because it reduces their costs of holding an asset*. By leasing, they conserve their limited capital for other purposes, or they conserve their anticipated cash flows for other purposes.[41]

A hard-core adherent of the irrelevance theorem can object that if one wants to acquire less of an asset, in terms of the time one holds an asset, one can simply purchase the asset and then re-sell the asset when the desired time period has expired. But this assumes the truth of the assumption that all parties have full access to perfectly functioning capital markets and that there are no transaction costs associated with acquiring and disposing of assets. When these assumptions fail, because the person who is contemplating acquisition of the asset is constrained from accessing capital markets and/or it is more costly to purchase and re-sell assets than to lease them, the irrelevance theorem fails.

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[40] See Bennie H. Nunnally, Jr. and D. Anthony Plath, Leasing Versus Borrowing: Evaluating Alternative Forms of Consumer Credit, 23 J. Consumer Affairs 383, 386 (1989).

[41] There is evidence that if one wants to purchase an assert for its full useful life, borrowing money to purchase the asset under a purchase money loan is cheaper, on a per period basis, than acquiring the asset under a series of leases. Andrea Eisfeldt and Adriano Rampani, Leasing, Ability to Repossess, and Debt Capacity, 22 Rev. Financial Stud. 1621 (2009). The authors suggest this is because of higher monitoring costs incurred by lessor to protect the value of their reversion in the asset. This is not inconsistent with the get less/cost less postulate, which simply says that lessees pay less because they acquire the asset for less than its full useful life.

To illustrate, consider a person contemplating the purchase of a new automobile. Assume a new auto has an expected useful life of ten years, and that it will yield 1000 units of use value per year for each year of its life. If someone leases the vehicle for three years, they obtain three years' use (3000 units). If they purchase the asset, they obtain ten years' use (10,000 units). It will inevitably cost less to acquire the vehicle for three years than to acquire it for ten. This will be true even if we discount the use values (1000 units per year) to present value using some discount rate. The discounted present value of three years' use (years 1-3) will still be significantly less than the discounted present value of ten years' use (years 1-10). Consequently, the monthly charge for leasing the asset for three years will be less than the monthly charge for acquiring the asset for all ten years.[42]

For the capital or cash-flow constrained person this is of obvious significance. Such a person might prefer to own the asset rather than lease it, perhaps because they value the prestige of owning things, or this would provide them more security, or simply because they prefer more to less. But on balance, they would rather preserve their capital and or cash for other purposes, precisely because they face budgetary constraints in these respects. Thus, they prefer to acquire less of the asset (in terms of the time they have it) and leave more of their limited resources for other things.

The significance of get less/pay less is not limited to low income and net worth households and small business firms. It also means that leases are a form of leveraging limited capital for investment purposes. Consider an individual who wants to start a restaurant. This individual may have saved enough to make a down payment to purchase a building for a restaurant. But devoting their capital to purchasing space for the restaurant may not be the best use of limited funds. It may make more sense to lease space for the restaurant, and conserve the capital for acquiring kitchen equipment, tables, and chairs. Or, it may make even more sense to lease the space, *and* lease the kitchen equipment, tables, and chairs, and conserve the capital for initial marketing efforts and as a reserve fund to pay the wages of employees during the startup phase. Similar points can be made about law firms in deciding how to acquire space for their offices, chain stores in deciding how to acquire space for additional outlets, and airline companies in deciding how to expand their fleet of planes. Leases allow persons to leverage their limited resources in roughly the same way that borrowing allows persons to leverage limited resources, except that when one leases assets, the cost of acquiring the asset will be lower, because it is being acquired for less than its useful life.

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[42] A recent internet advertisement from CarsDirect illustrates. See https://www.carsdirect.com/2018/chvrolet/mailbu. The ad states that one can lease a new Chevrolet Malibu for 36 months for $266 per month, or one can purchase the same car by making payments over 36 months for $549 per month. The financed price is more than double the lease price, which reflects the fact that under the first option one is acquiring three years' of use, and under latter option one is acquiring the full useful life of the vehicle.

3. Enhanced Security for Lessors

A secondary advantage of leases as a financing device is that they provide greater protection for lessors in event of default than is provided to lenders holding security interests in a purchased asset. In both cases, the primary concern is nonpayment. Lessors have better protection against nonpayment than do lenders holding security interests. Here too we see a significant divergence from the assumptions of the irrelevance theorem.

There are multiple mechanisms for dealing with the risk of default. One is to adjust the rate of interest or the rent to account for the risk of default.[43] Another is to require a large downpayment or security deposit from the acquirer. On both scores, leases provide little or no advantage to the source of the asset; indeed, if anything leases are characterized by comparatively small security deposits relative to the substantial downpayment traditionally required to obtain a secured loan. Where leases have a comparative advantage is in respect of the third source of protection: the ability to seize the asset in the event of default.

The superior ability to seize assets from defaulting lessees is to some extent built into the structure of leases. Leases are for a limited time period less than the useful life of the asset. Hence when the lease expires, the lessor is entitled to get the asset back. There is, if you will, a built-in limit to the time in which a lessee can remain in default. When the term expires, the lender can get a judgment for possession, no questions asked. No such time limit applies to a secured lender dealing with a debtor in default. The debtor has title to the asset for its full useful life. The lender can recover possession only by securing a judgment that the debtor is in default and then using appropriate means to force a sale of the asset. The automatic recovery of possession based on the expiration of the lease term is particularly useful in the context of high-risk residential leases, which are often month-to-month. Here the maximum waiting time to regain possession is roughly 30 days.

Another source of the lessor's advantage in regaining possession from defaulting lessees is based on social norms and legal conventions that make it easier to recover possession from lessees than from owners in default on loans. As a generalization around the world, it appears that lessors can recover leased property more easily than mortgagees can foreclose on mortgages. This is probably due, in significant part, to the intuition that the lessor is "the owner" of the property, and hence is entitled to get it back when the lease term ends or the lessee defaults.[44]

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[43] See Benjamin et al., supra, at 226 (noting that "if lessees generally lack access to capital because of credit risk, then property managers' optimal behavior will most likely assess and incorporate this risk into the lease terms.").

[44] Admittedly there is national variation here. Landlord-tenant law in France, for example, makes it very costly for landlords to evict tenants either for nonpayment of rent or for holding over at the end of a lease term. Robert Ellickson, "Legal Constraints on Household Moves: Should Footloose Americans Envy the Rooted French." Paper presented at Notre Dame Law Law and Economic Symposium, 18-20 (September 17, 2010). Available at http://www3.nd.edu/~ndlaw/conferences/lawecon/Ellickson.pdf . Similar laws

With respect to real property in the U.S., leasing has a clear comparative advantage over mortgage lending in this respect. Foreclosure of mortgages is encrusted with all sorts of legal constraints, such as mandatory notices, hearing requirements, fiduciary duties in conducting sales, and redemption rights.[45] All of which greatly depresses the value of the collateral in the event of default, by some estimates as much as forty percent of the original loan amount.[46]

In contrast, when a lessee defaults on payment of rent for real property, the lessor can typically declare a forfeiture of the lease.[47] Lessors can then either use self-help to regain possession (e.g., change the locks) or can obtain a forcible entry and detainer judgment followed by an eviction carried out by the sheriff's office. Thus, the lease includes a built-in security device in the form of forfeiture of the property for nonpayment of the rent,which is likely to be quicker and cheaper than foreclosure of a mortgage.[48]

The advantage of leasing in recovering possession may not be as great in the case of movable property. This is because the Uniform Commercial Code, in effect in 49 states, permits self-help repossession of personal property subject to a security interest, provided it can be done "without breach of the peace."[49] If the jurisdiction adopts a broad definition of peaceable repossession, the cost of recovering personal property used as security for a loan is likely to be similar to the cost of recovering personal property which has been leased.

A third advantage involves the relative position of the lessor and the holder of a security interest when the defaulting holder of the asset is insolvent, as will commonly be the case.

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could be adopted in other countries, or could spread to other markets where leasing is used, such as commercial real estate, autos, and business equipment. Adoption of costly eviction or repossession laws would reduce the cost advantage to lessors of using leases as a form of security for payment.

[45] Committee on Mortgage Law and Practice, Cost and Time Factors in Foreclosure of Mortgages, Real Property, Probate and Trust Journal, 3 (1968); Grant Nelson and Dale Whitman, Reforming Foreclosure: The Uniform Nonjudicial Foreclosure Act, Duke L. J. 53 (2004); David Madway and Daniel Pearlman, Mortgage Forms and Foreclosure Practices: Time for Reform, Real Property, Probate and Trust Journal, 9 (1974); Alex Johnson, Jr., Critiquing the Foreclosure Process: An Economic Approach Based on the Paradigmatic Norms of Bankruptcy, Virginia L. Rev. 79 (1993).

[46] Ronald Mann, Cases and Materials on Commercial Finance 80 (Foundation Press 2017).

[47] Milton R. Friedman, Friedman on Leases 16-13 (5th ed. 2016); American Law of Landlord and Lease, 2017 Cumulative Supplement 428 (2017); Robert S. Schoshinski, American Law of Landlord and Tenant 377 (1980).

[49] U.C.C. §9-609(b). See, g.g., Williams v. Ford Motor Credit Company, 674 F.2d 717 (1982). See also, Ryan McRobert, Defining "Breach of the Peace" in Self-Help Repossessions, 87 Wash. L. Rev. 569 (2012). Henry Smith, Self-Help and the Nature of Property, 1 J.L. Econ. & Pol'y 69 (2005); Jean Braucher, The Repo Code: a Study of Adjustment to Uncertainty in Commercial Law, 75 Wash. U. L.Q. 549 (1997).

Under U.S. Bankruptcy law, an insolvent lessee must make an election relative soon after filing for bankruptcy either to confirm or reject the lease.[50] If the lessee elects to confirm the lease, then all payments in default must be corrected and the lessee must agree to comply with all existing terms of the lease going forward. In effect, the lessor gets a super-priority relative to other creditors, and is immune from taking any kind of haircut. If the lessee elects to reject the lease, then the asset can be immediately recovered by the lessor without regard to the remaining term of the lease, which allows the lessor to re-lease to another party. This may entail some downtime in which the asset remains idle, but the deadweight loss is usually less than that experienced by holders of security interests, who are subject to an automatic stay in seeking to force a sale of the asset to cover the debt.

In addition, a lender who holds a security interest in property owned by an insolvent purchaser has a priority over unsecured creditors only to the extent that the property equals or exceeds the value of the debt. If any portion of the property is underwater, it is an unsecured claim. Moreover, if the court concludes that the asset is important to a reorganization of the debtor, the lender may be forced to take cash or other property deemed to be of equivalent value to the security interest, which subjects the lender to valuation risk. Overall, secured lenders recover only about 92 cents on the dollar when the debtor declares bankruptcy. This explains the extensive caselaw in which secured lenders seek to recharacterize their interests as leases. Lessors enjoy better security relative to holders of secured debt.

4. Summary

In sum, lessees may prefer leases as a financing device because they cost less than purchasing an asset. This is primarily a function of the fact that one gets less with a lease: one gets only a fraction of the useful life of the asset. Lessors may prefer leases as a financing device because they provide greater security in the event of default.

There is clearly an interaction between the advantages to lessees – lower monthly charges – and the advantage to lessors – greater security in the event of default. If security to the lessor were to deteriorate, perhaps to the level associated with security interests, then it is reasonable to assume that lessors would respond by requiring higher monthly rental charges, or at the very least would become more picky about those to whom they agree to lease. Conversely, if lessors continue to have a more security relative to secured lenders, it is reasonable to assume that, at least in a competitive market, these cost savings will be passed on, at least in part, to lessees in the form of lower rents, or at least less strenuous screening by lessors.

[50] Daniel Hemel, The Economic Logic of the Lease/Loan Distinction in Bankruptcy, 120 Yale L. J. 1492 (2011); Dicker & Campo, supra. English law appears to be similar. See Nigel Furey, Goods Leasing and Insolvency 787, in Interests in Goods (Norman Palmer & Ewan McKendrick eds. 2d ed. 1998).

The irrelevance theorem is valuable in highlighting the function of leases as a financing device. It also highlights the role of tax law in influencing the lease or purchase decision, at least by business firms with ready access to capital markets. However, by relaxing the theorem's assumptions – especially the assumptions that all parties have access to perfect capital markets, the transaction costs of acquiring and disposing of assets are zero, and there is no risk of default – we obtain a much better picture of the economic role of leasing as a financing device. Leasing will be the preferred means of financing the acquisition of assets by persons who are constained in their access to capital markets, and/or who present a material risk of default.

B. Leases as a Risk Management Device

A second function of leases is to manage risk. Leasing can be used to reduce certain risks associated with owning assets, but it also creates risks relative to ownership. This Section will first consider how leasing can be used as a tool by both lessors and lessees to reduce the risk associated with ownership of assets. It will then discuss some of the devices that can be used to mitigate the risks created by leasing itself.

1. How Leases Can Reduce the Risks of Ownership.

Leases are used by both lessors and lessees to reduce the risks associated with ownership of assets. For lessors, an important feature of leases is that they transfer the residual rights associated with an asset from the lessor to the lessee for the duration of the lease.[51] This was perceived by courts as early as the foundational case of *Paradine v. Jane*.[52] The lessee captures the upside gains associated with the assset – high crop prices, increased demand for the output of a machine, the rising value of occupancy of an apartment due to a housing shortage. At the same time, the lessee suffers the downside risks – crop failure, technological obsolescence, the falling value of occupancy due a glut of new construction. The lessor, in contrast, converts its interest in the asset, at least for the duration of the lease, into a fixed return in the form of periodic payments of rent. A close analogy is to the bondholders and stockholders of a firm. The lessor, analogous to the bondholders, is promised a fixed return, subject to the risk of default. The lessee, like the stockholders, adsorbs the residual profits and losses after satisfying the obligation to pay rent.

