

# Captive vs Non-Captive:

How Their Default Remedies Differ?





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# Prepared for the Foundation by:

Itzhak Ben-David

University of Chicago

and

James Schallheim

University of Utah

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# Captive vs Non-Captive: How Their Default Remedies Differ?

A better understanding of how lessors respond to default could help increase efficiency in the leasing market. Not only would market participants know better how to react to default themselves by knowing how other institutions behave under similar situations; knowledge of a leasing company's specialization in core assets and its accompanying default remedies could help other lessors target their market niche(s).

In further support of this belief, several economic theories have suggested that default response may be an important differentiating factor between Captive and Non-captive lessors. For all of these reasons, this study focused on default procedures – specifically, how Captive and Non-captive lessors differ in their default remedies.

During the research phase, several characteristics of the lease contracts were documented. These include asset type, contract size and term of the contact, as well as default remedies implemented.

One initial finding was that Captives seem to have two conflicting motivations when it comes to default response. On one hand, Captives can incur higher indirect costs than Non-captives when repossessing assets in default. For example, Captives risk their brand reputation as well as their long-term relationship with a customer when they repossess an asset. Hence, Captives may prefer to renegotiate the loan instead of taking the more drastic measure of repossession.

On the other hand, Captives have the ability to generate higher values from repossessions than Non-

captives, because they can resell used equipment at a price based not on a cursory reading of the market, but on proprietary information that they or their parent companies have amassed about the asset and its customer(s).

Recognition of this conflict led to formation of a simple, testable hypothesis and its alternative. The hypothesis: *Captive lessors are more likely to repossess equipment as a default remedy than are Non-captive lessors*.

The alternative hypothesis: Captives are less likely to use repossession as a default remedy than are Non-captive lessors.

Research of the hypothesis revealed the following:

- Captive leasing companies, in which at least 50% of the lease portfolio consists of products produced by a parent and/or affiliates, are significant participants in the leasing marketplace. According to the ELA's 2005 Survey of Industry Activity Report, 25% of new-lease volume in 2003 and 2004 was reported by Captive lessors.<sup>1</sup>
- Most Captive lessors are subsidiaries of equipment manufacturers that specialize in leasing a range of products that is narrower than the variety leased by Non-captive lessors.
- Captives have the ability to remarket equipment after repossession and potentially obtain top dollar. Thus, with lower disposal costs, vendors prefer repossession over litigation or renegotiation, especially if the chances of the customer surviving are low.

ELA's 2005 Survey of Industry Activity tabulates responses from approximately 130 leasing companies (out of 435 eligible companies).

Non-captive leasing companies, including subsidiaries of some of the largest banks, specialize in providing funds and monitoring leases for equipment in a wide range of classes and manufacturers. Non-captives are much more likely to use litigation and to write-off leases in default.

# Corollary: Captive lessors are willing to provide leases to lower credit quality lessees.

Captives are in the unique position of having access to a known customer database of potential lessees (Petersen and Rajan, 1997). Captive lessors are also more sales- and customer-driven, while Non-Captives are more credit-driven. And because Captives are more willing to repossess equipment in case of default, they place more weight on equipment values than on lessee credit characteristics. Therefore, Captives may be willing to take on lessees with lower credit qualifications than would Non-Captives.

Support for the Alternative Hypothesis can be found in arguments concerning a Captive's relations with its parent's customers. Wilner (2000) argues that vendors are more inclined to renegotiate bad loans rather than to repossess assets, because they can lose their reputation and destroy current and future relationships. Hence, vendors may attract customers with low credit who prefer to lease assets from a more lenient Captive lessor.

Brennan, Miksimovic, and Zechner (1988) make a similar prediction. In their model, the reason vendors provide financing to their customers in the first place is because it is an effective marketing tool that delivers better value to credit-constrained customers. Without attractive financing, customers might prefer to purchase a competing product.

