

REPORTS
OF THE
UNITED STATES TAX COURT

JOHN HANCOCK LIFE INSURANCE COMPANY (U.S.A.), AS SUCCESSOR IN INTEREST TO JOHN HANCOCK LIFE INSURANCE COMPANY (F.K.A. JOHN HANCOCK MUTUAL LIFE INSURANCE COMPANY) AND SUBSIDIARIES, ET AL.,¹ PETITIONERS *v.* COMMISSIONER OF INTERNAL REVENUE, RESPONDENT

Docket Nos. 6404–09, 7083–10, Filed August 5, 2013.
7084–10.

JH is primarily in the business of selling life insurance policies, annuities, long-term care insurance, and other retirement services. To fulfill its contractual obligations under these services JH invests the premiums it receives. In 1979 JH began investing in leveraged leases. A leveraged lease is a lease in which the equity investor borrows money from a third-party lender to finance a portion of the purchase price of the asset involved and leases the asset to its ultimate user. In 1997 JH began investing in lease-in-lease-out (LILO) transactions and in 1999 began investing in sale-in-lease-out (SILO) transactions. JH participated in 19 LILO transactions and 8 SILO transactions between 1997 and 2001. With respect to the LILO transactions, JH claimed deductions for rental expenses for the prepaid rent paid to the tax-indifferent entities and interest expenses related to the repayment of the nonrecourse loans. JH also amortized transaction costs related

¹Cases of the following petitioners are consolidated herewith: The Manufacturers Investment Corporation and Subsidiaries, as Successor in Interest to John Hancock Financial Services, Inc., and Subsidiaries, docket No. 7083–10; and John Hancock Life Insurance Company (U.S.A.) and Subsidiaries, as Successor in Interest to John Hancock Life Insurance Company (f.k.a. John Hancock Mutual Life), docket No. 7084–10.

to the LILO transactions. With respect to the SILO transactions, JH claimed deductions for depreciation and interest expenses and amortized the related transaction costs. R disallowed these deductions for the years at issue and determined that JH had OID income with respect to the LILO and SILO transactions. The parties agreed to litigate three LILO transactions and four SILO transactions and use them as test transactions for the remaining LILO and SILO transactions at issue. A transaction will be respected for Federal income tax purposes if it has economic substance and the substance of the transaction is consistent with its form. P argues that the LILO and SILO test transactions have economic substance because JH derived a pretax profit from each transaction and entered into the transactions with the primary purpose of making a profit. P also argues that the substance of each LILO and SILO transaction is consistent with its form because JH held a true leasehold interest in each of the LILO assets and obtained an ownership interest in each of the SILO assets. R argues that the LILO and SILO test transactions lack economic substance and the substance of the transactions is not consistent with their form. Specifically, R argues that JH failed to acquire a substantive leasehold interest in the LILO assets and failed to acquire a substantive ownership interest in the SILO assets. Thus, R argues the true substance of the LILO and SILO transactions is a loan from JH to the tax-indifferent entities. R argues in the alternative with respect to the LILO and SILO transactions that at most P acquired a future interest in the LILO and SILO assets. The parties also dispute the location of JH's principal place of business. *Held*: JH's principal place of business is Boston, Massachusetts. *Held, further*, R failed to prove that the three LILO and four SILO test transactions lack economic substance. *Held, further*, the substance of the three LILO test transactions is not consistent with their form. The LILO test transactions resemble financial arrangements, and JH is therefore denied its claimed rental expense, interest expense, and transaction cost deductions with respect to them. *Held, further*, the substance of three of the SILO test transactions is consistent with their form; however, JH did not acquire a present interest in the SILO test transaction properties and is therefore denied its claimed depreciation and interest expense deductions. *Held, further*, the substance of the fourth SILO test transaction is not consistent with its form. That SILO test transaction resembles a financial arrangement, and JH is therefore denied its claimed depreciation expense, interest expense, and transaction cost deductions with respect to that transaction. *Held, further*, JH had OID income with respect to the three LILO test transactions and the fourth SILO test transaction but not with respect to the first three

SILO test transactions, in which it failed to acquire a present interest.

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HAINES, *Judge*: These cases are consolidated for purposes of trial, briefing, and opinion. Respondent determined the following deficiencies in petitioners' Federal income tax for 1994² and 1997–2001 (years at issue):³

<i>Year</i>	<i>Deficiency</i>
1994	\$8,860,564
1997	65,746,621
1998	173,497,367
1999	59,899,141
2000	108,046,947
2001	143,516,079

These deficiencies stem from 27 leveraged lease transactions (leveraged leases) that petitioners participated in between 1997 and 2001. For purposes of resolving this action expeditiously, the parties agreed to try seven of the leveraged leases (test transactions) and apply a formula to determine the deficiency, if any, with respect to the remaining leveraged leases. The test transactions comprise three lease-in-lease-out (LILO) transactions and four sales-in-lease-out (SILO) transactions.⁴

The test transactions were identified at trial and are referred to herein by the lease counterparty to each transaction. The counterparties for the LILO test transactions are:

²Petitioners' 1994 deficiency arises from the denial of a claimed NOL carryback.

³All section references are to the Internal Revenue Code (Code), as amended and in effect for the years at issue, and all Rule references are to the Tax Court Rules of Practice and Procedure, unless otherwise indicated. Amounts are rounded to the nearest dollar.

⁴Petitioners have referred to the SILO transactions as "service contract" transactions throughout the pleadings and at trial and have emphasized this distinction from a LILO. For simplicity and without prejudice, we refer to these transactions as SILO transactions.

(1) Österreichische Bundesbahnen (ÖBB), a Government-owned Austrian corporation that operates the Austrian Federal railway system, and (2) Société Nationale des Chemins de Fer Belges (SNCB), a Belgian company that owns and operates the national rail system of Belgium.⁵ The counterparties for the SILO test transactions are: (1) Tiwag-Tiroler Wasserkraft AG (TIWAG), an Austrian corporation that is owned by the Austrian Province of Tyrol and is in the business of generating, transmitting, and distributing electrical power to commercial and residential consumers in Tyrol; (2) the City of Dortmund, Germany (Dortmund);⁶ and (3) SNCB.

The issues for decision are: (1) whether the principal place of business for petitioner in docket No. 7083–10 was in Massachusetts or Michigan; (2) whether the test transactions lacked economic substance resulting in disallowance of petitioners' claimed deductions for rent, depreciation, interest, and transaction expenses; (3) whether under the substance over form doctrine, the substance of the test transactions was a purchase of a future interest, inconsistent with its form, resulting in disallowance of petitioners' claimed deductions for rent, depreciation, interest, and transaction expenses; or (4) alternatively, whether under the substance over form doctrine, the substance of the test transactions was a financing arrangement, inconsistent with its form, resulting in generation of original issue discount (OID) income and the disallowance of petitioners' claimed deductions for rent, depreciation, and interest expenses.

⁵ SNCB is the counterparty to two LILO test transactions. At trial and on brief these LILO transactions were referred to as SNCB 2 and SNCB 5 lot 1. For purposes of this Opinion, we refer to them individually in the same manner and collectively as the SNCB LILO transactions.

⁶ Dortmund is the counterparty to two SILO test transactions, referred to at trial and on brief as the Dortmund 1 and Dortmund 2 transactions. The assets subject to the Dortmund 1 transaction are Halls 1, 2, and 3A of the Westfalenhallen Dortmund Trade Fair, Event, and Congress Center Complex and the associated facility sites. The assets subject to the Dortmund 2 transaction are Halls 4–8 of the Westfalenhallen Dortmund Trade Fair, Event, and Congress Center Complex and the associated facility sites. In all other material respects, Dortmund 1 and Dortmund 2 are identical. Therefore, for purposes of this Opinion, we refer to them individually as Dortmund 1 and Dortmund 2, and collectively as the Dortmund transactions.

FINDINGS OF FACT

Some of the facts have been stipulated and are so found. The stipulations of fact, together with those attached exhibits which were found relevant and admissible, are incorporated herein by this reference. At the time they filed their petitions, the principal place of business of petitioners in docket Nos. 6404–09 and 7084–10 was in Massachusetts. There is a dispute among the parties as to whether the principal place of business of petitioner in docket No. 7083–10 was in Massachusetts or Michigan.

*Background**I. John Hancock's History*

John Hancock Mutual Life Insurance Co. (JH Mutual) was incorporated in Massachusetts in 1862. In February 2000 JH Mutual converted from a mutual life insurance company to a publicly traded company. At that time it was renamed John Hancock Life Insurance Co. (JHLIC) and became a wholly owned subsidiary of John Hancock Financial Services, Inc. (JHFS). In April 2004 Manulife Financial Corp., a Canadian company (Manulife), acquired JHFS and all of its subsidiary corporations. Pursuant to a restructuring, on December 31, 2009, John Hancock Life Insurance Co. (U.S.A.) (JHUSA) succeeded JHLIC. A subsidiary of Manulife, the Manufacturer's Investment Co., a Michigan general business corporation (MIC), succeeded JHFS. Unless otherwise indicated, for purposes of this Opinion we refer to JH Mutual, JHLIC, JHFS, JHUSA, MIC, and their subsidiaries collectively as John Hancock.

Throughout its history John Hancock's primary business has been the sale of life insurance policies, annuities, long-term care insurance, and other retirement services. To fulfill its contractual obligations under these services, John Hancock invests the premiums it receives. Because of the varying lengths of John Hancock's contractual obligations to its policyholders, it seeks to invest in opportunities that match its long- and short-term cashflow needs and provide an appropriate return or yield for its assessed risk levels.

John Hancock's financial needs require it to invest in a diversified set of domestic and international assets. Between

1997 and 2001 John Hancock invested between \$6.8 and \$10 billion annually and managed a portfolio of investments valued between \$38.9 and \$46.6 billion.

II. *Investment Process and Review*

Between 1997 and 2001 John Hancock's committee of finance oversaw its investments. The committee of finance comprised members of John Hancock's board of directors as well as its chairman, vice chairman, and president. Committee of finance approval was required for all investments of a designated size.

John Hancock's bond and corporate finance group managed the day-to-day responsibilities with respect to a significant portion of the company's investments, including bond portfolios, private equity, and alternative asset investments. The bond and corporate finance group was divided into teams. For instance, the "industrial" team was charged with managing investments in transportation, timber, industrial equipment, mining, metal and communications assets. The "energy" team managed investments in power plants, power companies, and other energy assets. The "international" team managed cross-border investments. The work of each team was connected to the "portfolio management" department, which determined the types of investments and yields that John Hancock needed to support its contractual obligations to its policyholders. The division of responsibility within the bond and corporate finance group allowed each team to specialize and develop an expertise in its designated industries.

Each of John Hancock's investments went through a thorough review process. Typically, a bond and corporate finance group team was charged with drafting an investment recommendation, known within John Hancock as a "yellow report". A yellow report analyzes a proposed investment in numerous ways, including an analysis of the expected return, risk profile, collateral support, credit rating of the relevant parties to the transaction, term of the transaction, and any special aspects of the investment. The yellow report was used as an approval request for many of John Hancock's investments.

John Hancock's bond investment committee reviewed the yellow reports. The bond investment committee held

bimonthly meetings and comprised leaders from each of the bond and corporate finance group's industry teams. At each bond investment committee meeting, the credit analyst responsible for analyzing the investment featured in the yellow report presented the opportunity, discussed the risks and rewards of the investment, and fielded questions from the committee. After review and consideration, the bond investment committee's members voted to approve or deny an investment. If an investment was approved, it moved to the committee of finance for further review and approval.

Generally, a committee of finance meeting was held once a month. However, in certain circumstances the bond investment committee was granted "between meeting authority" to enter into an investment normally requiring further approval. "Between meeting authority" was necessary in cases where John Hancock has to proceed with a time-sensitive investment.

III. *Leasing*

In 1979 John Hancock formed a leasing company. Leasing transactions were attractive to John Hancock because they offered a higher after-tax return than traditional investments. A leveraged lease is a lease in which the equity investor borrows money from a third-party lender to finance a portion of the purchase price of the asset involved and leases the asset to its ultimate user. John Hancock participated in leveraged leases as both equity investor and lender. A variety of assets were involved, including aircraft, medical equipment, tractors, irrigation systems, barges, trailers, grain silos, natural gas compressors, manufacturing equipment, automobiles, and railcars.

IV. *LILO and SILO Transactions*

A. *Basic Structure*

John Hancock participated in 19 LILO transactions and 8 SILO transactions between 1997 and 2001. LILO and SILO transactions are types of leveraged leases. In a typical LILO transaction, a U.S. taxpayer, acting through a grantor trust,⁷

⁷The grantor trust is generally disregarded for Federal income tax purposes.

leases assets from a foreign or domestic tax-exempt entity and simultaneously leases that property back to the lessee.⁸ The U.S. taxpayer prepays the initial lease's rent, which is funded through a nonrecourse loan from a third-party lender and an equity contribution from the U.S. taxpayer. The equity ordinarily ranges from 10% to 20% of the value of the initial lease. Because the loan funding the debt portion of the investment is nonrecourse, the U.S. taxpayer is entitled to favorable accounting treatment on its financial statements pursuant to Statement of Financial Accounting Standards No. 13 (FAS 13).⁹

The sublease has a shorter term than the initial lease. At the end of the sublease term the tax-exempt entity has the option to purchase the remainder of the U.S. taxpayer's leasehold interest in the initial lease. If the tax-exempt entity chooses not to exercise this purchase option, the U.S. taxpayer may elect to: (1) compel the tax-exempt entity to renew the sublease; (2) take possession of the asset; or (3) enter into a replacement sublease with a third party. Most LILO and SILO transactions impose requirements upon a tax-exempt entity that chooses not to exercise its purchase option, such as refinancing the U.S. taxpayer's nonrecourse loan. If the tax-exempt entity cannot meet these requirements, it must ordinarily exercise the purchase option.

A typical SILO transaction is similar, except that the term of the initial lease extends beyond the remaining useful life of the asset. Therefore, the U.S. taxpayer takes the position that the initial lease is a sale for U.S. Federal tax purposes. Also, if the tax-exempt entity chooses not to purchase the asset at the end of the sublease term, the U.S. taxpayer's options differ slightly. The U.S. taxpayer may (1) compel the lessee to arrange for a service contract for the asset for a pre-determined term or (2) take possession of the asset.

⁸Each lessee counterparty to the test transactions is a foreign entity. These foreign entities are so called tax-indifferent entities because they are not subject to U.S. taxation. For convenience we shall refer to these entities as tax-exempt entities.

⁹FAS 13 addresses lease accounting for lessors and lessees taking part in leveraged leases. FAS 13 enables earlier recognition of income relative to other transactions with similar cashflows. Additionally, FAS 13 allows nonrecourse debt used in a leveraged lease to be excluded from the liabilities side of a balance sheet.

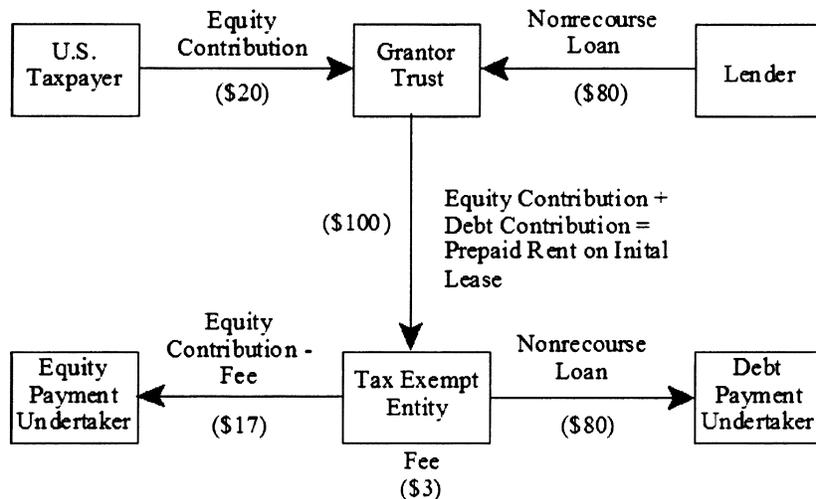
“Defeasance” is a common characteristic in most LILO and SILO transactions. Defeasance is a way to minimize risk. The form of the defeasance in a particular LILO or SILO transaction will vary, but it is ordinarily accomplished through one or more deposits with third-party financial institutions, known as payment undertakers. In most LILO and SILO transactions the U.S. taxpayer will require a debt payment undertaking agreement (DPUA) as part of the transaction, and often will require an equity payment undertaking agreement (EPUA) as well. In a DPUA, the tax-exempt entity deposits a portion of prepaid rent received from the U.S. taxpayer funded by the nonrecourse loan with the debt payment undertaker (DPU), sometimes related to the lender, and in return the DPU agrees to make rent payments on behalf of the tax-exempt entity under the sublease. The timing and amount of the tax-exempt entity’s rent under the sublease usually matches the U.S. taxpayer’s debt service payments on the nonrecourse loan. As a result, the DPU will often pay the lender directly and neither the U.S. taxpayer nor the tax-exempt entity makes any out-of-pocket payments during the initial lease term.

In an EPUA, the tax-exempt entity deposits a portion of the U.S. taxpayer’s equity investment with an equity payment undertaker (EPU). This deposit is designed to pay the tax-exempt entity’s equity portion of rent payments, to grow to cover the sublease termination value in case of a sublessee default, and to fund the tax-exempt entity’s purchase option at the end of the initial lease. As a result, the tax-exempt entity is not forced to incur any additional out-of-pocket expenses if it chooses to exercise its purchase option.

In addition to a DPUA and an EPUA, the U.S. taxpayer in a LILO or SILO transaction may require additional protection, such as a pledge of the amounts deposited pursuant to the DPUA or EPUA, or residual value insurance. If an amount deposited with a payment undertaker is not pledged to the U.S. taxpayer, the tax-exempt entity may have the right to withdraw the deposit for its own use if it replaces the deposit with approved substitute collateral, such as a letter of credit. The tax-exempt entity retains the portion of the equity contribution that is not deposited pursuant to an EPUA. This amount is known as the tax-exempt entity’s “net present value benefit” from the transaction.

The following graphics display the closing day and sublease lease term cashflows¹⁰ and the operating structure of a basic single-lender LILO with debt and equity defeasance during the sublease lease term. For purposes of this graphic, the U.S. taxpayer's grantor trust is the lessor and the tax-exempt entity is the lessee during the sublease lease term.

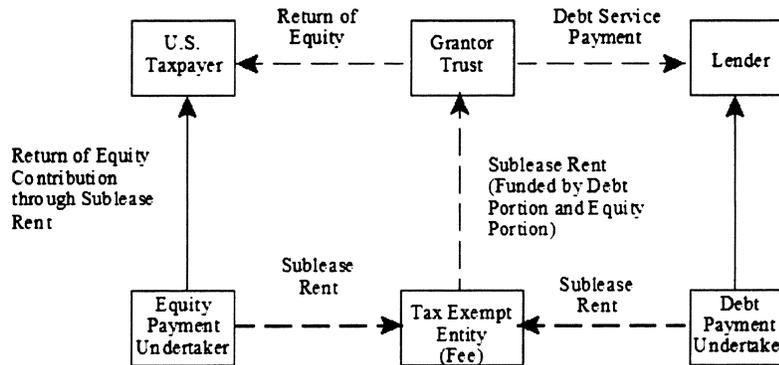
Illustrative Hypothetical Closing Day Cashflows



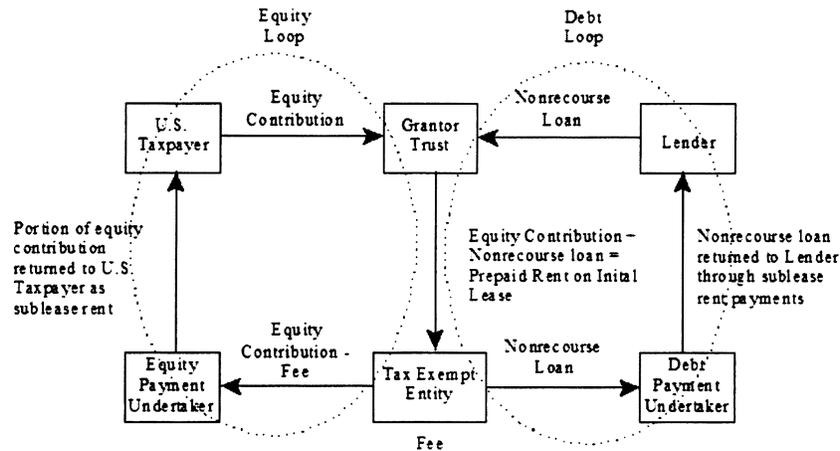
The tax-exempt entity receives a fee for entering into the transaction with the grantor trust. The equity contribution (minus the fee) will then be invested by the equity payment undertaker and will be used to pay a portion of the sublease rent payments and fund the purchase option at the end of the sublease term. The debt contribution will be invested by the debt payment undertaker and will be used to pay a portion of the sublease rent payments and eventually returned to the lender as debt service payments on the nonrecourse loan. Typically the lender and the debt payment undertaker are related parties, and often the equity payment undertaker is also related to the lender.

¹⁰The graphic ignores transaction expenses that the U.S. taxpayer ordinarily pays on the closing date.

Sublease Term Cashflows



The dashed lines represent the theoretical flow of cash from the payment undertakers to the tax-exempt entity, the tax-exempt entity to the grantor trust, and the grantor trust to the U.S. taxpayer and the lender. However, because the timing and amount of the lessee's sublease rent payments and the lessor's debt service payments match exactly, the debt payment undertaker often pays the lender directly, satisfying both the sublease rent and the debt service payment. Similarly, the equity payment undertaker's sublease rent ends up in the hands of the U.S. taxpayer as a return of equity.

Closing Day Cashflows and Sublease Term Cashflows

Above is a combination of the closing day cashflows and the sublease term cashflows. Together the two cashflows create what is known as loop debt.

B. History

In 1975 the Internal Revenue Service (IRS) issued guidelines for advance ruling purposes in determining whether leveraged lease transactions may be treated as leases for Federal tax purposes. Rev. Proc. 75-21, 1975-1 C.B. 715. In 1981 Congress enacted safe harbor leasing rules for sale and leaseback transactions that allowed taxpayers to lease property from tax-exempt entities. Economic Recovery Tax Act of 1981, Pub. L. No. 97-34, 95 Stat. 172. These safe harbor rules were repealed in 1982 because of adverse public reaction and reduced tax revenues. Tax Equity and Fiscal Responsibility Act of 1982, Pub. L. No. 97-248, 96 Stat. 324. In 1984 Congress enacted what has become known as the "Pickle rule", which subjected property leased to a tax-exempt entity to unfavorable depreciation rules. Deficit Reduction Act of 1984, Pub. L. No. 98-369, 98 Stat. 494.

John Hancock began investing in LILLO transactions in 1997. LILLO transactions were designed to work around the Pickle rule because the taxable party leased the property involved, rather than purchasing it, and then immediately

subleased the property back to the tax-exempt entity. LILO transactions became popular means of raising funds for tax-exempt entities. In fact, the Federal Transit Administration (FTA) promoted and approved LILO and SILO transactions between 1997 and 2001 as a means of providing cash infusions for financially troubled public transit agencies.

In 1999 John Hancock and other similar investors ceased to invest in LILO transactions because of a change to the regulations under section 467, requiring that prepayment of the initial lease rent be treated as a loan for tax purposes. *See* sec. 1.467-4, Income Tax Regs.¹¹ In 2002 the IRS issued Rev. Rul. 2002-69, 2002-2 C.B. 760, which determined that a LILO transaction is more properly characterized as a future interest in property and a taxpayer may not deduct rent or interest paid or incurred in connection with such a transaction. The IRS further stated that it would disallow tax benefits claimed in connection with LILO transactions on other grounds, including the substance over form and economic substance doctrines. *Id.*

Unable to continue investing in LILO transactions, John Hancock and other similar investors began investing in SILO transactions. SILO transactions also avoided the pitfalls of the Pickle rule because the service contract was arguably not included in the lease term as long as it complied with section 7701(e). As a result, SILO transactions were designed to allow the lessor to claim depreciation deductions over a shorter term, increasing the transaction's tax value.

In 2004 Congress enacted the American Jobs Creation Act of 2004, Pub. L. No. 108-357, 118 Stat. 1418, eliminating the benefits associated with LILO and SILO transactions. This legislation was prospective in effect and was not designed to alter the general principles of tax law that apply to determine the legitimacy of transactions designed to generate tax deductions. *See* H.R. Conf. Rept. No. 108-755, at 660 (2004), 2004 U.S.C.C.A.N. 1341, 1720-1721.

¹¹The IRS proposed regulations that largely eliminated the tax benefits associated with LILO transactions in 1996; these regulations became effective in 1999.

C. Due Diligence

John Hancock learned of opportunities to invest in LILO or SILO transactions from promoters such as D'Accord Financial Services and Citigroup. A promoter acted as an adviser to the counterparties in these transactions, drafted offering memoranda, and solicited offers or bids from potential investors. After receiving an offering memorandum, John Hancock would prepare an offer that was contingent on participation of the lenders at agreeable terms, completion of internal and external due diligence, and the receipt of approved expert opinions and reports. If John Hancock was chosen to participate in the transaction, it engaged experts and attorneys to help negotiate a term sheet. John Hancock set limitations for its total investments in LILO and SILO transactions between 1997 and 2001 that were based on its "tax capacity", which was determined on the basis of its ability to offset its taxable income with losses.

As part of John Hancock's internal assessment of a LILO or SILO transaction, the bond and corporate finance group drafted a yellow report. Each transaction had to receive the approval of John Hancock's bond investment committee and committee of finance. John Hancock generally chose to participate in LILO and SILO transactions where its specialty groups had a familiarity with the assets involved. Team members of the bond and corporate finance group performed site visits and inspected many of the subject assets of the leveraged leases.

John Hancock also engaged a team of independent specialists and consultants as part of its due diligence process. These specialists and consultants were relied upon to provide appraisals, accounting advice, insurance advice, legal opinions, engineering opinions, and market analysis with respect to the relevant industries. John Hancock also relied upon a financial modeling tool within the leasing industry known as the ABC reports. Among other things, the ABC reports projected John Hancock's pretax and after-tax financial consequences for each transaction. The ABC reports provided alternative simulations based on the assumption that the counterparty to each LILO or SILO transaction exercised its purchase option and on the assumption that the counterparty did not exercise its purchase option.

As part of John Hancock's internal risk assessment, John Hancock gave each LILO and SILO transaction a credit rating based on the credit ratings of the counterparties, the relevant defeasance, and the external specialty reports and opinions. John Hancock's internal credit rating for each LILO transaction was AA1, one grade below John Hancock's highest credit rating of AAA. John Hancock's internal credit rating for each SILO transactions was AA3, a grade slightly lower than AA1. John Hancock categorized its investments in LILO and SILO transactions as bonds.

The securities valuation office of the National Association of Insurance Commissioners (NAIC) evaluates and rates investments held by insurance companies. Its highest rating is NAIC 1, which is given to transactions that require the least amount of regulatory capital. Each of John Hancock's LILO and SILO transactions was rated NAIC 1.

D. *The Hoosier Transaction*

In 2008 the financial sector experienced a credit crisis. This crisis resulted in widespread credit downgrades of financial institutions throughout the world, including downgrades to the credit ratings of some of the payment undertakers and insurance entities involved in John Hancock's LILO and SILO transactions. In one such case, John Hancock was forced to litigate with an Indiana cooperative, Hoosier Energy, over a SILO transaction involving a coal-fired power plant. *Hoosier Energy Rural Elec. Coop., Inc. v. John Hancock Life Ins. Co.*, 588 F. Supp. 2d 919 (S.D. Ind. 2008), *aff'd*, 582 F.3d 721 (7th Cir. 2009).

In 2002 John Hancock entered into a SILO transaction with Hoosier in which John Hancock leased a coal-fired power plant for 63 years and subleased it back to Hoosier for 30 years. John Hancock's equity investment in the transaction was \$56,772,812. John Hancock also spent \$12,830,640 in transaction expenses. As part of John Hancock's security package, Hoosier obtained a credit default swap from Ambac Assurance Corp. (Ambac). In 2008 Ambac's credit rating was downgraded, and John Hancock exercised its right upon a credit downgrade under the transaction documents to require Hoosier to replace Ambac. When Hoo-

sier was unable to replace Ambac within the specified period, John Hancock tried to enforce its default rights.

Hoosier sought injunctive relief to prevent John Hancock from enforcing its default rights while it continued to look for a replacement for Ambac. The District Court for the Southern District of Indiana granted Hoosier's request for injunctive relief, and the Court of Appeals for the Seventh Circuit affirmed, giving Hoosier approximately 3½ months to find a replacement. During this period, John Hancock and Hoosier settled their dispute. In this settlement, Hoosier agreed to pay John Hancock \$68 million.

The LILO Test Transactions

In connection with each of the test transactions John Hancock entered into numerous agreements covering thousands of pages and conferring various rights and obligations upon the parties involved.¹² The general rights and obligations created as part of each test transaction are similar. However, the details of those rights and obligations vary from transaction to transaction. In each case, a "participation agreement" governs the interaction of the agreements to the transaction and provides, among other things, a general framework for the transaction's structure. Each transaction includes numerous agreements, including an initial lease and sublease, known as the "head lease" and the "lease" in some cases. For simplicity and consistency, we refer to the head lease in each transaction as the initial lease and the lease as the sublease.¹³ Our reference to the transaction in this way is for convenience and is not dispositive of the status of a

¹²John Hancock did not directly participate in any of the test transactions. Rather, John Hancock established a grantor trust through which it participated. These grantor trusts are generally disregarded for Federal income tax purposes and thus do not affect our analysis. Therefore, they are disregarded for purposes of this Opinion.

¹³Each test transaction includes a tax indemnity agreement. The tax indemnity agreements provide that the lessee counterparty will indemnify John Hancock should John Hancock lose its rights to claim the expected tax benefits from the test transactions because of certain enumerated reasons. Unlike the taxpayer in *Historic Boardwalk Hall, LLC v. Commissioner*, 694 F.3d 425 (3d Cir. 2012), *rev'g* 136 T.C. 1 (2011), John Hancock is not protected if its tax benefits are reduced as a result of an IRS challenge.

transaction or the determination of the benefits and burdens of ownership. The basic structures and relevant details of each of the LILO test transactions are described below.

I. *OBB LILO*

A. *Lease and Sublease*

1. *The Asset*

The OBB transaction closed on June 18, 1998. The asset subject to the OBB transaction is the Vienna Kledering Marshalling Yard (VK marshalling yard), which opened in 1996. Its primary function is “shunting”, or the splitting up of freight cars from incoming trains, sorting them, and attaching them to outbound trains headed to their final destinations in Europe. The VK marshalling yard has the capacity to process over 6,100 freight cars daily and is one of the largest marshalling yards in eastern Europe.