The transfer of residual rights to the lessee is a universal feature of all leases, and follows from the transfer of possession and use of the asset to the lessee for the duration of the lease. As a rule, the party who has possession and use of an asset enjoys the accessionary rights associated

[51] On the concept of residual rights, see generally Yoram Barzel, Economic Analysis of Property Rights (1997).

[52] 82 Eng. Rep. 897 (K.B. 1647). The court observed: "[A]s the lessee is to have the advantage of casual profits, so he must run the hazard of casual losses[.]"

with the asset.[53] Accessionary rights are the rights to capture derivative assets or values closely associated with some more prominent asset.[54] A paradigmatic example is the right of a person who has possession of land to plant and harvest crops that grow on the land. The allocation of residual rights to the lessee applies to every lease and rental contract, no matter how short its duration. Suppose you reserve the rental of a convertible from Hertz for one day. If the chosen day turns out to be sunny and mild, perfect for riding around in a convertible, you capture the added value of having possession and use of a convertible for one day. If the day turns out to be rainy and miserable, you suffer the loss of having a convertible for a day when it is of no additional value.

As should be obvious, the party who holds the residual rights bears more risk than the party who has converted its interest into a stream of fixed payments.[55] Thus, a primary stratregy for the owner of an asset who wants to eliminate or reduce the residual risks associated with ownership is to lease the asset. This is why entities that need to generate a stable and secure flow of funds, such as insurance companies and pension funds, often invest in commercial real estate which is leased.

For lessees, leases reduce the risk of holding assets for the full length of their useful life. One source of risk associated with ownership can be called experiential risk. Consumers in search of housing may be uncertain about whether a particular type of house or apartment will fit their lifestyle. Those in search of an auto may not know which model is right. Similar concerns apply to businesses contemplating the acquisition of various assets that serve as inputs to their operations, whether it be kitchen equipment for a restaurant, computer equipment for a bank, or warehouse space to reduce distribution bottlenecks. The critical feature of leases that serves to minimize these sorts of experiental risk is the finite term of the lease, always less than the useful life of the asset. The ability to lease for a comparatively short period of time may provide information about the type of asset in question that resolves these uncertainties.

[53] There are exceptions, such as the assignment of residual righs to the buyer rather than the seller under the doctrine of equitable conversion, even though the seller, rather than the buyer, has possession.

[54] Thomas W. Merrill, Accession and Original Ownership, 1 J. Legal Anlysis 459, 495-96 (2009) (explaining how residual rights can be derived from the general principle of accession).

[55] The lessee's status as residual claimant is usually most significant in long-term leases of commercial property, where market conditions are apt to change in ways that affect the value of the asset. When the asset has a market value higher than the rent reflected in the original lease, it is said to have a "bonus value." When the asset has a market value lower than the rent reflected in the lease, it is said to have (somewhat oxymoronically) a "negative bonus value." Leases with a large bonus value create an incentive for the lessee to transfer the lease in order to capture the bonus. Leases with a negative bonus value create an incentive for the lessee to default.

There may be other, more particular reasons for wanting to minimize the experiential risk associated with ownership of real property. Someone who has just moved to a community, or is starting a business in a new community, may not know whether they will want to stay for an extended period of time. Leasing offers a way to test the waters, and then decide, after acquiring more information about the community, whether to stay or move on.

In theory, these kinds of experiential risk can be reduced by purchasing the asset and then selling it if it proves unsatisfactory. But the transaction costs of purchasing and selling are nearly always higher than the transaction costs of leasing and not renewing. This is indubitably true with respect to real property, given the substantial costs assocated with purchases of real estate, including contract negotiation, credit qualification, title searches, and physical inspection. It is also usually true in the personal property context, given the economies of scale and expertise that leasing companies enjoy in re-leasing or selling previously-leased assets.

A related set of risks concerns the quality of assets. A consumer eager to acquire a new car that lacks a track record for frequency of repairs may not want to risk buying a car that may turn out to be a lemon. One solution is to lease with an option to buy – a feature universally provided with consumer auto leases. If the auto proves to be largely free of repair costs and is otherwise satisfactory, the consumer can exercise the option and buy it at the end of the lease. If the experience is negative, the car can be turned in at the end of the lease.

A special type of quality risk is the risk of technological obsolescence. Autos are currently undergoing rapid innovations in safety equipment, associated with the use of advanced sensory devices and computers, allowing autos automatically to brake for unseen objects, control drifting out of lanes, warn of potential impediments in backing up, and so forth. Fully autonomous driving is widely predicted to be only a few years away. In this context, it may make sense to lease a car rather than invest in ownership of a vehicle that may soon be outmoded. Businesses have for many years faced similar risks in acquiring computers, servers, and similar types of office equipment. Leases assure that the equipment can be upgraded when the lease term ends; purchasing may mean that the equipment must be held beyond the point when it represents state-of-the-art technology. And once it is obsolete, business equipment will have little resale value. Of course, if the lessee avoids the risk of technological obsolescence, this risk must be borne by the lessor. But the lessor, assuming it specializes in leasing the equipment in question, may be in a better position to assess this risk. Also, the lessor may be able to diversify against this risk by leasing a variety of types of vehicles or equipment.

With respect to real property, whether residential or commercial, another source of risk is changed conditions. Real property is immovable, but the community around it does not stand still. The value of the property is likely to change over time based on factors largely outside the owner's control, such as changes in local demographics, zoning or other land use regulations, the condition of local infrastructure, local crime rates, and other ineffable factors that make an area "trendy" or "passe."[56] For many households and small businesses, ownership of real property where they live or conduct their business will represent a very high degree of nondiversified risk.[57] The risk of a decline in the value of this asset due to a decline in the quality of the neighborhood will not be offset by other assets exposed to different risks.[58] A more rational investment strategy, for either a household or a small business, is to lease real property, and invest the money saved in a more diverse portfolio of assets.

Given all these risk factors, we can see more generally how variability in the duration of leases can be use to enhance the welfare of lessees. We can frame the point in terms of the literature celebrating the rise of the "access" or "sharing" economy.[59] Sometimes this literature draws a contrast between acquiring the use of an asset on a very short term basis, such as renting an auto from Zip-car or acquiring a tool from a tool-sharing library, and owning an auto or a tool. Sometimes the contrast is drawn between obtaining services, such as transportation provided by Uber or storing digital records on the cloud, and purchasing assets that provide such services.[60] Either way, the literature constructs a sharp dichotomy between very short term, primarily contractual relationships, and full ownership, characterized by the obligation to hold an asset for its entire useful life.

When we add leasing to the mix, we see that the dichotomy is overdrawn, and that in reality people have a continuum or spectrum of options, of which the access economy and ownership are the polar extremes. Leasing spans the gap between the short term rental or services contract and ownership of assets for a potentially infinite time. This is of particular advantage to lessees, as it allows them to strike a preferred balance between flexibility and stability, experimentation and security.

2. Mitigating Risks Created by Leasing

Although leases perform valuable functions in reducing the risks associated with ownership of assets, they also create risks. Lessors face the risk of lessees failing to pay rent or engaging in misconduct that damages the asset or alienates other lessees. Lessees face the risk of lessors interfering with their possession and use of the asset, perhaps by selling the reversion to a third party. Another source of risk is created by the very division of rights between the lessor

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[56] Cf. Benjamin et al., supra at 229.

[57] William A. Fischel, The Homevoter Hypothesis: How Home Values Influence Local Government Taxation, School Finance, and Land-Use Policies (2001).

[58] Of course, many households are in exactly this position – they have stretched to purchase a house or condominium unit which represents an outsized portion of their net worth.

[59] See, e.g., Shelly Kreiczer-Levy, Share, Own, Access, Yale L. & Pol'y Rev. 156 (2017).

[60] Tien Tzuo, Subscribed (2018).

and lessee. The lessee has present possession and use of the asset; the lessor has the reversion, meaning it will obtain possession and use after the lease has ended. This division of rights creates a risk of opportunism on both sides. Lessors will worry that lessees will excessively depreciate the asset, either by overusing it or failing to maintain it, thereby impairing the value of the lessor's reversion. Lessees will worry that the lessor will shirk on promises to provide services provided in conjunction with the lease, in order to minimize expenses and maximize its return from the stream of rents.

Before considering some specific ways in which leases can be adjusted to reduce the risks associated with leasing, it is appropriate to offer a more general obsevation about how the relational exchange feature of leases works to suppress opportunistic behavior on both sides. As long as the lease remains in effect, the relationship between the parties closely resembles the type of repeated game that has been shown to create a high probability of cooperative behavior between participants in game-theoretic experiments.[61] For each period, the lessee expects to enjoy the possession and use of the asset along with any services promised by the lessor. The lessor expects the lessee to pay the rent, and to adhere to any obligations of behavior and maintenance designed to preserve the value of the reversion. If the lessor performs its obligations, the lessee will pay the rent. If the lessee pays the rent, the lessor will perform its obligations. Both parties face a risk of defection by the other. But as long as the value of the relational exchange remains positive on both sides, potential conflicts as they arise they will ordinarily be managed. The party confronted with a risk of misconduct will likely raise the issue with the other, and some kind of accommodation will be agreed upon. This explains why it is very difficult to find litigated decisions involving disputes between lessors and lessees while the lease remains in effect. Nearly all disputes arise in end periods, either at the beginning of the lease or, more commonly, at the end.

The reduction in opportunistic behavior achieved through the relational exchange feature of leases is subject to three qualifications. First, the lease must have more than a minimal duration in order to achieve the repeated-game constraint. A one-shot short term rental will not achieve this effect. Second, regulatory interventions that severely constrain the ability or willingness of the parties to exit from the relationship – such as those that emerge from rent control regimes – may prevent mutual reciprocity from emerging or being sustained. Third, the relational feature will largely work to resolve minor risks or irritations, or prevent them from escalating into major ones. If the lessee is late in paying rent in one or more periods, or the lessor fails to fire up the furnace before the cold weather sets in, the aggrieved party will likely complain to the other, and this will often result in a resolution of the issue. But if the lessee goes bankrupt, or the lessor dies and is replaced by indifferent heirs, relational exchange will likely break down. These sorts of major risks must be managed using other mechanisms.

[61] See Robert Alexrod, The Evolution of Cooperation (1984).

In considering more particularly how leases can be structured to minimize risk, we begin with the lessor, since the lessor is the one who will chose to hold an asset in the form of a lease rather than full ownership. Here, the most prominent source of risk is lessee misconduct, including both nonpayment of rent as well as misconduct that alienates other lessees. Economists have given special attention to a third form of misconduct described as a moral hazard created by the finite duration of leases, namely that the lessee has an incentive to overuse the asset or shirk on maintenance insofar as the costs of this behavior will be borne by the lessor in the form of reduced value of the reversion.[62]

One familiar device for dealing with the risk of lessee misconduct is the security deposit. This is not an advance payment of rent but a sum of money that can be used if the lessee defaults on payment of rent or otherwise abuses the asset. If the lessee complies with all obligations under the lease, the security deposit must be returned at the end of the lease; otherwise it is forfeited to the lessor as (partial) compensation for its losses. The prospect of losing the deposit undoubtedly serves to deter lessee misconduct.

Another feature of leasing that helps reduce the risk of lessee misconduct is the ability to vary the lease term. If the lessee is perceived as to be high risk, either for default or for other bad behavior, the lessor can start with a short term lease, such as a month-to-month tenancy. This both limits the lessor's exposure to risk and allows for nonrenewal if the risk materializes. If the risk does not materialize, i.e., the lessee turns out to be reliable and responsible, the lease can be rolled over or extended for a longer term. The adjustments in response to lessee misconduct are not limited to renew or not renew. At least in the context of real property leases, it is common practice for landlords to freeze or moderate rent increases for good tenants, in the hope of inducing them to renew. Tenants who have to be hounded for payment or who engage in behavior irritating to other tenants can be subjected to larger rent increases as a condition for renewal. In general, one can see the short term renewable lease as a kind of Baysean device that allows the lessor to adjust lease terms as information accumulates about the behavior of the lessee. As such, it serves as an effective device for limiting the risk from lessee misconduct.

Another way to minimize the risk of lessee misconduct is through diversification. Here scale economies are critical. A landlord who owns a four-unit apartment building faces greater risk from tenant misconduct than does a lessor who owns an eight-unit building, who in turns faces more risk than the owner of a sixteen-unit building, and so on. The larger the number of units, the less financial harm will be incurred if one or a small number of tenants default or engage in other forms of misconduct. Similar points apply to equipment leasing. The logic of reducing risk through diversification suggests that large scale leasing companies will enjoy an

[62] See, e.g., J.V. Henderson and Y.M. Ioannides, A Model of Housing Tenure Choice, 73 Am. Econ. Rev. 98 (1983).

inherent advantage over mom and pop operations. There is some empirical evidence backing this up.[63]

Not only does leasing help to minimize risk of misconduct as experienced by the lessor, it also helps reduce the risk to other lessees. This is because the lessor largely internalizes the costs of lessee misconduct, given the lessor's desire to maintain the good will of other lessees and to preserve the value of the reversion.[64] If the lessee engages in misconduct that results in irritation to other lessees, the lessor will bear some of the costs, in terms of higher vacancy rates and resistance to rent increases from other lessees. In contrast, the seller of an asset, such as a real estate developer, typically externalizes the risk of misconduct to others, such as other unit owners, who may be forced to pay increased assessments to cover a unit owner's default or damage. Thus, leasing creates superior incentives to control these risks.