### Data

The data sample for this study consisted of over

600,000 individual leases and loans obtained from the PayNet database. These data cover the period from January, 2002 to April, 2004. Contracts were randomly selected from approximately one-half of the PayNet database. When a lessee was selected, care was taken to include in the sample all contracts with lessors for the sample period.<sup>2</sup>

Table 1: Sample of 608,612 Individual Contracts from the PayNet Database, 2002-2004

Procedure	Captives	Non-Captives
In default procedures	4.2%	4.5%
No default procedure	95.8%	95.5%
Total	100.0%	100.0%
Num observations	226,440	382,172

Table 1 shows the default frequency for the entire sample. As seen here, the default rate for Non-Captives is slightly higher, at 4.5%, than for Captives, at 4.2%. These numbers do not indicate that Captives are providing credit to lower-quality lessees in terms of default, as proposed in the Corollary to our Hypothesis.

But it is informative to compare this information to that from an alternative data source: ELA's Survey of Industry Activity (SIA). The SIA does not report default rates, but does report the aging of receivables. In it, Captives have higher receivables in the past-due, 30+ days categories (3.7% in 2003 and 3.1% in 2004), as compared to the Non-captives, with past-due, 30+ days receivables (2.9% in 2003 and 1.9% in 2004). The SIA evidence for "late payments" is more consistent with the idea that Captives' customers may reflect higher credit risk, as suggested by the Corollary.

<sup>&</sup>lt;sup>2</sup>Paynet classifies contracts as leases or loans. Our sample includes 22% loans; the rest are classified as different types of leases.

# **Testing**

To test the main hypothesis, default remedies were examined by type of lessor. PayNet identifies the following default procedures in its database:

- bankruptcy
- collection
- extension
- legal steps
- · repossession
- write-off

For the contracts identified as in-default, and in which the procedure is also identified, the percentage of contracts in each category was calculated by type of lessor. Table 2 shows these results.

**Table 2: Default Procedures for Captive** and Non-captive Lessors

Default Procedure	Captives	Non-Captives
Bankruptcy	20.9%	11.8%
Collection	6.7%	4.2%
Extension	2.6%	2.1%
Legal steps	1.7%	15.3%
Repossessed	64.3%	4.0%
Write-off	3.8%	62.5%
Total	100.0%	100.0%
Num observations	9,591	17,206

Table 2 offers overwhelming evidence regarding the differences in default procedure between Captive and Non-captive lessors. In strong support of the study's hypothesis, 64% of the default contracts for Captives used repossession as a default remedy, compared to only 4% of the default contracts for Non-captives.

Table 2 also shows other differences between the default procedures by Captive and Non-captive lessors. Non-captives are writing off bad debts at a much higher percentage than Captives (62.5% vs. 3.8%). Non-captives are also instigating legal action at a rate of 15% of default contracts, while Captives report less than 2%.

Finally, the data show that the lessees of Captives

are filing for bankruptcy at a much higher rate than the lessees of Non-captives (21% vs 12%). The bankruptcy numbers are consistent with the idea in the Corollary that Captives are offering leases to less creditworthy customers.

In the following sections of this article, more details of the contracts, as compared to default procedures, are examined. Asset type, contract size, contract term, and core assets all are examined and reported.

# **Asset Type**

One of the most important characteristics of the lease contract is the type of equipment or asset that is under lease. Using the PayNet database, equipment was categorized into 13 asset types, as listed in Table 3.

In the sample, both Captives and Non-captives had concentrations of more than 30% of their contracts in waste and refuse-handling equipment.

Captives had concentrations in manufacturing (20%), medical equipment (19%), and printing equipment (16%). Non-captives showed more diversity of equipment than Captives, with concentrations in vending and restaurant equipment (22%) and in trucks (9%).

Focus on the default contracts revealed that Captives had the largest number of defaults in manufacturing equipment, with 71% of default contracts falling into this category. Non-Captives, in contrast, showed the largest number of defaults (38%) in trucks.

### **Contract Size**

Size was found to be a very important determinant of default and default remedies. The entire sample was divided into three nearly equal size categories, and then the default contracts were examined within each category. Panel A of Table 4 shows results for Captives, while Panel B contains results for Non-Captives.