Deloitte & Touche (Deloitte) appraised the VK marshalling yard for the OBB transaction at a fair market value, as of the closing date, of \$352,711,000. This value served as the basis for determining John Hancock’s investment in the initial lease. John Hancock and OBB did not further negotiate this investment amount. The appraisal further determined that as of the closing date, the VK marshalling yard had a remaining economic useful life of approximately 48 years. The appraisal used both the cost method of valuation and the discounted cashflow method in reaching its fair market value determination but based its conclusion on the cost method because of a lack of reliable data with respect to expected revenues and expenses from the VK marshalling yard. Deloitte also estimated the residual value of John Hancock’s remaining leasehold interest in the VK marshalling yard at the end of the sublease term to be \$105,107,878. The appraisal relied upon the discounted cashflow method to reach this residual value determination, stating that the cost approach was inapplicable and that the residual value of John Hancock’s remaining leasehold interest would depend upon the cashflows the VK marshalling yard would generate during the remainder of the initial lease term.

2. *Terms*

On the closing date, OBB leased the VK marshalling yard to John Hancock for a term of approximately 38 years. Simultaneously, John Hancock subleased the VK marshalling yard back to OBB for a term of approximately 18 years. At the end of the sublease term OBB was given the option of purchasing John Hancock's leasehold interest in the VK marshaling yard.

3. *Rent and Financing*

a. *Initial Lease*

The initial lease required John Hancock to make an up-front payment to OBB of \$309,375,024 and a deferred rent payment of \$2,295,340,042 on November 12, 2041, five years after the end of the initial lease term. To fund the up front payment, John Hancock contributed \$65,980,517 and borrowed \$243,394,507 from Creditanstalt AG (Credit AG) on a nonrecourse basis. John Hancock also paid \$8,817,775 of transaction expenses.

b. *Sublease and Defeasance*

Pursuant to the sublease, OBB agreed to pay rent to John Hancock. In order to fund the sublease rent payments OBB entered into a number of defeasance agreements. Pursuant to a DPUA, on the closing date OBB deposited the \$243,394,507 John Hancock borrowed from Credit AG and paid to OBB as an up front rent payment with CA-Leasing GmbH (CA Leasing), an affiliate of Credit AG. In return, CA Leasing agreed to make a series of payments on behalf of OBB which exactly match John Hancock's debt service payments to Credit AG in amounts and timing. As a result, pursuant to the transaction documents, CA Leasing pays Credit AG directly to satisfy John Hancock's debt service and OBB's sublease rent.

Credit AG guaranteed CA Leasing's payments under the DPUA. The DPUA and guaranty do not eliminate OBB's legal obligation to pay rent under the sublease. In certain circumstances, OBB is entitled to replace the DPUA with substitute collateral, including a qualified letter of credit.

On June 19, 1998, one day after the closing date, OBB entered into a swap agreement with Merrill Lynch Capital Services, Inc. (Merrill Lynch). Pursuant to this agreement, OBB paid Merrill Lynch \$45,380,000 from John Hancock's \$65,980,517 of equity contribution in exchange for Merrill Lynch's agreement to make payments to OBB in accordance with a specified schedule, including payments to fund OBB's purchase option if exercised. Further, an affiliate of Merrill Lynch guaranteed Merrill Lynch's obligations pursuant to the swap agreement. OBB pledged a first-priority security interest in the swap agreement to John Hancock as collateral for its obligations under the sublease. OBB retained the excess of the up front rent payment from John Hancock to OBB pursuant to the initial lease over the amounts OBB deposited with CA Leasing and Merrill Lynch under the DPUA and swap agreement, respectively. This amount is OBB's cash takeaway from the transaction, or what the parties refer to as OBB's "net present value benefit".

On the closing date, OBB also provided John Hancock with a letter of credit issued from Bank Austria Aktiengesellschaft (Bank Austria). Under the letter of credit, Bank Austria is required to pay John Hancock a specified amount in the event OBB defaults on its obligations pursuant to the sublease. This potential payment eliminated any of John Hancock's risk of exposure that was not covered under the DPUA and the swap agreement. The DPUA, swap agreement, guaranties, pledge, and letter of credit were all required in the OBB transaction under the participation agreement. As a result of the structure in place, the OBB LILLO transaction is fully defeased.

4. Property Rights and Obligations

The initial lease grants John Hancock the right to "possession, use and quiet enjoyment" of the VK marshalling yard. The initial lease is a net lease, meaning that it requires John Hancock to insure, maintain, and repair the VK marshalling yard. John Hancock may satisfy these requirements through its participation in the sublease. John Hancock's participation in the sublease is required under the participation agreement.

OBB's rights and obligations under the sublease with respect to possession and use of the VK marshalling yard are nearly identical to John Hancock's rights and obligations under the initial lease, including the right to "quiet enjoyment" of the VK marshalling yard. The sublease grants OBB the right to modify the VK marshalling yard, subject to certain restrictions. OBB is further restricted, with certain exceptions, from subleasing the VK marshalling yard or creating or permitting a lien on the VK marshalling yard. John Hancock has the right to visit and inspect the VK marshalling yard.

5. Default

If John Hancock defaults on its obligations under the initial lease, OBB may require John Hancock to return the VK marshalling yard, terminate the lease, and demand liquidated damages. In the "Event of Loss", the lease terminates and John Hancock is required to pay a stipulated value to OBB. An "Event of Loss" is defined to include, among other things, actual loss of the VK marshalling yard due to damage or governmental seizure.

John Hancock's rights against OBB in the case of a lessee default under the sublease are similar. John Hancock is entitled to collect on the "Termination Value" of the sublease, take possession of the VK marshalling yard, sell the VK marshalling yard, and terminate the sublease. The sublease termination value is predetermined and is designed to provide John Hancock with a return on its equity investment. In the case of an "Event of Loss" under the sublease, which is the equivalent to the event of loss under the initial lease, the initial lease ends and OBB must pay John Hancock the termination value. Additionally, all rents are due from OBB to John Hancock, and OBB must pay John Hancock an additional amount to offset the stipulated value John Hancock is required to pay OBB under the initial lease.

B. End of Sublease Term

1. OBB's Purchase Option

At the end of the sublease term OBB has the option to purchase John Hancock's leasehold interest in the VK marshalling yard for \$153,817,825, payable in predetermined install-

ments. The payments due to OBB from CA Leasing and Merrill Lynch match exactly the purchase option price and timing. If OBB exercises its purchase option, all agreements executed pursuant to the OBB LILO transaction will terminate and John Hancock will no longer be required to pay OBB the deferred rent payment under the initial lease.

2. John Hancock's Options

If OBB does not exercise its purchase option, John Hancock may choose among three alternatives. John Hancock may elect to: (1) renew the sublease; (2) replace OBB and lease the VK marshalling yard to another lessee; or (3) take possession of the VK marshalling yard. In all three scenarios John Hancock must provide OBB with acceptable collateral to secure John Hancock's obligations to pay the deferred rent payment under the initial lease.

a. Renewal Option

The renewal option extends John Hancock's sublease with OBB for approximately 13 years and includes a set of prenegotiated rent payments during the renewal term totaling \$642,175,362. These rent payments have two components. First, the current portion of renewal rent is equal to \$213,241,461 and is payable throughout the renewal term. The remainder, or \$428,933,901, is deferred and payable at the end of the renewal term. Combined, these rent payments ensure John Hancock's return on its equity investment. At the end of the renewal term John Hancock would take possession of the VK marshalling yard for the remainder of the initial lease term.

If John Hancock elects to renew the sublease, OBB must arrange for either an extension of the nonrecourse loan from Credit AG to John Hancock or for another lender to replace Credit AG as the lender under substantially the same terms as the original loan. If OBB is unable to do so, it must purchase up to 49% of the principal outstanding on the loan from Credit AG and attempt to again extend the remaining loan or find a replacement lender. If OBB is still unable to extend the loan or find a replacement lender, it again has the option of choosing to exercise the purchase option.

If OBB elects the renewal option, it must also arrange for collateral substantially identical to the swap agreement and letter of credit to secure the equity portion of rent during the renewal term. OBB may also be required to provide collateral to secure the debt portion of rent during the renewal term if the replacement lender deems it necessary for the loan extension.

b. Replacement Option

Under the replacement option, OBB must cooperate with John Hancock in the negotiation, execution, and delivery of a replacement lease. However, John Hancock bears the costs incurred in connection with the replacement lease. The replacement lease does not have to mirror the renewal lease. John Hancock, and not OBB, must arrange for a loan extension for its nonrecourse loan from Credit AG or find a replacement lender. If John Hancock is unable to do so, it must purchase the remaining principal of the loan from Credit AG. Further, if John Hancock is unable to find a replacement lessee within 30 days of the end of the sublease term, it will be deemed to have selected the renewal option.

c. Retention Option

Under the retention option, John Hancock must arrange for payments in satisfaction of the principal of its non-recourse loan from Credit AG. If John Hancock is unable to do so within 30 days of the end of the sublease term, it will be deemed to have selected the renewal option.

II. *SNCB 2 and SNCB 5 Lot 1 LILO Transactions*

A. Lease and Sublease

1. The Assets

The SNCB 2 and SNCB 5 lot 1 transactions closed on September 29 and December 15, 1997, respectively. The Kingdom of Belgium owns 99.9% of SNCB, which was reorganized as a limited liability company under Belgian public law in 1991.¹⁴ SNCB operates and maintains domestic and inter-

¹⁴In 2005 SNCB again reorganized with SNCB being renamed SNCB Holding. Under the reorganization SNCB formed two subsidiaries, SNCB

national passenger trains and freight rolling stock in Belgium. The asset subject to the SNCB 2 transaction is the Thalys highspeed trainset (Thalys trainset), which consists of two power units and eight passenger cars, holds approximately 400 people, and is used for highspeed international travel. The assets subject to the SNCB 5 lot 1 transaction are eight electric motive units (EMUs). The EMUs are three-car trainsets consisting of a driving car and two trailer cars and are used predominantly for intercity service.

Deloitte appraised the Thalys trainset at a fair market value of \$34,267,200 on the closing date of the SNCB 2 transaction. Deloitte separately appraised the EMUs at a fair market value of \$61,371,200 on the closing date of the SNCB 5 lot 1 transaction. As in the OBB transaction, these values served as the basis for determining John Hancock's investments in the transactions, and the parties did not further negotiate the investment amounts. Deloitte concluded that as of the closing dates of the SNCB 2 and SNCB 5 lot 1 transactions, the Thalys trainset and the EMUs had remaining economic useful lives of 42 and 45 years, respectively. The appraisals used both the cost method and the discounted cashflow method in their fair market value determinations but chose to rely on the cost method because of a lack of reliable data with respect to expected revenues and expenses in connection with the assets. Deloitte also appraised John Hancock's remaining leasehold interests in the Thalys trainset and EMUs at the end of the subleases, estimating the residual values to be \$7,774,387 and \$14,483,603, respectively.

2. Terms

As part of the SNCB 2 transaction John Hancock leased the Thalys trainset from SNCB for a term of approximately 34 years. Simultaneously, John Hancock subleased the Thalys trainset back to SNCB for a term of approximately 15 years. In the SNCB 5 lot 1 transaction John Hancock leased the EMUs from SNCB for a term of approximately 34 years. Simultaneously, John Hancock subleased the EMUs back to SNCB for a term of approximately 16 years. SNCB has the

and Infrabel, both public limited liability companies. For purposes of this analysis, we refer to SNCB Holding and its subsidiaries as SNCB.

option of purchasing John Hancock's leasehold interests in the Thalys trainset and EMUs at the end of each transaction's sublease term.

3. Rent and Financing

a. Initial Lease

Similar to the OBB transaction, the initial lease in each of the SNCB LILO transactions required John Hancock to make an up-front rent payment on the closing date and a deferred rent payment five years after the end of each initial lease term. John Hancock contributed \$6,314,390 and \$12,164,454 to the SNCB 2 and SNCB 5 lot 1 transactions, respectively, and borrowed \$23,957,351 and \$42,725,648 to fund the remainder of the up-front payments on a nonrecourse basis from Eurofima European Co. for the Financing of Railroad Rolling Stock (Eurofima). John Hancock also paid transaction expenses of \$733,318 and \$797,826 as part of the SNCB 2 and SNCB 5 lot 1 transactions, respectively.

b. Sublease and Defeasance

Pursuant to the subleases, SNCB agreed to pay rent to John Hancock. Similar to the OBB LILO, in order to fund its sublease rent payments SNCB entered into a number of defeasance agreements. The debt defeasance in each transaction is accomplished through a prepaid currency swap whereby SNCB and Eurofima agreed to swap specified amounts of U.S. dollars for Belgian francs on specified dates. Similar to the DPUA in the OBB transaction, the payments due from Eurofima to SNCB exactly match John Hancock's debt service payments to Eurofima in amount and timing.

The equity defeasance in each SNCB LILO transaction is governed by a pledged collateral account agreement (PCAA) with Merrill Lynch. Pursuant to the PCAAs, SNCB deposited a specified amount with Merrill Lynch to secure the equity portion of sublease rent, sublease termination value, and the amount required for SNCB's purchase options. John Hancock was granted a first-priority security interest in each of the PCAAs. SNCB's net present value benefit in the SNCB LILO transactions is the difference between John Hancock's up-front payments under the initial leases and the respective amounts deposited and paid pursuant to the currency swaps

and PCAAs. As a result of the structure in place, the SNCB LILO transactions are fully defeased.

4. Property and Default Rights and Obligations

John Hancock's and SNCB's property and default rights and obligations pursuant to the initial leases and subleases of the SNCB LILO transactions are substantially similar to those conferred under the initial lease and sublease of the OBB transaction. The most significant difference between the OBB transaction and the SNCB LILO transactions is that in each of the SNCB LILO transactions the counterparty, SNCB, has limited right under the subleases to replace the subject assets.

B. End of Sublease Term

According to the appraisals, the fixed purchase option price in each of the SNCB LILO transactions is greater than the expected fair market values of the respective assets on the purchase option dates. If SNCB exercises its purchase options with respect to the SNCB LILO transactions, all agreements executed pursuant to the transactions would terminate and John Hancock would no longer be required to pay the deferred rent payments under the initial leases.

If SNCB does not exercise its purchase options, John Hancock may renew the subleases, replace SNCB with a different lessee, or take possession of the assets. The rights and obligations conferred upon John Hancock under each option are substantially similar to those described with respect to the OBB transaction.

The SILO Test Transactions

Several characteristics distinguish John Hancock's SILO transactions from its LILO transactions. First, because the length of the initial lease exceeds the estimated economic useful life of the asset, John Hancock treated each SILO transaction as a sale for U.S. Federal tax purposes. Next, a service contract option replaces the renewal and replacement leases if the lessee forgoes its purchase option. And finally, pursuant to section 467 the sublease rent payments are treated as a loan from the lessee counterparty to the U.S. taxpayer (section 467 loan). Section 467 imputes a loan and

adds an interest component to a lease in certain cases where the allocation of rent payments does not match the dates when actual payments are due. In the case of John Hancock's SILO transactions, the lessee counterparties prepay their sublease rent payments, creating a section 467 loan from the lessee counterparty to John Hancock.

I. TIWAG

A. Lease and Sublease

1. The Assets

The TIWAG transaction closed on December 21, 2001. TIWAG is a regional energy utility in the Province of Tyrol, Austria. The asset subject to the TIWAG transaction is a 21.6% undivided interest in the Sellrain-Silz hydropower facility (Sellrain-Silz). Sellrain-Silz is a pumped storage, hydroelectric generating facility. The water powering the facility comes from an area covering 139 square kilometers in the northern Stubai Alps. Sellrain-Silz is an important component in TIWAG's power supply. According to the most recent public data, in 2008 Sellrain-Silz produced 21% of TIWAG's total power generation and 4% of TIWAG's total power sold.

Deloitte appraised the 21.6% undivided interest in Sellrain-Silz as of the closing date of the TIWAG transaction at a fair market value of \$323,136,000, with a remaining economic useful life of 75 years. This appraised fair market value served as the basis for determining John Hancock's investment in the transaction, and the parties did not further negotiate the investment amount. Further, Deloitte estimated that as of the end of the sublease and service contract terms the fair market value of the 21.6% undivided interest in Sellrain-Silz would be \$648,210,816 and \$778,757,760, respectively. Deloitte used the discounted cashflow method in its fair market value determinations.

2. Terms

On the closing date John Hancock leased the 21.6% undivided interest in Sellrain-Silz from TIWAG for a term of approximately 94 years. Simultaneously, John Hancock subleased the 21.6% undivided interest in Sellrain-Silz to

TIWAG for a term of approximately 35 years. Because the term of the initial lease exceeded its estimated remaining economic useful life, the parties treated it as a sale for U.S. tax purposes. TIWAG has the option of purchasing John Hancock's leasehold interest in Sellrain-Silz at the end of the sublease term.

3. Rent and Financing

a. Initial Lease

On the closing date John Hancock paid TIWAG \$323 million pursuant to the initial lease. To fund this payment, John Hancock contributed \$49,427,050 in equity and borrowed a total of \$273,572,950 from two lenders on a nonrecourse basis: \$246,215,655 from Mercantile Leasing Co. (Mercantile) (series A loan) and \$27,357,295 from Bank für Tiroler und Vorarlberg (BTV) (series B loan). John Hancock paid \$4,037,500 of transaction expenses.

b. Sublease and Defeasance

Pursuant to the sublease, TIWAG agreed to pay rent to John Hancock. The sublease required many of these payments to be made before the period to which they were allocated. The prepayment of rent is treated as a loan from TIWAG to John Hancock under section 467. At the end of the sublease term the section 467 loan balance is expected to be \$636,037,102. In order to fund the sublease rent payments, TIWAG entered into a number of defeasance agreements.

Unlike John Hancock's LILO transactions, the SILO transactions do not require full defeasance. Rather, the transaction documents only require the proceeds of the series A loan to be set aside pursuant to a DPUA. In the TIWAG transaction, pursuant to the series A DPUA, TIWAG paid \$246,215,655 to Barclays Bank PLC (Barclays) on the closing date. In return, Barclays agreed to make a series of payments on behalf of TIWAG which exactly match John Hancock's debt service payments to Mercantile under the series A loan. As a result, the transaction documents allow for payments directly from Barclays to the series A lender, Mercantile, to satisfy John Hancock's series A debt service and a portion of TIWAG's sublease rent. The series A DPUA is a three-party agreement that includes John Hancock, pro-

viding John Hancock with a priority interest in the deposit in the event TIWAG defaults on its sublease rent obligations.

Barclays is an affiliate of the series A lender, Mercantile. However, Mercantile did not guarantee Barclay's payments under the series A DPUA. TIWAG remains legally responsible for all rent and other obligations under the sublease. In certain circumstances TIWAG may replace the series A DPUA with substitute collateral, including a qualified letter of credit.

In addition to the series A DPUA, TIWAG entered into a series B DPUA and an EPUA on the closing date. TIWAG's series B DPUA and EPUA were arranged and agreed upon outside of the SILO transaction. The documents governing the TIWAG transaction do not require these agreements. John Hancock is not a party to either agreement, and neither is pledged to John Hancock.

Pursuant to the series B DPUA, TIWAG deposited \$29,585,454 with Dexia Credit Local (Dexia). In return Dexia agreed to make a series of payments on behalf of TIWAG which exactly match John Hancock's debt service payments to BTV under the series B loan. The payments from the series A DPUA and the series B DPUA exactly satisfy TIWAG's debt portion of sublease rent.¹⁵ Dexia is not an affiliate of BTV, the series B lender.

Pursuant to the EPUA, TIWAG deposited \$23.1 million with UBS AG (UBS). In return UBS agreed to make a series of payments on behalf of TIWAG pursuant to a specified schedule covering the equity portion of sublease rent and funding a portion of TIWAG's purchase option if exercised. TIWAG's net present value benefit in the transaction is approximately \$24.1 million, equaling the difference between John Hancock's investment in the initial leases, \$323 million, and the amounts paid to Barclays, Dexia, and UBS pursuant to the series A DPUA, series B DPUA, and EPUA.

Although the series B DPUA and the EPUA were not required pursuant to the TIWAG transaction documents, John Hancock knew of TIWAG's intention to enter into such agreements because the defeasance agreements allowed

¹⁵Throughout the sublease term, TIWAG's sublease rent payments exceed John Hancock's debt service payments by approximately \$10 million. This \$10 million is known as the "equity portion" of sublease rent.

TIWAG to receive beneficial accounting treatment under European accounting principles (European GAAP). Even if TIWAG decided not to enter into a series B DPUA and EPUA on the closing date, the transaction documents required such agreements or other similar qualifying collateral upon the occurrence of certain trigger events such as a credit downgrade or majority ownership change in TIWAG. As a precaution John Hancock preapproved a “form” of the series B DPUA and the EPUA as well as Dexia and UBS as qualified payment undertakers. The “form” series B DPUA and EPUA are identical to TIWAG’s actual agreements absent the information specific to the timing and participating parties.

4. Property Rights and Obligations

The initial lease grants John Hancock the right to use, operate, maintain or possess the 21.6% undivided interest in Sellrain-Silz. During the initial lease term TIWAG cannot sell, dispose of, or create a security interest in the property without John Hancock’s consent. The initial lease also restricts TIWAG’s rights to consolidate or merge with another company or spin off, convey, transfer, or lease substantially all of its assets to another party.

TIWAG’s rights and obligations under the sublease with respect to possession and use of the 21.6% undivided interest in Sellrain-Silz are nearly identical to John Hancock’s rights and obligations under the initial lease. The sublease is a net lease, meaning that TIWAG is responsible for maintenance, insurance, and operational costs. During the sublease term TIWAG generally cannot create or permit any lien on the 21.6% undivided interest in Sellrain-Silz. John Hancock has the right to visit and inspect Sellrain-Silz twice a year.

On the closing date John Hancock and TIWAG also entered into an “Agreement of Servitude” pursuant to which TIWAG granted John Hancock a right-of-way to specified land parcels at Sellrain-Silz (ROW agreement). The ROW agreement provides John Hancock access to the road that leads from the public road to the upper dam of Sellrain-Silz. This right-of-way was registered with the land registry at the district court in Silz, Austria. Upon the occurrence of a “Trigger Event”, John Hancock has the right to purchase certain parcels of land related to Sellrain-Silz. A trigger event

includes, among other things, TIWAG's selling or imposing a mortgage or pledge on specified land connected with Sellrain-Silz.

5. Default

Neither John Hancock nor TIWAG has the right to declare the initial lease in default and pursue remedies. However, under the sublease, John Hancock has certain remedies against TIWAG in the case of a "Lessee Event of Default". In such a case, John Hancock is entitled to collect on the "Termination Value" of the sublease. John Hancock may also take possession of, sell, or sublease the 21.6% undivided interest in Sellrain-Silz. Just as in John Hancock's LILO transactions, termination value is predetermined on the closing date and ensures John Hancock's return on its equity investment. TIWAG must also pay John Hancock the termination value in the case of a "Lease Event of Loss", which includes actual loss or seizure of Sellrain-Silz.

B. End of Sublease Term

1. TIWAG's Purchase Option

At the end of the sublease term TIWAG has the option of purchasing John Hancock's leasehold interest in Sellrain-Silz for \$795,135,940. If TIWAG exercises the purchase option, John Hancock must pay TIWAG the amount due under the section 467 loan, and all agreements executed pursuant to the TIWAG transaction would terminate. The section 467 loan balance exactly matches the first installment of the purchase option. Therefore, if TIWAG exercises its purchase option, these amounts offset each other. The remaining installments of the purchase option price are financed through TIWAG's EPUA, meaning that if TIWAG exercises the purchase option, it does not have to contribute or borrow any additional cash.

2. John Hancock's Options

If TIWAG does not exercise its purchase option, John Hancock has two choices. First, it may elect to require TIWAG to arrange for a service contract between John Hancock and one or more power purchasers. Second, it may elect to take possession of the 21.6% undivided interest in Sellrain-Silz. In

either case, TIWAG must ensure at its own expense that Sellrain-Silz is in satisfactory condition in accordance with all regulatory and other requirements.

Similar to the LILO test transactions, neither party has advanced a compelling reason John Hancock would select the retention option in any of the SILO test transactions. Therefore, as the parties have, we focus our discussion for each SILO test transaction on the service contract option.

Under the service contract option, TIWAG must procure one or more “Qualified Bidders” to enter into one or more power purchase agreements with John Hancock and arrange for an operator of the 21.6% undivided interest in Sellrain-Silz during the service contract term. TIWAG must also find a bank to refinance the section 467 loan. A qualified bidder cannot be the operator or be related to the operator of Sellrain-Silz. TIWAG may be the power purchaser or the operator but not both. The power purchase agreements must match the service contract term which is prearranged on the closing date to be approximately 25 years.

Any power purchaser must agree to make a series of pre-determined payments throughout this term, known as the “Capacity Charges”. These payments total \$1,316,013,696. A power purchaser is also required to pay for John Hancock’s fixed and variable cost of operating the 21.6% undivided interest in Sellrain-Silz. The capacity charges are set at amounts that reflect the future fair market value of the asset and cover John Hancock’s cost of servicing the refinanced section 467 loan while paying John Hancock a specified return. If John Hancock fails to make the required capacity available to the service purchaser for any reason, including force majeure, the capacity charges will be reduced in a manner consistent with the service contract. The power purchase agreements do not require credit support to secure the power purchaser’s payments during the service contract term. However, if at any point during the service contract term a power purchaser’s credit rating were to fall below A or A2 under S&P’s and Moody’s credit rating systems, respectively, that power purchaser would be required to procure credit support in the form of a letter of credit or guaranty from a bank or guarantor with the requisite credit rating.

John Hancock may also request that TIWAG acquire residual value insurance to protect a portion of the value of the 21.6% undivided interest in Sellrain-Silz at the end of the service contract term. The amount of the residual value insurance is the lesser of: (1) \$205,422,256 or (2) 35% of the appraised fair market value of the 21.6% undivided interest in Sellrain-Silz at the end of the service contract term as determined at or near the purchase option date. From the end of the service contract term to the end of the initial lease John Hancock would take possession of the 21.6% undivided interest in Sellrain-Silz to use as it pleases.

If TIWAG fails to find qualified bidders to enter into the power purchase agreements or fails to procure a bank to refinance the section 467 loan, it may cure this failure through the exercise of its purchase option. If TIWAG is able to satisfy all the required conditions and a power purchase agreement is in place, it will receive the proceeds of the section 467 loan from John Hancock as well as the balance of the EPUA.

II. *Two Dortmund Transactions*

A. *Lease and Sublease*

1. *The Asset*

The Dortmund transactions closed on December 20, 2001. The assets subject to the Dortmund transactions are halls 1, 2, 3A, and 4–8 of the Westfalahallen Dortmund Trade Fair, Event, and Congress Center Complex (trade fair facility). Dortmund is in the State of North Rhine-Westphalia, Germany. Westfalahallen Dortmund GmbH (Westfalahallen), a German limited liability company, operates the trade fair facility through its subsidiaries, and Dortmund is the sole owner of Westfalahallen. The trade fair facility presents more than 30 national and international trade fairs each year. In 2000, the year before John Hancock entered into the Dortmund transactions, more than 7,000 exhibitors and more than 1 million visitors came to Dortmund for events hosted in the trade fair facility. In 2004 Dortmund constructed hall 3B as an addition to the trade fair facility, which is not and was never made part of the Dortmund transactions. John Hancock and Dortmund executed servitude consent agree-

ments so that the new hall would not adversely affect John Hancock's interest in the trade fair facility.

Deloitte appraised the trade fair facility. As of the closing date of the Dortmund transactions, the appraisals¹⁶ concluded that the halls subject to the transactions had the following fair market values and remaining economic useful lives:

<i>Hall</i>	<i>Fair market value</i>	<i>Remaining useful life in years</i>
1	\$31,661,000	60
2	10,295,000	55
3A	4,588,000	55
4	23,249,000	60
5	13,910,000	55
6	22,330,000	62
7	17,835,000	62
8	15,160,000	68

The appraisals were used to determine John Hancock's investment in the transactions, and the parties did not further negotiate the investment amounts. According to the appraisals, as of the purchase option date the expected fair market value of the trade fair facility was determined to be \$242,882,556. The methodology used in the appraisals attributed 80% of the fair market value determinations to the discounted cashflow method and 20% to the cost method.

2. *Terms*

On the closing date John Hancock leased the trade fair facility from Dortmund for a term of 99 years. Simultaneously, John Hancock subleased the trade fair facility to Dortmund for a term of approximately 30 years. This arrangement required multiple agreements to incorporate the entire trade fair facility. In each transaction, an initial lease and sublease govern the parties' rights and obligations with respect to the halls. With respect to the facility sites associated with each hall, the parties entered into a "Facility Site Lease Agreement" for each transaction. Unless otherwise stated, there are no material rights and obligations con-

¹⁶Deloitte issued one appraisal for halls 1, 2, and 3A of the trade fair facility and a second appraisal for halls 4–8.

ferred, pursuant to each facility site lease, that distinguish the Dortmund transactions from John Hancock's other SILO test transactions for purposes of this Opinion. Dortmund has the option of purchasing John Hancock's leasehold interests in the trade fair facility at the end of the sublease term.

3. Rent and Financing

a. Initial Lease

On the closing date of the Dortmund transactions John Hancock made payments to Dortmund of \$46,544,000 and \$92,484,000 pursuant to the initial lease agreements and facility lease agreements of the Dortmund 1 and Dortmund 2 transactions, respectively. To fund these payments, John Hancock contributed \$7,379,928 for the Dortmund 1 transaction and \$14,652,452 for the Dortmund 2 transaction. John Hancock also borrowed approximately 90% of the debt from Mercantile, equal to \$35,247,665 and \$70,048,393 for the respective transactions (series A loans). The remaining 10% was borrowed from Westdeutsche Landesbank Girozentrale (series B loans). John Hancock also paid transaction expenses of \$1,373,048 and \$2,728,730 as part of the Dortmund 1 and Dortmund 2 transactions, respectively.

b. Sublease and Defeasance

Pursuant to the sublease agreements, Dortmund agreed to pay rent to John Hancock. As in the TIWAG transaction, the sublease agreements require that many of these payments be made before the period to which they are allocated, resulting in section 467 loans to John Hancock in each transaction. On the purchase option date, the total balance of the section 467 loans is expected to be approximately \$221,835,000. In order to fund the sublease rent payments Dortmund entered into a number of defeasance agreements.

On the closing date Dortmund entered into a series A DPUA with Barclays for each of the Dortmund transactions. The series A DPUs are substantially similar to the series A DPUA in the TIWAG transaction. With respect to the series B loan and equity, just as in the TIWAG transaction, the Dortmund transactions do not require Dortmund to enter into a series B DPUA or an EPUA. John Hancock is not a party to a series B DPUA or EPUA, and John Hancock is not

the beneficiary of a pledge of a series B DPUA or EPUA. Nonetheless, Dortmund defeased the series B loans and equity in agreements executed outside of the Dortmund transactions. Dortmund's net present value benefit in each transaction is equal to its up-front payments under the initial leases less the amount that was deposited pursuant to the series A DPUAs, series B DPUAs, and EPUAs.