If the primary risk is the moral hazard of lessee overuse of the asset or poor maintenance, the optimal strategy may for the lessor to insist on a relatively long-term lease. The rationale here would be that if the lessee will hold the assert for a significant period of time, the lessee will be the one who suffers, at least to a significant degree, from overuse and improper maintenance of the asset. Obviously, one cannot simultaneously minimize the risk of default by using short term leases and minimize the risk of abuse or poor maintenance by using long term leases. What one would expect, and what we generally find, is that lessors adjust the duration of leases in response to what they perceive to be the primary risk in the relevant market. With respect to leases to low-income residential tenants, the primary risk is default, and very short, month-to-month tenancies predominate. With respect to leases in commercial office buildings where the tenants are law firms, accounting firms, advertising agencies, and so forth, the risk of default is less salient, and the concern about moral hazard comes to the fore. Here long term leases in the range of ten years or so predominate.

Another device for controlling moral hazard is to grant the lessee an option to purchase at the end of the lease. Even if the lessee is unlikely to exercise the option, the value of the option will be directly affected by the lessee's upkeep of the asset during the duration of the lease. Thus, if the lessee harbors even a remote thought that it will exercise the option, it will have an incentive to avoid excessive depreciation of the asset. Without regard to whether the lessee exercises an option to purchase, leases of motor vehicles and trailers commonly include a "terminal rental adjustment clause" or TRAC which permits the lessor to impose an adjustment payment at the

[63] Benjamin et al., supra at 228 (noting higher rate of growth by large-scale real estate leasing companies relative to small-scale companies).

[64] See Hemel, supra (noting that the holder of a security interest will be concerned with insolvency risk but a lessor will be concerned with all factors that threaten the value of the residual).

end of the lease if the value of the vehicle falls below some predetermined amount.[65] This too is obviously designed to deter or at least compensate the lessor for over-depreciation of the asset.

A primary source of risk to lessees is lessor misconduct. This can take the form of insufficient investment in common facilities, poor maintenance (if the lessor has maintenance obligations), or failure to provide inputs like utilities if promised in the lease. One way to minimize these risks, at least in the commercial leasing context, is the percentage lease. Under such a lease, the lessee typically pays rent in a fixed base amount and in addition pays a percentage of revenues or profits. A percentage lease effectively transfers a portion of the residual rights ordinarily assigned to the lessee to the lessor. This reduces the risk to the lessee of bearing the residual rights. A percentage lease also creates an incentive for the lessor to fulfill obligations important to the success of the lessee's endeavor. The more successful the lessee, the higher the rental income of the lessor pursuant to the percentage formula.[66] A somewhat analogous device found in the agriculture context is the sharecropping lease. This provides that the sole rental obligation of the tenant is to share the output of the farm in some percentage, such as 50-50.[67] This minimizes the risk to the tenant of a bad harvest, which is often a function of weather and other factors outside the tenant's control.[68] If the landlord has obligations under the lease such as providing seed and fertilizer, the sharecropping lease also minimizes the risk of landlord misconduct.

C.Leases as a Collective Action Device

A third function of leases is to overcome collective action problems that would otherwise preclude owners of assets from entrering into value-maximizing contracts. In effect, the lessor serves as the collective agent of the lessees to provide localized public goods that the lessees would have great difficulty providing by contract if the assets were independently owned. Here, as is often the case in considering economic institutions, transaction costs are the key.

1. Specialization of Functions.

One way in which leases overcome collective action problems is by creating a specialization of functions between the lessor and the lessees. This is made possible by the fact that leasing entails a division of rights. The lessee has possession and use of the asset for a limited duration;

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[65] Federal tax law specifically provides that TRAC penalities do not disquality a transaction from being regarded as a true lease. See 26 U.S.C. § 7701(h).

[66] The use of percentage leases cannot be explained in terms of creating incentives for the lessee, since the percentage device *reduces* the incentive of the lessee to maximize output, relative to the effect of a fixed rental obligation.

[67] See Steven N.S. Cheung, The Theory of Share Tenancy (1969).

[68] Douglas W. Allen and Dean Lueck, The Nature of the Farm, 41 J. L. & Econ. 343 (1998).

the lessor holds the reversion and the right to receive periodic rent as long as the lessee remains in possession. If the lessor held nothing but a reversion this might not be enough to support a specialization of functions. But the combination of the reversion and the lessor's right to receive periodic rents means that the lessor will invariably have an active, ongoing interest in how the lessee is behaving with respect to the asset. The lessor has both a future interest in the asset but also a kind of present interest (receiving rent). This division of rights allows leasing to be structured so that the lessor specializes in certain functions, and the lessee specializes in other functions.

As in other contexts, specialization of functions is often value-enhancing. One party can concentrate on certain functions with respect to an asset as to which it has particular expertise or informational advantages; the other party can focus on other functions where it has advantages. The result is that the asset is more valuable than it would be if either party held it in full ownership. An alternative to leasing is to contract with agents to achieve a specialization of functions. But this gives rise to familiar principle-agent problems, and there are reasons to believe that in many contexts a division of control through leasing provides better incentives for achieving value-maximizing specialization.

As an illustration of the way leasing is used to achieve a specialization of functions consider shopping centers. Whether we are speaking of mega-malls or strip malls, shopping centers are almost universally organized by leasing. One party, the lessor, owns the land and building. Space in the building is leased to different retail establishments. This arrangement allows the lessor to specialize in a number of functions which are common to the complex as a whole. These include maintaining the overall structure of the building and parking lot, providing heat, air conditioning and other utilities to the building, insuring the building against loss, providing a security service to protect the complex against theft and vandalism, selecting tenants to ensure compatibility with other tenants, determining standard hours of operation to prevent consumer confusion, and selecting new tenants when existing tenants go out of business. Meanwhile, the interior spaces occupied by the lessees are subject to their individual discretion and control. They can decide (within limits) how much space to acquire, how to lay out the space, what kind of decorating they prefer, how much inventory to keep on hand, how many employees to hire, how to allocate assignments among the employees, and so forth.

There are many reasons to believe that this specialization of functions is value enhancing for both the lessor and the lessees, and probably for consumers as well. By concentrating control over common areas and collective governance in the lessor, leasing allows one party to develop expertise in these matters. If the lessor deals repeatedly with issues involving the parking lot or the heating plant, the lessor will gain superior knowledge about these matters relative to what any individual lessee would have. The individual unit owners could attempt collectively to perform the common functions, perhaps under a condominium structure or by contract with a managing agent. But any such effort would encounter collective action problems. Some unit owners might free ride on the efforts of others, others might holdout and refuse to contribute their share of common costs, still others might engage in opportunism in an attempt to resolve collective issues in their favor. By giving these common functions to the lessor, the lessor can resolve such issues as they arise, either by acting unilaterally as the exclusive owner of the common areas, or by including appropriate covenants in the individual space leases.[69]

As a rule, the lessor will not act like an oppressive autocrat in resolving these issues. The lessor's incentive is to manage the property in such a way as to maximize the net rental value of the shopping center. Ultimately, the net rental value will be maximized if the shopping center is maintained so as to keep a healthy flow of paying customers patronizing the retail shops, which means that the incentives of the lessor roughly align with the interest of the lessees – and with consumer welfare.

On the other side of the coin, the value of the shopping center is probably also enhanced by decentralizing control of the interior retail spaces to the individual lessees of those spaces. The issues here are the familiar ones of comparing the performance of small entrepreneurs or franchisees to vertically integrated corporations. The lessees, as independent firms, will likely be more responsive to consumer needs and preferences, will likely do a more effective job of hiring and supervising appropriate employees, and will likely generate more diversity and experimentation in offering different products and services to consumers. The history of the department store, which originally licensed departments to independent contractors and later integrated operations under hierarchical control, suggests that there is a tradeoff between the advantages of decentralized control and certain economies of scale. The rise of internet shopping sites like Amazon.com suggests similar tradeoffs. But the continued dominance of leasing as a form of organization of shopping centers indicates that specialization of functions between lessor and lessees continues to have inherent advantages in organizing retail enterprises.

It should be obvious that similar factors are at work in organizing commercial office space or apartment buildings and complexes. Apartment buildings are a particularly interesting case, given the rise of the condominium (and to a lesser extent cooperative apartments) as an alternative mode of organization. As Hansmann has emphasized, condominiums and cooperatives encounter collective action problems (similar to those mentioned in connection with shopping centers) that leasing avoids.[70] This makes it something of a puzzle as to why the condominium form continues to expand (although leasing continues to be the most common form of organizing apartment complexes). Hansmann argues that distortions introduced by tax law provide the best explanation. Another reason might be that some persons who prefer living in apartments want the security of longer duration tenancy, and landlords for reasons considered

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[69] See Benjamin et al., supra at 229 (noting that the lessor "serves as the equivalent of a 'homeowner's association' with the power to collect 'dues.'"); Hansmann, supra.

[70] Henry Hansmann, Condominium and Cooperative Housing: Transactional Efficiency, Tax Subsidies, and Tenure Choice, The Journal of Legal Studies 20, 34-36 (1991).

momentarily have been unwilling to offer residential tenants (unlike commercial tenants) long term leases.[71] Yet another explanation is that condominiums and cooperatives – because they require significant down payments as a condition of entry into the building – act as a de facto exclusionary device barring low income or low net worth households from the building.[72]

As these examples from the world of real property suggest, one important type of specialization that leasing permits is what can be called private land use regulation. A complex organized by leasing allows one party – the landlord – to regulate the appearance of the overall complex, the outward appearance of the individual possessory units, and to place controls on the uses to which the individual units may be put. This allows one entity to generate positive externalities (in terms of maintaining a pleasing appearance and various common facilities or spaces) and minimize negative externalities (incompatible land uses). Indeed, in Nineteenth Century England, before covenants running with the land were enforceable in equity,[73] large scale subdivision development was structured through long term leases, which permitted the landlord to enforce uniform appearance and control uses. Even today, it is common to see advertisements in London for sales of flats under 125-year or 99-year leases. More recently, both in the U.S. and England, subdivision controls have largely been maintained through covenants and zoning regulations. But as the shopping center and commercial office space examples show, leasing continues to perform the function of providing private land use regulation in many contexts.

Although less obvious, leasing also functions as a device for overcoming collective action problems in the personal property context. For instance, with respect to auto leases, the lessor will impose a variety of behavioral restraints on the lessee. The lessee must limit the miles the vehicle is driven or pay a penalty, maintain insurance coverage against loss, and comply with a schedule of regular maintenance, typically at facilities designated by the lessor. All of this is designed to maintain the residual value of the vehicle. But it also functions to generate a supply of high-quality (off lease) used cars, which enhances the profitability of dealers specializing in the brand by allowing them to make sales in a different segment of the market.[74]

[71] Commercial tenants commonly lease bare space, which must be fitted out with costly interior modifications and decoration. Incurring this investment functions as a kind of commitment device by commercial tenants, which gives lessors confidence the lessee will remain in place for the full lease term. Residential tenants typically do relatively little interior modification and decoration, which makes the costs of relocation lower, and eliminates the commitment device associated with commercial leases.

[72] Cf. Lior Strahilevitz, Exclusionary Amenities in Residential Communities, 92 Vir. L. Rev. 437 (2003).

[73] Tulk v. Moxhay, 2 Phillips 774, 41 Eng. Rep. 1143 (Chancery 1848).

[74] Igal Hendel and Allesandro Lizzeri, The Role of Leasing Under Adverse Selection, 110 J. Pol Econ. 113 (2002). The authors argue that auto companies set the price of the purchase option at a high level in

One type of specialization of functions which deserves special mention is specialization in disposing of assets that have not exhausted their full useful life.[75] Under a lease, the asset is returned to the lessor before the end of the useful life of the asset. This naturally assigns to the lessor the function of disposing of the asset, either by selling it or leasing it to someone else. A lessor who has some experience with the process – and large scale leasing companies will have a great deal of experience – will have a comparative advantage, relative to the lessee, in identifying and negotiating with potential transferees. This particular specialization of functions helps explain why landlords prefer short term leases for residential leases, since residential leases tend to turn over relatively frequently. This allows the landlord to use its superior knowledge and expertise in selecting new tenants, rather than delegating the transfer function to the lessee, through assignment or subletting. The lessee will typically have little experience with the process, and may select a substitute tenant who is a poor credit risk or who may otherwise pose a risk to the value to the reversion or to the welfare of other tenants.

Specialization in disposing of assets also helps explain the rapidly growing popularity of leasing autos. Some people prefer to hold autos until they are ready for the junkyard. But a large portion of the driving public wants to drive relatively new cars. If the only form of holding the asset were ownership, the owner would have to trade in the car when purchasing a new one, often at a significant discount to its market value, or would have to incur the transaction costs of selling the car him or herself. Leasing eliminates these costs, because the car is simply returned to the leasing company at the end of the lease, and the leasing company is responsible for disposing of it. Since the leasing company has a comparative advantage is disposing of used cars, this probably results in a better price on resale. In any event, it almost certainly saves on transaction costs.

One can go further, and can see that the specialization of functions that leasing makes possible can eliminate or at least reduce problems of asymmetric information than inhere in any sale of assets. This the "lemons" problem made famous by George Akerlof.[76] The problem is created by the fact that the seller nearly always has more information about the quality of the asset than the buyer, and the buyer may assume that the seller is trying to dump an asset of below-average quality. The result is that buyers systematically discount the price they are

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order to encourage most lessees to return the car at the end of the lease, which generates a large pool of high quality used cars for dealers to sell.

[75] Benjamin et al., supra at 227-28.

[76] George Ackerlof, The Market for Lemons: Quality Uncertainty and the Market Mechanism, 84 Q. J. Econ. 488 (1970). The use of leasing to solve lemons problems is noted by Benjamin, et al., supra at 232-33.

willing to pay for an asset relative to what they would pay if they could accurately ascertain the quality of the asset.