The repossession rate among captives was found

	Captives			Non-Captives		
	Active	In Defau	lt	Active	In Default	
Waste & Refuse Handling	37%	6%		34%	15%	
Vending & Restaurant	1%	0%		22%	14%	
Trucks	0%	0%		9%	38%	
Telecommunications	2%	0%		7%	7%	
Retail	0%	0%		5%	3%	
Real Estate	0%	0%		4%	2%	
Railroad	0%	0%		4%	3%	
Printing & Photographic	16%	12%		4%	4%	
Office Equipment	0%	0%		3%	5%	
Manufacturing	20%	71%		2%	4%	
Medical	19%	6%		2%	1%	
Forklift	4%	4%		0%	0%	
Other	1%	1%		4%	3%	
Total	100%	100%		100%	100%	
Total observations	206,302	9,274		276,785	14,309	

Table 3: Type of Asset for Captive and Non-Captive Lessors

to increase with size. Larger leases showed that repossession was used in 74% of default cases. Non-captives also showed repossession as the response most often used for their largest contracts, although the response occurred at a much lower rate (12%).

Greater repossession rates for large contracts are probably related to large residual values that likely exceed the transaction costs incurred to repossess the assets.

Also consistent with transaction costs, it was noted that the small Captive leases had a higher rate of write-offs (11.5%). As contract size increased, Captive lessees were less likely to file for bankruptcy. By comparison, the data revealed that Non-captive lessees showed an increase in the likelihood of bankruptcy as contract size increased.

Interestingly, for the largest leases, the bankruptcy rates among lessees of Captives and Non-captives were almost identical (around 15.5%). Although Non-captives wrote off a large number of small contracts (62%), they also took legal action at a higher rate for small contracts (23%).

## **Contract Terms**

Maturity of the contracts was divided into three

categories. For the entire sample, the lowest contract terms averaged around 2 years, the medium group averaged 46 months, and the highest group averaged a little more than 5 years. It is clear from Table 5 that leases produced by Captives tended to have longer maturation than those produced by Non-captives.

The breakdown of data according to the term of the contract continues to support the main hypothesis – that Captives are much more likely to repossess in response to default, while Non-captives are much more likely to write off the debt. Another observation of Table 5 shows that asset write-offs are most prevalent for short maturities, while repossession by Captives is more common for medium and long-term maturities. If asset lives are correlated with contract maturity, which is likely, then the higher repossession rates for longer-term contracts is probably due to the longer remaining economic life and value for these assets.

Another contract term contained in the PayNet database is payment frequency (annual, semi-annual, quarterly, and monthly). These terms and default procedures were examined, but not reported in a table. As expected, the default rate was found to

increase with the payment frequency. For Captives, repossession also increased with payment frequency, while Non-captives increased their write-offs.

Noteworthy results also appeared in the rate of bankruptcies for Captive lessees. Bankruptcy filings were much higher for lessees whose payments were due quarterly (85%), semi-annually (56%), and annually (47%) than for lessees whose payments were due monthly. Among Non-captive lessees, collection procedures were highest for those paying annually (58%) and semi-annually (60%).

#### **Core Assets**

Captive lessors were concentrated in an equipment category by definition. Non-captive lessors may concentrate in a special equipment type as well. Lessees were also likely to have "core assets" that were prominent in their businesses. Example: trucking companies use trucks as core assets.