Dortmund entered into a series B DPUA with Hypo-und Vereinsbank AG for each of the Dortmund transactions. Dortmund also entered into numerous EPUAs with Bank Austria. As in the TIWAG transaction, the series B DPUAs and EPUAs entitle Dortmund to beneficial accounting treatment under European GAAP. John Hancock knew that Dortmund intended on entering into such agreements because John Hancock preapproved a "form" of the EPUAs as well as Bank Austria as the EPUA undertaker. The EPUAs were required under the participation agreement upon the occurrence of certain trigger events. There are no trigger events that would require Dortmund to enter into the series B DPUAs. Nonetheless, John Hancock approved a "form" for the series B DPUAs.

4. Property and Default Rights and Obligations

John Hancock and Dortmund's property and default rights and obligations, pursuant to the Dortmund transactions' initial leases, facility site leases, and sublease agreements, are substantially similar to those conferred under the initial lease and sublease in the TIWAG transaction.

B. End of Sublease Term

Dortmund has a purchase option at the end of each transaction's sublease term which is designed in a manner consistent with the TIWAG transaction. If Dortmund does not exercise its purchase options, John Hancock must choose between requiring Dortmund to arrange for a service contract or take possession of the trade fair facility itself.

Under the service contract option Dortmund must procure one or more service purchasers for the trade fair facility. The service purchasers must agree to pay service fees that consist of: (1) the annual capacity availability charges that are designed to cover John Hancock's debt service on the

refinanced section 467 loan and ensure a predetermined economic return on its investment and (2) the trade fair facility operating and maintenance expenses. Dortmund may remain the operator of the trade fair facility or must find a qualified replacement operator. Unlike the TIWAG transaction, Dortmund may be both the service purchaser and the operator.

If John Hancock fails to make the trade fair capacity and management services available to the service purchasers for any reason, including force majeure, the capacity availability charges will be reduced in a manner consistent with the service contract. The service contract does not require credit support to secure a service purchaser's payments during the service contract term. However, if at any point during the service contract term a service purchaser's credit rating were to fall below BBB+ or Baa1 under S&P's and Moody's credit rating systems, respectively, the service purchaser is required to procure acceptable credit support. In all other ways, the design, structure, and economics of John Hancock's service contract options and retention options in the Dortmund transactions are substantially similar to those of the TIWAG transaction.

III. SNCB SILO

A. Grant and Subgrant

1. *The Asset*

The SNCB SILO closed on November 14, 2001. The asset subject to the SNCB SILO is a 50% undivided interest in the high-speed rail line that runs from the Belgian-French border to Lembeek, Belgium, and the railway station known as "Brussels South" that is dedicated to that high-speed line (together the HSL). The HSL is integrated with the main east-west rail line in Belgium. SNCB considers the HSL to be its "crown jewel" as it enables high-speed rail services between the United Kingdom, France, the Netherlands, and Germany.

Deloitte appraised the HSL and concluded that as of the closing date, a 50% undivided interest in the HSL had a fair market value of \$426,900,500 and a remaining economic useful life of 78 years. This value served as the basis for determining John Hancock's investment in the SNCB SILO, and

the parties did not further negotiate the investment amount. Deloitte further appraised the 50% undivided interest in HSL as of the purchase option date at \$890,941,344. The appraisal used the discounted cashflow method in its fair market value determinations.

2. Terms

On the closing date John Hancock entered into a grant of rights agreement with SNCB with respect to the 50% undivided interest in HSL for a term of approximately 99 years (grant). Simultaneously, John Hancock and SNCB entered into a subgrant of rights agreement for a term of approximately 29 years (subgrant) whereby John Hancock granted a set of nearly identical rights in the 50% undivided interest in HSL back to SNCB.¹⁷ SNCB has the option of purchasing John Hancock's interest in the HSL at the end of the subgrant term.

3. Rent and Financing

a. Grant

On the closing date John Hancock paid \$426,900,500 to SNCB pursuant to the grant. To fund this payment John Hancock contributed \$61,177,535 in equity and borrowed a total of \$365,722,965 from two lenders on a nonrecourse basis, \$329,150,668 from Mercantile (series A loan) and \$36,572,297 from Barclays (series B loan). John Hancock also paid \$3,799,414 of transaction expenses.

b. Subgrant and Defeasance

Pursuant to the subgrant SNCB agreed to make subgrant rent payments to John Hancock in the amounts and on the dates specified in the sublease agreement. The sublease requires that many of these payments be made before the period to which they are allocated. As in John Hancock's other SILO test transactions, this prepayment creates a section 467 loan. At the end of the sublease term the section 467

¹⁷For purposes of this analysis, there are no material differences between the function of the grant of rights and the subgrant used in the SNCB SILO and the leases and subleases used in John Hancock's other SILO test transactions.

loan balance is expected to be \$780,056,766. In order to fund the subgrant rent payments SNCB entered into a number of defeasance agreements.

On the closing date, SNCB entered into a series A DPUA with Barclays. The series A DPUA is substantially similar to those in John Hancock's other SILO test transactions. Also as in John Hancock's other SILO test transactions, the SNCB SILO transaction does not require SNCB to enter into a series B DPUA or an EPUA. John Hancock is not a party to a series B DPUA or an EPUA, and John Hancock is not the beneficiary of a pledge of a series B DPUA or EPUA.

On November 19, 2001, SNCB entered into a currency swap transaction (CST) with Bank of America, NA (BofA). Pursuant to the currency swap transaction, SNCB agreed to pay BofA U.S.-dollar-denominated payments on certain specified dates in exchange for euro-denominated payments. The payments made to SNCB under the currency swap transaction match the debt service payments on the series B loan. Unlike the currency swap transactions in the SNCB LILO transactions, SNCB did not prepay this currency swap.

Also on November 19, 2001, SNCB entered into a USD Credit Linked Deposit Agreement with UBS (CLDA). Similar to the EPUAs in John Hancock's other SILO test transactions, SNCB placed a deposit with UBS in exchange for a series of payments exactly matching the timing and amount of the equity subgrant payments and the purchase option price. SNCB may not freely terminate the CLDA.¹⁸ However, the CLDA permits SNCB to direct the payments due from UBS to the recipient of its choosing. As in John Hancock's other SILO test transactions, the CLDA entitled SNCB to beneficial accounting treatment under European GAAP, and John Hancock knew that SNCB intended on executing such an agreement. SNCB calculated its net present value benefit from the transaction as the difference between the \$426,900,500 received from John Hancock pursuant to the grant and the amounts paid upon the execution of the series A DPUA, the CLDA, and the CST.

¹⁸Petitioners argue that SNCB may terminate the CLDA at any time to free up cash for its general business purposes. To support this argument, petitioners rely solely on the testimony of an SNCB executive. This testimony is not consistent with the terms of the CLDA.

4. Property and Default Rights and Obligations

For purposes of this analysis the property and default rights and obligations of John Hancock and SNCB, with respect to the grant and subgrant, are substantially similar to those conferred under the initial leases and subleases in John Hancock's other SILO test transactions. The primary difference in the SNCB SILO transaction is that HSL is part of the Belgian public domain. Consequently, the parties included provisions in the transaction documents providing that if HSL ceases to be an asset in the public domain, the parties intend for all of the transaction documents to survive and the rights and obligations of the parties to constitute an independent contractual relationship.

B. End of Subgrant Term

SNCB has a purchase option at the end of the subgrant term under substantially the same terms and conditions as in John Hancock's other SILO test transactions. Further, as in those transactions, if SNCB does not exercise its purchase option, John Hancock must choose between requiring SNCB to arrange for a service contract or taking possession of the 50% undivided interest in HSL.

Under the service contract option SNCB must procure a "Service Purchaser" under the service contract, which cannot be SNCB, and arrange for the section 467 loan to be refinanced. John Hancock must find an operator for the 50% undivided interest in HSL; but if it cannot find a suitable operator, SNCB is required to assume the position. Under the service contract the service purchaser must agree to pay John Hancock: (1) the base service fees, which are designed to cover John Hancock's debt service on the refinanced section 467 loan and ensure a predetermined economic return on its investment and (2) the monthly additional fees that cover the fixed and variable costs of operating the 50% undivided interest in HSL.

The service purchaser has the right to terminate the service contract if John Hancock fails to make the asset available for the negotiated services for any reason, except for force majeure, and fails to cure within 60 days of notification. In the case of force majeure, the service purchaser may terminate the service contract if John Hancock fails to cure

within 180 days. In all other ways, the design, structure, and economics of John Hancock's service contract option and retention option are substantially similar to those of John Hancock's other SILO test transactions.

Tax Returns, Notices of Deficiency, and Trial

I. Procedural History

John Hancock filed a consolidated Federal income tax return for each of the years at issue.

A. Notice of Deficiency (Docket No. 6404–09)

On December 17, 2008, respondent issued a notice of deficiency to John Hancock which determined Federal income tax deficiencies for 1994, 1997, and 1998 of \$8,860,564, \$65,746,621, and \$173,497,367, respectively, based upon the disallowance of various deductions and adjustments to gross income from John Hancock's LILO transactions and the denial of a capital loss carry back to 1994. On March 16, 2009, John Hancock filed the petition with this Court at docket No. 6404–09, disputing the 1994, 1997, and 1998 determined deficiencies.

The notice of deficiency for docket No. 6404–09 included three of the test transactions litigated in these cases, the OBB LILO and the two SNCB LILOs.¹⁹ With respect to the OBB LILO, respondent determined that the LILO transaction was in substance the purchase of a future interest by John Hancock and therefore denied John Hancock's deductions of \$66,899,067 for a rental expense, \$15,946,722 for an interest expense, and \$298,054 for amortized transaction costs for 1998. Additionally, respondent reduced John Hancock's taxable rental income by \$19,169,206 for 1998. Alternatively, respondent determined that in substance the OBB LILO transaction was a financing arrangement and therefore increased John Hancock's taxable income by \$1,040,159 for OID income for 1998. Under this alternative argument, respondent concedes John Hancock's deduction for amortized transaction costs.

With respect to the two SNCB LILOs, respondent determined that the LILO transactions were in substance pur-

¹⁹The notice of deficiency combined the two SNCB LILO transactions.

chases of future interests by John Hancock and therefore denied John Hancock's deductions of \$6,849,494 and \$39,408,434 for rental expenses, \$1,737,691 and \$10,030,464 for interest expenses, and \$23,787 and \$127,220 for amortized transaction costs for 1997 and 1998, respectively. Additionally, respondent reduced John Hancock's taxable rental income by \$2,265,498 and \$13,298,535 for 1997 and 1998, respectively. Alternatively, respondent determined that in substance the two SNCB LILO transactions were a financing arrangement and therefore increased John Hancock's taxable income by \$229,736 and \$1,929,488 for OID income for 1997 and 1998, respectively. Under this alternative argument, respondent concedes John Hancock's deduction for amortized transaction costs.²⁰

B. Notice of Deficiency (Docket No. 7084–10)

On December 24, 2009, respondent issued a notice of deficiency to John Hancock which determined a Federal income tax deficiency for 1999 of \$59,899,141 based upon the disallowance of various deductions and adjustments to gross income from John Hancock's LILO transactions. On March 23, 2010, John Hancock filed the petition with this Court at docket No. 7084–10, disputing the 1999 determined deficiency.

The notice of deficiency for docket No. 7084–10 included three of the test transactions litigated in these cases, the OBB LILO and the two SNCB LILOs.²¹ With respect to the OBB LILO, respondent determined that the LILO transaction was in substance the purchase of a future interest by John Hancock and therefore denied John Hancock's deductions of \$124,785,824 for a rental expense, \$29,516,300 for an interest expense, and \$555,956 for amortized transaction costs for 1999. Additionally, respondent reduced John Hancock's taxable rental income by \$35,739,244 for 1999. Alternatively, respondent determined that in substance the OBB LILO transaction was a financing arrangement and therefore increased John Hancock's taxable income by \$4,746,135 for OID for 1999. Under this alternative argument, respondent

²⁰ Respondent made similar determinations and denied similar deductions for the six other LILO transactions listed in the notice of deficiency.

²¹ The notice of deficiency combined the two SNCB LILO transactions.

concedes John Hancock's deduction for amortized transaction costs.

With respect to the two SNCB LILO transactions, respondent determined that the LILO transactions were in substance the purchase of a future interest by John Hancock and therefore denied John Hancock's deductions of \$39,408,436 for a rental expense, \$9,787,937 for an interest expense, and \$127,220 for amortized transaction costs for 1999. Additionally, respondent reduced John Hancock's taxable rental income by \$13,298,535 for 1999. Alternatively, respondent determined that in substance the two SNCB LILO transactions were financing arrangements and therefore increased John Hancock's taxable income by \$2,055,293 for OID income for 1999. Under this alternative argument, respondent concedes John Hancock's deductions for amortized transaction costs.²²

C. Notice of Deficiency (Docket No. 7083–10)

On December 24, 2009, respondent issued a notice of deficiency to John Hancock which determined Federal income tax deficiencies for 2000 and 2001 of \$108,046,947 and \$143,516,079, respectively, based upon the disallowance of various deductions and adjustments to gross income from John Hancock's LILO and SILO transactions and the denial of worthless stock losses for 2000.²³ On March 23, 2010, John Hancock filed the petition with this Court at docket No. 7083–10, disputing the 2000 and 2001 determined deficiencies.

The notice of deficiency for the case at docket No. 7083–10 included all seven of the test transactions litigated in these cases, the OBB LILO, the two SNCB LILOs,²⁴ the TIWAG SILO, the two Dortmund SILOs,²⁵ and the SNCB SILO. With respect to the OBB LILO, respondent determined that the LILO transaction was in substance the purchase of a future interest by John Hancock and therefore denied John

²² Respondent made similar determinations and denied similar deductions for the six other LILO transactions listed in the notice of deficiency.

²³ The parties filed a stipulation of settled issues with the Court on June 7, 2011, resolving the worthless stock loss issue for 2000.

²⁴ The notice of deficiency combined the two SNCB LILO transactions.

²⁵ The notice of deficiency combined the two Dortmund SILO transactions.

Hancock's deductions of \$124,785,824 and \$124,785,724 for rental expenses, \$29,073,071 and \$28,598,273 for interest expenses, and \$555,956 and \$555,956 for amortized transaction costs for 2000 and 2001, respectively. Additionally, respondent reduced John Hancock's taxable rental income by \$35,739,244 and \$35,739,244 for 2000 and 2001, respectively. Alternatively, respondent determined that in substance the OBB LILO transaction was a financing arrangement and therefore increased John Hancock's taxable income by \$4,044,640 and \$5,361,948 for OID income for 2000 and 2001, respectively. Under this alternative argument, respondent concedes John Hancock's deduction for amortized transaction costs.

With respect to the two SNCB LILO transactions, respondent determined that the LILO transactions were in substance purchases of future interests by John Hancock and therefore denied John Hancock's deductions of \$39,408,436 and \$38,940,891 for rental expenses, \$9,527,327 and \$9,068,703 for interest expenses, and \$127,220 and \$127,220 for amortized transaction costs for 2000 and 2001, respectively. Additionally, respondent reduced John Hancock's taxable rental income by \$13,298,535 and \$13,297,807 for 2000 and 2001, respectively. Alternatively, respondent determined that in substance the two SNCB LILO transactions were a financing arrangement and therefore increased John Hancock's taxable income by \$2,189,343 and \$2,332,181 for OID income for 2000 and 2001, respectively. Under this alternative argument, respondent concedes John Hancock's deductions for amortized transaction costs.

With respect to the TIWAG SILO, respondent determined that John Hancock had not acquired the benefits and burdens of ownership of the property subject to the SILO transaction and therefore denied John Hancock's deductions of \$807,500 for a depreciation expense, \$535,234 for an interest expense, and \$2,802 for amortized transaction costs for 2001. Additionally, respondent determined that in substance John Hancock made a loan to TIWAG and failed to report interest income on that loan. Therefore, respondent increased John Hancock's taxable income by \$78,302 for OID income for 2001.

With respect to the two Dortmund SILO transactions, respondent determined that John Hancock had not acquired

the benefits and burdens of ownership of the property subject to the SILO transactions and therefore denied John Hancock's deductions of \$115,170 for depreciation expenses, \$240,614 for interest expenses, and \$21,259 for amortized transaction costs for 2001. Additionally, respondent determined that in substance John Hancock made a loan to Dortmund and failed to report interest income on that loan. Therefore, respondent increased John Hancock's taxable income by \$24,985 for OID income for 2001.

With respect to the SNCB SILO, respondent determined that John Hancock had not acquired the benefits and burdens of ownership of the property subject to the SILO transaction and therefore denied John Hancock's deductions of \$5,032,552 for a depreciation expense, \$2,594,278 for an interest expense, and \$15,898 for amortized transaction costs for 2001. Additionally, respondent determined that in substance John Hancock made a loan to SNCB and failed to report interest income on that loan. Therefore, respondent increased John Hancock's taxable income by \$627,439 for OID income for 2001.²⁶

D. Pretrial Motions

Respondent failed to timely raise the economic substance theory in the pleadings, instead raising the issue for the first time in his pretrial memorandum, dated September 16, 2011. Petitioners filed a motion in limine for exclusion of respondent's argument based on the economic substance theory on September 23, 2011, and respondent filed an objection to petitioners' motion on October 6, 2011. On October 11, 2011, the parties presented oral arguments to the Court with respect to petitioners' motion. By order of the Court dated October 12, 2011, we denied petitioners' motion in limine for exclusion of the economic substance theory but placed the burden of proof with respect to the economic substance theory on respondent.

²⁶ Respondent made similar determinations and denied similar deductions for the six other LILO transactions and one other SILO transaction listed in the notice of deficiency.

II. *Trial*

The Court held a five-week special trial session in Boston, Massachusetts. The record in these cases includes the testimony of 53 witnesses, over 3,600 exhibits, over 4,000 pages of trial transcripts, and over 1,000 pages of briefing. Both parties rely heavily on expert opinions to support their arguments. The parties' expert witnesses, their qualifications, and their Court-recognized expertises are listed below. We evaluate expert opinions in the light of all of the evidence in the record, and we are not bound by the opinion of any expert witness. *Helvering v. Nat'l Grocery Co.*, 304 U.S. 282, 295 (1938); *Shepherd v. Commissioner*, 115 T.C. 376 (2000), *aff'd*, 283 F.3d 1258 (11th Cir. 2002). We may reject, in whole or in part, any expert opinion. *Estate of Davis v. Commissioner*, 110 T.C. 530, 538 (1998).

A. *Petitioners' Expert Witnesses (Alphabetical Order)*

1. *Mr. John Dolan*

The Court recognized Mr. Dolan as an expert in the field of European railways and railway assets. Mr. Dolan is a chartered civil engineer, a member of the Institution of Civil Engineers, and a holder of the title European engineer. He is also a chartered member of the Institute of Logistics and Transport. Mr. Dolan has worked in the European railway industry since 1972 and currently works as a consultant for InterFleet Technology Ltd. where he advises on a range of railway safety, infrastructure, and operational issues. He previously worked in advisory roles for Haliburton, Her Majesty's Railway Inspectorate, and British Rail.

2. *Dr. Paul Doralt*

The Court recognized Dr. Doralt as an expert in the field of Austrian tax law. Dr. Doralt is admitted to the Austrian Chamber of Accountants as a certified tax adviser and to the Austrian bar as an attorney. He is currently a partner at Dorda Brugger Jordis GmbH, with his practice focus in tax law. Mr. Doralt is a board member of the International Tax Committee of the International Bar Association.

3. *Mr. Hans Haider*

The Court recognized Mr. Haider as an expert in the field of Austrian and European electricity. Mr. Haider is currently the managing partner of Hans Haider Consulting. He has over 40 years of experience, having served as a member of the management board of Siemens AG Austria and chairman of the management board and CEO of Verbund AG, Austria's largest utility. He has previously served as president of the Austrian National Committee to the World Energy Counsel and president of the European Union of the Electricity Industry. Mr. Haider is currently a member of Ernst & Young's Energy Advisory Board.

4. *Dr. Friedrich Hey*

The Court recognized Dr. Hey as an expert in the field of German tax law. Dr. Hey received a doctorate in law from the University of Hamburg/Germany and is admitted as a certified tax adviser and a German attorney. He is currently a partner at Debevoise & Plimpton LLP (Debevoise & Plimpton) and the chair of the German American Lawyers Association. Dr. Hey's work has been published numerous times, and he has been recognized as a leading German tax expert by publications such as Chambers, Legal 500 EMEA, PLC Which Lawyer?, and Who's Who Legal.

5. *Dr. Friedrich Popp*

The Court recognized Dr. Popp as an expert in the field of Austrian corporate law and creditor rights law. Dr. Popp received a doctorate in law from the University of Vienna/Austria with a thesis in civil law. He is currently an associate at Debevoise & Plimpton. Dr. Popp has published numerous articles in various journals and is a frequent contributor to the Austrian Journal of Banking and Financial Research.

6. *Dr. Thomas Schürle*

The Court recognized Dr. Schürle as an expert in the field of German administrative and public law. Dr. Schürle received a doctorate in law from the University of Heidelberg. He is currently the managing partner of the Frankfurt

office of Debevoise & Plimpton. His experience has focused on advising municipalities and companies on the financial, economic, and regulatory aspects of cross-border leasing. Dr. Schürle teaches a law class at the Institute of Law and Finance at the Johann-Wolfgang-Goethe-University in Frankfurt.

7. Dr. Norbert Stoeck

The Court recognized Dr. Stoeck as an expert in the field of trade fair industry including the ownership and operation of trade fairs in Germany. Dr. Stoeck received a Ph.D. in marketing from the University of Rostock. Since 1983 he has worked at Roland Berger Strategy Consultants and currently serves as the head of the “International Trade Shows, Tourism and Mega-Events” practice group. In this role Dr. Stoeck has managed over 100 trade fair projects internationally and advised on countless others including trade fairs in German municipalities. He has written numerous books and articles discussing the management of trade fairs, trade fair strategies, and all other aspects of the trade fair industry.

8. Dr. Frederik Vandendriessche

The Court recognized Dr. Vandendriessche as an expert in the field of Belgian administrative and public law. Dr. Vandendriessche received a doctorate in law at the University of Ghent with a focus in public and private legal entities. He is currently a partner in the Brussels office of Stibbe where he focuses his practice in administrative law. Dr. Vandendriessche is a professor of public law at the University of Ghent and the University of Antwerp. He has written a wide range of articles about public law that have been published in Belgian journals and magazines.

B. Respondent’s Expert Witnesses (Alphabetical Order)

1. Dr. Ignaas Behaeghe

The Court recognized Dr. Behaeghe as an expert in Belgian law. Dr. Behaeghe received a doctorate in law and economic sciences from the University of Antwerp and a master’s in tax law from the Fiscale Hogeschool in Brussels. He is currently an equity partner at Eversheds Brussels.

2. *Dr. Stefan Diemer*

The Court recognized Dr. Diemer as an expert in the field of German tax law. Dr. Diemer received his doctorate in law from the University of Regensburg. He is currently a partner at Heisse Kursawe Eversheds and practices in the area of corporate and tax law. Dr. Diemer is a certified tax lawyer and is a member of the International Transaction Support Team of Eversheds, a unit specializing in international transactions. The JUVE Handbuch 2009/2010 lists Dr. Diemer as a frequently recommended lawyer in the field of corporate law.

3. *Dr. Matthias Heisse*

The Court recognized Dr. Heisse as an expert in the field of German law, except for German criminal law. Dr. Heisse received his doctorate in law from the University of Munich. He is currently the managing partner of Heisse Kursawe Eversheds and focuses his practice in mergers and acquisitions, corporate, and tax law. Dr. Heisse lectures on corporate law topics at the University of Turin, the University of Munich, and the University of Augsburg. He is recognized in numerous publications such as Chambers Europe, Legal 500 Europe, and the JUVE Handbook 2010/2011 as a leading attorney in the field of corporate law.

4. *Dr. Thomas Lys*

The Court recognized Dr. Lys as an expert in the field of financial economics. Dr. Lys received his Ph.D. in accounting and finance from the University of Rochester. He presently holds the Eric L. Kohler chair in accounting and professor of accounting and information management at the Northwestern University Kellogg School of Professional Management. Dr. Lys teaches classes in financial reporting, security analysis, and mergers and acquisitions. Dr. Lys' research has been published in prominent academic journals including the Journal of Accounting and Economics, the Journal of Financial Economics, the Journal of Business, and the Accounting Review. Dr. Lys has previously testified for the Government in other Federal leasing cases.

5. *Dr. F.H. Rolf Seringhaus*

The Court recognized Dr. Seringhaus as an expert in the field of trade fair exhibiting and marketing. Dr. Seringhaus earned his doctorate in administrative studies from York University. He is a professor emeritus in global marketing at the Wilfred Laurier University School of Business and Economics. Dr. Seringhaus has worked in academics since 1981 teaching courses and researching international marketing. He has written countless journal articles discussing topics such as international trade fairs and marketing, as well as three books on global marketing management.

6. *Mag. Alexander Stolzka*

The Court recognized Mag. Stolzka as an expert in the field of Austrian law. Mag. Stolzka received a doctorate in law from Vienna University. He is currently the managing partner of Eversheds Austria, focusing his practice in real estate, insurance, and corporate law. He is also a member of the board of directors of Eversheds International, Ltd., London. Mag. Stolzka is a member of the German Chamber of Commerce in Austria and is also a legal adviser to the Swiss embassy in Vienna.

7. *Dr. Vukan Vuchic*

The Court recognized Dr. Vuchic as an expert in the field of transportation systems. Dr. Vuchic received a Ph.D. in civil engineering and transportation from the University of California at Berkeley. He is an emeritus professor of transportation systems engineering at the University of Pennsylvania where he taught and performed research in various areas of transportation from 1967–2010. Dr. Vuchic has written over 150 papers and reports discussing rail systems and has lectured at approximately 90 universities. He has also published three books on urban public transportation systems and another book on relationship of transportation and cities. Dr. Vuchic is also the recipient of numerous honors and awards from transportation organizations around the world for his contributions to the field of transportation systems.

8. *Dr. Peter Wundsam*

The Court recognized Dr. Wundsam as an expert in the field of Austrian taxation and accounting. Dr. Wundsam is a partner at Moore Stephens in Vienna and has been working as an auditor and tax consultant for 15 years. He is a certified public accountant and certified tax adviser in Austria. He is also a member of the executive board of the Chamber of Accountants and a member of the committee on commercial law and auditing within the Austrian Chamber of Accountants. Further, Dr. Wundsam is the head of the working committee public sector of the Austrian Institute of Auditors and an editor of the publication *Public Sector Bulletin*.

OPINION

Burden of Proof

The burden is upon petitioners to prove that respondent's determinations in the notices of deficiency are incorrect. *See* Rule 142(a)(1). However, in respect of any new matter, respondent bears the burden of proof. *Id.* Respondent failed to timely raise his economic substance argument in the pleadings. As a result, on October 12, 2011, the Court issued an order placing the burden in these cases on respondent to prove that the economic substance doctrine applies to the leveraged leases. Petitioners do not argue that the burden of proof shifts to respondent pursuant to section 7491(a) for any other issue or year, nor have they shown that the threshold requirements of section 7491(a) have been met for any of the other determinations at issue. Accordingly, the burden remains on petitioners with respect to all other issues to prove that respondent's determinations of deficiencies in income tax are incorrect.

Principal Place of Business

In the case at docket No. 7083–10 the parties disagree as to whether an appeal would come before the U.S. Court of Appeals for the First or Sixth Circuit. In the case of a corporation seeking redetermination of a tax liability, section 7482(b)(1)(B) provides that a decision of the Tax Court “may be reviewed by the United States court of appeals for the cir-

cuit in which is located * * * the principal place of business or principal office or agency of the corporation”. This determination is made as of the time the petition is filed. Thus, the crux of the parties’ dispute is the location of MIC’s “principal place of business”.

The Supreme Court has recently determined that a corporation’s “principal place of business” is “best read as referring to the place where a corporation’s officers direct, control, and coordinate the corporation’s activities.” *Hertz Corp. v. Friend*, 559 U.S. 77, 92–93 (2010). This is often referred to as the “nerve center” test, and it normally refers to where a corporation maintains its headquarters, provided that the headquarters is the actual center of direction, control, and coordination. *Id.* Respondent argues that MIC’s principal place of business is and always has been in Michigan because MIC was incorporated there and has represented in correspondence to the IRS and the Michigan Department of Consumer & Industry Services that its principal place of business is in Michigan. Petitioners argue, on the other hand, that MIC’s principal place of business is in Massachusetts because six of its nine corporate officers²⁷ and all three of its directors work in Massachusetts, its corporate books and records are kept in Massachusetts, and its significant business decisions have been and continue to be made in Massachusetts. Further, MIC does not maintain offices in Michigan.

It is clear to us that MIC’s “nerve center” is in Massachusetts. Respondent has not presented any evidence to dispute that MIC’s office in Massachusetts is the center of its direction, control, and coordination. Therefore, we conclude that Massachusetts was MIC’s principal place of business when its petition was filed.

Leveraged Lease Transactions

I. Frank Lyon

The seminal case for leveraged lease transactions is *Frank Lyon Co. v. United States*, 435 U.S. 561 (1978), where the Supreme Court set forth the circumstances under which the

²⁷The remaining three officers work in Toronto, Canada.

Commissioner must respect such a transaction for Federal tax purposes. The Supreme Court stated:

[W]here * * * there is a genuine multiple-party transaction with economic substance which is compelled or encouraged by business or regulatory realities, that is imbued with tax-independent considerations, and that is not shaped solely by tax-avoidance features * * * [to which] meaningless labels [are] attached, the Government should honor the allocation of rights and duties effectuated by the parties. Expressed another way, so long as the lessor retains significant and genuine attributes of the traditional lessor status, the form of the transaction adopted by the parties governs for tax purposes. What those attributes are in any particular case will necessarily depend upon its facts. * * * [*Id.* at 583–584; fn. ref. omitted.]

In *Frank Lyon*, Worthen Bank (Worthen) sought to construct a new bank building. State and Federal regulations prohibited Worthen from financing the construction through conventional methods. As a result, Worthen was forced to find alternative financing, and eventually came to an agreement with the taxpayer, Frank Lyon Co. (Frank Lyon). Pursuant to this agreement, Frank Lyon purchased the building from Worthen during its construction for a total of \$7,640,000, and leased it back to Worthen for an initial term of 25 years. Frank Lyon invested \$500,000 and financed the remainder with a third-party lender. A mortgage secured the loan on the building, as well as Frank Lyon's promise to assume personal responsibility for the loan's repayment and an assignment to the lender of the rental payments under the lease.

Worthen retained options to repurchase the building at the end of the 11th, 15th, 20th, and 25th years of the initial lease. Alternatively, Worthen could opt to renew the lease for eight additional five-year terms. Worthen's rent payments equaled the amounts of Frank Lyon's debt service in amount and timing. Further, the prices of Worthen's purchase options matched Frank Lyon's then-outstanding loan balance, plus Frank Lyon's initial \$500,000 investment, with 6% compounded interest. The lease was a net lease with Worthen remaining obligated to pay taxes, insurance, and utilities.