The market for used autos, where the term "lemon" originated, shows how leasing can be used to reduce the problem of asymmetric information. When an auto is leased, the lessor can impose restrictions on the lessee, such as the number of miles the vehicle can be driven, requirements of periodic maintenance, and so forth. On termination of the lease, the car can undergo a thorough inspection by a dealer, who then offers the car for sale with a "certification" of its quality, including an extended warranty. This process has yielded a large market for two-to-four-year-old "certified" used cars, nearly all previously leased, in which consumers can assume with some confidence they are not getting a lemon. Such cars sell for a premium relative to cars of similar make and model sold by individuals or independent used car lots, presumably at a price closer to the value based on the actual quality of the asset. Leasing can accomplish this because the lessor can impose behavioral restrictions on lessees and can use its high volume of after-lease vehicles to adopt a certification program. This is another example of the specialization of functions made possible by leasing.

As previously mentioned, leasing can also overcome the lemons problem through hire-purchase agreements. These allow the lessee to use the asset for a period of time, coupled with an option to purchase at the end of the lease term. If the lessee ascertains during the lease term that the asset is of high quality, or otherwise is well suited to the lessee's needs, the lessee can exercise the option and acquire the asset for its full useful life. If the lessee is dissatisfied with the asset, the lessee can simply turn the asset back to the lessor at the end of the lease term. Virtually all auto leases include an option to purchase the vehicle at its residual value at the end of the lease, which reflects another way in which leasing has been deployed in this market to help overcome the lemons problem.

In the market for real estate leases, the lemons problem is not limited to acquiring previously used assets, but also includes newly constructed space. The primary device for overcoming the lemons problem is through the reputation of the lessor. Lessors who develop favorable reputations presumably can lease and re-lease properties at higher rents than lessors with poor or unknown reputations. Lessors who have no reputation in the leasing market, such as individuals seeking to lease free-standing houses or condominiums, presumably fare less well, because of the lemons problem. All of which suggests that we should expect large-scale real estate leasing companies to flourish relative to small-fry leasing companies or individuals operating in the commercial real estate market. There is some data that backs this up.[77]

2. Complementarities Among Lessees

[77] See note x [60] supra.

Leases can also be used to overcome collective action problems in order to achieve complementarities among lessees. These are situations in which the presence of one lessee enhances the prospects of another lessee, in ways that would be very difficult to arrange by contracts among independent owners of assets.

A good example is provided by a classic California case, *Medico-Dental Building Co. v. Horton and Converse*.[78] The lessor owned a building in Los Angeles in which it leased space on multiple floors to various doctors and dentists. On the ground floor, it entered into a lease with Horton and Converse, a drug store. The lessor agreed to a covenant promising the drug store it would have the exclusive right to sell prescription drugs in the building. The various doctors and dentists who leased space on the upper floors executed covenants in which they agreed not to dispense prescription drugs. The exclusive dealing arrangement was clearly to the benefit of the drug store. In effect, it generated a captive market in the form of patients who had scripts written by doctors and dentists in the building, which the patients would fill at the drug store on their way out. But it was also to the benefit of the doctors and dentists, insofar as it added to the convenience of using medical professionals in the building. Thus, the leasing arrangement was designed to provide complementary benefits to both classes of lesssees. The case involved a conflict that arose when one of the doctors started a clinic that included prescription drugs as part of its services. The lessor attempted to resolve the dispute, but failed. This illustrates another role that lessors can provide in managing a complex of assets: the landlord is the logical mediator when disputes arise among different lessees.

The modern shopping center of course provides many examples of complementarity on a large scale. Anchor department stores draw many customers, speciality shops may entice a smaller number but different customers. Either class of customer may end up spending money in stores at which they did not originally intend to shop. Many shopping centers now have one or more higher end restaurants. Again, the restaurants may benefit from patronage by those who come to shop. But it is also undoubtedly the case that some who come for the restaurants stay to shop. The owners of shopping centers engage in extensive planning about the proper mix of stores and outlets in order to maximize sales (and thus rents). This form of carefully-crafted complementarity is made possible by leasing. Such complementarity would be nearly impossible to achieve by contract in a traditional downtown shopping area, with multiple buildings owned by different owners.

An empirical paper by Peter Pashigian and Eric Gould puts a price tag on complementarity in shopping centers.[79] They find that anchor stores in shopping centers pay on average 72 percent less in rent per square foot than do non-anchor stores. Their explanation is

[78] 132 P. 2d 457 (Cal. 1942).

[79] B. Peter Pashigan and Eric D. Gould, Internalizing Externalities: The Pricing of Space in Shopping Malls, 41 J. L. & Econ. 115 (1998).

that anchor stores drive customer traffic to shopping centers to a much greater extent than do non-anchor stores. They describe this as a positive externality for the non-anchor stores, which benefit from higher customer traffic than they would generate on their own.[80] A significant portion of the revenue earned by non-anchor stores is derived from the customer traffic generated by the anchor stores, which justifies the practice of charging the anchors proportionately lower, and the non-anchors proportionally higher, rents. This reveals a strong form of complementarity between different classes of lessees. Transaction costs would surely prohibit any kind of contractual arrangement among multiple stores under independent ownership to secure side payments for differential contributions to customer traffic.

A final example of using leases to achieve complementarity comes from the fast food industry. Fast food outlets are commonly franchises, and the success of the fanchisees may depend on the location of the outlets. Outlets must be carefully selected with a view to prospective customer traffic. It is also important that franchisees be spaced far enough apart that they do not cannibalize each other's potential sales. One way to assure desired locational decisions is for the franchising company to lease or sublease outlets to franchisees. Franchisees are likely to go along with such an arrangement, especially if the franchising company, because of its superior financial resources, can negotiate more favorable lease terms than the franchisee could obtain on its own.[81] Conceivably these objectives could be realized by negotiating appropriate restrictive covenants in each franchise agreement, but controlling locations through leasing may proceed with less friction and may allow for changes over time (e.g., recalibrating optimal locations and spacing of franchisees) at lower cost.

3. Redeployment of Assets

A third type of collective action problem that leasing can solve involves redeployment of assets from one firm to another within an industry. The oldest and most visible form of this, mentioned in Part I, is the longstanding practice in the railroad industry of allowing rail cars to be moved over the lines of different railroads, subject to a computerized program of per diem charges that nets out what is owed from different railroads to different car owners. This allows grain hopper cars to surge to the upper Midwest as corn, wheat, and soybeans are harvested and are ready for transport. And it allows tank cars to be rapidly redeployed between North Dakota and Texas as different oil and gas fields shift their rate of output. The end result is that swings in demand for rail cars can be handled with fewer total numbers of cars, an obvious efficiency.

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[80] I am not sure it is correct to call this is an "externality," since the differential contribution to customer traffic is captured in the differential lease rates. I think it more accurate to describe it as a complementarity.

[81] See, e.g., Jannotta v. Subway Sandwich Shops, Inc., 123 F.3d 503 (7th Cir. 1997) (describing the leasing practices of Doctors Associates, Inc., the parent company of the Subway Sandwich chain of franchises).

Reployment of assets may also explain the leasing policies of the United Shoe Machinery Company, which in the 1930s and 40s had a near-monopoly on machines used to manufacture shoes. The company refused to sell its most complicated machines, and required that they be leased for ten-year terms. The leases also provided that United Shoe would service the machines at no additional charge. The shoe manufacturing industry at that time was highly fragmented with hundreds of individual producers. The manufacturers specialized in different styles of shoes, and were subject to the vagaries of fashion from year-to-year. But the machines used to manufacture the shoes were largely interchangeable. The mandatory leasing policy was challenged on anti-trust grounds, the theory being that this was United Shoe's method of mataining its monopoly by preventing other firms from purchasing machines and entering into competition with United Shoe.[82]

My colleage Vic Goldberg has suggested that a better explanation for United Shoe's leasing policy relates to the high rate of failure in the shoe industry.[83] United Shoe's leases provided that the leases would be cancelled if the lessee became insolvent or filed for bankruptcy.[84] There was evidence that nearly 25 percent of the machines were returned within the first five years, and that 40-50 percent had been under lease for less than ten years. This suggests that United's policy of leasing and servicing machines was adopted to allow rapid redeployment of well-maintained machines form one manufacgturing firm to another. If shoe manufacturing firm A bet on the wrong style, and went out of business, United could repossess the well-maintained shoe machines and re-lease them to firm B, which had bet on the right style. The leasing policy resulted in a more efficient deployment of capital goods in a highly competitive and unstable industry than could have been achieved by contract.

A similar rationale helps explain the emergence of major aircraft leasing firms in the airline industry. Leasing took off in the U.S. airline industry after the enactment of the Airline Deregulation Act of 1978. The Act stimulated the entry of new discount carriers and led to the consolidation and eventual bankruptcy of many legacy carriers. Evidence suggests that leasing became widespread in this volatile environment because it allowed carriers to increase or reduce the size of their fleets more rapidly and at lower cost than would be possible if all aircraft were owned.[85] A study by Gavazza shows that leased aircraft are held by carriers for shorter durations than owned aircraft, fly more hours than owned aircraft, and have higher capacity utilization than owned aircraft. These findings suggest that commercial airlines use leasing to make marginal

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[82] United States v. United Shoe Machinery Corp., 110 F. Supp. 295 (D. Mass. 1953).

[83] Victor P. Goldberg, The United Shoe Machinery Leases (unpublished paper on file with author).

[84] 110 F. Supp. at 317.

[85] Allesandro Gavazza, Leasing and Secondary Markets: Theory and Evidence from Commercial Aircraft, 119 J. Pol. Econ. 325 (2011).

adjustments in fleet size as the volume of traffic swings up and down. Adjustments could also be made by negotiating individual purchases or sales of used aircraft with other carriers. But Gavazza also presents evidence indicating that large leasing companies perform this function more efficiently, both by holding an inventory of planes and because of their deep knowledge of the needs of all carriers operating in the market.

III. LEASE LAW

I turn now to a subject which has been almost entirely ignored in the economic literature on leasing and, surprisingly, has also largely been ignored in the legal literature, namely, the basic legal principles that govern leasing. Economists tend to assume that leases are simply bilateral contracts, and that they have no features that distinguish them from other bilateral contracts. Law professors tend to focus on leases of housing to low-income tenants to the exclusion of all else, and (at least until recently) have tended to advocate a "contractual" model for understanding such leases, as opposed to supposedly outmoded "property" model said to derive from feudalism. In fact, leases have certain defining features that distinguish them from other types of bilateral contracts, and they contain a mixture of contract and property elements. If we are to establish a basis for sensible policy interventions in leasing markets, it is important to start with an accurate conception of the legal features of leases.

My approach in this regard is to compare the law of real property leases and personal property leases in search of common elements. Real property leases are governed by a common law that has evolved over centuries. During the early stages of this development, the dominant type of lease was the lease of agricultural land, which infused this law with a strong property-like flavor.

Personal property leases have an odd legal pedigree. Before their recent rise as a widespread form of holding assets, personal property leases, to the extent courts and commetators paid them any attention, were regarded as bailments for hire. As discussed below, this classification was based on the proclivity of treatise writers to lump together all transfers of possession of personal property as a species of bailment. Whatever the motivation for the classification, assimilating personal property leases to the law of bailments gave them a very contractual flavor. More recently, personal property leasing has been the subject of comprehensive codification effort in the U.S.: Article 2A of the Uniform Commercial Code adopted in 1987.[86] While acknowledging that they were historically regarded as bailments for hire, the UCC codifiers constructed a law of personal property leasing that borrows primarily from Article 2 of the Code, dealing with sales of goods.[87] This also gives the personal property lease a more contractarian orientation than one

[86] All States other than Louisiana have adopted Article 2A.

[87] See Amelia H. Boss, The History of Article 2A: A Lesson for Practitioner and Scholar Alike, 39 Ala. L. Rev. 575, 600, 603 (1988) (noting that Article 2A copies many provisions of Article 2 "literally and

finds in the law of real property leases. With respect to identifying the defining features of leases, however, the codifiers also adopted intuitive notions of leases drawn from their experience with commercial practice. In this fashion, the provisions of Article 2A were brought somewhat more closely in line with the central principes of the common law with respect to real property leases.

A. Defining Features of a Lease

The central task here will be to identify the legal propositions that define something as being a lease. This is close to, but not quite the same, as talking about "mandatory" versus "default" rules in the manner of contemporary contract theory. What we are looking for are the features that cause an economic arrangement to be classified as a lease, which then brings to bear the law that pertains to leasing.[88] In other words, what are the characteristics that in law define something as a lease, as opposed to an installment sales contract, a life state, an easement, a license, a security interest, or a bailment for a specific purpose?

In synthesizing the law that applies to real property and personal property leases, three features emerge as the distinguishing features of a lease: (i) A lease lasts for a limited period of time; (ii) a lease contains a promise by the lessor not to interfere with the lessee's possession and use of the assert during this period of time; and (iii) a lease includes a promise by the lessee to give consideration to the lessor in return for this period of possession and use. I consider each of these features in turn.

1. Limited Duration

Leases always last for a limited period of time. With respect to real property leases, this follows from the permissible forms of such leases under the common law. At least in Anglo-American law, leases come in one of three forms: the term of years, the periodic lease, and the lease terminable at will.[89] The term of years is most commonly encountered and is effectively the only form found in leases of commercial property. The phrase term of years is a bit of a misnomer. It means effectively that the lease has a determinate time of termination. Thus, for example, a lease stated to terminate in 45 days is a term of years. More typically, a term of years

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slavishly" while at the same time it fails to address "some issues unique to leasing that do not have Article 2 analogues.").