**Table 4: Contract Size and Default Procedures** 

A. Captives	Contract Size				
	Low	Medium	High		
Bankruptcy	41.7%	24.8%	15.4%		
Collection	14.2%	11.7%	3.5%		
Extension	0.0%	1.3%	3.6%		
Legal steps	7.1%	0.7%	1.1%		
Repossessed	25.4%	56.3%	74.4%		
Write-off	11.5%	5.1%	2.0%		
Total	100%	100%	100%		
Num of defaults	1,110	2,293	6,168		
Avg Contract Size	7,751	24,791	103,537		
Num of observations	75,481	75,479	75,480		
B. Non-Captives	Contract Size				
	Low	High			
Bankruptcy	10.4%	11.0%	15.5%		
Collection	2.3%	5.3%	6.9%		
Extension	1.0%	2.2%	4.1%		
Legal steps	23.2%	9.6%	5.9%		
Repossessed	1.0%	1.3%	12.0%		
Write-off	62.0%	70.6%	55.7%		
Total	100%	100%	100%		
Num of defaults	8,497	4,228	4,481		
Ava Contract Cina	3,622	10,841	88,558		
Avg Contract Size	3,022	11711			
Num of observations	127,425	127,356	127,391		
			127,391		

Lessee core assets are defined as those that generate income for lessors instead of supporting their administration and peripheral logistics. For example, trucks and forklifts were classified as core assets for farms, while copier machines were classified as peripheral or non-core.

Captive *lessor* core assets were defined as holdings of more than 60% of the same asset. Because Non-captive lessors were more diversified, holdings of more than 20% in an asset group were defined as core assets. In Table 6, the sample was divided into core and non-core assets of *lessees* and *lessors*.

Panel A shows core and non-core assets for both Captive and Non-captive lessees, while Panel B shows core and non-core assets for both Captive and Non-captive lessors.

Panel A of Table 6 provides continued support for the study's hypothesis. For Captives that leased the lessee's core assets, there was a much higher rate of repossession (64.5%) than for the lessee's non-core

Table 5: Term of Contracts (in Months) and Default Procedures

A. Captives	Contract Term				
	Low	Medium	High		
Bankruptcy	20.6%	18.7%	23.7%		
Collection	13.7%	3.8%	6.8%		
Extension	1.8%	4.0%	1.2%		
Legal steps	5.0%	0.6%	1.4%		
Repossessed	48.8%	70.7%	64.3%		
Write-off	10.1%	2.1%	2.6%		
Total	100%	100%	100%		
Num of defaults	1,857	4,618	3,096		
Avg Contract Term	31.9	48.1	61.1		
B. Non-Captives	Contract Term				
	Low	High			
Bankruptcy	11.6%	11.6%	12.6%		
Collection	2.4%	4.7%	6.6%		
Extension	2.6%	1.7%	1.9%		
Legal steps	8.1%	25.3%	11.1%		
Repossessed	4.0%	3.4%	4.8%		
Write-off	71.4%	53.2%	62.9%		
Total	100%	100%	100%		
Num of defaults	6,656	6,526	4,024		
Avg Contract Term	11.0	39.7	60.4		
For all observations:					
Avg Contract Term	24.7	45.7	61.1		

assets (28%). There was also a higher rate of repossession of lessees' core assets by Non-captive lessors (10%) than for lessees' non-core assets (2%).

This evidence is consistent with the idea that a lessee's core assets are valuable in default and thus experience increased rates of repossession. Nevertheless, the main hypothesis still holds, that Captives are more likely to repossess in the case of default, whereas Non-captives are more likely to write off the default.

Panel B of Table 6 examines the core assets of the lessors. For all contracts both active and default, 79%

fell into the core asset category of Captive lessors while 76% qualified as core or specialized assets of the Non-captive lessors. For defaulted contracts, it was again observed that Captives were more likely to repossess, while Non-captives were more likely to write off. Evidence was also found that Captives experience greater repossession rates for core assets (67%), compared to non-core assets (48%), while Non-Captives are more likely to write off core assets (66%) than non-core assets (50%).