The Supreme Court held that the form of a sale-leaseback transaction will be respected for Federal tax purposes as long as the taxpayer retains significant and genuine attributes of

a traditional lessor. *Id.* at 584. An important inquiry is “whose capital was committed to the * * * [property] * * * [and therefore, who is] entitled to claim depreciation for the consumption of that capital.” *Id.* at 581. Frank Lyon was liable as principal for the repayment of the \$7,640,000 loan, had invested \$500,000 in the transaction, and its return on the transaction was guaranteed only if Worthen exercised its extension options, which was speculative.

The Supreme Court also determined the following factors, among others, to favor Frank Lyon: (1) Worthen’s rent and purchase option prices were reasonable; (2) Frank Lyon assumed the credit risk of Worthen’s defaulting on its rent payments; (3) there was a real possibility that Worthen could walk away from the transaction at the end of the initial lease; (4) the transaction was negotiated in good faith between independent parties; and (5) Worthen and Frank Lyon paid the same tax rates, making the transaction tax neutral for the fisc. Accordingly, the Supreme Court held for Frank Lyon, concluding that “a sale-and-leaseback, in and of itself, does not necessarily operate to deny a taxpayer’s claim for deductions.” *Frank Lyon*, 435 U.S. at 584.

A. *Economic Substance*

After the Supreme Court issued its opinion in *Frank Lyon*, several Courts of Appeals reduced the Supreme Court’s economic substance formulation to a two-part test: (1) whether the transaction had economic substance beyond tax benefits (objective test); and (2) whether the taxpayer had shown a nontax business purpose for entering the disputed transaction (subjective test). *See, e.g., ACM P’ship v. Commissioner*, 157 F.3d 231, 247–248 (3d Cir. 1998), *aff’g in part, rev’g in part* T.C. Memo. 1997–115; *Bail Bonds by Marvin Nelson, Inc. v. Commissioner*, 820 F.2d 1543, 1549 (9th Cir. 1987), *aff’g* T.C. Memo. 1986–23; *Rice’s Toyota World, Inc. v. Commissioner*, 752 F.2d 89, 91–92 (4th Cir. 1985), *aff’g in part, rev’g in part* 81 T.C. 184 (1983). However, the various Courts of Appeals disagree as to the appropriate relationship between the objective and subjective tests.²⁸

²⁸Congress codified the economic substance doctrine in the Code by the Health Care and Education Reconciliation Act of 2010, Pub. L. No. 111–152, sec. 1409, 124 Stat. at 1067. *See also* H.R. Rept. No. 111–443 (I), at

The Court of Appeals for the Fourth Circuit has adopted a disjunctive approach, treating a transaction as having economic substance if the transaction has either a business purpose or economic substance. *See, e.g., Rice's Toyota World, Inc. v. Commissioner*, 752 F.2d at 91–92. The Courts of Appeals for the Ninth and Eleventh Circuits view the objective and subjective prongs as elements of one comprehensive inquiry. *See, e.g., Sacks v. Commissioner*, 69 F.3d 982, 988 (9th Cir. 1995), *rev'g* T.C. Memo. 1992–596; *Kirchman v. Commissioner*, 862 F.2d 1486, 1492 (11th Cir. 1989), *aff'g Glass v. Commissioner*, 87 T.C. 1087 (1986). Finally, the Court of Appeals for the Federal Circuit adheres to a multi-factor test which provides that a lack of economic substance may be sufficient to invalidate a transaction regardless of whether the taxpayer has motives other than tax avoidance. *Coltec Indus., Inc. v. United States*, 454 F.3d 1340, 1355 (Fed. Cir. 2006).

B. Substance Over Form

Courts use substance over form and its related judicial doctrines to determine the true nature of a transaction disguised by formalisms that exist solely to alter tax liabilities. *See United States v. R.F. Ball Constr. Co.*, 355 U.S. 587 (1958); *Commissioner v. Court Holding Co.*, 324 U.S. 331 (1945); *Stewart v. Commissioner*, 714 F.2d 977, 987–988 (9th Cir. 1983), *aff'g* T.C. Memo. 1982–209; *Rose v. Commissioner*, T.C. Memo. 1973–207. In such instances, the substance of a transaction, rather than its form, will be given effect. We generally respect the form of a transaction, however, and will apply the substance over form principles only when warranted. *See Gregory v. Helvering*, 293 U.S. 465 (1935); *Blueberry Land Co. v. Commissioner*, 361 F.2d 93, 100–101 (5th Cir. 1966), *aff'g* 42 T.C. 1137 (1964).

In *Frank Lyon*, 435 U.S. at 584, the Supreme Court held that the form of a sale-leaseback transaction will be respected for Federal tax purposes as long as the lessor retains significant and genuine attributes of a traditional

291–299 (2010), 2010 U.S.C.C.A.N. 123, 222–231 (discussing the reasons for codification of the economic substance doctrine). This codified doctrine does not apply to these cases because it is effective only for transactions entered into after March 30, 2010.

lessor. The substance over form doctrine requires viewing the transaction as a whole. *Commissioner v. Court Holding Co.*, 324 U.S. at 334. A “critical fact,” however, is whether the taxpayer has undertaken “substantial financial risk” of loss of its investment on the basis of the value of the underlying property. *Coleman v. Commissioner*, 16 F.3d 821, 826 (7th Cir. 1994), *aff’g* T.C. Memo. 1987–195 and T.C. Memo. 1990–99.

II. LILO and SILO Litigation

In the cases at bar, petitioners assert that the LILO and SILO leveraged leases are genuine multiple-party transactions, with economic substance, that were compelled or encouraged by business realities and were not designed as a scheme to avoid payment of taxes. As such, petitioners assert, the LILO and SILO leveraged leases should be respected for Federal tax purposes because they satisfy the requirements set out by the Supreme Court in *Frank Lyon Co.*

Respondent contends that the LILO and SILO leveraged leases are “prepackaged, promoted tax products” that “create tax benefits for John Hancock out of thin air, and share that value with the counterparties, promoters, and advisors”. Therefore, respondent argues that the leveraged leases should not be respected for Federal tax purposes because John Hancock did not acquire the benefits and burdens of ownership with respect to the SILO transactions or a true leasehold interest with respect to the LILO transactions and thus the transactions lack economic substance.

Taxpayers have lost their fight for claimed tax benefits in SILO and LILO transactions in all Courts of Appeals in which they have appeared. The Courts of Appeals for the Second and Fourth Circuits have ruled against taxpayers in *Altria Grp., Inc. v. United States*, 658 F.3d 276 (2d Cir. 2011) (denying the taxpayer’s motion for judgment as a matter of law and a new trial after a jury verdict disallowed the tax benefits derived from three SILO transactions and a LILO transaction), *aff’g* 694 F. Supp. 2d 259 (S.D.N.Y. 2010), and *BB&T Corp. v. United States*, 523 F.3d 461 (4th Cir. 2008) (disallowing the tax benefits derived from a LILO transaction), *aff’g* 2007 WL 37798 (M.D.N.C. 2007), respectively.

Likewise, the Court of Appeals for the Federal Circuit has ruled against taxpayers in *Wells Fargo & Co. v. United States*, 641 F.3d 1319 (Fed. Cir. 2011) (disallowing the tax benefits derived from 26 SILO transactions), *aff'g* 91 Fed. Cl. 35 (2010), and *Consol. Edison Co. of N.Y., Inc. & Subs. v. United States*, 703 F.3d 1367, 2013 WL 93110 (Fed. Cir. 2013) (disallowing tax benefits derived from a LILO transaction because the taxpayer never acquired the benefits and burdens of ownership), *rev'g* 90 Fed. Cl. 228 (2009). In *AWG Leasing Trust v. United States*, 592 F. Supp. 2d 953 (N.D. Ohio 2008), the District Court for the Northern District of Ohio disallowed the tax benefits derived from a SILO transaction. *AWG* was not appealed.²⁹

The Tax Court has never ruled upon the income tax consequences of a LILO or SILO transaction. As an aid to our evaluation of the present cases, we will review the LILO and SILO cases already decided, in chronological order by the date they were decided. We begin with *BB&T*, in which the Court of Appeals for the Fourth Circuit established the basis for a substance over form inquiry with respect to LILO transactions. We next review *AWG*, in which the District Court for the Northern District of Ohio was the first court to review a SILO transaction, applying both a substance over form inquiry and a two-part economic substance inquiry. Finally, we review three decisions from the Courts of Appeals for the Second Circuit³⁰ and the Federal Circuit,³¹ which determine whether the substance of each transaction is consistent with its form, among other inquiries, and set forth the standard

²⁹Additionally, in *Fifth Third Bancorp v. United States*, No. 05-350 (S.D. Ohio Apr. 18, 2008), a jury verdict without a related published opinion disallowed the taxpayer's claimed tax benefits derived from a LILO transaction. Further, beginning on March 12, 2012, the Court of Federal Claims held a 10-day trial in *Unionbanca Co. & Subs. v. United States*, No. 1:06-cv-00587 (Fed. Cl. filed Aug. 14, 2006), to determine whether to uphold assessed deficiencies resulting from two LILO transactions. To date, no opinion has been issued and no decision has been rendered in that case.

³⁰*Altria Grp., Inc. v. United States*, 658 F.3d 276 (2d Cir. 2011), *aff'g* 694 F. Supp 2d. 259 (S.D.N.Y. 2010).

³¹*Wells Fargo & Co. v. United States*, 641 F.3d 1319 (Fed. Cir. 2011), *aff'g* 91 Fed. Cl. 35 (2010), and *Consol. Edison Co. of N.Y., Inc. & Subs. v. United States*, 703 F.3d 1367 (Fed. Cir. 2013), *rev'g* 90 Fed. Cl. 228 (2009).

by which to judge whether a purchase option is likely to be exercised in a LILO or SILO transaction.

A. *BB&T*

In the first case of its kind, the Court of Appeals for the Fourth Circuit affirmed a District Court's decision to grant summary judgment to the Government, disallowing the taxpayer's claimed deductions in connection with a LILO transaction. *BB&T*, 523 F.3d 461. The taxpayer, BB&T Corp. (BB&T), was a domestic financial service company. In the LILO transaction, BB&T leased pulp manufacturing equipment from Sodra Cell AB (Sodra), a Swedish manufacturer of wood pulp, for a term of 36 years and subleased the equipment back to Sodra for a term of 15.5 years.

BB&T's LILO transaction was very similar to the typical LILO transaction described above in section IV.A of our findings of fact and depicted in the associated graphic. The rights and obligations conferred in the initial lease and sublease were nearly identical, with Sodra continuing to use and possess the equipment as it did before the transaction. The transaction was fully defeased, resulting in a series of bookkeeping entries in satisfaction of Sodra's sublease rent payments and BB&T's debt service which matched in amount and timing. The defeasance transactions also prefunded Sodra's purchase option at the end of the sublease. As in John Hancock's LILO transactions, if Sodra were to decide not to exercise its purchase option, BB&T would have the choice of: (1) renewing the sublease; (2) replacing Sodra; or (3) retaining the equipment. Finally, Sodra was required to procure a long-term letter of credit for the benefit of BB&T in the event that the transaction was unwound early.

BB&T argued to the District Court that it had acquired a legitimate leasehold interest in the equipment. The argument was predicated upon certain new obligations imposed on Sodra as part of the sublease, including Sodra's obligation to maintain and operate the equipment consistently with certain standards, hold a specified amount of insurance, and file certain reports not previously required. The court disagreed, holding that "[i]n substance, Sodra's use and possession of the [e]quipment was unaltered by the transaction". The court held that nothing in the record indicated that any alterations

to Sodra's rights and obligations with respect to the equipment were unique to the initial lease, nor was there any evidence that such obligations were not the responsibility of Sodra before the LILO transaction.

The District Court further held that even if Sodra were to choose not to exercise its purchase option, the defeasance structures and obligations imposed on the parties ensured that BB&T bore no real risk of loss. Despite construing the evidence in the light most favorable to BB&T, the court granted the Government's motion for summary judgment, disregarded the reciprocal and offsetting obligations of the LILO transaction, and concluded that BB&T acquired no more than a future interest in the equipment.

On appeal, the Court of Appeals for the Fourth Circuit affirmed the trial court's decision. Applying the doctrine of substance over form, the Court of Appeals determined that in order for BB&T to deduct payment on the initial lease as a rent payment under section 162(a)(3), it had to establish that it acquired a genuine leasehold interest in the equipment, i.e., that the initial lease was, in substance, a true lease for tax purposes.

In determining whether the transaction allocated BB&T's and Sodra's rights, obligations, and risks in a manner that resembles a traditional lease relationship, the court found that (1) BB&T and Sodra exchanged nearly identical rights and obligations in the initial lease and sublease, leaving BB&T only a right to make an annual inspection of the equipment; (2) though the transaction provided for the exchange of tens of millions of dollars in rent payments, there was a lack of actual cashflow during the term of the transaction aside from the money BB&T provided Sodra as incentive for the transaction; (3) Sodra, through its purchase option, could unwind the transaction without ever losing dominion and control over the equipment or having surrendered any of its own funds to BB&T and had no economic incentive to do otherwise; thus, BB&T did not expect Sodra to walk away from the cashless purchase option at the end of the sublease; and (4) the structure insulated BB&T from any risk of losing its initial investment. *BB&T*, 523 F.3d at 473.

Moreover, the court held that unlike the transaction in *Frank Lyon*, the LILO transaction "failed to show any 'busi-

ness or regulatory realities' that 'compelled or encouraged * * * the structure of the transaction at issue here, nor has it established that the LILO is 'imbued with tax-independent considerations, and is not shaped solely by tax avoidance features that have meaningless labels attached'". *Id.* Thus, the court held in substance the transaction was a financing arrangement, not a genuine lease and sublease.

The court did not analyze BB&T's LILO transaction for economic substance. The court noted that whether a particular transaction lacks economic substance is a question of fact. *Id.* at 472. As a result, because the case arose out of a motion for summary judgment, the District Court and the Court of Appeals were required to view the facts in a light most favorable to BB&T, and both courts assumed the LILO transaction had economic substance.

B. AWG

In *AWG*, 592 F. Supp. 2d 953, the District Court for the Northern District of Ohio was the first court to review a SILO transaction. In the transaction at issue, KeyCorp (Key) and PNC Financial Services Group, Inc. (PNC), two financial institutions, entered into a grantor trust (Key/PNC). Key/PNC leased a waste-to-energy disposal and treatment plant (facility) in Wuppertal, Germany, from Abfallwirtschaftsgesellschaft mbH Wuppertal (AWG) for a term of 75 years and subleased the facility back to AWG for a term of 24 years. A consortium of German municipalities owned AWG, and they were also some of the facility's most important customers. Like John Hancock's SILO transactions, because the initial lease exceeded the expected economic useful life of the leased asset, it was treated as a sale for U.S. Federal tax purposes.

The sublease was a net lease, with AWG retaining nearly identical rights and obligations with respect to the facility as it had before the SILO transaction. Key/PNC through an equity contribution provided approximately 13% of the prepaid rent to AWG as required by the initial lease. Similar to John Hancock's SILO transactions, the remainder of the transaction was financed through two nonrecourse loans, a series A loan accounting for 90% of the debt and a series B loan accounting for the remaining 10%. Unlike John Han-

cock's SILO transactions, Key/PNC required that the transaction feature full defeasance, with AWG obligated to enter into separate DPUAs for the series A and series B loans, as well as an EPUA. These defeasance agreements ensured the payment of AWG's rental obligation under the sublease, which matched Key/PNC's debt service in amount and timing, and funded AWG's purchase option. The series A DPUA was pledged as collateral for repayment of Key/PNC's loans.

The structure of AWG's purchase option was similar to those of the lessee counterparties in John Hancock's SILO transactions. However, unlike John Hancock's SILO transactions, if AWG chose not to exercise its purchase option, Key/PNC was not given options. Rather, the transaction required AWG to enter into a service contract to purchase solid waste disposal services from Key/PNC for a specified term. As in John Hancock's SILO transactions, the service contract option required the lessee counterparty, AWG, to arrange for a refinancing of Key/PNC's nonrecourse debt.

In order to determine whether Key/PNC was entitled to the claimed tax deductions, the District Court analyzed the economic substance of the transaction following *Dow Chem. Co. v. United States*, 435 F.3d 594, 599 (6th Cir. 2006), which treats a transaction as having economic substance only if the transaction has genuine economic effects other than tax benefits and the taxpayer is truly motivated by profit to participate in the transaction.

Starting with the assumption that AWG would exercise its purchase option, the evidence showed that Key/PNC would receive approximately \$78 million on its \$55 million equity investment during the sublease term. The court held that this 3.4% return was consistent with the type of return banks ordinarily receive from leveraged lease transactions. Further, the court held that although it was unlikely that AWG would choose the service contract option, if it did so Key/PNC had the potential to earn between 5% and 8% on its equity investment, depending on the facility's business production. Accordingly, the District Court held that the transaction had genuine economic effects other than tax benefits. The court also held that Key/PNC had a profit motive, relying on the small chance that the transaction could earn between 5% and 8%.

Having concluded that the SILO transaction had economic substance, the District Court turned to the substance over form test. Citing *Frank Lyon*, 453 U.S. 561, the District Court held that in order for Key/PNC to prevail on its claim that the substance of the transaction was consistent with its form, thus entitling Key/PNC to tax depreciation and amortization deductions, Key/PNC had to prove that it both obtained and kept significant and genuine characteristics of ownership of the facility. “Such genuine attributes of ownership are generally found only where the alleged owner bears both the burdens and enjoys the benefits of asset ownership.” *AWG*, 592 F. Supp. 2d at 981.

Several facts were pivotal to the court’s decision. First, the court held that AWG’s rights and obligations with respect to the facility remained virtually the same before and after the SILO transaction. Notably, under German law, legal title to the facility remained with AWG, entitling AWG to depreciation deductions on the facility for German tax purposes. Next, the court pointed to the circular nature of the SILO transaction’s payment structure, holding that the offsetting payments strongly indicated that the transaction had little substantive purpose. Third, the court held that Key/PNC did not assume the substantive credit, residual value, or remarketing risk that is typical of a lessor in a leveraged lease. Aside from its other protections, the court noted that the SILO transaction included a guaranty from the municipal members of AWG, backed by the German Federal Government, to the benefit of Key/PNC.

Finally, the District Court emphasized that AWG was “highly likely” or “nearly certain”³² to exercise its purchase option. If AWG did not exercise the purchase option, it was required to refinance Key/PNC’s nonrecourse debt of \$383 million. On the purchase option date, the appraisal estimated

³²The District Court also used terms such as “compelled to” and “virtually certain” to determine whether AWG would exercise its purchase option. *AWG Leasing Trust v. United States*, 592 F. Supp. 2d 953, 986 (N.D. Ohio 2008). Later, Courts of Appeals have discussed in depth the standard to be used to determine whether a party in a SILO or LILO transaction will exercise its purchase option. See *Wells Fargo*, 641 F.3d at 1325–1330; *Consol. Edison*, 703 F.3d at 1379. The District Court in *AWG* lacked the benefit of the Court of Appeals for the Federal Circuit’s in-depth analysis of the issue and creation of a reasonable likelihood standard.

the fair market value of the facility to be \$390 million. Accordingly, initial refinancing would require a loan-to-value ratio of over 98%. A provision in the service contract required a \$50 million payment from AWG, reducing the amount required to be borrowed to \$333 million. Nonetheless, this loan-to-value ratio of approximately 85% was still well above the typical ratio for a German loan, of no greater than 67%. The District Court concluded that exercise of the purchase option was the only viable choice for AWG.

The court also took into consideration the tax consequence to AWG of nonexercise under German law. As is the case in John Hancock's SILO transactions, although the initial lease is treated as a sale for U.S. Federal tax purposes, under German law AWG remained the owner of the facility. If AWG were to elect the service contract option, it would receive the cash balance from the DPUAs and EPUA, or approximately \$521 million. The District Court held that this receipt of cash, combined with AWG's relinquishment of the facility, would likely be treated as a taxable sale under German law. The transaction's original appraisal failed to consider this possibility and its impact on AWG's purchase option decision.

Several other unique facts were important in the District Court's decision. For instance, the court seemed skeptical about the accuracy of the appraisal, pointing to the large discrepancy between the facility's original appraised fair market value of \$250 million and the \$450 million appraisal used to build the transaction. The court also noted that no representative from AWG testified at trial to provide evidence of any reason for AWG to participate in the SILO transaction outside of its net present value benefit. In sum, the court concluded that

the AWG transaction is a financing arrangement designed in significant measure to increase tax deductions available to * * * [Key/PNC]. The AWG transaction * * * is not a genuine sale and leaseback. Essentially all that * * * [Key/PNC] did was to pay AWG a \$28.5 million accommodation fee to sign paperwork meeting the formal requirements of a sale and leaseback and to arrange a circular and largely meaningless flow of cash from and then back to * * * [the German lenders]. AWG, meanwhile, continues to have undisturbed and uninterrupted possession and control of the Facility, continues to claim the tax benefits of ownership of the Facility under German law, and has no economic or political motivation to give up control of the plant to * * * [Key/PNC] at any time. Because * * * [Key/PNC] never became the true owners of the Facility,

they are not entitled to deductions for the depreciation or amortization of expenses associated with the asset. [AWG, 592 F. Supp. 2d at 990.]

C. *Wells Fargo*

In *Wells Fargo*, 641 F.3d 1319, the Court of Appeals for the Federal Circuit affirmed the Court of Federal Claims' decision to disallow the taxpayer's claimed tax benefits arising from 26 SILO transactions. The parties agreed to try a set of test transactions, four of which involved transportation assets with domestic transit agencies as the counterparties (transit agency transactions) and a fifth involving qualified technological equipment with a foreign counterparty. The lessee counterparties and the assets of the *Wells Fargo* test transactions were as follows:

(1) New Jersey Transit Corporation—45 light rail vehicles and 650 buses;

(2) State of California Department of Transportation (Caltrans)—6 locomotives and 12 intercity passenger rail cars;

(3) Metropolitan Transit Authority of Harris County, Texas (Houston Metro)—45 commuter buses and 241 transit buses;

(4) Washington Metropolitan Area Transit Authority (WMATA)—42 subway cars; and

(5) Belgacom Mobile, S.A., a Belgian entity (Belgacom)—2 lots of GSM cellular communications equipment.

Wells Fargo & Co. (Wells Fargo) is a diversified financial services company. It operates a leasing company, maintains a fairly significant leasing portfolio, and invests in leases involving a variety of assets. Wells Fargo conducted extensive due diligence before entering into its SILO transactions, including credit approvals and tax capacity analyses. It also relied upon the work of qualified appraisers, accountants, and lawyers who reviewed and provided support for their SILO transactions.

In each of the transit agency transactions Wells Fargo, through a grantor trust, made an initial equity contribution of approximately 15% to 20% of the prepaid rent made to the lessee counterparty and borrowed the remainder on a non-recourse basis. Unlike John Hancock's SILO transactions, Wells Fargo did not divide its borrowing into series A and series B loans. A promoter secured the appraisals that determined the value of each transaction. The rights and obliga-

tions transferred to Wells Fargo under the initial lease in each of the transactions were substantially similar to those transferred back to the lessee counterparties in the respective subleases. The lessee counterparties' rent payments under the subleases exactly matched Wells Fargo's debt service payments in amount and timing. Further, unlike John Hancock's SILO transactions, which did not require series B debt or equity defeasance, each of Wells Fargo's transactions required full debt and equity defeasance.

Wells Fargo's SILO transactions featured purchase options for the lessee counterparties at the end of the sublease terms. The purchase options were prefunded through the defeasance transactions. If a lessee counterparty were to decide not to exercise its purchase option, Wells Fargo would have the choice of either taking possession of the transportation equipment or requiring the lessee to arrange for a service contract.

The service contract option imposed certain obligations on the lessee counterparty. These obligations included: (1) finding an acceptable operator for the transportation equipment and negotiating an operating agreement; (2) arranging for the refinancing of Wells Fargo's nonrecourse loan; (3) in the Caltrans and WMATA transactions, obtaining and paying for a letter of credit for the benefit of the refinancing lender; (4) in the Caltrans, WMATA, and Houston Metro transactions, procuring and paying for residual value insurance for the benefit of Wells Fargo; (5) satisfying the equipment's physical return conditions; and (6) if Wells Fargo requires, entering into new defeasance agreements to secure amounts owed to Wells Fargo under the service contracts.

The trial court analyzed Wells Fargo's test transactions under both the substance over form and economic substance doctrines. In each test transaction, the court concluded that Wells Fargo was not entitled to its claimed deductions. Analyzing whether the benefits and burdens of ownership had passed to Wells Fargo, the court compared each Wells Fargo test transaction with the transaction in *Frank Lyon*, finding:

The loan proceeds were not invested in the property or equipment, or retained by either the tax-exempt entity or Wells Fargo. Moreover, the debt and equity undertaking payment arrangements eliminated the need for the tax-exempt entity to actually pay rent under the lease-backs, or for Wells Fargo to actually make any debt service payments. The "rent"

and “debt” payments in each SILO simply are accounted for as offsetting entries within the lender group. The debt will be completely paid without Wells Fargo having to supply any funds, whether the * * * [purchase options] are exercised or not. In contrast, in *Frank Lyon*, the taxpayer alone was liable for repayment of recourse debt, “to which it exposed its very business well-being.” * * * The taxpayer also was dependent upon the lessee for payment of rent to service the debt. [*Wells Fargo*, 91 Fed. Cl. at 77.]

The court also found that Wells Fargo’s return on its investment was guaranteed in each of the SILO transactions, regardless of any decline in the value of the leased assets.

The court distinguished Wells Fargo’s test transactions “from *Frank Lyon*, where the lessee had renewal options, but the exercise of the options was at the lessee’s unconstrained choice, and the taxpayer did not have the ability to impose a renewal upon the lessee.” *Id.* at 78. The court concluded that despite convincing evidence that the service contract and return options were viable, “[t]he near certain exercise of * * * [the purchase options] at the end of the lease-back period renders moot what might or might not happen after the * * * [purchaser option] date passes.” *Id.* at 74.

Finally, the court determined that Wells Fargo’s transactions lacked economic substance because on a net present value basis each SILO is “a losing proposition without the tax benefits.” *Id.* at 82. The court also held that there was no nontax business purpose to the SILO transactions and that the transactions were not the product of “any negotiations or commercial realities”.

On appeal, Wells Fargo challenged the Court of Federal Claims’ decision with respect to both the application of the substance over form doctrine and the court’s determination that there was no economic substance. The Court of Appeals for the Federal Circuit focused its analysis on the substance over form inquiry (i.e., whether Wells Fargo acquired the benefits and burdens of ownership in the leased assets) and the question of whether the lessee counterparties would exercise their purchase options at the end of the lease term. *Wells Fargo*, 641 F.3d at 1325–1330.

Wells Fargo argued that (at the time the transactions were entered into) it could not know for certain whether the lessee counterparties would exercise their purchase options. The court stated: “We have never held that the likelihood of a

particular outcome in a business transaction must be absolutely certain before determining whether the transaction constitutes an abuse of the tax system. The appropriate inquiry is whether a prudent investor in the taxpayer's position would have reasonably expected * * * [the counterparties to exercise their purchase option]", not whether the taxpayer was certain of such an outcome. *Id.* at 1325–1326.

Wells Fargo challenged the testimony of Dr. Lys, the Government's expert on financial economics, and defended its own appraisers' analyses. The court identified the discount rate that the lessee counterparties would apply in calculating the net present value of its purchase option decision as the "crux of the disagreement" between Dr. Lys' analysis and those of Wells Fargo's appraisers. The appraisers analyses used the weighted average cost of capital (WACC) in the transit industry as the appropriate discount rate. Dr. Lys, on the other hand, used a lower discount rate in the same way as he has done for John Hancock's transactions, equal to the rate at which the lessee counterparty could borrow funds. Using the borrowing rate, Dr. Lys projected that (1) the fair market values of the leased assets on the sublease purchase options dates and (2) the cost of the payments to Wells Fargo under the service contracts were higher than their appraised values. As a result, Dr. Lys concluded that the service contract provided the lessee counterparties with less financial benefit than if they simply decided to exercise the purchase option. Wells Fargo argued that Dr. Lys' deviation from the use of the WACC rate was inappropriate and produced inaccurate results.

The court adopted Dr. Lys' approach, citing the trial court's acceptance of his methodology. The court declined to pass judgment on whether a different discount rate was more appropriate. Rather, the court held that the discount rate was a "distinctly factual matter" and that Wells Fargo had failed to prove that the trial court's acceptance of Dr. Lys' methodology was clear error. Further, the court concluded that the trial court's conclusion that the lessee counterparties would exercise their purchase options did not depend on Dr. Lys' analysis. Citing witness testimony and documentary evidence, the court held that the trial court's findings of fact provided ample evidence that there were substantial difficul-

ties for the lessee counterparties to comply with the service contract option and that Wells Fargo reasonably expected the purchase options to be exercised. Any testimony or evidence to the contrary was “not enough to call into question” the trial court’s conclusions. Therefore, the benefits and burdens of ownership did not pass to Wells Fargo and Wells Fargo’s SILO transactions could not be respected for Federal tax purposes under the substance over form doctrine.

D. *Altria*

In *Altria*, 658 F.3d 276, the Court of Appeals for the Second Circuit affirmed a District Court’s decision to deny the taxpayer judgment as a matter of law following an unfavorable jury verdict. At issue in *Altria* were three SILO transactions and a LILO transaction. The taxpayer, Altria Group, Inc. (*Altria*), is a financial services company. The lessee counterparties and subject assets of *Altria*’s test transactions were as follows:

(1) New York Metropolitan Transportation Agency (MTA)—a rail car maintenance facility;

(2) Oglethorpe Power Corp. (Oglethorpe)—a pumped storage hydroelectric facility;

(3) Seminole Electrical Cooperative, Inc. (Seminole)—a coal-fired electrical generating plant; and

(4) Watershap Vallei en Eem (Vallei), an independent agency of the Government of the Netherlands—a wastewater treatment facility. Oglethorpe, Seminole and Vallei were SILO transactions, and MTA was a LILO transaction.

Each of *Altria*’s transactions featured full defeasance, a lessee purchase option, and a renewal option or service contract option at the end of the sublease term. Additionally, in each of the transactions at issue: (1) there was no viable secondary market for the subject assets; (2) the assets were essential to the lessee counterparties’ businesses; (3) the appraisals did not properly estimate the assets’ expected residual value and useful lives; (4) the transactions shifted tax benefits from a nontaxable to a taxable entity, rather than transferring benefits among taxable entities; and (5) the defeasance accounts created a circular flow of money.

Altria’s motion for judgment as a matter of law argued that the jury gave undue weight to evidence that had no

bearing on the interests Altria acquired in the transactions, that the trial court's jury instructions were misleading, and that Altria proved that the transactions were reasonably expected to generate a non-tax-based profit. Notably, Altria argued that the jury was not instructed to consider the proper factors in determining whether Altria acquired the benefits and burdens of a traditional lessor.