[88] For example, if the conveyance is a lease, certain provisions such as the implied warranty of habitability may apply that would not apply to other forms of property. If it is a security interest or a mortgage, recordation or the filing of a finance statement may be required, which does not apply to leases. If it is a land sale contract, protections afforded to mortgagors may apply, which do not apply to lessees. And if it is an installment sale contract or so-called finance lease, usury laws may apply, which do not apply to leases.

[89] A fourth category – the tenancy at sufferance – applies to a tenant who holds over after a lease terminates. It is functionally the same as a tenancy at will.

would last for one year, or ten years, and so forth. A periodic lease is one that rolls over automatically for a given period, nearly always month-to-month or year-to-year, unless one of the parties gives notice of intent to terminate. It can be thought of as a term lease with a default provision for renewal for the same term. A lease terminable at will is one that can be terminated by either party at any time, and functions as a kind of residual category that applies if the lease fails to state a determinate time of termination or is not clearly periodic.

These categories are exhaustive. They represent an instantiation of the principle of the *numerus clausus*, meaning that the permissible forms of property are limited in number.[90] In Anglo-American law, the principle is enforced by construing all leases as falling into one or another of the three categories, as opposed to interpreting the agreement to create a new category or to represent a kind of individualized bilateral contract corresponding to no category. The key point for present purposes is that each form precludes the creation of a lease of potentially infinite duration. Leases last for a finite, delimited period of time. If one attempted to create a lease of infinite duration, the courts would hold that it was not a proper lease, and would construe it to be something else, such as a fee simple.

To be sure, the three categories permit a tremendous amount of variety in the duration of leases. They can be as short as one month or as long as 99 years (or longer). They can terminate on a fixed date or renew indefinitely until one party wants to stop. They can be made defeasible (i.e. can terminate prematurely) based on a variety of conditions, most notably failure to pay rent. All this is a matter of contractual agreement between the parties. Moreover, in economic terms a lease for 99 years or longer (which is permitted but rare) is scarcely any different than a conveyance for an infinite duration.

Insofar as personal property leases are conceived to be a bailment for hire, the law does not explicitly require that the transfer of the asset be for a limited time. As a matter of practice, such leases are always for a limited time, as is the case with bailments more generally. A bailment requires a division of rights in an asset between two parties – the bailor and the bailee. The bailor transfers possession of the asset to the bailee for a particular purpose or use, and when this purpose or use is accomplished the asset is returned to the bailor. Absent agreement to the contrary, the bailor is entitled to demand the return of the asset at any time. In this respect, a bailment resembles a tenancy at will. With respect to bailments for hire, the parties by contract will typically specify a time limit after which the asset must be returned to the bailor. Thus, whether by default or by contract, bailments for hire are always for a finite period of time, even if it is not legally required that they be for a limited period of time.

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[90] Thomas W. Merrill and Henry E. Smith, Optimal Standardization in the Law of Property: the Numerus Clausus Principle, 110 Yale L. J. 1 (2000).

For their part, the codifiers of the UCC defined a lease of personal property to be "a transfer of the right to possession and use of goods *for a term* in return for consideration."[91] Thus, the UCC, like the common law of real property leases, defines a lease as having a delimited duration. The phrase "for a term" presumably means that personal property leases are always what the common law of real property leases calls a term of years. Thus, the drafters appear to have ruled out either periodic leases or leases terminable at will. Another general definitional section spells out the difference between a lease and a security interest, a matter which had given rise to litigation under Article 9 of the UCC (dealing with security interests) and in bankruptcy proceedings. They key provision here is that a lease is a transfer of possession and use for a term which is *less than* the remaining useful life of the good.[92] Thus, a transfer of a good that requires periodic payments for the full useful life of the good will be classified as a security interest subject to Article 9. This provision goes beyond defining a personal property lease as having a limited term and makes it also explicit that the term of a lease is for a duration less than the useful life of the asset – something that is at best implicit in real property leases.

The commonality among the sources of lease law is that leases have a limited duration. The primary significance of this defining feature is that leases always create divided ownership. The lessee has the asset for the designated term; the lessor retains a residual interest called a reversion which is "left over" after the term ends.[93] The fact that leases create divided ownership, with the result that both parties have an active interest in the use of the property, is very important to the functional roles played by leases. Divided ownership is essential to the use of leases as a security device, as a risk minimization device, and as a device for achieving a specialization of functions, as discussed in Part II.

2. Quiet Enjoyment

A second defining feature of a lease is that it transfers possession and use of an asset from the lessor to the lessee for the term of the lease. With respect to leases of real property, this is reflected in the ancient understanding that every lease includes an implied covenant of quiet enjoyment running from the lessor to the lessee (sometimes called the covenant of quiet possession). The covenant is a promise that neither the lessor, nor anyone claiming under the authority of the the lessor, will interfere with the lessee's possession and use of the land for the

[91] UCC § 2A-103(j).

[92] See UCC § 1-203.

[93] See Hemel, supra, at 1498 ("Ultimately, what distinguishes a lease from a loan is that in a lease, the provider of funds (the lessor) retains a residual interest in the underlying asset *regardless* of whether the asset user (the lessee) remains solvent, whereas in a loan, the provider of funds (the creditor) has an interest in the underlying asset only if the user (the debtor) becomes insolvent.").

term of the lease. It dates from the Thirteenth Century, and continues today in both English and American common law.[94]

It is important to be clear about what the common law covenant of quiet enjoyment does and does not include. It is a promise that the lessor will not oust the lessee, retake the asset without the lessee's consent, encroach on part of the asset, or create a superior right in the asset in some third party before entering into the lease. It does not protect the lessee against ousters, takings, or encroachments by third parties not acting in concert with the lessor. Such third party interferences must be remedied by the lessee, not the lessor, by calling upon the criminal law or by using common law rights of action such as trespass and conversion.[95]

With respect to leases of personal property, the law is more uncertain. This is attributable to absence of direct judicial authority on the question. When we look to the treatises, we find that something closely analogous to the covenant of quiet enjoyment has long been recognized with respect to letting and hiring or bailments for hire. Story, in his influential treatise, stipulated that the letter (i.e., the lessor) "impliedly engages to allow the hirer the full use and enjoyment of the thing hired," with the result that if "a chattel is let, the resumption of the possession by the letter is a clear case of violation of duty."[96] Treatises following Story were even more explicit. Dobbie, for example, expressly analogized the hirer's "exclusive right[] to the use of the thing hired during the time of the bailment" to the covenant of quiet enjoyment.[97] Simiarly, Elliott wrote that in a bailment for hire "the bailee has the right to the exlusive use and control of the thing for the purpose for which it was hired, as against all the world, including the letter, or an attaching creditor of the letter, and this right is not lost by redelivery to the owner for a temporary purpose."[98] As we shall see, at least one contemporary English scholar denies that a

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[94] Charles Harpum et al., Megary & Wade's The Law of Real Property 735-36 (7th ed. 2008). For the early history, see A.W.B. Simpson, A History of the Land Law 71-77 (2d ed. 1986).

[95] There are, perhaps inevitably, borderline cases, such as whether the covenant of quiet enjoyment requires the lessor to evict holdover tenants or squatters before a lease commences. Jurisdictions are divided as to whether the covenant prohibits nonfeasance by the lessor in allowing these sorts of competing claims to complicate the lessee's right of possession.

[96] Joseph Story, Commetaries on the Law of Bailments 317, 318 (Edmund H. Bennett ed., 8th ed. 1870). Story was greatly influenced by the French scholar Robert Joseph Pothier, who wrote that the lessor "may not disturb the lessee's enjoyment during any portion of the period under the lease." Pothier's Treatise on the Contract of Letting and Hiring (Contrat de Louage) 35 (G.A. Mulligan trans. 1953) (orig. date?).

[97] Armistead M. Dobie, Handbook on the Law of Bailments and Carriers 104, 116 (1914).

[98] William F. Elliott, A Ttreatise on the Law of Bailments and Carriers 115-16 (William Hemingway revisor, 2d. ed. 1929).

"hire of goods" confers any "proprietary" interest on the hirer.[99] I consider below why I believe this characterization of the common law of personal property leasing to be wrong.

When we turn to the statutory version of personal property leases in Article 2A of the UCC, we find that a lease is defined as the transfer of "possession and use" of the assert for the term of the lease. Thus, the UCC expressly requires the transfer of both possession and use before something will be treated as a lease subject to Article 2A. If only possession is transferred, but not use, then presumably the conveyance should be treated as something other than a lease, such as a bailment for a specific purpose or a license. The new accounting rules adopted by the FASB are even clearer in this respect, defining leases an anarrangement that gives the lessee the right to *control the use* of the asset during the term. The lessee can have the right to control the use only if the lessor is precluded from interfering with the lessee's use.

We also find that the UCC recognizes the covenant of quiet enjoyment, which was the legal device the common law developed to recognize the transfer of possession and use in the context of real property leases. Thus, § 2A-211(1) contains a paraphrase of the covenant of quiet enjoyment, albeit one that is not especially elegantly drafted. It reads:

> There is in a lease contract a warranty that for the lease term no person holds a claim to or interest in the goods that arose from an act or omission of the lessor, other than a claim by way of infringement or the like, which will interfere with the lessee's enjoyment of its leasehold interest.[100]

The official comment makes clear that this language is intended to "reinstate" the covenant of quiet enjoyment with respect to leases, which had been abolished by Article 2 with respect to sales.[101] The comment, unfortunately, fails to offer a convincing explanation for why the covenant of quiet enjoyment is appropriate for leases but not for sales.[102]

By treating the covenant of quiet enjoyment as a warranty, the UCC makes the covenant waivable. One of the "general rules" that apply throughout the Code is that all provisions in the Code except a small subset "may be varied by agreement."[103] Article 2A nevertheless stipulates

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[99] See William Swaddling, The Proprietary Effect of a Hire of Goods 491, in Interests in Goods (Norman Palmer & Ewan McKendrick eds. 2d ed. 1998).

[100] UCC §2A-211(1).

[101] Official Comment to §2A-211, in Uniform Commercial Code 2014-15 Edition at 201.

[102] Also, there is no definition of "infringement" and no explanation for the clause excepting claims for infringement. Presumably this was designed to clarify that the lessee may be held liable for infringement of intellectual property rights that third parties may have in the leased goods.

[103] UCC Art. § 1-302(a). There is a short list nonwaivable provisions that may not be varied by agreement, consisting of "[t]he obligations of good faith, diligence, reasonableness, and care" prescribed

that the warranty of quiet enjoyment may be disclaimed only by conspicuous and specific language in writing. This moves the warranty up the scale to the status of a strong default rule rather than an ordinary default rule.[104]

In any event, we should perhaps not read too much into the decision of the drafters to treat the covenant of quiet enjoyment as a potentially waivable warranty, because the very definition of a lease requires that the conveyance be one that transfers the "possession and use" of the asset to the lessee for the term of the lease. If a lessor were to include appropriately conspicuous language in a conveyance waiving the "warranty" of quiet enjoyment, this would arguably disqualify the conveyance as being regarded as a lease, because it would no longer be the transfer of possession and use for the term of the lease.

The transfer of possession and use to the lessee for the term of the lease is obviously of fundamental importance to leasing as an economic institution. This feature is central to many of the functional attributes of leases discussed in Part II, such as the use of leases as a device for financing the acquisition of assets, the assignment of residual rights to the lessee, the ability to use leases to manage risk, and the use of leases to achieve a specialization of functions.

3. Consideration

The third defining feature of leases is the lessee must give consideration to the lessor in return for the transfer of prossession and use of the asset.

In the case of real property lease, the common law implied a covenant to pay rent in all leases. By the Seventeenth Century, it was settled that the lessee had "an absolute duty to pay rent."[105] This was conventionally expressed by the notion that the obligation to pay rent "arises out of the land."[106] The doctrinal explanation for requiring consideration may be that the lessor enforced the lease by bringing an action for debt, which came to require consideration.[107] There are a small number of English cases that enforce what appear to be gratuitous leases of land, but

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by the Code. Id. § 1-302(b). Conceivably, one could argue that an agreement waiving the lessor's covenant of quiet possession violates "good faith." But the more common assumption is that a code section would have to use the words "good faith" in order to qualify as nonwaivable, and the covenant of quiet possession in Article 2A does not contain the words "good faith."

[104] UCC Art. § 2A-214(4). Thee is no discussion in the Official Comment to either § 2A-211 or §2A-214 as to why the covenant of quiet possession was regarded as something that should be disclaimable.

[105] Simpson, supra, at 255,

[106] See, e.g., Smith v. McEnany, 48 N.E. 781 (Ma. 1897) (Holmes, J.).

[107] D.J. Ibbetson, A Historical Inroduction to the Law of Obligations ___ (1999).

highly exceptional cases do not define legal understanding.[108] In contemporary practice, leases are commercial instruments; they are not used to transfer wealth within families or to make charitable donations. As befits a commercial instrument, the lessor will invariably want to obtain a financial return in exchange for the transfer of possession and use of the asset, and that return always takes the form of rent.[109] If one were to transfer an asset for a limited time with an express provision that no payment of rent is required, the court would likely construe this to be something other than a lease, such as a license, a life estate, or an easement.

The obligation to pay rent is also implicit in the common law conception of personal property leases, insofar as they are regarded as bailments for hire. A bailment for hire is one in which the bailee give consideration to the bailor in return for the temporary use of the bailed object. Thus, to the extent it is accurate to characterize personal property leases as bailments for hire, they will always entail the requirement that the bailee pay the bailor, which would encompass the payment of rent.

For its part, the UCC's codified version of the personal property lease explicitly requires that the lessee pay for the rights obtained. The Code's definition of a lease, to repeat, is "a transfer of the right to possession and use of goods for a term *in return for consideration*."[110] Thus, gratitous leases are ruled out by the Code. The understanding that the lease is a commercial transaction is here made explicit. The FASB's definition of a lease also makes explicit that consideration is required.