# **Summary**

The main result of the study is quite strong: More than 60% of Captive contracts were repossessed when in default, while only 4% of defaulted contracts were written off. In contrast, more than 60% of Non-captive defaulted contracts were written off, while just 4% were subjected to repossession. These results support the hypothesis that Captives are more likely to repossess in default. The hypothesis

Table 6: Lessees' and Lessors' Core Assets and Default Procedures

			_		_		
A. <b>Lessee's</b> Core	Assets and Defa	ult Procedure	s				
	Captive			Non-Captive			
Default Procedure	Core Assets	Non-Core		Core Assets		Non-Core	
Bankruptcy	11.8%	43.4%		14.0%		11.4%	
Collection	9.4%	10.1%		9.7%		3.9%	
Extension	8.6%	2.6%		8.7%		1.9%	
Legal steps	1.1%	10.1%		8.9%		15.4%	
Repossessed	64.5%	28.0%		10.3%		2.0%	
Write-off	4.6%	5.8%		48.4%		65.4%	
Total	100%	100%		100%		100%	
Num defaults	1,754	378		890		4,883	
B. <b>Lessor's</b> Core	Assets and Defa	ult Procedure	S				
	Captives			Non-Captive			
Default Procedure	Core Assets	Non-Core				Non-Co	re
Bankruptcy	20.4%	22.5%		9.1%		21.1%	
Collection	5.3%	15.7%		4.7%		2.7%	
Extension	3.1%	0.0%		0.9%		6.1%	
Legal steps	1.1%	5.1%		15.1%		16.0%	
Repossessed	67.1%	47.9%		3.9%		4.2%	
Write-off	3.0%	8.9%		66.2%		49.8%	
Total	100%	100%		100%		100%	
Num defaults	8,219	1,352		13,301		3,905	

continued to hold when sample data was divided into categories based on size, contract terms, and core assets. Larger contracts and longer contracts had greater repossession rates than contracts that were smaller, shorter-term, and required more payment frequency.

Greater rates of repossession also occurred for core assets of both the lessee and lessor. Still, Captives use repossession in default at much greater rates than Non-captives in all segments of the sample.

The results of the study point to these important differences between Captives and Non-captives:

- Non-captives usually are not in the equipment business, and thus, repossession is a costly default remedy for Non-captives. As a Non-captive member of ELA commented, "We do not have the wherewithal to evaluate condition, refurbish, and remarket equipment in order to obtain the best price."
- But in case of default, Non-captives prefer to

recover their investment as quickly as possible, and thus are more likely to litigate.

- Non-Captives also are more likely to write-off a bad debt. For example, many Non-captive lessors are financial institutions subject to regulatory requirements such as faster write-off policies.
- Captives, which are much less regulated, enjoy greater freedom in default response.

One final observation, in the form of a comment made by a Non-captive ELA member, is pertinent: "A captive/manufacturer is selling equipment with a huge gross margin, while the lease company is dealing in a small money spread. Clearly, the captive has much less to lose. We [non-Captives], on the other hand, are desperate to recover our investment."

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# **About the Researchers**

# Itzhak Ben-David

The University of Chicago Graduate School of Business Chicago, IL 60637 ibendavi@ChigagoGSB.edu

Itzhak Ben-David is a doctoral student in finance at the Graduate School of Business, the University of Chicago. He received an MSc, with distinction, in finance from London Business School and an MSc, cum laude, in industrial engineering from Tel-Aviv University. In addition, Mr. Ben-David holds a BSc, cum laude, in indus-trial engineering and a BA, cum laude, in accounting, both from Tel-Aviv University.

# James S. Schallheim, Ph.D.

Professor of Finance University Of Utah Salt Lake City, UT finjs@business.utah.edu

James S. Schallheim is the Jake Garn Professor of Finance at the University of Utah. He holds a bachelor's degree in economics from the University of California at Santa Barbara, an M.B.A. from Wright State University, and a Ph.D. degree in finance from Purdue University. Dr. Schallheim is author of *Lease or Buy: Principles for Sound Corporate Decision Making* (Harvard Business School Press, Boston, 1994). He has published in numerous academic and practitioner journals, and his research and teaching interests are corporate finance, leasing, and stock markets in both the U.S. and Japan. Dr. Schallheim has served as a consultant or expert witness for numerous firms and organizations. He also serves on the board of the Equipment Leasing and Finance Foundation and the *Journal of Equipment Lease Financing* editorial review board.



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