The jury instructions asked the jury to consider "all the relevant facts and circumstances", including the following eight nonexclusive factors: (1) whether "meaningful" control over the assets was transferred; (2) whether the equity investment in the facility was "meaningful"; (3) cashflows between the parties; (4) whether the transaction was motivated by "legitimate business purposes, or solely by a desire to create tax benefits"; (5) regulatory realities; (6) whether the assets had expected useful lives beyond the leaseback that Altria could benefit from; (7) whether it was reasonable to expect that the assets would have meaningful value at the end of the leaseback which would benefit Altria; and (8) whether Altria had the potential to benefit from an increase in the assets' value and suffer a loss of its equity investment in the facility as a result of a decrease in the facility's value. *Altria*, 694 F. Supp. 2d at 271. For factors (6)–(8), the District Court asked the jury to consider the "likelihood" that the lessee counterparty would exercise its purchase option.

Altria argued that these factors were inappropriate, that the controlling factors with respect to the benefits and burdens of ownership analysis should come from a series of post-*Frank Lyon* Tax Court decisions, and that the jury should have been instructed to evaluate the factors in those cases as the exclusive determinative indicia of ownership. The District Court disagreed, holding that

[t]o say * * * that the Tax Court's decisions identify the exclusive criteria for determining which taxpayer is entitled to a depreciation deduction would be to ignore the essential holding of *Frank Lyon*, that whether a taxpayer possesses a depreciable interest in a leased asset must be determined through a fact-intensive analysis focused on the "substance and economic realities" of the challenged transaction. * * * [*Id.* at 275.]

Altria further argued that even if the all-encompassing approach of *Frank Lyon* is proper, several of the specific fac-

tors the court presented to the jury were inappropriate. The District Court focused its discussion on two particular factors. First, Altria argued that the court erred in instructing the jury to determine the “likelihood” that the lessee counterparties would exercise their purchase options, rather than instructing the jury to determine whether the purchase options were “certain” or “nearly certain” to be exercised. The District Court held that Altria’s argument was merely one of semantics, since the “likelihood” of exercise includes the possibility of a determination that it was “certain” or “nearly certain”. It stated that no Court of Appeals supports Altria’s proposed standard and none has addressed exactly “how likely” the exercise of an option must be to support a conclusion that the taxpayer did not acquire a depreciable interest. Finally, and most importantly, the District Court held that Altria’s proposed instruction misunderstood the Government’s argument, i.e., that it was the cumulative effect of each of the transactions’ possible scenarios, and not just the purchase options, that determines whether the benefits and burdens have passed.

Second, Altria argued that the District Court should have instructed the jury to disregard present value in its residual interest analysis. The District Court disagreed, finding that the present value analysis “properly sought to illuminate the transactions’ ‘substance and economic realities’, * * * particularly the relative importance of the residual values nominally Altria stood to receive”. *Altria*, 694 F. Supp. 2d at 280 (quoting *Frank Lyon*, 435 U.S. at 582).

Altria also argued against the use of a present value analysis as part of the second prong of the economic substance test, whether Altria acted with a bona fide business purpose. Citing rule 401 of the Federal Rules of Evidence, which provides that “relevant evidence” is “evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable”, the District Court held that the Government’s present value analysis easily satisfied this test, and a reasonable factfinder might conclude that it is “less probable” that an investor had a reasonable business purpose for a transaction with a negative net present value. *Id.* at 284–285. Altria also argued that the use of a present value analysis in the business purpose test was inconsistent with one of the District

Court's other jury instructions, which was to ignore present value in determining whether the transactions had "economic effect", the first prong of the economic substance test. The District Court dismissed this argument, holding that it was dependent on a "false dichotomy" and that realizing transactional profit on a cash-in-cash-out basis is not the only legitimate objective a business may pursue.

On appeal, the Court of Appeals for the Second Circuit addressed three arguments with respect to substance over form. *Altria*, 658 F.3d at 286. First, Altria challenged the District Court's decision that it was appropriate for the jury to evaluate the "likelihood" that the lessee counterparties would exercise their purchase options, again arguing that the jury should have been instructed to evaluate whether exercise was "certain" or "nearly certain". The Court of Appeals affirmed the District Court's position, holding that the purchase option is just one factor in determining ownership and that the likelihood of the purchase options' being exercised is not determinative of the analysis. Further, the court held that neither the Supreme Court nor the Court of Appeals for the Second Circuit has ever concluded that the true substance of a transaction is limited to events that are "certain" or "virtually certain" to occur.

Altria argued that the jury instructions failed to provide any guidance on what levels of equity investment or residual value are "meaningful" in the leasing context, leaving the jury without a proper standard to work with. Altria requested an instruction stating that a 6% equity investment and an expected residual value of 10% to 20% would satisfy this threshold. The court dismissed this argument, holding that a precise numerical test would encourage taxpayers to change the form and not the substance of their transactions. Citing *Frank Lyon*, the court said that the existence of a depreciable interest in an asset depends on the particular facts of the case.

Finally, Altria argued that two of the factors included in the jury instructions' nonexclusive list were "neutral" and therefore not relevant to determining traditional lessor status. The first factor was control over the asset, which Altria noted is present in all leveraged leases. The court rejected this argument, holding that *Frank Lyon* specifically requires such an analysis. The second factor was cashflows,

which the court likewise rejected, citing the relevance of circular cashflows to the courts in *Wells Fargo*, *BB&T*, and *AWG*. Accordingly, the court affirmed the jury's findings that Altria did not obtain the benefits and burdens of ownership with respect to its transactions.

E. Consolidated Edison

In *Consol. Edison*, 703 F.3d 1367, the Court of Appeals for the Federal Circuit reversed the Court of Federal Claims' decision holding that the taxpayer was entitled to its claimed deductions from a LILo transaction. The taxpayer, Consolidated Edison Co. of New York, Inc., and its subsidiaries (ConEd), is a publicly held utility company that generates, transmits, and sells electricity to New York City and surrounding areas. ConEd, through a grantor trust, leased a 47.47% undivided interest in a gas-fired, combined cycle cogeneration facility (RoCa3) in the Netherlands from Electriciteitsbedrijf Zuid-Holland, N.V. (EZH), for a term of approximately 43 years and subleased RoCa3 back to EZH for a term of approximately 20 years. ConEd was interested in international LILo transactions that diversified its assets and developed strategic alliances abroad. ConEd evaluated prospective transactions in a very deliberate manner, conducted extensive due diligence, and chose to invest in RoCa3 after rejecting many other proposed opportunities.

The initial lease required ConEd to prepay rent of \$120,112,270, which was funded through an equity contribution of \$39,320,000, or approximately 33% of the upfront payment, and a nonrecourse loan of \$80,792,270. On the initial lease termination date, ConEd was required to make a second rent payment to EZH of \$831,525,734. Under the sublease, EZH was required to make periodic rent payments to ConEd. At the end of the sublease, EZH has the option of purchasing ConEd's leasehold interest in RoCa3.

The transaction featured both equity and debt defeasance to ensure EZH's rent payments under the sublease and ConEd's debt service, which matched in timing and amount. The defeasance transactions also funded EZH's purchase option, allowing EZH to exercise its option without contributing any additional equity or borrowing any additional amounts. ConEd was granted a first-priority security interest

in both the debt and equity defeasance accounts. As further security for ConEd's interests in the LILO transaction, EZH was required to maintain one or more letters of credit in favor of and for the benefit of ConEd.

If EZH did not exercise its purchase option at the end of the sublease, ConEd could either compel EZH to renew the sublease for an additional 16.5 years or choose the retention option, which would force EZH to deliver possession of RoCa3 to ConEd. Under the renewal option, EZH had to maintain defeasance accounts or other similar arrangements to secure its ongoing rent payments. Further, under the renewal option ConEd had to fund two deposits, or provide acceptable substitute collateral, to secure the final rent payment under the initial lease. If the retention option was elected, ConEd had to prepay its nonrecourse loan. If ConEd was unable to do so and timely notified EZH, the renewal option was deemed to have been elected.

The Court of Federal Claims, to which a refund suit was brought, determined that the transaction could not be ignored under the substance over form doctrine and further concluded that the transaction had economic substance. The court concluded that there was no certainty that EZH would exercise the sublease purchase option. Thus it followed that the transaction, although insulated to minimize risk, was not without risk and that the transaction presented three separate viable options (i.e., the retention, renewal, and sublease purchase options) that could be exercised at the end of the sublease term, none of which was guaranteed or inevitable at the time the transaction was consummated. The United States appealed the Court of Federal Claims' ruling and challenged it under the substance over form doctrine.³³

The Government argued that as of the closing date the sublease purchase option was reasonably expected to be exercised and thus the transaction should be characterized as one without any meaningful substance. The Court of Appeals for the Federal Circuit, following its prior decision in *Wells Fargo*, agreed with the Government and found the transaction should be disregarded for Federal tax purposes under the substance over form doctrine.

³³On appeal, the Government did not challenge the Court of Federal Claims' ruling under the economic substance doctrine.

The issue as framed by the Court of Appeals was

whether EZH would exercise its purchase option at the end of the [s]ublease * * * [t]erm. If the [s]ublease [p]urchase [o]ption were exercised, the transaction would merely become a transaction in which ConEd leased the RoCa3 Plant from EZH and leased it back for the same identical period. Such a transaction lacks substance. This would particularly be so here because EZH would maintain uninterrupted use of the RoCa3 Plant without any involvement on ConEd's part and ConEd would not experience any benefits or burdens associated with its leasehold interest. [*Consol. Edison*, 703 F.3d at 1375–1376.]

The Court of Appeals reiterated that the standard for determining whether the purchase option would be exercised was a reasonable likelihood standard. In evaluating whether the LILO transaction had to be recharacterized, the Court of Appeals assessed whether a prudent investor in ConEd's position would have reasonably expected EZH to exercise its purchase option. ConEd had the burden of proving that EZH's exercise of the purchase option was not reasonably likely. The Court of Appeals determined on the basis of the record that ConEd had failed to meet its burden.

The record demonstrated that ConEd, shortly before the closing date of the transaction, expected that EZH would exercise the sublease purchase option. Brian DePlatt, the vice president of the ConEd subsidiary responsible for the RoCa3 transaction, admitted that ConEd believed that EZH planned, before the closing date of the transaction, to exercise the option. Mr. DePlatt, when asked by ConEd's accountants before the transaction whether he thought EZH's exercise of the purchase option was "reasonably assured", responded: "Yes, among the reasons are (a) * * * [the RoCa3] facility is a newly built key asset for * * * [EZH], [and] (b) * * * [EZH] has preplanned for purchase and done * * * [its] economic analysis on the assumption that the plant will be purchased." *Id.* at 1378. Additionally, in a November 26, 1997, memo, ConEd acknowledged a Transaction Structure Description document from Cornerstone, the LILO promoter, which indicated that it was reasonable to assume that EZH would exercise the purchase option. *Id.*

ConEd relied on an appraisal it obtained from Deloitte to demonstrate that a prudent investor would not have reasonably expected that EZH would exercise the purchase option. The appraisal primarily relied on Deloitte's view that there

was no economic compulsion to exercise the purchase option because the option price would exceed the projected value of the property. The Court of Appeals found the appraisal unconvincing as Deloitte had failed to consider several non-economic factors and the costs to EZH that would result from ConEd's exercise of the renewal or retention options if EZH declined to exercise the purchase option. Moreover, Deloitte failed to consider the fact that the purchase option required no out-of-pocket funds, as the money EZH would require to exercise the purchase option was set aside in the two defeasance accounts.

Having found that the undisputed evidence established that EZH was reasonably likely to exercise the purchase option, the Court of Appeals found that ConEd had failed to show that the substance of the transaction included a genuine leasehold interest in which ConEd would bear the benefits and burdens of a lease transaction. Therefore, the court held that the LILO transaction did not constitute a true lease and ConEd's rent deductions were disallowed under section 162(a)(3).

The Test Transactions

Respondent argues that John Hancock's LILO and SILO transactions lack economic substance and that the substance of each transaction is not consistent with its form. Specifically, respondent argues that John Hancock failed to acquire substantive leasehold interests in the LILO properties and failed to acquire substantive ownership interests in the SILO properties. Thus, respondent argues the true substance of these LILO and SILO transactions is a loan from John Hancock to the counterparties and, consequently, John Hancock's equity contributions in these LILO and SILO transactions should be recharacterized as loans, consistent with their substance. As a result, John Hancock would not be entitled to its claimed deductions.³⁴ In addition, respondent argues that if we recharacterize the LILO and SILO transactions as loans, the LILO and SILO transactions would create OID

³⁴John Hancock claimed deductions for rent, depreciation, and interest expense with respect to the various LILO and SILO transactions.

income for John Hancock upon which John Hancock would be subject to Federal income tax.

Petitioners, on the other hand, argue that the LILO and SILO transactions had economic substance because John Hancock expected to derive a pretax profit from each transaction and entered into each transaction with the primary purpose of making a profit. Additionally, petitioners argue that the substance of each LILO and SILO transaction is consistent with its form and thus the form of each transaction should be respected for Federal tax purposes. Specifically, petitioners argue that John Hancock held a true leasehold interest in each of the LILO properties and obtained an ownership interest in each of the SILO properties. As a result, petitioners argue that John Hancock should be entitled to its claimed deductions for the years at issue.

In order to conclude that John Hancock is entitled to its claimed deductions, we must determine both that the test transactions have economic substance and that the substance of each test transaction is consistent with its form. There is no clear formula by which to answer these questions, nor do we attempt to create one. We begin our inquiry with the economic substance doctrine.

I. *Economic Substance*

These cases are appealable to the Court of Appeals for the First Circuit absent stipulation otherwise. In *Deweese v. Commissioner*, 870 F.2d 21 (1st Cir. 1989), *aff'g Glass v. Commissioner*, 87 T.C. 1087 (1986), the Court of Appeals for the First Circuit discussed the economic substance doctrine as part of its consideration of whether the taxpayers were entitled to claimed ordinary losses in a silver straddle transaction. The parties argued a number of theories including that the transaction was a sham and/or lacked economic substance. Although ultimately the court did not apply the economic substance doctrine to reach its result,³⁵ the court permitted an analysis of both the objective and subjective fea-

³⁵“We need not choose among these three different conceptual ways of addressing the problem. That is because all three roads lead to Rome.” *Deweese v. Commissioner*, 870 F.2d 21, 36 (1st Cir. 1989), *aff'g Glass v. Commissioner*, 87 T.C. 1087 (1986).

tures of a transaction, without a rigid two-part test requiring a subjective analysis. *Id.* at 34–35.

A. *Objective Inquiry*

Under the objective test, a transaction has economic substance and will be respected for Federal tax purposes where the transaction offers a reasonable opportunity for profit independent of tax savings. *Gefen v. Commissioner*, 87 T.C. 1471, 1490 (1986). However, the mere presence of potential profit does not automatically impart substance where a commonsense examination of the transaction and the record in toto reflect a lack of economic substance. *Sala v. United States*, 613 F.3d 1249, 1254 (10th Cir. 2010); *Keeler v. Commissioner*, 243 F.3d 1212, 1219 (10th Cir. 2001), *aff'g Leema Enters., Inc. v. Commissioner*, T.C. Memo. 1999–18; *see also Blum v. Commissioner*, T.C. Memo. 2012–16.

John Hancock entered into a complex series of financial arrangements with various lessee counterparties and various other parties in order to effect the test transactions. In addition to the transaction documents and extensive testimony, there are also numerous diagrams, charts, and tables submitted by both parties describing the test transactions. The parties agree generally to the overall cashflows stemming from the test transactions although there are a few discrepancies regarding the dollar values. Where the parties disagree is whether such cashflow projections as of the closing date give John Hancock a pretax economic return sufficient to pass the objective inquiry of the economic substance doctrine.

Petitioners argue that the test transactions satisfy the objective inquiry of the economic substance doctrine because each test transaction projected a positive, cash-on-cash pretax yield, and after-tax yield on the closing dates. Petitioners, relying on the ABC reports, argue that if the purchase options are not exercised, John Hancock's expected pretax returns from the test transactions as of the closing dates ranged between 2.54% and 4.33%. If the purchase options are exercised, John Hancock's expected pretax returns ranged from 2.83% to 3.43%.

Respondent does not contest the projections in the ABC report. Instead, respondent argues that petitioners' projec-

tions do not provide an appropriate measure of the test transactions' expected profitability and that petitioners' calculations must be discounted to determine the value of John Hancock's investments. After discounting petitioners' calculations respondent argues that the test transactions return pretax losses without tax benefits. Respondent relies on the expert report of Dr. Lys to support his argument.

Because Dr. Lys' calculations of the pretax economic benefits of all test transactions are similar, we use Dr. Lys' TIWAG calculations to demonstrate his methodology and respondent's argument. Dr. Lys begins by comparing the payments John Hancock made into the TIWAG SILO transaction with the amount of money John Hancock took out of the TIWAG SILO transaction through the purchase option date. Dr. Lys surmised that John Hancock made cash payments of \$327.1 million to enter into the TIWAG SILO transaction. These payments included \$47.2 million in equity investment, \$273.6 in borrowed funds, and \$6.3 million in transaction fees paid to third parties.³⁶ Thus John Hancock's total cash outlay for the TIWAG SILO transaction was \$53.5 million (\$47.2 million equity investment plus \$6.3 million in transaction fees). The total purchase price to enter into the transaction was \$320.8 million (\$47.2 million equity investment plus \$273.6 million in debt invested into the transaction).

Next Dr. Lys noted that the \$320.8 million purchase price was distributed among the SILO transaction participants. At the inception of the transaction TIWAG obtained \$24.1 million as an inducement fee. The \$273.6 million in loans was placed into a debt defeasance account and the remaining \$23.1 million was placed in an equity defeasance account. By the purchase option date, assuming exercise of the purchase options, the original loans of \$273.6 million would be fully repaid with interest to John Hancock's lenders and John Hancock would receive the \$23.1 million that was paid into the equity defeasance accounts, plus accrued interest. Dr. Lys then discounted these cashflows back to the closing date to determine John Hancock's pretax return.

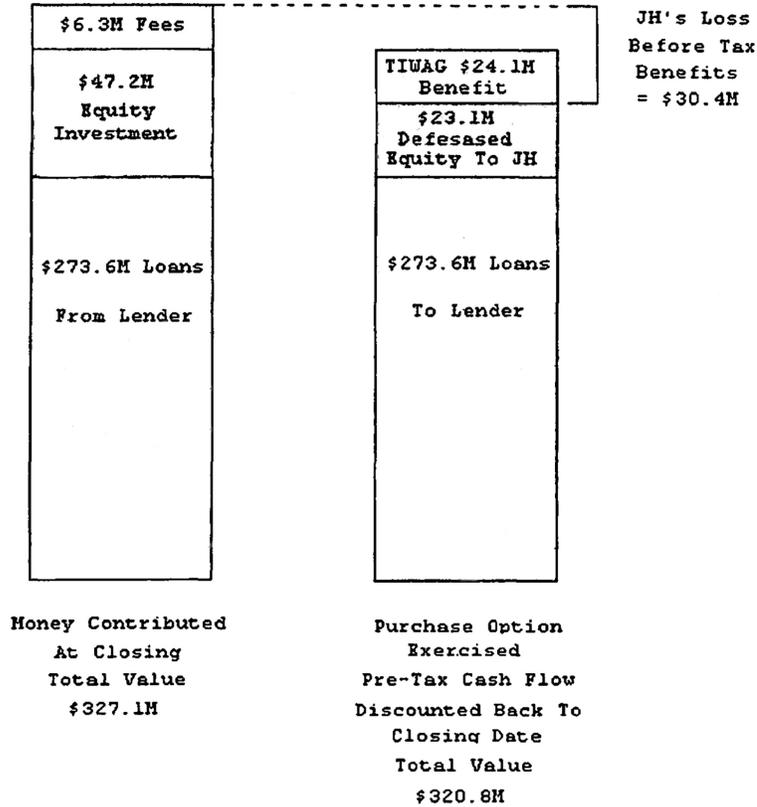
³⁶Dr. Lys' values for the TIWAG SILO transaction vary from those stated in the facts and used in the ABC report. For purposes of this Opinion, these discrepancies are not material.

Dr. Lys' calculations of the pretax returns on the TIWAG SILO transaction, and all of the test transactions, rely on net present value determinations, which were calculated in two steps. First, Dr. Lys used a discount rate to accumulate John Hancock's expected returns from the TIWAG SILO transaction through its purchase option date. Next, he discounted these expected returns back to the closing date in 2001 using the same rate he used to accumulate the expected returns. The result is a net gain of zero and the actual cash taken out of the TIWAG SILO transaction by John Hancock, TIWAG, and the lenders as of the purchase option date is \$320.8 million, the same amount put in.³⁷ Because John Hancock incurred transaction fees as part of the transaction and paid an inducement fee to TIWAG, Dr. Lys concludes that on a net present value basis John Hancock's expected pretax return is negative.

Therefore, Dr. Lys argues that absent tax benefits, the transaction does not create any economic benefits. The present value of the benefits obtained by TIWAG and the present value of the benefits obtained by John Hancock exactly add up to the present value of the investment made by John Hancock in December 2001, before transaction fees (i.e., \$47.2 million). Thus, Dr. Lys argues that the TIWAG SILO transaction actually results in a pretax cash loss of \$30.4 million to John Hancock (consisting of the transaction fees of \$6.3 million and the inducement fee of \$24.1 million).

³⁷ As a result of Dr. Lys' methodology, the interest income John Hancock and its lenders received was irrelevant and did not factor into his calculations. As Dr. Lys stated in his expert report: "The interest received by the lender and by the U.S. Taxpayer represents the costs of having to wait for repayment of their original investment * * *. The Amounts that the lender and U.S. Taxpayer will eventually receive are equivalent in PV terms to the amounts they originally provided to the SILO structure at its close in 2001." Dr. Lys is essentially saying that the discount rate he will use to calculate the net present value will be the same as the rate at which an interest is earned, or the same rate he used to accumulate the expected returns.

TIWAG SILO



Next, Dr. Lys found that the U.S. tax benefits to John Hancock from entering into the TIWAG SILO transaction up to the purchase option date equal \$63.9 million, more than offsetting the pretax cash loss of \$30.4 million he determined. Additionally, Dr. Lys found that the U.S. tax benefits to John Hancock through the service contract period (if the purchase option is not exercised) equal \$79.8 million, once again more than offsetting the pretax cash loss of \$30.4 million he determined. Overall, Dr. Lys concludes that the TIWAG SILO transaction is value-destroying to John Hancock absent tax benefits.

Dr. Lys' calculation of John Hancock's pretax returns differs significantly from petitioners' calculations in the ABC reports because petitioners' calculations do not take into account a net present value analysis. According to the TIWAG ABC report, John Hancock invested \$49,427,050 in the TIWAG SILO transaction. John Hancock also borrowed \$273,572,950 to fund the \$323 million purchase. Lastly John Hancock paid \$4,037,500 in transaction fees associated with the SILO transaction. Thus according to the ABC report, John Hancock invested a total of \$53,464,550 in the TIWAG transaction. Over the course of the initial lease John Hancock would receive \$1,155,889,616 in rent payments and other fees such as capacity charges from TIWAG or a third-party power purchaser. From these payments, \$1,139,737,359 would be paid to John Hancock's lender in satisfaction of its \$273,572,950 loan. John Hancock would also receive \$205,422,256 in residual value from the asset, leaving John Hancock with a \$168,109,693 pretax cash return over the life of the lease. The ABC report assumed Federal tax payments of \$63,041,236 on the income received by John Hancock, leaving John Hancock with an after-tax cash return of \$105,068,727 over the life of the lease or an average cashflow of \$1,751,145 per year. The cashflow results in a pretax cash internal rate of return of 2.54%.

The ABC reports also calculated John Hancock's pretax cash internal rate of return when the lessee counterparty exercised its purchase option. For the TIWAG transaction according to the ABC report, John Hancock invested a total of \$53,464,550. Over the course of the sublease John Hancock would receive \$150,124,081 of rent payments, and make a total of \$466,223,022 in debt service payments. John Hancock would also receive \$795,135,940 upon the exercise of the purchase option at the end of the sublease term. As a result, John Hancock would be left with a pretax cashflow of \$115,324,288 over the course of the sublease term. John Hancock would make Federal tax payments of \$43,246,608, leaving it with an after-tax cashflow of \$72,077,680 over the life of the sublease or an average cashflow of \$2,057,729.16 per year. The cashflow results in a pretax cash internal rate of return of 3.40%.

Respondent cites multiple cases to support his assertion that any calculation of a transaction's pretax profit must

include a net present value analysis. Notably, in *ACM P'ship v. Commissioner*, 157 F.3d at 259, the taxpayer argued that the Tax Court's profitability analysis was flawed because it used a net present value analysis to adjust certain expected income determinations. The Court of Appeals for the Third Circuit held valid the analysis and reasoned that "[i]n transactions that are designed to yield deferred rather than immediate returns, present value adjustments are * * * an appropriate means of assessing the transaction's actual and anticipated economic effects." *Id.* Respondent also cites *Wells Fargo*, where the court applied a net present value analysis in holding that the transactions at issue lacked economic substance.³⁸

Generally, we will not second-guess a taxpayer's judgment even if a theoretical investor could have found a more profitable investment. *Estate of Thomas v. Commissioner*, 84 T.C. 412, 440 n.52 (1985); *Greenbaum v. Commissioner*, T.C. Memo. 1987-222. However, we agree with *ACM P'ship* that analyzing the net present value of a transaction as part of the economic substance inquiry may be useful for transactions with deferred benefits. The extent to which such an analysis is useful depends on the facts and circumstances. Where the returns on a tax-advantaged investment are immediate, a net present value analysis will be of limited aid in determining the tax validity of a transaction. *Blum v. Commissioner*, T.C. Memo. 2012-16.

Having found that a net present value analysis may be useful in these cases, we turn to respondent's argument that the ABC reports do not provide reliable pretax economic returns and thus that Dr. Lys' net present value calculations should control. We disagree. If, as Dr. Lys opined, the proper test of profitability requires an investor to accumulate a return on an investment and discount the return back at the

³⁸Other courts have declined to do the same in the context of a LILLO or SILO transaction. In *Consol. Edison*, the Court of Federal Claims declined to apply a present value analysis, holding that no specific minimum pretax profit is required to recognize the economic substance of a leasing transaction and the use of a present value analysis "must depend on the specific and unique characteristics and conditions of the individual transaction under review." Further, in *AWG*, the taxpayers' nondiscounted pretax returns of 2.5% to 3.5% were sufficient to establish economic substance.

same rate and over the same period, any investment with transaction costs would always produce a pretax loss. In fact, Dr. Lys stated at trial that the actual pretax cashflows from the test transactions were “irrelevant”.

At trial petitioners presented Dr. Lys with a simple example to illustrate this point.

Q: So my simple example is: Assume that you walk into your stock-broker and you have \$101,000 in your pocket.

A: Uh-huh.

Q: And you buy a \$100,000 bond—

A: 101 or—

Q: A \$100,000 bond, because there are going to be some transaction costs.

A: Okay.

Q: The broker is going to charge you \$1,000 for that transaction.

A: That’s correct.

Q: Using your methodology, assume my bond is 4 percent—you would calculate the present value today of that bond at maturity, you would take the \$100,000 and accumulate it forward at 4 percent, and then you would discount it back at 4 percent. Am I right?

A: Correct.

Q: So on a present-value basis, the value of my investment is [\$]100,000.

A: That’s correct.

Q: But I have [\$]101,000 invested.

A: That’s correct.

Q: Is that a value-destroying investment?

A: Yeah. But may I specify, Your Honor? But I get a service. What the broker did is—I had a problem. I had \$100,000 today, and I didn’t want to have \$100,000 today, I wanted to have \$100,000 tomorrow, or whenever that period is. The \$1,000 transaction fee is something that I voluntarily paid for getting \$100,000 tomorrow.

Under Dr. Lys’ methodology he does not have to analyze the actual pretax cashflows stemming from the test transactions, cashflows which were projected in the ABC reports and available to Dr. Lys.

At trial Dr. Lys was asked whether in order to make a present value calculation for the test transactions he would have to know the unrepresented valued numbers, i.e., the cashflows stemming from the transactions. Dr. Lys responded: “No, I don’t. No, I don’t. If you put something into

a bank account and you got something in the future and it's a fair deal, you're going to get exactly what you paid into it, unless something evaporates." Further at trial, Dr. Lys was asked whether he took a look at the ABC reports and at the actual pretax cashflows to perform his present value analysis. Dr. Lys responded: "I think we did. We computed the cashflows to actually determine what would be the compounding rate necessary to earn that future value. So yes, we did that. But it's irrelevant. Absent transaction fees, the compounding rate and the discount rate have to be the same, because you are incurring the same risk."

However, Dr. Lys does not present us with any projected cashflows in his expert report, and he does not show us how his calculations are based on these projected cashflows. Also, Dr. Lys uses dollar values significantly different from those listed in the ABC report.

Dr. Lys' present value calculations are not based on projected pretax cashflows; his methodology simply uses a discount rate to accumulate expected returns forward and then discounts these expected returns back using the same rate used to accumulate the expected returns. Though the Court does not consider itself an expert in project finance or economics, the Court recognizes that there are reasons for entering into transactions, that taxpayers may want to generate income over a period of time with varying degrees of risks and with varying times for payouts. An economic analysis of such transactions requires a detailed approach. Calculations should be based on all relevant knowledge, including projected cashflows, as cashflows will vary as will risk. Thus, we find Dr. Lys' position untenable. Neither Dr. Lys nor respondent has provided a logical explanation to support a real world application of his method and calculations. As a result, the record does not include a credible net present value calculation. We also question Dr. Lys' decision to forgo an analysis of any income streams or potential for profit from nonexercise of the purchase options. As will be discussed later in this Opinion, it is not a foregone conclusion that the lessee counterparties will exercise their purchase options.

Dr. Lys also argued that John Hancock's pretax returns would be negative without discounting. According to Dr. Lys, John Hancock's calculations neglected to include a cost of borrowing on its equity contributions. Dr. Lys believed that

including this cost of borrowing is appropriate because John Hancock’s debt-to-equity ratio from 1999–2001 was consistently above 93%. According to Dr. Lys’ calculations with respect to the TIWAG SILO transaction, on the closing date John Hancock makes a \$53.5 million investment in the transaction. By 2037, upon the exercise of TIWAG’s purchase option, John Hancock will have received \$168.8 million. Thus John Hancock appears to receive a nominal pretax profit of \$115.3 million over 36 years. However, Dr. Lys assumes that John Hancock must borrow 93 cents on every dollar it spends on the TIWAG SILO transaction because Dr. Lys did not see any evidence that John Hancock raised separate capital from outside investors to fund its equity investment and transaction fees cost. We note that neither respondent nor Dr. Lys has submitted any evidence or made any showing of proof that John Hancock did in fact borrow an additional \$49.8 million as part of the TIWAG SILO transaction.³⁹ Dr. Lys then creates two tables in which he attributes a 6.81% borrowing cost and a 7.04% borrowing cost to \$49.8 million of John Hancock’s equity investment and transaction fee cost (\$53.5 million × 93%). According to Dr. Lys’ calculations, John Hancock’s investment in the TIWAG SILO transaction, even without a net present value analysis, will generate either a \$5.8 million loss or a \$9.9 million loss.