C. Common Features that are Not Definitional

Two nearly-universal features of leases are omitted from the legally defining elements. One feature missing from the legal account is that the term of a lease is less than the expected useful life of the asset. The other is that the obligation to give consideration for a lease nearly always takes the form of periodic payments of rent as opposed to a lump sum payment. My view is that these features are not necessary elements of the legal definition, because commercial practice and mutual interest will lead the parties to adopt these features in nearly every lease, provided the legally defining elements are present. Which is not to say that it would be wrong or undesirable to add these elements to the existing legal definition.

1. Term Less Than Useful Life

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[108] Megarry and Wade, supra at ___.

[109] In contemporary English law, consideration is required, and "[t]he consideration for the grant of a lease is normally the payment of rent." Megarry & Wade, supra at 730. The authors nevertheless cite exceptional cases upholding leases providing for payment in bottles of wine, doing teamwork, or cleaning the parish church. Id. at 872.

[110] UCC § 2A-103(j) (emphasis added).

The common law of real property leasing requires that the lease have a limited duration, but does not require that the duration be for a term less than the useful life of the asset. In practice, as we have seen, leases of real property invariably are for a term less than the useful life of the asset, which creates a reversion in the lessor. If we assume that real property lasts for a potentially infinite time, then the requirement that a lease be for a limited time will inevitably result in its duration being for less than the useful life of the asset.

If we classify personal property leases as bailments for hire, there is also no legal requirement that they be for a term less than the useful life of the asset. Implicitly, however, this will always be the understanding of the parties. In contrast to sales or gifts, bailments are understood to be temporary transfers of personal property from bailors to bailees. The mutual intention of the parties is that at some point the bailee will return possession of the property to the bailor. This means that if the parties characterize the transfer of an asset as a type of bailment, they necessarily intend that the transfer will last for a period of time less than the useful life of the asset. Certainly this will be true in a bailment for hire, which is for consideration and requires a contract between the parties.[111]

Under the UCC, a personal property lease is expressly defined as an instrument that transfers possession and use of the assert for *less than* the remaining useful life of the good.[112] This was designed to distinguish a lease from a security interest, a major source of litigation that provided a significanat part of the motivation for adding a new article to the UCC devoted to personal property leases. So in the the U.S., where all jurisdictions except Louisiana have adopted article 2A, the definition of a personal property lease now specifically requires that the term be for a period less than the useful life of the asset. Since this is congruent with practice, and since the codifiers evidently concluded that this was the most parsimonious way to distinguish a lease from other interests (most prominently a security interest), such a statutory clarification seemingly would be helpful in the context of real property leases as well. For example, requiring that a lease of real property be for a term less than the useful life of the asset would serve to distinguish real property leases from installment sale contracts.

2. Periodic Payment of Rent

The defining elements of a lease require the payment of consideration but do not specify that the consideration must take the form of periodic payments of rent. As we have seen, the practice is nearly always that cash rent is paid periodically, typically monthly. Because the law

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[111] Bailment law also includes so-called involuntary bailments and constructive bailments, which are based on the assumption of temporary possession of personal property by someone other than its owner without the consent of the owner. Examples would include transfers of possession to a common carrier by mistake, or the taking up of possession of an object by a finder.

[112] See UCC § 1-203.

does not require this, it is legally permissible to pay the entire rental obligation in one lump sum payment up front, although this is almost never encountered.[113] The parties will nearly always agree that the consideration will take the form of periodic rent, and they do not need any legal compulsion to induce them to do so. This is primarily because of the function of leasing as a financing device. Just as most loans provide for periodic repayment of principal and interest, in recognition of the fact that the obligor would likely not seek to borrow funds if it had adequate cash on hand to make an outright purchase, so most persons who lease assets do so at least in part because they are capital or cash constrained in ways that make an outright purchase too costly.

The periodic nature of the rental obligation is a valuable feature of leasing as an institution, for several reasons. As noted, it is integral to the function of leasing as a financing device. It also allows the lessor to reduce risk by shifting the residual rights to an asset to the lessee for the term of the lease. Moreover, as we have seen, the periodic nature of the rental obligation creates a reciprocal relationship between the lessor and the lessee. And the lessor's interest in receiving a stream of periodic payments helps account for the lessor's engagement with the lessee's use of the asset, notwithstanding the transfer of possession and use to the lessee. Because the lessor will be anxious to preserve the stream of rental payments from the lessee, the lessor has an incentive (beyond that created by the desire to preserve the residual value of the asset) to constrain and monitor the behavior of the lessee.

D. Are Personal Property Leases a Type of Bailment?

In attempting to synthesize the major sources of law about the defining features of leases, it appears that the major point of tension is the conventional view at common law that personal property leases are a type of bailment, specifically, a bailment for hire. This characterization creates the risk, unless one attends carefully to the distinction between bailments for hire and other types of bailments, that personal property leases will be regarded as a purely contractual relationship that contains no protection of the lessee's right of use for the duration of the lease.

The short history of how the common law came to classify personal property leases as a type of bailment is as follows. Roman law, as codified by Justinian, included a number of discrete legal doctrines involving personal property. One of these was called *locatio-conductio*, which closely conforms to what today would be called a personal property lease. Roman law did not collect these personal property doctrines under any overarching heading, such as "bailments." The early English treatise writers, Glanville and Bracton, largely copied Roman

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[113] Magerry and Wade cite decisions upholding leases when the consideration takes the form of a lump sum payment or foregiveness of a debt. See supra at ___.

law in this respect.[114] The *locatio-conductio*, when translated into English, was called a "letting and hiring." It was regarded, as under Roman law, as a distinct type of legal relationship.

The first attempt in English law to gather the various categories of personal property relations under the unified heading of "bailment" appears to be Lord Holt's influential opinion in *Coggs v. Bernard*.[115] In an elaborate dictum discussing the appropriate standard of care of persons who have temporary possession of personal property, Lord Holt spoke of "six sorts of bailments." One of these was the category of goods "left with the bailee to be used by him for hire…called locatio et conductio." Holt cited Bracton, who in turn drew upon Justinian. But the decision to collect all these categories under the heading of "several sorts of bailments" appears to have originated with Holt.

The assimilation did not immediately take hold. Blackstone, writing later in the Eighteenth Century, treated bailments and letting and hiring as discrete types of personal property relations.[116] A few years later, this drew a rebuke form William Jones, in a short book on bailments.[117] Jones insisted that letting and hiring should be regarded as a species of bailment law. Jones, in turn, was heavily influenced by the French treatise writer Robert Pothier. Pothier, of course, also drew on Roman law, but in his re-formulation of that law he classified all forms of time-limited possession, including both real and personal property leases, as bailments. Jones acknowledged that this was not possible under the common law. Real property leases at common law had long been regarded as a discrete form of holding property. But Jones followed Pothier in lumping all forms of possessory interests in personal property under the unified heading of bailments. Story, in his far more comprehensive treatise on bailments published early in the Nineteenth Century, also took his cue from Pothier in this regard.[118] Letting and hiring, along with deposits, common carriage and other types time-limited possessory interests in personal property, was treated as a species of bailment. In later treatises, letting and hiring came to be called a "bailment for hire," fixing the categorization of this interest as a type of bailments by virtue of its very name.[119]

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[114] Ronulf de Glanville, The Treatise on the laws and customs of the realm of England 132 (G.D.G. Hall trans. 1965) (1189); [Bracton].

[115] 2 Lord Raym 909, 92 Eng. Rep. 107 (1703).

[116] 2 Blackstone *454.

[117] William Jones, An Essay on the Law of Bailments (1781).

[118] Joseph Story, Commentaries on the Law of Bailments [1832].

[119] Holmes, in his important chapter on the history of bailement law, wrote of "bailments in general," giving closer consideration only to the obligations of common carriers as a special case. See Oliver Wendell Holmes, The Common Law 151 (Mark DeWolfe Howe ed. 1963) [1881].

In theory, nomenclature should not matter, as long as the substantive rights and obligations of the parties are clearly viewed for what they are. In particular, as we have seen, a "letting and hiring" or "hire of goods" or "bailment for hire" has always been understood to entail the three legal elements that serve to define something as a lease: a limited period of time, the covenant of quiet enjoyment (or its equivalent), and the requirement of consideration.

Nevertheless, William Swaddling, an Oxford legal scholar, has argued that what English generally call the "hire of goods" should not be understood as having any "propriety effect."[120] By this he means that if a letter of personal property conveys his reversionary interest to a third party, the conveyance wipes out the hirer's right to possession and use of the goods in question. In other words, a bailment for hire does not "run" with asset hired, unless the original parties expressly contract for such a guarantee. The question whether bailments for hire do or do not have such propriety effect, according to Swaddling, remains an open one under English law.

Swaddling concedes that bailments for hire are closely analogous to real property leases, and that real property leases do have a proprietary effect, as defined. He also concedes that the bailee for hire, like bailees more generally, can enforce its possessory interest against interference by third parties. And he concedes that charter parties of vessels have been held by English courts to have propriety effect in the relevant sense. But he regards this as an idiosyncrasy of admiralty law.

Swaddling's primary argument for denying proprietary effect to bailments for hire is that this would be contrary to the *numerus clausus* – the understanding that the number of property forms is closed. He claims that if courts gave propriety effect to a bailment for hire this would constitute the judicial creation of a new form of property.[121] This, he argues, is an improper function for courts, and should be left to the legislature. I have no quarrel with the *numerus clausus* or the idea that the creation of new forms of property is better left to the legislature.[122] But this simply begs the question whether bailments for hire have hitherto been understood to lack the relevant propriety effect. As we have seen, letting and hiring has long been understood as entailing something like the covenant of quiet enjoyment that applies to leases of real property. The American treatises following Story have made this explicit. American courts have also protected the hirer (lessee) against claims by creditors of the letter (lessor). It would seem but a small step from such holdings to recognize that bailments for hire are binding on successors in interest to the lettor.

Although Swaddling does not argue that bailments for hire lack propriety effect because they are bailments, one cannot help but wonder if the conventional classification of "letting and

[120] See Swaddling, supra.

[121] See Swadling, supra.

[122] See Merrill and Smith, Optimal Standardization, supra.

hiring" as a species of bailment is not at some unstated level influencing the claim. The paradigmatic type of bailment in the contemporary world is a transfer of personal property for a specific purpose like repair, storage, or transportation. These sorts of bailments do not have proprietary effect. Absent some special contractual provision to the contrary, they can be terminated by the bailor for any reason at any time. Thus, if the object is sold while in the hands of the bailee, the new owner is free to terminate the bailment. There is a danger here of overgeneralizing from the proto-typical modern bailment to other relations that, based on the proclivities of earlier treatise writers, were in the distant past also given the label "bailment."

In any event, there is no good reason, based on the general *numerus clausus* principle, to classify letting and hiring as a type of bailment, as opposed to a type of lease. In terms of its general features and functions, letting and hiring shares all the salient legal features of real property leases. Letting and hiring transfers both possession and dicretionary use of the assert from the lettor to the hirer, letting is always for a limited time and nearly always for a time less than the useful life of the asset, and letting requires that the hirer give consideration to the lettor, nearly always in the form of periodic payments of rent. The paradigmatic modern bailment, in contrast, entails the transfer of possession but not discretionary use of the asset by the bailee, does not typically specify a limited time for the transfer of possession, and does not provide for periodic payments to the bailor during the time when possession is in the hands of the bailee. The contest for best fit is not even close.

The only possible reason why one would consider bailment law a better fit for letting and hiring than lease law is the unstated assumption that all property rights must fall either on one side of the wall or the real/personal divide: that the distinction is some kind of Chinese Wall that can never be breached. Historically, there may have been some basis for such an assumption. Real property enjoyed a superior social and economic status during the formative years of English law. Leases of land struggled to achieve recognition as a "tenement" or estate in land, and were never regarded as freehold interests. But at least they were land. Personal property had a secondary status, and many disputes over personalty were relegated to local manorial courts, rather than the royal courts. Leases of land were common by the Fourteenth Century, and gradually developed their own set of legal principles. Leases of personal property were uncommon before the modern era, and hence were largely ignored by common law lawyers and courts. Bailment law was somewhat better developed, in part because of borrowings from Roman law.[123] And so, when letting and hiring appeared irregularly on the scene, English lawyers, accustomed to observing different bodies of law for real and personal property, decided to categorize letting and hiring as something belonging to the separate sphere of personal property law, hence as a species of bailment.

[123] See Coggs v. Bernard, 92 Eng. Rep. 107 (K.B. 1703).

If not in the past, then certainly today there is little basis for maintaining a strict separation of real and personal property in law. There are many examples of property forms that straddle the real/personal line. Licenses are one. One can grant a license to access real property or to access personal property (or indeed intellectual property). Trusts are another. The corpus of a trust can consist of real property, personal property, intellectual property, or some mixture of any of the above. Whether one can use the estate system (life estates, remainders, etc.) to create different legal "estates" in personal property is somewhat unclear. What is clear is that one can use the estate system to describe different beneficial interests in trusts, including trusts composed entirely of personal property. The overlap is not limited to forms. Many limiting property doctrines also straddle the real/personal divide, such as the requirement of delivery for an enforceable transfer of property by gift or deed, the rule against restraints on alienation, and the Rule Against Perpetuities.