<i>End of sublease term</i>	<i>At 6.81%</i>	<i>At 7.04%</i>
Net cash to John Hancock	\$168.8M	\$168.8M
Equity investment	(47.2M)	(47.2M)
Transaction fees	(6.3M)	(6.3M)
Interest paid on funds borrowed for equity investment and fees	(121.1M)	(125.2M)
Nominal accounting profits	(5.8M)	(9.9M)

This conclusion, however, ignores John Hancock’s fundamental business. John Hancock derives its revenue primarily from insurance premium payments. With each premium John Hancock assumes a potential liability. These liabilities

³⁹ Respondent in his opening and reply briefs cites *Mortensen v. Commissioner*, T.C. Memo. 1984–600, for the proposition that this borrowing rate must be used in the calculation of John Hancock’s cashflows and profits from the test transactions. However, in *Mortensen* the taxpayer actually borrowed funds used to invest in a series of spot silver transactions. The Court did not impose a hypothetical cost of borrowing.

were reported on John Hancock's balance sheets under the liabilities section as aggregate reserve for life policies and contracts. These liabilities are not linked to traditional debt. Dr. Lys used the overall liability total from John Hancock's balance sheets to come up with his theory that John Hancock must be borrowing 93 cents on every dollar it spent. He did not separate out the liabilities and see which liabilities are connected to traditional debt. At trial petitioners asked Dr. Lys: "Did you make any inquiry to see what type of liabilities John Hancock has?" Dr. Lys responded with a simple "No."

Petitioners were able to show that approximately 1.2%, not 93%, of John Hancock's liabilities on its balance sheets were from traditional debt, i.e., actual borrowings. Additionally, petitioners were able to show that John Hancock had not incurred additional debt for the years 1998 through 2001. Finally, petitioners were able to show that John Hancock had collected almost \$7 billion in premiums in 2001 and that these retained earnings could have been used to pay John Hancock's equity contribution to the test transactions and the corresponding transaction fees. On the basis of the evidence presented by petitioners and Dr. Lys' testimony, we find that Dr. Lys' cost of borrowing argument is wholly unreliable and misleading.

Respondent has failed to demonstrate that John Hancock had no realistic expectation of profit when it entered into the test transactions. Though John Hancock's ABC reports lack a net present value analysis and are therefore inconclusive, respondent bore the burden of proof on this issue. Respondent has failed to meet his burden of proof, and we are therefore not persuaded that the test transactions fail the objective economic substance inquiry.

B. *Subjective Inquiry*

The subjective inquiry of the economic substance doctrine focuses on whether the taxpayer has shown that it had a business purpose for engaging in a transaction other than tax avoidance. *Bail Bonds by Marvin Nelson, Inc. v. Commissioner*, 820 F.2d at 1549. We examine whether the taxpayer was induced to commit capital for reasons relating only to tax considerations or whether a nontax or legitimate profit motive was involved. *Shriver v. Commissioner*, 899 F.2d 724,

726 (8th Cir. 1990), *aff'g* T.C. Memo. 1987-627; *see also Andantech LLC v. Commissioner*, T.C. Memo. 2002-97, *aff'd in part, remanded in part*, 331 F.3d 972 (D.C. Cir. 2003).

Respondent argues that the test transactions do not serve a nontax business purpose and that John Hancock's sole motivation for entering into the test transactions was to consume tax capacity. This conclusion ignores John Hancock's principal business function. The need to fulfill John Hancock's insurance policy and annuity obligations contributed significantly to its investment decisions. Numerous representatives from John Hancock credibly testified at trial that John Hancock sought and continues to seek diverse investments that provide returns and cashflows to meet its short- and long-term responsibilities. John Hancock refers to this investment objective as "asset/liability duration matching".

John Hancock has a long history of investing in leveraged lease transactions. The assets subject to the test transactions were long-lived assets with which John Hancock was familiar. John Hancock's bond and corporate finance group performed significant due diligence in choosing its investments and had special expertise and experience in the relevant industries. Further, John Hancock engaged multiple consultants and advisers to better understand the assets involved. In each case, John Hancock determined that the test transactions would contribute towards diversifying its investments, provide a strong yield, and match its long-term obligations. Accordingly, we are not persuaded that the test transactions fail the subjective economic substance inquiry.

Respondent has failed to meet his burden of proving that the test transactions fail either the objective or subjective test under the economic substance doctrine. Therefore, we do not find that the test transactions lack economic substance.

II. *Substance Over Form*

Having found that the test transactions do not lack economic substance, we must now determine whether the substance of each test transaction is consistent with its form. The Supreme Court, in determining whether the transaction in *Frank Lyon* satisfied the substance over form test, held that the form of a sale-leaseback transaction will be

respected for Federal tax purposes as long as the lessor retains significant and genuine attributes of a traditional lessor. *Frank Lyon*, 435 U.S. at 584. Stated differently, the form of the test transactions will be respected for Federal tax purposes if John Hancock holds a true leasehold interest in each LILO property and obtained an ownership interest in each SILO property.

As previously discussed, this is a case of first impression for this Court, and thus we have not had the opportunity to apply a substance over form test to a LILO or SILO transaction. However, we have previously applied the substance over form test to leveraged leases. In *Levy v. Commissioner*, 91 T.C. 838, 860 (1988), the taxpayers entered into a sale-leaseback transaction involving computer equipment. In determining whether the substance of the transaction was consistent with its form, we held that “[w]hether the benefits and burdens of ownership passed is a question of fact which must be ascertained from the intentions of the parties as evidenced by the written agreements read in light of all of the relevant facts and circumstances.” *Id.* We considered several factors as part of our facts and circumstance test, including: (1) the taxpayer’s equity interest in the property as a percentage of the purchase price; (2) the existence of a useful life of the property in excess of the leaseback term; (3) renewal rental at the end of the leaseback term set at fair market rent; (4) whether the residual value of the equipment plus the cashflow generated by the rental of the equipment allows the investors to recoup at least the initial cash investment; (5) the expectation of a “turnaround” point which would result in the investors’ realizing income in excess of deductions in the later years; (6) net tax benefits during the leaseback term less than the initial cash investment; (7) the potential for realizing a profit or loss on the sale or re-lease of the equipment; (8) the use of a net lease; (9) the absence of significant positive net cashflow during the lease term; and (10) the fact that the rental income stream during the initial lease term is tailored to or matches interest and debt payments that are due. *See id.*; *Torres v. Commissioner*, 88 T.C. 702, 721 (1987); *Gefen v. Commissioner*, 87 T.C. at 1490–1495; *Mukerji v. Commissioner*, 87 T.C. 926, 967–968 (1986); *Estate of Thomas v. Commissioner*, 84 T.C. at 433–438. We have yet to make a determination as to which of the

above factors are relevant to our facts and circumstances inquiry into the substance of the LILO and SILO test transactions.

Petitioners argue that *Levy* and the Tax Court cases before it set forth a strict factor test, and that we must adhere to this test to determine the substance of the test transactions. We disagree. This Court in *Levy* relied on a facts and circumstances test to make its decision and simply considered several factors in evaluating the facts and circumstances of the transaction. This Court, as in *Levy* and the Tax Court cases before it, will continue to evaluate the overall facts and circumstances of a transaction in determining whether the substance of the transaction is consistent with its form. We find no authority for a strict factor test, nor do we create such authority.

A. OBB and SNCB LILO Transactions

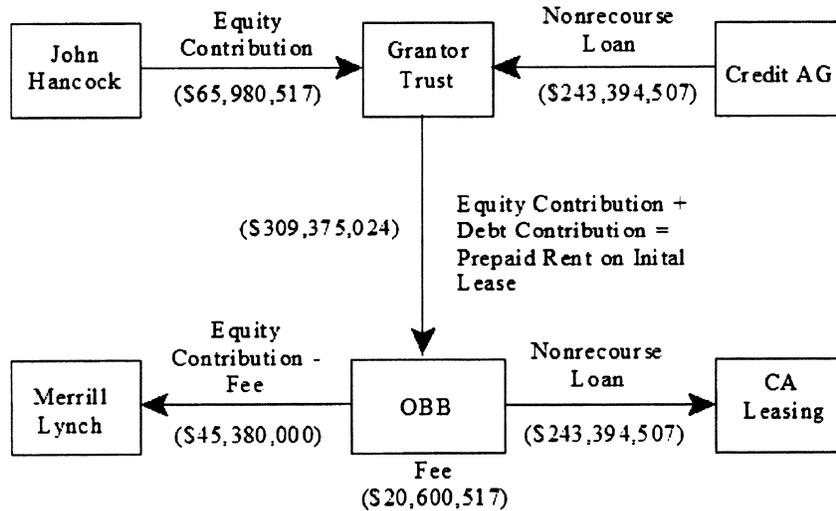
Respondent argues that in substance the OBB and SNCB LILO transactions are nothing more than financing arrangements. Petitioners argue that John Hancock entered into leases with OBB and SNCB as demonstrated by the numerous agreements signed by the parties, including the initial lease agreements, and thus the substance of the LILO transactions is consistent with their form. To establish that the initial lease is, in substance, a true lease for Federal tax purposes, petitioners must prove that “the lessor retains significant and genuine attributes of the traditional lessor status”. *Frank Lyon*, 435 U.S. at 584. We are not persuaded that petitioners have done so.

First, we look at John Hancock’s and the lessee counterparties’ rights and obligations under the initial lease and sublease documents. In the OBB transaction John Hancock leased the VK marshalling yard from OBB for 38 years. Simultaneously, John Hancock subleased the VK marshalling yard back to OBB for 18 years. OBB’s rights and obligations under the sublease with respect to possession and use of the VK marshalling yard are virtually identical to John Hancock’s rights and obligations under the initial lease, including the right to quiet enjoyment of the VK marshalling yard, leaving John Hancock with only the right to visit and inspect the VK marshalling yard. The structures of the OBB and

SNCB LILO transactions are substantially similar; thus we find the same to be true in the SNCB LILO transactions.

Second, though the transaction documents called for large rent payments during the sublease term, the only money to actually change hands between John Hancock and OBB during the sublease term was John Hancock's payment of \$20,600,517 to OBB as a fee to enter into the LILO transaction. Petitioners claim that John Hancock will have paid \$309,375,024 in rent to OBB. We disagree. The \$243,394,507 of nonrecourse debt borrowed from Credit AG by John Hancock was deposited directly with CA Leasing, a related party to Credit AG, as part of the DPUA. Moreover, since the service payments on the nonrecourse loan and the sublease rent payments matched exactly in time and amount, CA Leasing directly paid Credit AG in satisfaction of the debt service payments and a portion of the sublease rent payments. Similarly, John Hancock's equity contribution of \$65,980,517 minus the \$20,600,517 paid to OBB was deposited directly with Merrill Lynch under the EPUA. These amounts will be returned to John Hancock in satisfaction of the portion of the sublease rent payments and through the exercise of the purchase option. Therefore, OBB continued to use the VK marshalling yard just as it had before entering into the LILO transaction without making any payments to John Hancock. Similar to the OBB transaction, the only money to change hands in the SNCB LILO transactions was the payments to SNCB for entering into the transactions.

OBB LILO Closing Day Cashflows



Third, we find that John Hancock's equity investments in the OBB and SNCB LILO transactions were never at real risk during the sublease terms. The transactions were fully defeased and employed 100% loop debt. This structure secured OBB's and SNCB's sublease rent payments, as well as John Hancock's debt service payments. Further, OBB and SNCB pledged first security priority interests in the defeasance accounts to John Hancock, removing any realistic risk of John Hancock's becoming an unsecured creditor. The OBB transaction provided additional protections, including the lender's guaranty of the DPU's obligations and a letter of credit ensuring John Hancock's predetermined return in the event of a sublease default.

Petitioners argue that even with such defeasance, John Hancock faces the risk of credit downgrades throughout the sublease terms. The two examples petitioners rely upon are the credit downgrades of Ambac in the Hoosier SILO transaction and Merrill Lynch, the equity payment undertaker, in the OBB LILO transaction. In *Hoosier Energy*, 588 F. Supp. 2d 919, when the credit default provider Ambac's credit rating was downgraded, John Hancock tried to enforce its default rights. Hoosier then sought injunctive relief, and the

parties eventually settled by unwinding the SILO transaction. An executive of John Hancock testified at the trial in these cases that the company lost money on its investment in the Hoosier SILO transaction; however, no documentation was provided to prove that fact. Petitioners argue that “this loss of investment is the calling sign of risk”. However, there was no evidence that Hoosier failed to make a sublease rent payment or that Ambac failed to meet its obligations as the credit default provider.

In the OBB LILO transaction, Merrill Lynch’s credit was downgraded and John Hancock entered into a forbearance agreement rather than pursue its default remedies. John Hancock’s willingness to enter into the forbearance agreement is evidence it understood that the chances of losing its investment were remote. Because OBB had an AAA rating and because OBB is the party ultimately responsible for the sublease payments, John Hancock had sufficient security that it was willing to forbear on OBB’s obligation to post collateral. Despite the credit crisis, John Hancock has not lost any portion of its equity investments in the test transactions and has not faced any real threat of such a loss.

Petitioners argue it is impossible to guarantee the strength of a financial instrument with any long-term duration. A transaction is not devoid of substance “merely because it does not involve excessive risk.” *IES Indus., Inc. v. United States*, 253 F.3d 350, 355 (8th Cir. 2001). However, de minimis risk does not necessarily give substance to a transaction that is otherwise without risk. *ASA Investering P’ship v. Commissioner*, 201 F.3d 505, 514–515 (D.C. Cir. 2000), *aff’g* T.C. Memo. 1998–305.

There is no such thing as a risk-free investment. Nonetheless, during the sublease terms John Hancock does not assume any more than a de minimis risk. The defeasance accounts, pledges, and other collateral secure the sublease rent payments, termination values, and debt service payments for John Hancock. As a result, if the purchase options are exercised, John Hancock will receive a predetermined return without regard to the value of the VK marshalling yard, the Thalys trainset, or the EMUs and will have no upside potential or downside risk tied to ownership of the leasehold interests because of the triple-net leases. Thus, if our inquiry was to end here, John Hancock would not be

entitled to the rent and amortization deductions claimed for the LILO transactions.

However, the parties dispute whether the purchase options will be exercised at the end of the lease terms guaranteeing John Hancock's return on its LILO investments.⁴⁰

1. *OBB Purchase Option Decision*

Petitioners argue that as of the closing date it was uncertain whether OBB would exercise its purchase option. Petitioners contend that to conclude in respondent's favor on this issue we must determine that exercise of the purchase option was "inevitable". See *Estate of Thomas v. Commissioner*, 84 T.C. at 434. Respondent, on the other hand, argues that as of the closing date OBB's only financially viable choice was to exercise its purchase option.

Both respondent and petitioners throughout their briefs have used the terms "compelled", "financially compelled", and "economically compelled" in discussing whether the purchase option will be exercised. The courts that have analyzed SILO and LILO cases have adopted varying standards in determining whether a party to a SILO or LILO transaction will exercise its purchase option. In *AWG*, the District Court used the terms "certain", "compelled", and "likely" interchangeably in discussing the exercise of a purchase option. *AWG*, 592 F. Supp. 2d at 985. In *Altria*, the Court of Appeals for the Second Circuit, affirmed the District Court's jury instruction to "consider . . . the likelihood that the lessee would exercise its purchase option' in determining whether Altria retained genuine ownership or leasehold interests in the leased assets." *Altria*, 658 F.3d at 286. Finally, in both *Wells Fargo* and *Consol. Edison*, the Court of Appeals for the Federal Circuit rejected a "certainty" standard (i.e., whether the taxpayer is certain as of the closing date of the transaction that the lessee counterparty will exercise their purchase

⁴⁰The purchase option decision is a critical issue in determining risk of loss. See *Consol. Edison*, 703 F.3d at 1375–1376 ("In this case, as in *Wells Fargo*, our key inquiry is whether EZH would exercise its purchase option at the end of the Sublease Basic Term."); *Wells Fargo*, 641 F.3d at 1327 ("[T]he critical inquiry is whether Wells Fargo could have reasonably expected that the tax-exempt entities would exercise their repurchase options."); *AWG*, 592 F. Supp. 2d at 981–982 ("[M]ost importantly, it is nearly certain that *AWG* will exercise the Fixed Purchase Option[.]").

option) instead adopting a “reasonable likelihood” standard (i.e., whether the taxpayer believes at the closing date of the transaction that the lessee counterparty is reasonably likely to exercise their purchase option). *Consol. Edison*, 703 F.3d at 1379; *Wells Fargo*, 641 F.3d at 1329.⁴¹

Neither the Tax Court nor the Court of Appeals for the First Circuit has ever set an “inevitable” or similar threshold for determining whether a lessee will exercise a purchase option, and we decline to adopt such a standard here. In *Estate of Thomas v. Commissioner*, 84 T.C. at 434, we evaluated a lessee purchase option at fair market value, and held that “[c]ases which hold that equity is being transferred to a lessee in instances where exercise of an option to purchase is inevitable because the option price is nominal or small are simply not in point here.” Accordingly, although we concluded in *Estate of Thomas* that the “inevitable” exercise of

⁴¹The Court of Appeals for the Federal Circuit in creating a reasonable likelihood standard stated the standard in a number of different ways. See *Consol. Edison*, 703 F.3d at 1369 (“[W]e conclude that ConEd’s claimed deductions must be disallowed. This is so because there was a *reasonable likelihood* that the tax-indifferent entity in the LILO Transaction (the lessor of the master lease) would exercise its purchase option at the conclusion of the ConEd sublease, thus rendering the master lease illusory.” (Emphasis added.)); *id.* at 1375–1376 (“[O]ur key inquiry is whether EZH would exercise its purchase option at the end of the Sublease Basic Term.” (Emphasis added.)); *id.* at 1376 (“We have never held that the likelihood of a particular outcome in a business transaction must be absolutely certain before determining whether the transaction constitutes an abuse of the tax system. *The appropriate inquiry is whether a prudent investor in the taxpayer’s position would have reasonably expected that outcome.* Characterization of a tax transaction based on a highly probable outcome may be appropriate, particularly where the structure of the transaction is designed to strongly discourage alternative outcomes.” (Emphasis added.) (quoting *Wells Fargo*, 641 F.3d at 1325–1326)); *id.* at 1376 (“In our view, and consistent with *Wells Fargo*, therefore, the ‘critical inquiry’ is whether ConEd ‘could have reasonably expected that the tax-[indifferent] entit[y] would exercise [its] repurchase option[.]’” (Emphasis added.) (quoting *Wells Fargo*, 641 F.3d at 1327)). Though the Court of Appeals for the Federal Circuit used varying language to state its reasonable likelihood standard, we find this distinction in language a distinction without a difference. Thus, under the reasonable likelihood standard we would look to see whether John Hancock on the closing date of the test transaction reasonably expected the lessee counterparties to execute their purchase options.

a purchase option crosses a threshold, we certainly did not find that it creates one.⁴²

Moreover we find petitioners' inevitable standard to be similar to both a compulsion and certainty standard. The Courts of Appeals for the Second and Federal Circuits have specifically rejected a certainty standard in favor of a "reasonable likelihood" standard. As was stated in *Wells Fargo*, 641 F.3d at 1325–1326: "We have never held that the likelihood of a particular outcome in a business transaction must be absolutely certain before determining whether the transaction constitutes an abuse of the tax system." Consistent with the Courts of Appeals for the Second and Federal Circuits, we must determine, in the light of all of the facts and circumstances known on the closing dates of the transactions, whether John Hancock's lessee counterparties were reasonably likely to exercise their purchase options.

Petitioners and respondent introduced evidence and expert testimony with respect to the legal, political, industrial, technical, and financial considerations that would affect the purchase option decision. According to respondent's expert in the field of Austrian law, Mag. Stolzka, OBB's nonexercise of the purchase option could face considerable legal obstacles. Mag. Stolzka testified to the principle under Austrian law that requires OBB to manage its railway systems in a manner consistent with that of a "prudent businessman". Under this standard OBB would not risk the possibility that it would be required to help finance the replacement loan. Mag. Stolzka also opined that if OBB forgoes its purchase option, it would likely violate its obligation under Austrian law to operate the VK marshalling yard as part of its public duty. If John Hancock could not get the required permits and licenses to operate the VK marshalling yard and the facility ceased operating, there could be considerable damages. In sum, Mag. Stolzka's position is that OBB cannot legally fulfill its public duty if it relinquishes control over the VK mar-

⁴²We find the same to be true for the other cases petitioners cited as the basis for an "inevitable" or similar standard. See *Oesterreich v. Commissioner*, 226 F.2d 798, 803 (9th Cir. 1955) (finding "virtually no question" that a \$10 purchase price would be exercised); *Belz Inv. Co. v. Commissioner*, 72 T.C. 1209, 1229 (1979) (asking whether exercise of the purchase option was a "'foregone' conclusion"), *aff'd*, 661 F.2d 76 (6th Cir. 1981).

shalling yard, and it will not risk the chance that the facility will not be operated for the public good. Mag. Stolzka also expressed concerns that nonexercise of the purchase option could create unwanted consequences to OBB under Austrian employment and environmental law.

Petitioners' expert in the field of Austrian corporate law and creditor rights law, Dr. Popp, disagreed with Mag. Stolzka, opining that under current Austrian law OBB would be free to choose whether to exercise its purchase option. According to Dr. Popp, the VK marshalling yard is considered part of the railway infrastructure. As such, he opined that European union law requires that any operator of the VK marshalling yard grant access to its shunting services on a nondiscriminatory basis and for fees that are equal to the cost of operations. Therefore, Dr. Popp concluded that whether or not the VK marshalling yard is in the possession of OBB, its operation for the public good cannot be altered.

Dr. Popp also addressed Mag. Stolzka's concerns regarding the loan extension and the permit and license requirements. With respect to the loan extension under the renewal lease, Dr. Popp opined that any conclusion regarding whether OBB would violate any required standard of care is speculative. In his opinion, the law allows for OBB's management to make risky decisions, and the decision to help finance the loan extension, if necessary, is one it will be permitted to make if it decides it is in OBB's best interests. Next, with respect to Mag. Stolzka's argument that John Hancock will not have the necessary permits and licenses to operate the VK marshalling yard, Dr. Popp concluded that not only is John Hancock not barred from applying for the required permits and licenses, a process that takes about six months, but it may also operate the VK marshalling yard through a third party that already has the required documentation.

Apart from any legal considerations, respondent argues that OBB will be compelled to exercise its purchase option because the VK marshalling yard is an integral part of the Austrian railway system. According to Dr. Vuchic, respondent's expert in the field of transportation systems, the operations of the VK marshalling yard are fully integrated with its rail network operations, and it is not realistic to consider the possibility of alternative uses for the facility or the land

it occupies. Mr. Dolan, petitioners' expert in the field of European railways and railway assets, disagreed with Dr. Vuchic. According to Mr. Dolan, there is no aspect of the VK marshalling yard that will compel OBB to exercise its purchase option. More specifically, Mr. Dolan reiterated Dr. Popp's position that the VK marshalling yard cannot legally be removed from its essential role in the Austrian railway system and also concluded that there are no technical, political or social concerns that would prevent its privatization.

Petitioners' experts have convinced us that any legal, political, industrial, or technical objections to the nonexercise of the purchase options can be overcome, and thus are not determinative of whether OBB is reasonably likely to exercise its purchase option. Consequently, our determination of whether the purchase option is reasonably likely to be exercised by OBB will rest primarily upon a financial analysis.

a. *Financial Considerations*

OBB's "management board" will decide whether OBB elects its purchase option in 2016. None of the members of OBB's management board on the closing date are currently serving on the management board. As of the date of trial, OBB had not decided whether to exercise its purchase option.⁴³

According to the appraisal, on the purchase option date the fair market value of John Hancock's remaining leasehold interest in the VK marshalling yard is expected to be \$105,107,878. The fixed price purchase option, or OBB's cost to exercise its option, would be \$148,760,020.⁴⁴ Therefore, according to the appraisal, independent of any other considerations, the expected purchase option disadvantage would be \$43,736,164.

However, OBB's purchase option decision is not a choice between the purchase option price and the estimated fair market value of the remaining leasehold interest. It is a

⁴³We must evaluate whether on the closing date of the transaction it was reasonably likely that OBB would exercise its purchase option.

⁴⁴This amount represents the present value of the installment payments of the purchase option price of \$153,817,825, using a discount rate of 7.5%. The discount rate (i.e., the cost of capital) is an adjustment to a determined value to take into account the rate of inflation, the time value of money, and any attendant risk.

choice between the cost to OBB of exercising its purchase option and its expected costs of not exercising its purchase option. In determining its expected costs of not exercising its purchase option, OBB must analyze the likelihood and consequences of John Hancock's choosing between the renewal lease, the replacement lease, and the retention option.

Under the renewal lease John Hancock can guarantee itself the predetermined rent payments during the renewal term as well as collateral to secure the rent payments. On the other hand under the replacement lease OBB must help John Hancock procure a new lease, presumably at fair market value, but without the benefit of collateral. Therefore, if OBB forgoes its purchase option, John Hancock will likely choose between: (1) the present value of the predetermined renewal lease rent payments, taking into account the security provided from the required collateral and (2) the present value of the expected fair market rents during the replacement term, taking into account the risks of being an unsecured creditor.

b. Retention Option

Neither party provides any reason John Hancock would choose the retention option in the LILLO test transactions. Although petitioners have presented evidence that John Hancock would be capable of owning and operating the assets involved in the LILLO test transactions if it were to select the retention option, they have not presented any evidence indicating that John Hancock would want to undertake such tasks. Therefore, as the parties have, we focus our discussion and analysis on the renewal and replacement options.

c. Renewal and Replacement Options

According to the appraisal the present value of the expected fair market rents during the replacement term and any associated costs exceed the present value of the rent payments under the renewal lease. As a result the appraisal concluded that if OBB forgoes its purchase option, John Hancock would select the replacement lease. The appraisal also determined that the replacement lease was financially advantageous to OBB when compared to the purchase option.

Therefore, the appraisal concluded that OBB would not be compelled to exercise its purchase option.

Respondent disagrees with the appraisal and argues that when comparing the purchase options to the renewal and replacement leases, exercise of the purchase options is financially advantageous to OBB. Respondent supports his conclusions with a comprehensive analysis of the OBB transaction by his expert in the field of financial economics, Dr. Lys.

Respondent’s financial analysis starts with the fundamental assumption that on the closing date, June 18, 1998, the VK marshalling yard was not leased to John Hancock. Petitioners argue that this assumption ignores the legal realities. That may be so, but respondent’s analysis is a financial analysis, not a legal analysis. Respondent argues that this assumption was appropriate because the marshalling yard never changed hands. According to Dr. Lys’ analysis, from a financial perspective OBB was always in possession of the VK marshalling yard and the amounts deposited in the DPUA and the swap agreement always belonged to John Hancock. Therefore, Dr. Lys described OBB’s purchase option as the equivalent of a “European put option”,⁴⁵ enabling OBB to put a leasehold interest in the VK marshalling yard to John Hancock on the purchase option date. If, however, OBB elects its purchase option, both parties always retain what always belonged to them, making the purchase option “cashless” for OBB. The following table summarizes Dr. Lys’ analysis of the purchase option and the renewal lease from OBB’s financial perspective:

	<i>Purchase option (PO)</i>	<i>Renewal lease</i>	<i>PO advantage</i>
End of sublease term:			
DPUA	-0-	\$19,100,000	(\$19,100,000)
Swap agreement	-0-	130,500,000	(130,500,000)
Renewal lease term:			
Renewal lease rent	-0-	(129,400,000)	129,400,000
Initial lease tail period:			
Residual value	\$61,500,000	-0-	61,500,000
Total	61,500,000	20,200,000	41,300,000

⁴⁵ A European option is one that can be exercised only on its expiration date. *New Phoenix Sunrise Corp. v. Commissioner*, 132 T.C. 161, 167 (2009), *aff’d*, 408 Fed. Appx. 908 (6th Cir. 2008).

Because the purchase option was fully funded through the DPUA and the swap agreement, Dr. Lys' analysis found no cost or benefit from the deposits to OBB at the end of the sublease term. Further, under the purchase option OBB avoids the costs of the renewal lease rent. Absent from both the purchase option column and the renewal lease column is the net cashflow that OBB could realize during the renewal lease term. This amount should be the same whether OBB operates the VK marshalling yard after exercising the purchase option or under the terms of the renewal lease. Therefore, the only benefit to OBB from the purchase option is that it would capture the present value of John Hancock's leasehold interest in the VK marshalling yard during the period between the end of the renewal term and the end of the initial lease, which respondent estimated to be \$61,500,000. Because OBB is a tax-exempt entity, this \$61,500,000 value is the result of converting the appraisal's after-tax cashflow determinations to pretax cashflows and discounting those cashflows using a pretax weighted average cost of capital (WACC) rate of 15%, as opposed to the after-tax WACC of 10% used in the appraisal.⁴⁶

Under the renewal lease column, respondent argues that OBB would receive \$149,600,000 on the purchase option date, equal to the balances of the DPUA and the swap agreement. However, the renewal lease requires OBB to make additional rent payments during the renewal lease term. The deferred portion of these rent payments is due at the end of the renewal term in 2029 and equals \$428,933,900. This amount is the present value of John Hancock's deferred rent obligation under the initial lease of \$2,295,340,042 that is due in 2041, applying a WACC rate of 15%. Therefore, these obligations offset and do not affect OBB's purchase option decision.⁴⁷ The present value of OBB's remaining obliga-

⁴⁶WACC is the expected rate of return for a company on the basis of the average portion of debt and equity in the company's capital structure, the current required return on equity (i.e., cost of equity), and the company's cost of debt.

⁴⁷If OBB exercises its purchase option, John Hancock is contractually relieved of its obligation to make the deferred rent payment. Therefore, John Hancock's deferred rent payment to OBB has a net value of zero in both the purchase option and the renewal lease and is not included in either column of Dr. Lys' analysis.

tions, as shown in Dr. Lys' analysis, is \$129,400,000. The result is a positive spread to OBB of \$20,200,000. Because OBB would relinquish control of the VK marshalling yard at the end of the renewal term, it would not be able to capture the residual value of John Hancock's remaining leasehold interest. This analysis produced an advantage to the purchase option of \$41,300,000.

Dr. Lys' analysis is similar when weighing the costs and benefits of the purchase option against the replacement lease, with one significant difference. Respondent argues that if the replacement lease is attractive to John Hancock, i.e., the anticipated fair market rents are expected to exceed the rents required under the renewal lease, OBB would choose to exercise the purchase option and enter into its own replacement lease, capturing the benefits of this expected value for itself. The following table summarizes Dr. Lys' analysis:

	<i>PO plus lease</i>	<i>Replacement lease</i>	<i>PO advantage</i>
End of sublease term:			
DPUA and swap	-0-	\$149,600,000	(\$149,600,000)
Cost to find a lessee	(\$7,000,000)	-0-	(7,000,000)
Replacement lease term:			
Replacement lease rent	112,300,000	-0-	112,300,000
Initial lease tail period:			
Residual value	61,500,000	-0-	61,500,000
	<hr/>		
Total	166,800,000	149,600,000	17,200,000

Under the purchase option column, OBB forgoes the proceeds of the DPUA and the swap agreement and retains the asset. As the lessor to a replacement lease OBB must incur the costs of finding a lessee but also captures the present value benefit of the replacement lease rents, which Dr. Lys estimated on a pretax basis to be \$112,300,000 using a discount rate equal to a replacement lessee's expected borrowing rate. Also, OBB would capture the present value of the VK marshalling yard's residual value at the end of the replacement lease term. If, on the other hand, OBB does not exercise its purchase option and John Hancock selects the replacement option, OBB would receive the balances of the DPUA and the swap agreement. However, OBB would forgo the benefits of the rent payments during the replacement lease term as well as the residual. Therefore, respondent con-

cludes that the purchase option is \$17,200,000 more advantageous to OBB than the replacement option.⁴⁸ Under both the renewal and replacement option analyses, respondent concludes that a similar result would be reached under almost any fair market value of the VK marshalling yard on the purchase option date.

Petitioners, bearing the burden of proof, made several attempts to attack the validity of respondent's analysis and the conclusions it reached. First, petitioners attacked the credibility of Dr. Lys, arguing he is not an appraiser. The Court recognized Dr. Lys as an expert in the field of financial economics and thus finds the subject matter well within his expertise. Petitioners also attacked the choice of discount rate used in the discounted cashflow method as inappropriate. We do not find respondent's choice of discount rate to be inappropriate in determining the residual values of John Hancock's leasehold interests.

Petitioners also argue that respondent's use of the discounted cashflow method is inappropriate because the appraisal determined that the cost method was the proper method for determining the fair market value of the VK marshalling yard on the closing date. Although petitioners rely on the appraisal, which used the cost method to determine fair market value on the closing date, it determined that the discounted cashflow method is the most reliable valuation method in calculating the residual value and applied the discounted cashflow method in determining the expected value of John Hancock's leasehold interest in the VK marshalling yard from the end of the sublease to the end of the initial lease.

Petitioners also rely on the appraisal to conclude that non-exercise of the purchase option is financially advantageous to OBB. Respondent has convinced us that he has the more sound analysis and approach. Thus, we find that at the

⁴⁸Again, Dr. Lys treated John Hancock's deferred rent obligation as a neutral factor in OBB's decision. Under the replacement lease, OBB will not be able to capture the revenue from the VK marshalling yard during the renewal lease term, offsetting any benefit from John Hancock's deferred rent payment in 2041. However, if John Hancock determines the replacement lease to be more beneficial than the renewal lease, the present value of the revenue OBB expects to have lost will exceed the present value of John Hancock's deferred rent payment.

inception of the OBB LILO transactions, it was reasonably likely that OBB would exercise its purchase option.

2. SNCB Purchase Option Decision

Petitioners and respondent also introduced evidence and expert testimony with respect to the legal, political, industrial, technical and financial considerations that affect the SNCB purchase option decision. Respondent's expert in the field of Belgian law, Dr. Behaeghe, expressed concerns that there may be legal obstacles preventing SNCB from forgoing its purchase options because the Thalys trainset and the EMUs are part of the "public domain" under Belgian law. As part of the public domain, he believed, they are subject to the "principle of untransferability", and SNCB would be prohibited from surrendering possession of the assets unless the Belgian Government or the Belgian minister responsible for SNCB decided to "disaffect" them from public use.⁴⁹

Dr. Vandendriessche, petitioners' expert in the field of Belgian administrative and public law, disagreed with Dr. Behaeghe. According to Dr. Vandendriessche, the Belgian supreme court has two requirements for an asset to be considered part of the public domain. First, the asset must be designated for the use of all, without any distinction between persons via explicit or implicit decisions. Second, the asset must be "affected", meaning that the competent Belgian authority must have designated the asset for public use.

With respect to the Thalys trainset, Dr. Vandendriessche opined that Belgian law provides that only the domestic transport of rail passengers is considered a public service. Therefore, the Thalys trainset is not a public domain asset

⁴⁹ Respondent also introduced the testimony of a representative of SNCB to support his argument that the purchase options will be exercised. According to that representative, as of the date of trial he believed that SNCB will "most probably" exercise its purchase option in the SNCB 2 transaction because it needs the Thalys trainset and the asset is in good condition. The representative also testified that SNCB is likely to exercise its purchase option in the SNCB 5 lot 1 transaction because SNCB will need the EMUs for at least six or seven years after the purchase option date. However, we must determine whether SNCB was reasonably likely to exercise its purchase options on the closing date of the transactions; thus, testimony regarding the representatives' beliefs as of the date of trial do not inform our decision.

because it is used for international travel. The EMUs, on the other hand, are used for domestic transportation. However, according to Dr. Vandendriessche, no Belgian authority has affected them as an asset for public use. Therefore, Dr. Vandendriessche concluded that neither the Thalys trainset nor the EMUs are public domain assets. Finally, Dr. Vandendriessche opined that even if the Thalys trainset and EMUs were public domain assets, there is no reason why the Belgian Government or the Belgian minister responsible for SNCB would not disaffect the assets if it was in SNCB's best interests, removing any restrictions of transfer.

Respondent next argues that the Thalys trainset and the EMUs are integral parts of SNCB's rail fleet and that it is extremely unlikely that SNCB would be willing to give them up. Respondent's argument is based on the opinion of Dr. Vuchic, who concluded that the assets have unique characteristics that SNCB will not risk losing. Mr. Dolan's testimony rebutted Dr. Vuchic. According to Mr. Dolan, there are no technical, political, or social concerns that would prevent SNCB from forgoing its purchase options.

Petitioners' experts have convinced us that any legal, political, industrial, or technical objections to the nonexercise of the SNCB purchase options can be overcome and thus are not determinative of whether SNCB is reasonably likely to exercise its purchase options. Consequently, our determination of whether the purchase option will be exercised by SNCB will rest primarily upon a financial analysis.

Respondent, on the basis of the analysis of his expert witness Dr. Lys, argues that SNCB is reasonably likely to exercise its purchase options. Petitioners disagree, relying on the appraisals to argue that SNCB is not reasonably likely to exercise its purchase options. According to the appraisals, the present value of the estimated fair market rents that would be expected under the replacement leases will exceed the present value of the predetermined rent payments under the renewal lease. Therefore, as in the OBB transaction, the appraisals concluded that SNCB can anticipate that John Hancock would select the replacement lease in each SNCB LILO transaction if SNCB forgoes its purchase options. The appraisals next determined that the replacement leases would be financially advantageous to SNCB when compared to the purchase options. Accordingly, the appraisals con-

cluded that SNCB will likely decide not to exercise its purchase options.

Dr. Lys' analyses for the SNCB LILO transactions are substantially similar to his analysis for the OBB LILO transaction. Because the two SNCB LILO transactions have nearly identical structures and since Dr. Lys reached the same conclusions in both, we will limit our review to his analysis of the SNCB 2 transaction. The following table summarizes Dr. Lys' comparison of the purchase option against the renewal lease:

	<i>Purchase option</i>	<i>Renewal lease</i>	<i>Purchase option advantage</i>
End of sublease term:			
Swap agreement	-0-	\$3,400,000	(\$3,400,000)
PCAA	-0-	9,100,000	(9,100,000)
Taxes	- - -	(400,000)	400,000
Renewal lease term:			
Renewal lease rent	-0-	(11,500,000)	11,500,000
Initial lease tail period:			
Residual value	\$4,500,000	-0-	4,500,000
Total	4,500,000	600,000	3,900,000

Under the purchase option column, Dr. Lys' conclusions are fundamentally the same as his conclusions for the OBB transaction. The only difference of note is the method used to calculate residual value. Because Dr. Lys and the appraisal treat SNCB as a taxable entity,⁵⁰ Dr. Lys' residual value calculation does not have to convert an after-tax value into a pretax value. Accordingly, the \$4,500,000 residual value in the purchase option column is simply the present value of the appraisal's estimated after-tax cashflows during the period between the end of the renewal lease and the end of the initial lease, using the appraisal's after-tax WACC rate of 11%.

Under the renewal lease column, the only difference between SNCB's LILO transactions and the OBB analysis is Dr. Lys' inclusion for taxes. According to Dr. Lys, the \$1 mil-

⁵⁰It is not clear whether under its reorganization SNCB transferred ownership of HSL, under Belgian law, to a tax-exempt subsidiary. However, because the appraisal applies a tax against SNCB's income in its discounted cashflow analysis, Dr. Lys does the same.

lion spread between the proceeds of the defeasance accounts and the amounts SNCB would have to pay pursuant to the renewal lease should be taxed as income. Applying the appraisal's 40% tax rate, Dr. Lys assessed a \$400,000 tax to SNCB under the renewal lease. The overall result of Dr. Lys' analysis is a \$3,900,000 advantage to the purchase option.

Dr. Lys reached a similar result when substituting the replacement lease for the renewal lease. The following table summarizes his calculations:

	<i>Purchase option plus lease</i>	<i>Replacement lease</i>	<i>Purchase option advantage</i>
End of sublease term:			
Swap and PCAA	-0-	\$7,500,000	(\$7,500,000)
Cost to find a lessee	(\$200,000)	-0-	(200,000)
Replacement lease term:			
Replacement lease rent	7,900,000	-0-	7,900,000
Initial lease tail period:			
Residual value	4,500,000	-0-	4,500,000
Total	12,200,000	7,500,000	4,700,000

Again, Dr. Lys' analysis is fundamentally similar to his OBB analysis. The only significant difference is his determination of the amount of proceeds SNCB can expect to receive from the swap agreement and the PCAA in the replacement lease column. According to Dr. Lys, SNCB will be subject to a tax on those amounts.⁵¹ Therefore, if the appraisal's 40% tax rate is applicable, SNCB's expected after-tax cashflow is \$7,500,000 ($\$12,500,000 - (\$12,500,000 \times 40\%)$). The overall result of this analysis is a purchase option advantage of \$4,700,000.

Under both the renewal and replacement lease analyses Dr. Lys concluded that a similar result would be reached assuming almost any residual value of the Thalys trainset on the purchase option date. Dr. Lys also performed additional analyses assuming SNCB to be a tax-exempt entity, and his conclusions did not change.

⁵¹ Respondent's expert in Belgian law, Dr. Behaeghe, concurred with this conclusion.

Petitioners, bearing the burden of proof, made arguments similar to those made with respect to the OBB purchase option decision to attack respondent's analysis and the conclusions it reached. We have already found Dr. Lys to be an expert in the field of financial economics and thus found that the subject matter is well within his expertise. We also have found that respondent's choice of discount rate in determining the residual values of the leasehold interests is appropriate.

Petitioners also argue that respondent's analysis failed to account for possible tax assets or tax losses by SNCB that would offset any taxes due under Belgian law from nonexercise of the purchase option. While this is true, SNCB's tax position will also affect the residual value of John Hancock's remaining leasehold interest on the purchase option date. Respondent's calculations consistently apply a 40% tax rate on both the nonexercise of the purchase option and the residual value calculation. As we discuss in greater detail in our analysis of the SILO test transactions, respondent's approach is not necessarily a reliable one. Nonetheless, petitioners have failed to present an alternative analysis with a realistic combination of effective tax rates to be applied to the residual value calculation and the proceeds of the defeasance accounts, respectively.

Finally, petitioners rely on the appraisal to conclude that nonexercise of the purchase option is financially advantageous to SNCB. Respondent has convinced us that he has the more sound analysis and approach. Thus, we find that on the closing dates of the SNCB LILO transactions, it was reasonably likely that SNCB would exercise its purchase options.

3. Conclusion

The lack of risk during the sublease terms, combined with our finding that OBB and SNCB will likely exercise their purchase options, insulates John Hancock from any risk of losing its initial investment in the OBB and SNCB transactions. Moreover, the structure of the transactions guaranteed John Hancock's return on its investments was fixed from each transaction's respective closing date. Therefore, given that OBB and SNCB kept control of their respective

assets during the sublease term, never paid any money for use of those assets, and were reasonably likely to unwind the transactions through the exercise of their purchase options, we hold that John Hancock did not acquire the benefits and burdens of a traditional lessor in the OBB and SNCB LILO transactions. Instead, the transactions more closely resemble financial arrangements. Specifically, the transactions resemble loans from John Hancock to OBB and SNCB for the duration of the sublease terms. As a result, John Hancock will receive a predetermined return without regard to the value of the relevant assets and will have no upside potential or downside risk tied to ownership of the leasehold interests. Thus, we find that the substance of the LILO transactions is not consistent with its form. Accordingly, we sustain respondent's determinations denying John Hancock's claimed rental expense deductions with respect to the LILO transactions.

B. *SILO Test Transactions*

There are several critical facts that distinguish the SILO test transactions from the LILO test transactions. First, during the sublease terms, the transaction documents do not require defeasance with respect to the equity or series B debt, nor did John Hancock acquire a security interest in any of the defeasance agreements executed outside of the transaction documents.⁵² Next, the SILO test transactions are distinguishable from the LILO test transactions because of the structure of the purchase options. In the SILO test transactions, the lessee will evaluate its purchase option against a service contract, rather than a renewal or replacement lease.⁵³ This evaluation will present unique considerations. Of particular importance is the foreign tax consequences to the lessee if it decides not to exercise its purchase option. Because the term of the initial lease in each SILO test transaction exceeds the useful life of the subject asset, nonexercise of the purchase option results in a sale of the asset from the

⁵²We do not specifically address respondent's argument that John Hancock required the equity and series B debt defeasance agreements in the SILO test transactions but conspired to keep them out of the transaction documents. The evidence does not support an allegation of this magnitude.

⁵³As discussed earlier, neither party has set forth a reasonable argument for exercise of the retention option.

lessee to John Hancock for foreign tax purposes. There was considerable expert testimony at trial regarding the potential tax consequences of such a sale and the impact of those potential taxes on the purchase option decisions. As with the LILO transactions, we must similarly determine whether John Hancock acquired the benefits and burdens of ownership of the subject assets. One of our many considerations is whether John Hancock's investment was subject to more than a de minimis risk of loss. As will be explained later, the TIWAG and Dortmund SILO transactions differ in structure from the SNCB SILO transaction; thus we will begin by analyzing the TIWAG and Dortmund SILO transactions together and provide a separate analysis for the SNCB SILO transaction.

1. *TIWAG and Dortmund Transactions*

a. *Sublease Term*

Petitioners argue that we cannot consider the equity or series B debt defeasance agreements in the TIWAG and Dortmund transactions because John Hancock did not require such agreements as part of the transaction. We disagree. First, John Hancock expected TIWAG and Dortmund to enter into such agreements because of the favorable accounting treatment to which they were entitled under European GAAP. Additionally, the transactions were designed to fund these agreements without affecting TIWAG's or Dortmund's expected net present value benefit. We are permitted to consider side transactions that are material to the substance of the transactions at issue. See *ASA Investering's P'ship v. Commissioner*, 201 F.3d at 513 (In evaluating whether for Federal tax purposes a partnership had been formed between the taxpayer and a foreign counterparty, the court considered side agreements executed outside the alleged partnership between the foreign counterparty and various banks. The taxpayer was not a party to and did not require such agreements. However, these agreements affected the foreign counterparty's risk of loss in the alleged partnership and were therefore relevant to the analysis.).

We find that John Hancock's lack of a pledge or guaranty with respect to the equity or series B debt is more critical to

our inquiry. When compared to the LILO test transactions, this distinction increases John Hancock's risk of loss, albeit only ever so slightly. However, we find that this increased risk, on its own, is not enough to carry petitioners' burden, for several reasons. For one, the equity and series B payment undertakers had strong credit, and John Hancock preapproved their inclusion in "form" equity and series B debt PUAs. Additionally, the equity and series B debt accounted for less than 30% of each transaction's value. John Hancock was a party to a series A DPUA in each of the TIWAG and Dortmund transactions, providing it with protection equivalent to a pledge or guaranty with respect to the series A debt service payments and most of the sublease rent payments. Accordingly, we find that John Hancock's lack of a pledge or guaranty with respect to the equity and series B defeasance does not materially alter John Hancock's risk. As was the case in the LILO test transactions, John Hancock's risk of loss during the sublease terms of the TIWAG and Dortmund transactions is *de minimis*.

Petitioners also argue that the initial lease and sublease materially alter the parties' rights and obligations with respect to the 21.6% undivided interest in Sellrain-Silz and create risks which are indicative of ownership. To support this argument, petitioners list a series of 16 clauses throughout the transaction documents. We list each of these clauses below and find that none of them creates risk to John Hancock during the sublease term. These clauses fall into two categories: (1) insignificant rights and obligations; and (2) rights and obligations that insulate John Hancock from risk rather than expose it to risk.

Beginning with the clauses we find to be insignificant, the initial lease requires TIWAG to post insignia on the physical structure of the 21.6% undivided interest in Sellrain-Silz to indicate that the asset was leased to John Hancock. Additionally, the sublease grants John Hancock the right to visit and inspect the asset not more than twice a year. We find these clauses to be immaterial to the analysis. They speak to the form of the transaction, not its substance.

The remaining 14 provisions petitioners cite are as follows:

(1) TIWAG generally may not consolidate or merge with another party, or spin off, convey, transfer or lease substantially all of its assets;

(2) TIWAG cannot sell, dispose of, or create a security interest in the 21.6% interest in Sellrain-Silz without John Hancock's consent;

(3) TIWAG must register notice decrees with the local land registry;

(4) the ROW agreement grants John Hancock a right of way to specified land parcels;

(5) TIWAG agreed not to take action to terminate the ROW agreement;

(6) upon the occurrence of a trigger event, John Hancock has the right to exercise an option to purchase an interest in certain facility parcels;

(7) with certain exceptions, TIWAG cannot create or permit any lien on the 21.6% undivided interest in Sellrain-Silz;

(8) TIWAG must operate, use, maintain and repair the 21.6% undivided interest in Sellrain-Silz in accordance with specified standards;

(9) TIWAG must replace parts with parts that meet specified standards;

(10) TIWAG must maintain records of daily operation and of maintenance, repairs, and improvements;

(11) TIWAG is permitted to make optional improvements, but only if the modification does not adversely affect the 21.6% undivided interest in Sellrain-Silz;

(12) TIWAG's ability to sublease is restricted;

(13) TIWAG must purchase insurance in accordance with specified standards; and

(14) John Hancock has the option of declaring a lessee event of default under the sublease, but TIWAG cannot declare an event of default under the initial lease.

None of the above-listed provisions creates risk to John Hancock during the sublease term. In fact, most of these provisions do nothing more than protect John Hancock's interests. With respect to some of these provisions, we have no evidence that TIWAG's use and rights with respect to the 21.6% undivided interest in Sellrain-Silz were altered after the closing date. For instance, there is no evidence that before the closing date TIWAG was not already maintaining suitable records and adhering to the specified standards required with respect to any insurance, repairs, and operations. Finally, we put little credence in the fact that John Hancock has the option of declaring a lessee event of default

under the sublease, but TIWAG cannot declare an event of default under the initial lease. Not only is this an example of John Hancock's insulation from risk, but we have already determined that the most likely cause of a lessee default under the sublease, failure to pay sublease rent, is nearly impossible because of the defeasance agreements.

b. *Purchase Options*

We look to the purchase options for additional evidence that John Hancock acquired the benefits and burdens of ownership in a way that is substantively distinguishable from the LILO test transactions. Respondent argues, and we agree, that the exercise of the purchase options guarantees John Hancock's return on its investment and insulates John Hancock's investment from more than a de minimis risk of loss. Thus we must determine whether the various purchase options are reasonably likely to be exercised. Respondent relies on the analyses of Dr. Lys to argue that the purchase options are, and have always been, TIWAG's and Dortmund's only financially viable choices. As we will discuss in much greater detail, unlike those of the LILO test transactions, Dr. Lys' analyses of the TIWAG and Dortmund transactions fail to withstand scrutiny.

i. *TIWAG Transaction*

Petitioners, relying on the appraisal, argue that it was financially disadvantageous for TIWAG to exercise its purchase option.⁵⁴ The appraisal analyzes TIWAG's purchase option decision as of the closing date of the transaction. According to the appraisal, on the purchase option date the fair market value of the 21.6% undivided interest in Sellrain-Silz is expected to be \$648,210,816. The fixed purchase option price, or TIWAG's cost to exercise its option, is \$795,135,940. On the other hand, assuming John Hancock would choose the service contract option, TIWAG's cost of nonexercise has two components: (1) the fair market value of the asset that TIWAG will no longer possess, or \$648,210,816

⁵⁴As of the date of trial TIWAG had not decided whether to exercise its purchase option. TIWAG's competent corporate body closer to the purchase option date will probably make the decision with the approval of its supervisory board.

and (2) the costs to arrange a service contract, refinance the section 467 loan, and obtain residual value insurance. The appraisal estimated these additional costs at \$7,108,992, making TIWAG's total cost of not exercising the purchase option \$655,319,808. Accordingly, the appraisal concluded that TIWAG would not be compelled to exercise its purchase option because the advantage of not exercising is \$139,816,132 (\$795,135,940 – \$655,319,808).

Respondent disagrees with the appraisal and relies on the expert testimony of Dr. Lys to rebut the appraisal's conclusions. Dr. Lys identified what he claimed to be two significant errors in the appraisal's analysis. First, he opined that the appraisal failed to account for the Austrian tax consequences to TIWAG if it chooses not to exercise the purchase option. Although U.S. tax law treats the initial lease as a sale, under Austrian tax law TIWAG is not treated as selling the 21.6% undivided interest in Sellrain-Silz on the closing date. However, if TIWAG forgoes its purchase option and relinquishes possession of the asset, Austrian tax law will treat such an event as a sale from TIWAG to John Hancock. TIWAG's amount realized in such a sale would be the purchase option price of \$795,135,940 funded from the proceeds of TIWAG's EPUA and John Hancock's repayment of the section 467 loan. Because this would be a taxable event to TIWAG, Dr. Lys believed that TIWAG would not net \$795,135,940 as the appraisal concluded. Rather, TIWAG would receive \$795,135,940 less the tax liability pursuant to Austrian tax law. Applying a 40% tax rate to TIWAG's amount realized, Dr. Lys subtracted a tax due of \$318,054,376 ($\$795,135,940 \times 40\%$), leaving TIWAG with a total after-tax cashflow from not exercising its purchase option of approximately \$477,081,564.⁵⁵

Next, Dr. Lys opined that the appraisal used an inappropriately high discount rate of 7% in calculating the present value of the capacity charges TIWAG would have to pay to John Hancock if TIWAG becomes the power purchaser during the service contract term. Dr. Lys believed that

⁵⁵ Dr Lys' analysis and calculations are based on an amount realized of \$790,700,000, rather than TIWAG's expected amount realized of \$795,135,940. It is not clear where this difference comes from. For consistency, we have adjusted Dr. Lys' calculations to conform with TIWAG's expected amount realized. This change is not material to the analysis.

because these payments are due to John Hancock regardless of TIWAG's operating performance, they are more like debt payments and should be discounted at TIWAG's cost of debt. Consequently, Dr. Lys applied a discount rate of 4.32%, resulting in a present value of the capacity charges on the purchase option date of approximately \$497,800,000.

Dr. Lys proceeded to give his own analysis of TIWAG's purchase option decision. Respondent adopts Dr. Lys' analysis and argues that the exercise of the purchase option was financially advantageous to TIWAG. Dr. Lys' financial analysis started with the fundamental assumption that on the closing date the 21.6% undivided interest in Sellrain-Silz was not transferred to John Hancock. Dr. Lys described TIWAG's purchase option as the equivalent of a European put option enabling TIWAG to put the 21.6% interest in Sellrain-Silz to John Hancock on the purchase option date. The following table summarizes Dr. Lys' comparative analysis of the purchase option and the service contract from TIWAG's economic perspective:

	<i>Purchase option</i>	<i>Service contract</i>	<i>Purchase option advantage</i>
End of sublease term:			
Sec. 467 loan and EPUA	-0-	\$477,081,564	(\$477,081,564)
Costs to refinance debt	-0-	(2,900,000)	2,900,000
Residual value insurance	-0-	(7,400,000)	7,400,000
Service contract term:			
Capacity charge expense	-0-	(497,800,000)	497,800,000
Initial lease tail period:			
Residual value	\$143,800,000	-0-	143,800,000
Total	143,800,000	(31,018,436)	174,818,436

Beginning with the purchase option, because Dr. Lys assumed that nothing was sold on the closing date, his position is that TIWAG always owns the 21.6% undivided interest in Sellrain-Silz. Similarly, the section 467 loan balance and the proceeds of the EPUA always belong to John Hancock. As a result, if TIWAG elects the purchase option, both parties retain what always belonged to them, making the purchase option "cashless" for TIWAG. Next, if TIWAG elects the purchase option, it will avoid the costs of refinancing the section 467 loan, arranging for residual value insurance, and paying capacity charges as the power purchaser. At the end of the service contract term the purchase

option allows TIWAG to capture the residual value of the 21.6% undivided interest in Sellrain-Silz which Dr. Lys determined to be \$143.8 million.⁵⁶

In contrast, under the service contract option Dr. Lys' position is that TIWAG will receive the after-tax balance of the section 467 loan and the proceeds of the EPUA. As part of the service contract requirements TIWAG must incur the costs to refinance the section 467 loan, arrange for residual value insurance, and pay the capacity charges if it chooses to be the power purchaser. In forgoing the purchase option TIWAG would not be able to capture the residual value of the asset, leaving it with zero value after the service contract term. The end result, according to Dr. Lys, is a \$178,818,436 advantage to TIWAG under the purchase option. Dr. Lys concluded that a similar result would be reached no matter the fair market value of the 21.6% undivided interest in Sellrain-Silz on the purchase option date.

Dr. Lys' service contract analysis assumed that TIWAG would choose to be the power purchaser under the service contract rather than procuring a third party. Missing from both the purchase option and service contract columns are TIWAG's power sales revenue and fixed and variable costs to operate Sellrain-Silz. These items are not included in the table because they are the same whether TIWAG owns the asset under the purchase option or acts as the power purchaser under the service contract. On the other hand, if TIWAG were to procure a third-party power purchaser to enter into the service contract, TIWAG would not have to pay the capacity charges and thus the negative \$497.8 million would be removed from the service contract column. This would be true whether TIWAG exercises its purchase option and enters into its own service contract or procures a third-party power purchaser for a service contract with John Hancock. Additionally, TIWAG would not benefit from the power sales revenue. To reflect this adjustment the \$497.8 million in power sales revenue would have to be added back to the purchase option column. Consequently, the results are the

⁵⁶ According to Dr. Lys, \$143,800,000 is the present value of the 21.6% undivided interest in Sellrain-Silz as of the purchase option date, determined by discounting the residual value of the asset at the end of the service contract, as determined by the appraisal, using the appraisal's WACC rate of 7%.

same whether TIWAG acts as the power purchaser under the service contract or procures a third-party power purchaser.

To counter Dr. Lys' analysis, petitioners begin by arguing that the purchase option is not cashless to TIWAG because the EPUA was not required as part of the SILO transaction and is not pledged to John Hancock. Petitioners argue that TIWAG can terminate the EPUA at any time and use the proceeds for any other purpose. The transaction documents do not support petitioners' argument. The EPUA is irrevocable and nonrefundable. TIWAG is merely entitled to direct the payments due from UBS on specified dates to any party of its choosing.

The crux of petitioners' dispute with Dr. Lys' analysis centers around his assumption that TIWAG will incur a significant Austrian tax liability if it chooses not to exercise its purchase option. As discussed above, under Austrian tax law TIWAG's nonexercise of its purchase option would be treated as a sale of the 21.6% undivided interest in Sellrain-Silz from TIWAG to John Hancock. According to Dr. Lys, TIWAG's taxable gain from this sale would equal the difference between its amount realized, measured as the purchase option price, and TIWAG's book value in the 21.6% undivided interest in Sellrain-Silz, which he assumed to be zero. The resulting tax liability shifted TIWAG's purchase option from a financially disadvantageous choice to TIWAG's only viable financial option.

Under Austrian tax law as of the closing date, the parties agree that TIWAG's taxable gain on the sale of the 21.6% undivided interest in Sellrain-Silz would be a measure of the difference between the fixed purchase option price, \$795,135,940, and TIWAG's book value in the asset. Therefore, unless TIWAG's book value in the asset is zero on the purchase option date, it will not be taxed on its entire amount realized as Dr. Lys assumed. Dr. Lys recognized this potential flaw in his calculations, stating that he had not seen any projections of the book value of the 21.6% undivided interest in Sellrain-Silz on the purchase option date, and he reserved the right to supplement his analysis if reliable information about TIWAG's expected book value were to become available. Despite not having this information, Dr. Lys proceeded with his analysis, assuming that given the age

of the asset its book value would be very low on the purchase option date.

To rebut Dr. Lys' calculations, petitioners presented the testimony of Dr. Doralt, an expert in the field of Austrian tax law, who opined that on the closing date TIWAG could expect the possibility of loss carryforwards to offset any capital gain from the sale of the 21.6% undivided interest in Sellrain-Silz. Further, Dr. Lys ignored the possibility of capital improvements throughout the sublease term, which would increase TIWAG's book value in the 21.6% undivided interest in Sellrain-Silz.⁵⁷ These possibilities are reasonable, and we expect that the TIWAG would engage in any necessary tax planning should the need arise.

Petitioners also challenge Dr. Lys' use of a 40% income tax rate because Austrian corporations are currently taxed at a flat income tax rate of 25% and before 2005 that rate was 34%. Dr. Lys acknowledged this discrepancy. However, he stated that the appraisal used a 40% income tax rate to determine the residual values of the asset as part of the discounted cashflow method and that as long as the tax rate used for both calculations is consistent, the methodology is correct. Petitioners have not presented alternative discounted cashflow calculations for the residual values using an income tax rate of 25% or 34%.⁵⁸

Finally, petitioners argue that Dr. Lys' financial analysis is predicated on the erroneous assumption that nothing was sold on the closing date and that if Dr. Lys started with the opposite assumption (i.e., that the parties entered into the lease transactions, that TIWAG received the equity investment, and that TIWAG must pay a purchase option price to recover ownership of the asset) the computations would prove the opposite. According to petitioners, if TIWAG exercises its

⁵⁷If TIWAG uses tax loss carryforwards to reduce or eliminate any gain from the sale of the 21.6% undivided interest in Sellrain-Silz, it will not have those carryforwards for future years, eliminating a tax asset. However, TIWAG could have expiring tax loss carryovers in the year of sale or may not have another chance to use the tax carryovers before their expiration. Accordingly, the impact of tax loss carryforwards is speculative.

⁵⁸Respondent's expert in the field of Austrian taxation and accounting, Dr. Wundsam, agreed with petitioners on this point, stating that Austrian tax law is always changing and that any opinion on the Austrian tax consequences of the transaction in 2037 is speculative.

purchase option it will pay \$795,135,940 for an asset with a fair market value of \$648,210,816. Additionally, in exercising its purchase option, TIWAG avoids the costs of refinancing the section 467 loan and the cost of procuring residual value insurance. Under the discounted cashflow method the appraisal accounted for power sales revenue and expenses in determining the fair market value of the 21.6% undivided interest in Sellrain-Silz on the purchase option date. Therefore, to avoid double counting, no further adjustments are necessary for power sales revenue, expenses, or residual value.