In short, one can be faithful to the *numerus clausus* and believe that it is entirely proper to recognize something called a lease of personal property that has the same proprietary effect as a lease of real property. I would go further, and maintain that Lord Holt and the treatise writers made a false move in assimilating letting and hiring to the law of bailments. Fortunately, the assimilation took place largely in commentary that did not affect the actual development of the law.[124] The actual decisional law, before the modern period with the explosive growth of personal property leases, is sufficiently undeveloped on this point that it's not too late to make a course correction, even without the benefit of legislative intervention like Article 2A.[125]

E. The Lease as Property

We are now in a position to pinpoint the aspect of leases that can be characterized as a property right.[126] The nub of the property right is the transfer of the right to use the asset from

[124] See F.H. Lawson and Bernard Rudden, The Law of Property 148 (2d ed. 1982) (characterizing personal property leases as bailments but observing that "the real or proprietary, as opposed to the contractual, aspect of bailment has been so little developed that quite a number of possible questions remain unanswered.").

[125] American courts often analyzed leases of personal property with reference to the principles of real property leases even before the enactment of the UCC Article 2A. See, e.g., Puritan Leasing Co. v. August, 546 P.2d 679 (Cal. 1976); Da Rocha v. Macomber, 116 N.E. 2d 139 (Ma. 1953). *Puritan* is especially interesting. Although the West headnotes are keyed to bailment law, there is not a word about bailments in the opinion, which draws freely from precedents under real property leases.

[126] This is not the place to enter into an extended discussion of the distinction between property and contract. Hansmann and Kraakman argue that the "property" label applies to legal principles that cannot be achieved by contract. [cite] An alternative understanding is that rules of property bind "all the world," as opposed to contractual obligations, which bind only the parties who have agreed to be bound. On either view, the defining features I have enumerated discussed here should be considered rules of property; whereas the other rules applicable to leases that are mostly defaults that should be classified as contract rules. As Smith and I have previously argued, lease law is best regarded as a mixture of

the lessor to the lessee. By promising not to interfere with the possession *and use* of the lessee during the term of the lease, the lessor (as owner of the asset) transfers all or nearly all prerogatives of ownership to the lessee during the term of the lease. The lessee takes control of the asset, assumes the right to exclude others from the asset, and determines how the asset will be utilized on a day-to-day basis. As far as "all the world" is concerned, the lessee is the owner, or at least acts like the owner, for the term of the lease. The rules of accounting for leases, as reformed by the FASB, now make this explicit: A lease transfers the right to control the use of the asset for the term of the lease.

The lessee's property right is qualified by the obligation to make periodic payments of rent to the lessor. What is more, if the lessee fails to make the required payments (or misbehaves in other specified ways), the lessor can evict the lessee or repossess the asset. How is this possible if the lessor has transferred the possession and use of the asset to the lessee, protected by the covenant of quiet enjoyment or (in the case of personal property leases) something closely similar? And doesn't the threat of eviction or repossession transform what looks at first like a property right into something that looks more like a contract?

The lessor's power to evict or repossess derives from something called a forfeiture clause. Lessors, if at all possible, insist on including forfeiture clauses in all leases. These clauses provide that certain violations by the lessee, most prominently the failure to pay rent, will result in a forfeiture of the lease. If the lease has been forfeited, the doctrinal logic goes, then the covenant of quiet enjoyment disappears along with it. This is a formalism, but an important one, because it preserves the understanding that as long as the lease remains in effect, that is, as long as the lessee is *not* in default, the covenant of quiet enjoyment bars the lessor from interfering with the lessee's possession and use of the asset. In practical terms, it means that the lessor can terminate the lease prematurely only if this possibility has been agreed to by the lessee ex ante as part of the lease, through the inclusion of a forfeiture clause. Moreover, if the cause triggering the forfeiture is challenged by the lessee, the lessor's justification for declaring a forfeiture is subject to de novo determination by a court.

The routine inclusion of forfeiture clauses in leases means that we must qualify the legal proposition that the lease gives the lessee the right to possession and use of the asset for the term of the lease. When we introduce the ubiquitous forfeiture clause, we can see that what the lease gives the lessee is the right to possession and use of the asset for the term of the lease as long as the lessee is in compliance with all material obligations specifically identified in the lease as grounds for forfeiture.

Notwithstanding this qualification, the covenant of quiet enjoyment is still critically important. The covenant assures the lessee that possession and use of the assert cannot be

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property and contract elements. Thomas W. Merrill and Henry E. Smith, The Property/Contract Interface, 101 Colum. L. Rev. 773, 820-33 (2001).

unilaterally rescinded by the lessor before the lease comes to an end. In contrast to the contemporary understanding of an ordinary bilateral contract, a lease does not create an option in the promissor either to perform or pay expectation damages. At least with respect to the basic promise to transfer possession and use to the lessee – the promise embodied in the covenant of quiet enjoyment – there is no "take and pay" option on the part of the lessor. The covenant of quiet enjoyment effectively gives the lessee "property rule" protection as long as the lease remains in effect, not "liability rule" protection.[127]

In this respect, leases are like property rights more generally. Property rights, in contrast to contract rights, are shielded by strong remedial rules designed to deter, and not merely compensate for, intentional takings. This of course protects the reliance interest of the holder of the property right. The relevant difference between a lease and other forms of property like the fee simple is that the protection against take and pay is contingent on the lessee's remaining in compliance wih the lessee's material obligation identified by the forfeiture clause of the lease.

None of this is to suggest that the lessor has no ability to control the uses of the asset by the lessee. The lessor can impose significant limitations on the use of the asset by the lessee, provided these are spelled out in the lease. Landlords can restrict tenants to residential use of the property; auto leasing companies can require that lessees observe routine maintenance schedules, and so forth. The lease can provide that the lessee's violation of such use restrictions will be regarded as a material breach justifying forfeiture of the lease. But absent specific lease provisions imposing restrictions on use and making these a basis for forfeiture, the lessee is free to use the asset in any way permitted by law. The covenant of quiet enjoyment gives the lessee residual discretion in the use of the asset, much in the way ordinary ownership confers residual discretion in use of property after specific zoning restrictions or subdivision covenants are taken into account. If the lessor's use restrictions become all-encompassing, then we would likely characterize the relationship as something other than a lease, like a license.

We can go further, and see that when a lessor breaches the covenant of quiet enjoyment (without cause), the lessee should be able to obtain specific performance of the lease. More prticularly, a court presented with an attempt by the lessor to retake possession before the end of the lease term – assuming the lessee is not in default in such a way as to justify forfeiture – should issue an injunction restoring the lessee to possession. Suppose a tenant leases an apartment for one year, and in the middle of the lease the landlord announces that she intends to evict the tenant in order to install a new tenant who has agreed to pay a higher rent. Should the tenant be forced to vacate and sue for expectation damages? Or should a court order specific performance of the lease, i.e., enjoin the threatened eviction? I suspect no judge would decline to award specific performance in these circumstances. Similarly, suppose a consumer leases an

[127] Cf.Guido Calabresi & A. Douglas Melamed, Property Rules, Liability Rules, and Inalienability: One View of the Cahedral, 85 Harv. L. Rev. 1089 (1972).

auto for three years, is in compliance with all lease terms, but the leasing company decides to repossess the car and sell it to someone else before the lease term is over. I seriously doubt that any court would hesitate to enjoin the repossession, that is, the court would award specific performance of the lease. And it would do so even if the leasing company could advance a plausible argument that the auto is not "unique" but is a generic good interchangeable with other available autos. The reason courts would award specific performance in these sorts of circumstances is the lessee's justifiable reliance on being able to possess and use the asset for the duration of the lease. In other words, the lessee's justifiable reliance on its property in the lease.[128]

Probably the most common circumstance in which this understanding is challenged is when the lessor sells the reversion, and the buyer argues that the sale wipes out the lease as a mere "contractual obligation" that does not run to successors in interest. There is some authority supporting such an understanding. In the well-known case of *Van Wagner Advertising Corp. v. S & M Enterprises*,[129] the lessor leased "billboard space" to Van Wagner on the side of a building that faced an exit ramp on a tunnel entering Manhattan.[130] The lessor then sold its reversion to S & M, who cancelled the lease, evidently in order to demolish the building and construct a new one. When Van Wagner sought specific performance, the court held that the company was entitled only to damages. While acknowledging that specific performance is routinely awarded for breach of contract for the sale of real property, the court reasoned that "contracts" in the form of a lease are different, and that specific performance should be awarded only when damages are particularly difficult to compute. That was not a problem in the case, the court concluded, because a sublease entered into by Van Wagner made damages for the balance of the term easy to calculate.

It does not appear that the attorneys for Van Wagner argued that specific performance was required because S & M was seeking to violate the covenant of quiet enjoyment. Had they done so, the court should have held that a lease runs with the land, and cannot be abrogated by a successor in interest on the ground that a transfer of the reversion wipes out the lease. This is

[128] Thus, I would argue that specific performance should be available to enforce contracts for the transfer of property, not because the property is "unique," or because valuation of damages is difficult in such cases, but to vindicate the expectations of the transferee in being able to rely on the security of possession and use of particular assets. This is not the occasion to develop a full justification of this position. The UCC's Article 2A, copying literally from Article 2 dealing with sales, provides that "[s]pecific performance may be decreed if the goods are unique or in other proper circumtances."

[129] 492 N.E. 2d 756 (N.Y. 1986).

[130] The court's uncritical acceptance of the characterization of the agreement as a "lease" is questionable. A better characterization would be that it was an easement in gross. See Baseball Publishing Co. v. Bruton, 18 N.E. 2d 362 (Mass. 1938). This mischaracterization of the interest would not affect the specific performance question, however.

because a lease is a property interest, insofar as it represents a transfer of possession and use of the assert for the term of the lease, provided, as always, that the lessee is in compliance with all material terms of the lease.

The same conclusion should be reached under a personal property lease. No less an authority than William Holdsworth, operating without the benefit of any decisional law on point, clearly intuited this. He wrote: "It is obvious that if A has let….his chattel to B, and has transferred its possession to B, and if he sells it to C, C can only take it subject to B's legal rights, whether C has notice of those rights or not."[131] Personal property leases entail the same propriety right as real property leases – the right to possession and use for the duration of the lease. As long as the lessee is in compliance with all materal obligations of the lease, the lessee should be entitled to specific performance.

Van Wagner presented another wrinkle on the problem, which illustrates an exception to the principle that leases automatically run to the successor of any purchaser of the reversion. The original lease, to which Van Wagner was a party, provided that the lessor could cancel the lease on 60 days notice in the event that the lessor's decided to sell the reversion. The trial court found as a matter of fact that this clause was available only to the original lessor (who did not invoke it), not to S & M, the lessor's successor. Had the original lessor invoked the clause, the court clearly implied, Van Wagner would have been out of luck. This is because courts will allow the lessor and lessee to agree that the lease will terminate upon sale of the reversion – provided this is clearly and expressly set forth in a suffiiceintly prominent fashion in the lease.[132] To this limited extent then, the covenant of quiet enjoyment is subject to override, at least in the context of an anticipated sale of the reversion where this possibility is fully disclosed to the lessee and the lessee consents to the exception at the outset of the lease.

E. The Lease as Contract

I have argued that leases are characterized by three features – the limited term, the covenant of quiet enjoyment, and requirement of consideration – which serve collectively to define what it means to be a lease. These rules can therefore be regarded as mandatory, in the sense that in their absence we would construe the conveyance to be something other than a lease.

In all other respects, leases operate more-or-less like contracts. This does not mean that leases are not subject to other mandatory rules, beyond those that are definitional. There are several, but they tend to apply in more particular circumstances, and hence cannot be regarded as defining the institution of the lease.

[131] Quoted in Swaddling, supra, at 514.

[132] Robert S. Schoshinski, American Law of Landlord and Tenant § 9:3 (1980).

1. Mandatory Contractual Rules

One of these particularized mandatory rules applies when the lessee seeks to transfer the lease to a third party. At least in the context of real property leases, transfers are permitted in only two forms: assignment and sublease. An assignment consists of a transfer of the entire leasehold interest of the original lessee (the prime lessee) to a third party, putting the third party (the assignee) into a direct leasehold relationship with the lessor. A sublease consists of a transfer in which the prime lessee acts as a lessor to a third party, thus creating a hierarchical relationship which, at the top, consists of original lessor and the prime lessee, and below this, the prime lessee and the sub-lessee. The significance here is that these are the only two options that exist for lessee transfers, and hence election of one option or the other is mandatory. Lessees cannot create some novel or hybrid form of transfer; in cases of ambiguity the courts will construe the transfer to be either an assignment or a sublease. Whether the same mandatory rule applies to personal property leases is unclear, under either the common law of bailments for hire or under Article 2A of the UCC.

The law governing residential real property leases has also evolved to include certain mandatory rules. The most prominent is the implied warranty of habitability (IWH), which is recognized in nearly all states and is generally regarded as nondisclaimable.[133] The warranty guarantees that leased residential property is in a safe and sanitary condition appropriate for human habitation, with specific requirements typically fixed by local housing codes. There is an extensive literature, mostly nonempirical, debating whether this mandatory warranty of quality has improved the welfare of low income tenants.[134] In contrast, the Uniform Commercial Code provisions regarding leases of personal property impose a warranty of fitness for purpose, but make it a default rule subject to disclaimer. Thus, one can lease an auto or an airplane "as is," but one cannot lease an apartment "as is."

Whether the IWH should be a mandatory rule or a default rule subject to disclaimer has been the subject of extensive debate, most of it resting on considerations of distributional

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[133] See 1 Milton R. Friedman, Friedman on Leases App. 10A (Patrick A. Randolph, Jr. ed. & rev., 5th ed. 2004) (updated 2016) (reporting that all but four states have adopted the IWH). Contrary to popular belief among law professors, all but ten states have adopted the IWH by legislation, not by common law decision. Id.

[134] See Bruce A. Ackerman, Regulating Slum Housing Markets on Behalf of the Poor: Of Housing Codes, Housing Subsidies and Income Redistribution Policy, 80 Yale L. J. 1093 (1971); Bruce Ackerman, More on Slum Housing and Redistribution Policy: A Reply to Professor Komesar, 82 Yale L. J. 1194 (1973); Neil K. Komesar, Return to Slumville: A Critique of the Ackerman Analysis of Housing Code Enforcement and the Poor, 83 Yale L. J. 1175 (1973); Duncan Kennedy, The Effect of the Warranty of Habilitability on Low Income Housing: "Milking" and Class Violence, 15 Fla. St. U. L. Rev. 485 (1987); cf. Richard Craswell, Passing on the Costs of Legal Rules: Efficiency and Distribution in Buyer-Seller Relationshaips, 43 Stan. L. Rev. 361 (1991).

equity.[135] The economic analysis set forth in Part II offers a different perspective on the question. As discussed there, leases of residential property are nearly always short term. All lessors of residential property will be concerned with the high rate of turnover among residential tenants, and will not want to lose control over selecting substitute tenants by being locked in to a long term lease. Lessors to low-income tenants will be especially concerned about uncertain tenant behavior, most prominently about the risk of default. Given that residential tenancies are nearly always short term, it is not economically rational for prospective tenants to hire specialists to investigate the quality of the property before signing a lease. Even high income tenants do not do this. In contrast, prospective purchasers of residential properties (including condominiums) commonly hire specialists to inspect before buying. This is rational behavior for purchasers, given the outsize commitment to a particular asset relative to their wealth, and the indefinite length of time they will hold the asset. Given that it is not rational for residential tenants to hire specialists to inspect the property before leasing (given the short duration of the lease), it makes sense to impose a warranty of minimal quality in this context, as a substitute for inspection.

Most states have also adopted a mandatory duty requiring lessors to mitigate damages in rentals of residential property when tenants abandon or repudiate the lease before the term expires.[136] The duty does not generally apply to leases of commercial real estate. The law of personal property leases, which is more contractual that real property lease law, also includes a general mandatory duty to mitigate damages, consistent with contract law more generally.

There would seem to be no sound reason not to adopt a mandatory rule requiring that the lessor mitigate damages in all cases in which the lessee abandons leased property or otherwise repudiates a lease. The reluctance to adopt such a rule in the context of commercial real estate leases probably reflects a concern about the retroactive effect on current leases negotiated under the understanding that mitigation is not required.[137] The solution is to adopt the requirement by legislation which applies prospectively to future leases, perhaps as part of a uniform state law.

2. Default Contractual Rules

[135] A recent survey of the literature suggests that the distributional impact has been minimal, because the IWH is rarely enforced. David A. Super, The Rise and Fall of the Implied Warranty of Habitability, 99 Cal. L. Rev. 389 (2011). The lack of enforcement is directly attributable to the small amount in controversy in the typical residential lease dispute, which is insufficient to attract the interest of the contingent fee bar.

[136] Stephanie G. Flynn, Duty to Mitigate Damages Upon a Tenant's Abandonment, 34 Real Prop. Prob. & Tr. J. 721, 732 (2000).

[137] Recent caselaw suggests that courts go out of their way to prevent lessors from doing nothing when a tenant repudiates a lease and seek to collect rent to the end of the lease term, as opposed to reletting for the lessee's account or accepting the lessee's proffered surrender. See, e.g., Gotlieb v. Taco Bell Corp., 871 F. Supp. 147 (ED NY 1994).

Given the significant contractual aspect of leases, it is unsurprising that they contain a large number of default rules. The features that serve to define a transfer of assets as a lease constitute only a bare skeletal outline of the parties' relationship. They serve to identify the arrangement as a lease, and specify certain invariant features characteristic of all leases. But the details of the relationship between the lessor and lessee are largely filled in by the lease – a bilateral agreement, required by the Statute of Frauds to be in writing if the lease lasts more than one year, that looks and very much operates like a contract.

No effort can be made here to specify a full catalogue of lease default principles. I will discuss one particularly important default principle, by way of illustrating how such principles have evolved in the context of leases of real property. Whether this particular default rules applies to personal property leases is not clear.

The default I have in mind is the law of waste. This seeks to mitigate the important moral hazard created by the limited duration of the lessee's possession and use of the asset, namely, the incentive this creates for the lessee to over-use or under-maintain the asset because these costs will be borne by the lessor in the form of a reduced value of the reversion. The law of waste is very ancient, dating from the Twelfth Century. It originally applied to freehold estates in land of lesser duration than a fee simple, but was extended by statute to leasehold estates in 1267.[138] Ever since the Statute of Gloucester of 1278, it has been understood to be a default rule.[139] A grantor, including a lessor, can disclaim the law of waste by conveying an interest to the grantee "without impeachment for waste."

In its original understanding, the law of waste required that those holding an interest of duration less than a fee simple had to preserve the asset in the same form and condition it was in when they acquired it, reasonable wear and tear excepted. As the cases put it, the possessor was prohibited from taking any action, or failing to act, if the result would be to create an "injury to the inheritance."[140] More recently, certain qualifications have been introduced in some jurisdictions in cases where the possessor makes changes that enhance the market value of the property.[141] But the core understanding has remained that the possessor must return the asset to the holder of the reversion in essentially the same form and condition as it was in when the possessor first took possession of it.

[138] Megarry and Wade, supra, at 868.

[139] 6 Edw. I, ch. 5 (1278).

[140] Brokaw v. Fairchild, 237 N.Y.S. 6 (1929).

[141] Thomas W. Merrill, Melms v. Pabst Brewing Co. and the Doctrine of Waste in American Property Law, 94 Marquette L. Rev. 1055 (2011).

The duty to avoid any permanent "injury to the inheritance" is more of a standard than a rule. Not surprisingly, its interpretation will vary depending on the nature of the asset and the duration of the lease. The tenant under a 99-year ground lease will be afforded significant discretion in building and re-building structures on the land. Someone who rents a fork lift for a month will be expected to return it in the same shape it was in when rented, perhaps even with the same amount of gas in the tank.

Nevertheless, the law of waste, as a default, is an important background understanding in lease law. Unless superseded by specific lease provisions, the default means that the lessee, not the lessor, has a duty to repair and maintain the asset during the term of the lease. Moreover, it means that the lessee, rather than the lessor, incurs the risk of loss or damage to the asset during the term of the lease. Thus, the lessee, under the default, is the one who must insure against fire, theft, and other causality losses. In some contexts, most prominently residential leases, these understandings have been changed by statute. But where the default has not been modified by statute, and is not superseded by lease provisions to the contrary, the lessee bears these duties and risks. This, of course, is consistent with the lessee's general status as the residual claimant under the lease.

Perhaps because it is expressed as an imprecise standard, the law of waste is not encountered very often in contemporary lease law. Most questions about the respective obligations of the lessor and lessee in terms of maintaining the form and condition of the asset will be addressed by specific lease provisions, which effectively supercede the law of waste. In residential leases, for example, the tenant may be required to obtain the advance consent of the landlord before modifying the premises or any of its fixtures. When disputes arise about the condition of the premises at the end of the lease term, they will generally be adjudicated in terms of compliance with such specific lease provisions, not the law of waste. The law of waste nevertheless functions as an important background principle, against which these specific provisions are interpreted and enforced.

The basic mandate of the default rule of waste – preserve the asset in the same form and condition as when it was acquired, reasonable wear and tear excepted – does not currently apply to personal property leases. There is no provision in the law of bailments for hire analogous to the law of waste. In the discussion of bailments for hire, the treatises assert that the standard of care of the bailee is one of "ordinary" or "reasonable care," or sometimes the degree of care that an owner would exercise toward her own property.[142] But given the paucity of cases before the recent explosion of personal property leasing, these notions were never spelled out in a fashion that might provide better guidance to parties in the modern era.

[142] Story, [others].

The original draft of Article 2A failed to address the level of care that the lessee should observe in order to protect the lessor's reversion. The oversight is directly attributable to the use of Article 2 as the template for most of Article 2A. There is no reversion in the sale of goods, and so the issue was not addressed in Article 2. After the California Commercial Code Committee noted the omission and proposed an amendment to California's version of Article 2A to address the matter,[143] Article 2A was amended in 1990 in response. Section 2A-532 now provides: "In addition to any other recovery permitted by this Article or other law, the lessor may recover from the lessee an amount that will fully compensate the lessor for any loss or damage to the lessor's residual interst in the goods caused by the default of the lessee."[144] Unfortunately, this is little more than a restatement of the duty of "ordinary" or "reasonable" care found in the law of bailments. The comments to this provision, as well as comments to other provisions dealing with lessor remedies, appear to contemplate that courts will flesh out the details in the common law fashion. The logical way to do so, although this is not mentioned by the codifiers, is to draw on the law of waste, developed in the context of real property leases.

IV. REFORMING LEASE LAW

Leasing is a flourishing institution. It is impossible to attribute this to the adoption of reform proposals propagated by law professors. Real property leases are subject to a law that started in the Thirteenth Century and which has been built up in sedimentary layers ever since, reflecting a largely untheorized mixture of property and contract precepts. To the extent that contractual understandings have been adopted, different notions about the nature of contract have prevailed over time, at first the idea of independent covenants, more recently that of dependent covenants.[145] Personal property leases moldered for centuries in the pages of dusty treatises, which developed the convention of characterizing such leases as "bailments for hire." More recently, an explosion of personal property leasing has made it impossible to build a coherent legal structure on this threadbare base. The result was a new article of the UCC, patched together by a committee of commercial lawyers from a few intuitive ideas about leases, to which page after page of borrowings from the law of sales was appended. Given that leasing is flourishing in the face of what can only be described as academic indifference, one might fairly attritubute its success to benign neglect. Perhaps the lesson is to leave well enough alone.

Nevertheless, I will offer a few suggestions for improvements in the law, each of which I regard as modest. A general question is whether any reforms should proceed by legislation, as in the case of the UCC Article 2A; by regulation, as in the case of the new accounting rules adopted by the FASB; by promulgating advisory materials, such as a new Restatement of Law;

143 See Boss, supra at 603.

144 UCC § 2A-532.

145 See Merrill & Smith, supra, Property: Principles and Policies, supra at 650, 660-61, 672-73.

or through common law decision making. There are familiar tradeoffs here: legislative or regulatory reform has desirable attributes like prospectivity, uniformity, and potential for clarity,[146] but is subject to interest group pressure. Judicial reform is less susceptible to overt lobbying, but suffers from a problem of coordination. Restatements fall somewhere in between. I will put off any question of institutional choice for another day, and simply enumerate what I think should be done. The central message is that care should be taken to ensure that any legal reforms do not impair the economic functions that leasing performs.

- A central proposal is to assimilate both real property and personal property leases to the same general body of principles that serve to define a lease. Both types of leases perform similar economic functions, and there is no good reason to define real property leases by one set of principles, and personal property leases by another. UCC Article 2A takes a step in this direction by describing personal property leases as leases. The FASB regulations go further, by explicitly assimilating both types of leases to the same set of accounting rules. The trend should be supported and continued. The idea that personal property leases are a species of bailment law should be rejected to the extent it still applies in commonwealth countries.
- Of the three legal features that define a lease, two are relatively secure – the finite duration of leases and the requirement that consideration be given for a lease. The third – that a lease includes a promise by the lessor not to interfere with the possession and use of the lessee – could use some shoring up. Something like the covenant of quiet enjoyment should be made a defining element of every lease, subject to the qualification about forfeiture clauses. At the very least, the lessee's right to use the asset free of unexcused interference by the lessor, including a sale of the reversion, should be a strong default, subject to override only by prominent disclaimer in the lease acknowledged by the lessee.
- Two features of leases are nearly universal but are not elements of the legal definition as it currently stands: the understanding that the duration of a lease is for a time less than the expected useful life of the asset and the understanding that the consideration for a lease is given in the form of periodic payments of rent. These features are critical to a number of the economic functions of a lease, including their use as a financing device, their relational exchange quality, and the specialization of functions between lessor and lessee. It is not necessary to make these elements necessary conditions of the definition of a lease, because the mutual interest of the parties will nearly always result in their inclusion in a lease agreement. But it would be desirable to make them at least implied conditions, in that they will be imputed if the lease is otherwise silent on either subject.
- UCC Article 2A should be revised over time to take better advantage of certain features of real property lease law, such as the doctrine of waste, the distinction between

[146] See Merrill & Smith, supra, Optimal Standardization at 60-66.

assignment and subletting, and the various circumstances that constitute a violation of the covenant of quiet enjoyment (e.g., constructive eviction).

- Leases perform an essential economic function of allowing persons to acquire assets at lower cost than what they would have to pay to own an asset. This is of vital importance to low income families seeking shelter, to small businesses, and to startup firms. Great care should be taken before adopting reforms that would have the effect of increasing the cost of acquiring assets by lease, unless such reforms can be shown to have an unambiguously beneficial effect on resource-constrained parties that exceeds any forseeable price effect. An example would be a reform that would increase the cost of recovering possession of a leased asset in the event of lessee default. Such a reform would predictably reduce the security of lessors, and would like increase rents or screening of potential lessees. The welfare effects in terms of increased homelessness or reduced rates of new business formation could be substantial.
- The relational exchange feature of leases is critical in overcoming the risks that leases pose to both lessors and lessees. This is especially important when the lessor is obligated to provide services in connection with the asset, or the lessee is obligated to perform maintenance on the asset. Reforms that would upset the tit-for-tat that keeps both sides performing should be avoided if possible. A primary culprit here are rent control statutes that preclude lessors from raising rents and/or give tenants indefinite rights to lease extensions. These create incentives for landlords to withhold services or otherwise engage in abusive behavior in order to force tenants to vacate. The relationship can quickly degenerate from one of mutual cooperation to one that is adversarial and mired in acrimony and litigation. Problems of housing affordability should be addressed by programs to increase housing supply, not by imposing extensive regulation on the lessor-lessee relationshaip.