Under the service contract option, TIWAG would retain the proceeds it already owned from the section 467 loan and the EPUA and would not receive any benefit from the asset. Assuming TIWAG chooses to be the power purchaser, it must pay the capacity charges.⁵⁹ However, those charges would be offset through power sales revenue. TIWAG must also incur the costs of refinancing the section 467 loan and procuring residual value insurance. The following table summarizes petitioners' analysis:

	<i>Purchase option</i>	<i>Service contract</i>	<i>Purchase option advantage</i>
End of lease term:			
Purchase price	(\$795,135,940)	-0-	(\$795,135,940)
Fair market value	648,210,816	-0-	648,210,816
Costs to refinance debt	-0-	(\$2,900,000)	(2,900,000)
Residual value insurance	-0-	(7,400,000)	(7,400,000)
Service contract term:			
Capacity charge expense	-0-	(497,800,000)	497,800,000
Power sales	-0-	497,800,000	(497,800,000)
Initial lease tail period:			
Residual value	-0-	-0-	-0-
Total	(146,925,124)	(10,300,000)	(136,625,124)

Petitioners reach a far different result from Dr. Lys, concluding that the purchase option is economically disadvantageous to TIWAG. This difference, however, is not just the result of beginning their analysis with a different assumption about whether there was a sale on the closing date. Rather, petitioners' conclusion also differs from respondent's because

⁵⁹ Petitioners' analysis does not dispute Dr. Lys' adjustment to the discount rate in calculating the present value of the capacity charges during the service contract term.

petitioners' calculations do not account for any Austrian tax liability to TIWAG. To illustrate this point, if the 40% tax rate Dr. Lys used in his analysis is applied to petitioners' calculations, TIWAG would incur a \$318,054,376 ($\$795,135,940 \times 40\%$) tax liability. This tax liability would be a negative in the service contract column of petitioners' analysis, resulting in a final purchase option advantage to TIWAG of \$181,429,252.⁶⁰

To further illustrate how this affects TIWAG's purchase option decision, we refer back to Dr. Lys' conclusion that TIWAG's advantage under the purchase option is \$174,818,436. This conclusion was based on an estimated Austrian income tax liability of \$318,054,376. Using Dr. Lys' analysis as the baseline, if, after considering the asset's book value on the purchase option date and using all other methods available to TIWAG to reduce or eliminate its taxable income, TIWAG's Austrian tax liability is reduced to \$136,625,124 ($\$318,054,376 - \$174,818,436$), the purchase option advantage would be zero.

However, a reduction in TIWAG's annual effective Austrian income tax rate will also affect the purchase option column in Dr. Lys' analysis. As discussed above, Dr. Lys determined the present value of the 21.6% undivided interest in Sellrain-Silz at the end of the service contract term to be \$143.8 million. This calculation was the result of discounting the appraisal's residual value determination which was calculated under the discounted cashflow method and included the imposition of an annual income tax rate of 40%. If, on the other hand, a lower effective tax rate is used in the discounted cashflow analysis, because of tax-reducing strategies consistent with petitioners' position on the nonexercise of the purchase option the result would be a higher estimated residual value.⁶¹ If the residual value as calculated in Dr.

⁶⁰ Subtracting \$318,054,376 from the service contract column results in a total under the service contract column of negative \$328,354,376. This results in a purchase option advantage of \$181,429,252 ($\$328,354,376 - \$146,925,124$).

⁶¹ The appraisal's failure to account for the possibility that the annual effective tax rate on income derived from the 21.6% undivided interest in Sellrain-Silz may be less than 40% also affects the reliability of its discounted cashflow method analyses used to determine the estimated fair

Lys' analysis was understated, the purchase option is more valuable.

This tax rate adjustment for purposes of the discounted cashflow analysis is also applicable when analyzing TIWAG's purchase option decision from petitioners' perspective. According to petitioners' calculation, on the purchase option date TIWAG will pay \$795,135,940 for an asset with a fair market value of \$648,210,816. Petitioners' calculation did not apply a tax to the proceeds of the section 467 loan and the EPUA. However, it relied on the appraisal's fair market value determination on the purchase option date, which was calculated using a 40% tax under the discounted cashflow method. If the effective tax rate used under the discounted cashflow method is lowered, the estimated value of the 21.6% undivided interest in Sellrain-Silz on the purchase option date would be higher than \$648,210,816, resulting in a fixed-price purchase option that is more attractive to TIWAG.

From a financial perspective, TIWAG's purchase option decision will depend on the Austrian tax laws and TIWAG's ability to generate and use tax assets on the purchase option date and during the period after the service contract term. Further, the decision will also depend upon the expected book value and residual value of the 21.6% undivided interest in Sellrain-Silz on the purchase option date. There was no way on the closing date for TIWAG to foresee its Austrian tax consequences from nonexercise of the purchase option with any certainty. Similarly, there was no way for TIWAG to foresee with any degree of certainty what its effective tax rate was going to be in any given year during the tail period of the service contract term. As a result, the appraisal's, Dr. Lys', and petitioners' purchase option analyses all produce unreliable results. Therefore, we find the evidence with respect to whether TIWAG was reasonably likely to exercise its purchase option as of the closing date to be inconclusive.

Respondent also argues that it is reasonably likely that the purchase option will be exercised because of TIWAG's obligation to refinance the section 467 loan under the service contract option. Petitioners' expert Mr. Haider opined that this obligation would not hinder TIWAG's decision and that the

market value of the asset on the closing date and the purchase option date.

cost to TIWAG of posting additional collateral if necessary could be far less than the cost of a disadvantageous purchase option. We agree with Mr. Haider, and we find that respondent's position on this point ignores the business realities.

Next, respondent argues that TIWAG could face significant complications under Austrian law that would prevent it from forgoing the purchase option. Petitioners' expert in the field of Austrian corporate law and creditor rights law, Dr. Popp, successfully rebutted each of respondent's concerns, and we do not find them to be obstacles preventing nonexercise of the purchase option. Therefore, we find that no additional considerations prove that TIWAG's purchase option was reasonably likely to be exercised.⁶²

Petitioners have presented enough evidence to counter respondent's claim that the exercise of the purchase option was TIWAG's only viable financial option. As a result, we cannot say whether on the closing date of the transaction it was reasonably likely that TIWAG would exercise its purchase option.

ii. *Dortmund Transactions*

Petitioners, relying on the appraisal, argue that it was financially disadvantageous for Dortmund to exercise its purchase option.⁶³ According to the appraisal, on the purchase option date the fair market value of the trade fair facility was expected to be \$242,882,656.⁶⁴ The fixed price purchase options, or Dortmund's cost to exercise its options, is

⁶²For each test transaction, respondent has presented documents that he claims prove that the lessee counterparties always intended to exercise their purchase options. We find this evidence to be unavailing. In each case, the evidence presented was given little context and was subject to different interpretations. Further, at trial we heard the testimony of a representative from each of the lessee counterparties with respect to the purchase options. These representatives credibly testified that as of the closing date the lessee counterparties did not know whether they would exercise their purchase options. Further, each representative testified that the purchase option would be a business decision made at a time much closer to the purchase option date.

⁶³The Dortmund city council will decide whether Dortmund exercises its purchase options. At the date of trial Dortmund's city council had not made those decisions.

⁶⁴Excluding hall 3B.

\$283,934,629.⁶⁵ On the other hand, assuming John Hancock would choose the service contract, Dortmund's cost of non-exercise has two components: (1) the fair market value of the trade fair facility that Dortmund will no longer possess, or \$242,882,656; and (2) the costs to arrange a service contract, refinance the section 467 loan, and obtain residual value insurance. The appraisals estimated these additional costs at \$9,115,027, making Dortmund's total cost of not exercising its purchase options \$251,997,683. Accordingly, the appraisals concluded that Dortmund will likely not exercise its purchase options because the advantage of not exercising is \$31,936,946 (\$283,934,629 – \$251,997,683).

Respondent disagrees with the appraisal and once again relied on the expert testimony of Dr. Lys to rebut the appraisal's conclusions. As in the TIWAG transactions, Dr. Lys opined that the appraisal's methodologies were flawed because they failed to account for the German tax consequences to Dortmund of not exercising the purchase option and because the discount rate used to determine the present value of the capacity availability charges under the service contract was inappropriate. Dr. Lys described Dortmund's options as European put options and again began his financial analysis with the assumption that nothing was sold on the closing date.

To correct the perceived tax rate errors in the appraisals, Dr. Lys used a 38% income tax rate to reduce Dortmund's proceeds from the section 467 loan and the EPUAs under the service contract from \$283,934,629 to \$176,039,470.⁶⁶ Dr. Lys used a 38% income tax rate because it was the German corporate income tax rate on the closing date. The appraisals did not apply a tax rate in their discounted cashflow analyses. In fact, the appraisals state that "a pretax analysis has been used since buy/sell decisions of exhibition industry participants and published market yield requirements reflect a pretax basis".

For the same reasons as for the TIWAG transaction, Dr. Lys used the borrowing rate to compute the present value of

⁶⁵ These values take into account both Dortmund SILO transactions.

⁶⁶ The numbers used in Dr. Lys' analysis for the proceeds of the sec. 467 loan and the EPUAs are slightly different. These differences are not material to the analysis.

Dortmund's capacity availability charges under the service contract on the purchase option date. Additionally, Dr. Lys determined the present value of the trade fair facility's residual value at the end of the service contract using the appraisals' pretax discount rate of 10.5%. The following table summarizes Dr. Lys' analysis,⁶⁷ assuming that Dortmund acts as the service purchaser under the service contract:⁶⁸

	<i>Purchase option</i>	<i>Service contract</i>	<i>Purchase option advantage</i>
End of lease term:			
Sec. 467 loan and EPUA	-0-	\$176,039,470	(\$176,039,470)
Costs to refinance debt and arrange for residual value insurance	-0-	(9,115,027)	9,115,027
Service contract term:			
Capacity availability charges	-0-	(173,100,000)	173,100,000
Initial lease tail period:			
Residual value	\$42,300,000	-0-	42,300,000
Total	42,300,000	(6,175,557)	48,475,557

Under Dr. Lys' analysis, the purchase option advantage is \$48,475,557. However, his conclusion again depends on whether, and to what extent, Dortmund will be taxed on the proceeds of the section 467 loan and the EPUAs pursuant to German tax law. To illustrate this point, Dr. Lys estimated a total German income tax for Dortmund of \$107,895,159 (\$283,934,629 × 38%). If Dortmund actually owed \$48,475,557 less in German income tax liability than under Dr. Lys' analysis, there would be no economic advantage in Dortmund's exercising its purchase option.

Both parties presented expert reports with respect to the German tax consequences to Dortmund under the service contract option. Respondent's expert in the field of German tax law, Dr. Diemer, opined that Dortmund would be subject to capital gains tax under the German corporate income tax and trade income tax to the extent that its amount realized from the sale exceeded the trade fair facility's book value on the purchase option date. As in the TIWAG transaction, Dr.

⁶⁷Dr. Lys' analysis used lower costs than the appraisals for Dortmund to refinance the sec. 467 loan and obtain residual value insurance. We have adopted the appraisals' estimates of these costs.

⁶⁸As with TIWAG, the results are the same if Dortmund procures a third-party power purchaser.

Lys' analysis assumed a book value of zero. Dr. Diemer further opined that under the service contract the capacity availability charges would be tax deductible to Dortmund during the service contract term. As a caveat to Dr. Diemer's report, he stated that the changing nature of the German corporate tax laws makes it impossible to opine with certainty on the tax consequences of a transaction occurring in 2032. Therefore, his analysis was based on current law.

Petitioners' expert in the field of German tax law, Dr. Hey, agreed with Dr. Diemer that any determination with respect to the German tax consequences of a transaction in 2032 is speculative. However, he presented the potential for a much different impact on Dortmund under the service contract, concluding that taxes would likely not be a material factor in Dortmund's decisions. Beginning with the trade income tax, Dr. Hey explained that it is the equivalent of a municipal income tax. Therefore, Dortmund would pay any trade income tax imposed as a result of the sale of the trade fair facility to itself. Further, Dr. Hey explained that the trade income tax is deductible for German Federal corporate income tax purposes. Therefore, the only effect of the trade income tax would be to reduce Dortmund's effective corporate income tax rate.

Next, Dr. Hey opined on a number of scenarios where Dortmund could reduce or eliminate any corporate tax liability resulting from a sale. First, pointing to section 6b of the German income tax code, Dr. Hey opined that "roll-over" relief would be available to defer any gain. Dr. Hey described "roll-over" relief as a mechanism similar to like-kind exchanges under section 1031, where Dortmund would be able to roll over the book value of the trade fair facility to newly acquired land or buildings provided that such assets are acquired in the current or preceding year, or will be acquired in the following four to six years. Dr. Hey stated that the replacement property does not need to serve the same function as the trade fair facility and that it is reasonable to assume that a city like Dortmund would have other potential investments that would allow it to use this strategy.

Dr. Hey also stated that under German tax law capital gains may be offset against ordinary losses. There is no way to know with certainty what Dortmund's tax position will be

in 2032, but he surmised that Dortmund could be in a loss position from its commercial activities, a common occurrence for municipalities. Additionally, he noted that under current law losses may be carried forward indefinitely and carried back one year, with certain limitations.

We find Dr. Hey's testimony to be credible, and respondent failed to provide an effective rebuttal. As a result, although we cannot be certain what Dortmund's tax liability would be from nonexercise of its purchase options, it is likely to be less than Dr. Lys' calculations.

Neither Dr. Hey nor respondent's expert in the field of German tax law, Dr. Diemer, posited that Dortmund was a tax-exempt entity. Therefore, when evaluating Dortmund's purchase option decisions, we must account for an annual tax throughout the service contract term when calculating the residual value of the trade fair facility under the discounted cashflow method. The appraisals did not account for such a tax, stating that "a pretax analysis has been used since buy/sell decisions of exhibition industry participants and published market yield requirements reflect a pretax basis". We do not challenge this conclusion. Rather, we feel it does not apply to our inquiry. Here, we must view Dortmund's tax consequences consistently in evaluating its purchase option decisions. Therefore, even though we do not know what Dortmund's expected annual tax consequences were on the closing date, the exclusion of taxes from the discounted cashflow analysis ignores a potential cost, making it likely that the residual value was overstated.

Dr. Lys relied on the appraisal's pretax residual value determinations in his calculation. Dr. Lys used this value as the basis for determining, as of the purchase option date, the expected present value of the trade fair facility's residual value at the end of the service contract. However, despite using the appraisals' pretax calculations for the residual, Dr. Lys used an after-tax calculation to determine the proceeds Dortmund would receive from the sale of the trade fair facility to John Hancock for German tax purposes. As in the TIWAG transaction, Dr. Lys calculated Dortmund's taxable income as the difference between Dortmund's purchase option prices and Dortmund's book value in the trade fair facility, which he assumed to be zero. The result is a tax rate inconsistency.

When we apply a consistent tax approach to Dr. Lys' calculations, the result is a likely decrease in the value of the purchase option and a likely increase in the value of the service contract option. To illustrate this impact, we refer back to Dr. Lys' analysis, which concluded that Dortmund could expect its purchase options to yield a \$48,475,557 advantage over its service contract options. This conclusion reflects the least likely of scenarios, where no tax is applicable in calculating the residual and the maximum tax is applicable in calculating Dortmund's tax liability. In reality, the answer is probably somewhere in the middle, as a tax of some kind will likely be appropriate in calculating the residual and Dortmund can reasonably expect to offset some portion of its tax liability from nonexercise of the purchase option. In the range of possibilities, we find that there are many reasonable outcomes where the combined magnitude of a decrease in the residual value and a decrease in Dortmund's tax liability could exceed \$48,475,555. As a result, we find that petitioners have presented enough evidence to counter respondent's claim that on the closing dates the exercise of the purchase options was the only viable financial option and thus reasonably likely.

Respondent also argues that several other factors could prevent Dortmund from forgoing its purchase options, including legal considerations. Dr. Heisse, respondent's expert in the field of German law, except for German criminal law, offered several possible legal obstacles to the privatization of the trade fair facility. Dr. Heisse opined that under section 107, the municipality act for North Rhine-Westphalia (GO NRW), Dortmund is not allowed to grant a third party the permanent right to use a facility required for its public duties unless it gets permission from the proper authorities and secures an alternative facility. According to Dr. Heisse, Dortmund needs the trade fair facility to maintain its public duties of providing social and educational resources to its citizens.

Dr. Heisse brought to our attention a recent decision of Germany's highest administrative court which held that under article 28 of GO NRW, the city of Offenbach could not privatize a historic Christmas market, which had been operating since 1979, because a German municipality is obligated to protect the communal togetherness of its residents and to

safeguard long-established municipal-run institutions (Christmas market case). The German court referred to trade fairs as an example of another type of asset that a municipality must safeguard. In the Christmas market case the owner of a snack stall at the Christmas market challenged Offenbach's decision to privatize the Christmas market. The stall owner argued that article 28 requires Offenbach to manage the Christmas market. Dr. Heisse opined that this case established a law preventing the privatization of long-established municipal-run institutions and would apply to the trade fair facility on the purchase option date because it will have been in existence for 85 years. The Christmas market case was decided in 2009, eight years after the closing date.

In addition to Dortmund's social and communal duties to its citizens, Dr. Heisse also opined that Dortmund would face budget law obstacles if it relinquished control over the trade fair facility to John Hancock. Under section 75 of the GO NRW, a municipality must use its financial means as efficiently and diligently as possible. If Dortmund has to shift all of its employment contracts related to the trade fair facility to other city resources, it would be required to terminate many of its employees, which would require significant severance payments. Dr. Heisse opined that these severance payments could violate section 75 of the GO NRW.

Petitioners' expert in the field of German administrative and public law, Dr. Schürle, disagreed with many of Dr. Heisse's conclusions. According to Dr. Schürle, the German basic law provides a municipality with the constitutional right to regulate any matters affecting the local community at its own discretion. Although there are some mandatory tasks imposed on a municipality, the operation of a trade fair is a voluntary task. Therefore, a municipality is free to exercise its voluntary tasks as it pleases as long as it exercises the proper discretion. Dr. Schürle disagreed with Dr. Heisse's interpretation of section 107 of the GO NRW because, in his opinion, the section does not obligate municipalities to perform certain activities to promote the social and educational needs of its citizens. Rather, it merely describes certain activities which are not legally deemed to be business activities of the municipality.

Dr. Schürle's interpretation of the Christmas market case is consistent with his explanation of a municipality's right to

discretion. Dr. Schürle opined that the Christmas market case did not hold that a municipality could not privatize a long-established municipal-run institution but rather that the municipality must use the appropriate level of discretion in making such a decision and Offenbach failed to do so. For instance, if Offenbach did not have the financial means to continue to operate the Christmas market and instead chose to allocate its resources towards other public services it deemed to be more critical, the proper discretion would have been used and the German court would not have required Offenbach to maintain the Christmas market.

Finally, with respect to Dr. Heisse's employment and budget law concerns, Dr. Schürle opined that the German civil code prohibits the termination of employees for the sole reason of a transfer. Therefore, the likelihood that Dortmund employees would object to a transfer to a different position within the city government and expose Dortmund to significant financial risk was small. Dr. Schürle concluded that there are no legal obstacles to Dortmund's nonexercise of its purchase option. We find that neither the Christmas market case nor any other legal consideration would prevent Dortmund from forgoing its purchase options.

Respondent next argues that Dortmund is unlikely to allow the trade fair facility to fall out of its possession because of its importance to the local economy. Respondent offered the analysis of Dr. Seringhaus as an expert in international marketing and the trade fair industry.⁶⁹ The operation of the trade fair facility generates a direct loss to Dortmund annually. However, Dr. Seringhaus stated that the trade fair facility generates 140 million euro of direct and indirect benefits to Dortmund each year. Because the trade fair facility creates nearly 2000 jobs and approximately 124,000 hotel lodgings annually, it also has a significant impact on local restaurants and retail stores. Dr. Seringhaus also stated that nearly all German trade fairs are publicly owned. We do not question the accuracy of this data. However, respondent has not presented any evidence to show that the

⁶⁹ However, following *voir dire*, the Court limited the scope of Dr. Seringhaus' report, recognizing him as an expert only in the field of trade fair exhibiting and marketing.

privatization of the trade fair facility would negatively affect these benefits.

Petitioners' expert in the field of trade fair industry including the ownership and operation of trade fairs in Germany, Dr. Stoeck, reached contrary conclusions. First, Dr. Stoeck pointed to several examples of privatized German trade fairs and private companies available and able to operate a trade fair. Further, he noted that zoning laws would require that a private company operate the trade fair facility in the same manner it has always been operated and Dortmund would not have to fear a change in the manner of use of the trade fair facility. Because a private company could not alter the use of the trade fair facility, a transfer of control would not necessarily affect the indirect benefits the trade fair facility generates for Dortmund and the community. Therefore, whether Dortmund or John Hancock owns the trade fair facility, it is reasonable to anticipate that the economic impact Dr. Seringhaus described would not be significantly altered. Further, it is also reasonable to assume that Dortmund may be motivated to privatize the trade fair facility. On its own, operation of the trade fair facility generates an annual loss. It is possible that Dortmund will see nonexercise of its purchase options as an opportunity to preserve the benefits of the trade fair to the community, while at the same time avoiding its annual loss in operations.

Finally, respondent argues that Dortmund would not forgo its purchase options because of its interests in hall 3B, which was built after the closing dates and was not included in the Dortmund transactions. Nothing in the facts indicates that this is a real concern. We are confident that Dortmund and John Hancock could find a way to make it work. For instance, in the TIWAG transaction John Hancock acquired an undivided interest in Sellrain-Silz. In anticipation of the possibility that they may have to share the facility, John Hancock and TIWAG entered into facility operation, access, and support agreements, all of which protected the parties' rights and made a shared management arrangement feasible. Hall 3B by itself does not make exercise of the purchase options reasonably likely.

As with the TIWAG transaction, we cannot determine on the facts and circumstances presented to the Court that the TIWAG and Dortmund purchase options were reasonably

likely to be exercised at the closing dates. Thus for purposes of our analysis, we assume the purchase options will not be exercised. As a result, we must next determine whether John Hancock bore more than a *de minimis* risk of loss in the service contract term.

c. Service Contract Benefits and Burdens

Respondent argues that even if the purchase options in the TIWAG and Dortmund transactions are not exercised, John Hancock is ensured its expected return on the closing date under the service contract option. We use the facts of the TIWAG transactions to illustrate respondent's argument, but the result is equally applicable to the Dortmund transactions.

Respondent argues that in the TIWAG transaction the capacity charge payments, combined with the expected residual value of the 21.6% undivided interest in Sellrain-Silz at the end of the service contract term, guarantees the safety of John Hancock's equity investment. Beginning with residual value, on or before the purchase option date John Hancock may request that TIWAG acquire residual value insurance to ensure the expected fair market value of the 21.6% undivided interest in Sellrain-Silz at the end of the service contract term. Respondent argues that this residual value insurance removes John Hancock's residual value risk, ensuring its predetermined rate of return. Petitioners argue that we should ignore the residual value insurance because no such agreement is currently in place, and we do not know whether such an agreement would be available or prohibitively expensive. We find that petitioners' argument lacks merit. It is not unreasonable to assume that TIWAG will be able to procure residual value insurance if requested. In fact, according to the appraisal's purchase option analysis, TIWAG's cost to arrange a service contract, refinance the section 467 loan, and obtain residual value insurance is expected to be \$7,108,992. We see no reason John Hancock would not make such a request of TIWAG. Therefore, assuming that the insurance provider would not default on its obligations, the residual value insurance will provide security with respect to a portion of the expected residual

value of the 21.6% undivided interest in Sellrain-Silz at the end of the service contract term.

Given the residual value insurance, the following description summarizes respondent's position. John Hancock invested approximately \$53 million in equity and transaction expenses in the TIWAG transaction. Throughout the sublease and service contract terms, John Hancock is entitled to the sublease rent payments and the capacity charges, respectively. John Hancock is also responsible for its debt service on the series A and B loans during the sublease term and on the refinanced loan during the service contract term. John Hancock's equity portion of sublease rent is approximately \$10 million, meaning that to break even on its equity investment, John Hancock must recoup \$43 million (\$53 million – \$10 million) from the equity portion of capacity charges, expected to be approximately \$6 million, and the residual value of the 21.6% undivided interest in Sellrain-Silz at the end of the service contract term.⁷⁰ With the residual value insurance, John Hancock is ensured to receive the lesser of: (1) \$205,422,256 or (2) 35% of the appraised fair market value of the 21.6% undivided interest in Sellrain-Silz at the end of the service contract term as determined by a new appraisal at or near the purchase option date. Therefore, if we assume that (1) the new appraisal is consistent with Deloitte's appraisal and expects the asset to be worth \$778,757,760 at the end of the service contract term and (2) John Hancock receives the capacity charges, the result is a pretax profit to John Hancock of over \$741 million (\$778,757,760 + \$6 million – \$43 million). Further, even if the residual value of the 21.6% undivided interest in Sellrain-Silz is zero at the end of the service contract term, the result is a pretax profit to John Hancock of over \$168 million (\$205,422,256 + \$6 million – \$43 million).⁷¹

Despite the residual value insurance, respondent's "guaranteed return" argument is flawed because it ignores

⁷⁰This does not consider the time value of money. In reality, even at an inflationary rate of return John Hancock will need to recoup more than its equity investment to break even on the transaction.

⁷¹If the new appraisal expects the 21.6% undivided interest in Sellrain-Silz to be worth \$778,757,760 at the end of the service contract term, then the insured residual will be the lesser of: (1) 35% of this value, or \$272,566,216 and (2) \$205,422,256.

John Hancock's economic risks during the service contract term. Under the power purchase agreement, the power purchaser must make the capacity charge payments to John Hancock. These payments total \$1,316,013,696. There are no guaranties that John Hancock will receive any or all of these payments. Taking a closer look at the service contract option, TIWAG must procure a qualified bidder to act as the power purchaser in a power purchase agreement with John Hancock. If TIWAG is able to do so and John Hancock enters into a power purchase agreement, TIWAG no longer has any obligations pursuant to the sublease. At that time, all the risk of the power purchase agreement falls on John Hancock.

The power purchase agreement does not require any credit support. Rather, it provides that credit support will be necessary only if the power purchaser's credit rating falls below A or A2 under S&P's and Moody's credit rating systems, respectively. Additionally, the power purchase agreement does not guarantee payment of the capacity charges in all circumstances. The power purchaser is obligated to pay the capacity charges only if and to the extent John Hancock makes the required capacity available. If the required capacity is not made available for any reason, including force majeure, the capacity charge would be reduced accordingly. If we relate these risks back to the earlier example under respondent's assumption, we find that John Hancock's minimum expected pretax profit of approximately \$168 million depends on receiving capacity charge payments of \$1,316,013,696, none of which are guaranteed. This risk is indicative of ownership.

In addition to risk, under the service contract option John Hancock has the opportunity to capture the benefits of ownership in the 21.6% undivided interest in Sellrain-Silz. The power purchase agreement provides that if the power purchaser does not use all of the required capacity, John Hancock will have the right to sell such capacity to other power purchasers. Thus, if the power purchaser declines to take generated power or the 21.6% undivided interest in Sellrain-Silz produces more electricity than required under the power purchase agreement, John Hancock can benefit from such excess. There is no expectation that either of these events will take place. Nonetheless, they are an example of John Hancock's upside. Another example of John Hancock's

potential for gain is the residual value of the 21.6% undivided interest in Sellrain-Silz at the end of the service contract term. If the fair market value of the asset at the end of the service contract term exceeds its expected residual value, the entire benefit will belong to John Hancock. Nothing in the transaction documents caps this potential benefit. Therefore, during the service contract term John Hancock enjoys the benefits and burdens of ownership with respect to the 21.6% undivided interest in Sellrain-Silz.

The Dortmund transactions are substantially similar to the TIWAG transaction. The service contracts do not require credit support to secure the service purchaser's payments of the capacity availability charges during the service contract term and require such credit support only if the service purchaser's credit rating falls below BBB+ or Baa1 under S&P's and Moody's credit rating systems, respectively. Further, John Hancock is entitled to the capacity availability charges only if it provides the required services to the service purchaser, even in the case of force majeure. This risk, even when considering the residual value insurance, exceeds the value of John Hancock's expected residual interest from the trade fair facility. On the benefits side, as in the TIWAG transaction John Hancock is in position to capture any increase in value of the asset at the end of the service contract term. Therefore, during the service contract term of the Dortmund transactions, John Hancock will enjoy the benefits and burdens of ownership in the trade fair facility.

d. *Future Interest*

We have found that John Hancock will possess the benefits and burdens of ownership with respect to its interests in the subject assets of the TIWAG and Dortmund transactions during their respective service contract terms, which will begin at the end of the sublease terms if the purchase options are not exercised. We must now determine whether these benefits and burdens create a future, rather than a present, interest in the subject assets. Petitioners will not be entitled to their claimed deductions unless they prove that John Hancock held a current interest in the subject assets during the years at issue.

The defeasance agreements were designed to insulate John Hancock from any non-de-minimis risk during the sublease term. Further, if the purchase options are exercised, John Hancock will receive its expected return from the transactions. Respondent argues that under these circumstances, on their respective closing dates John Hancock acquired no more than a future interest in the subject assets of the TIWAG and Dortmund transactions. Respondent contends that this future interest cannot become a current interest unless and until the lessee counterparty chooses not to exercise its purchase option. Therefore, respondent argues that John Hancock should not be entitled to its claimed tax deductions during the sublease term.

In *BB&T*, 2007 WL 37798, the District Court reached a similar conclusion, determining that the taxpayer acquired no more than a future leasehold interest in the subject asset. Further, the court held that this future interest could become a current interest only during the tail period following the renewal lease term. The court concluded that the parties' use, rights, and obligations with respect to the subject asset were not materially altered during the sublease term and the taxpayer's initial cash outlay was never at risk because its return was guaranteed through either the purchase option or sublease renewal rents. *Id.* at *7. The Court of Appeals for the Fourth Circuit agreed, holding that the lease and sublease provided for offsetting rights and obligations, and the structure of the transaction insulated the taxpayer from any risk, regardless of whether the lessee counterparty exercised its purchase option. *BB&T*, 523 F.3d at 473.

Here, petitioners argue that respondent's future interest theory fails in both law and fact. Petitioners contend that under the principles of *Frank Lyon* a triple net lease is a feature typical of most commercial lease transactions and any offsetting obligations between the lease and sublease must be viewed as a neutral factor in the future interest analysis. As we have previously discussed, this Court has found a triple net lease in a leverage-lease transaction, on its own, to be a neutral factor in determining whether a taxpayer has acquired a leasehold interest. However, when a triple net lease or similar arrangement is combined with other mechanisms to eliminate all non-de-minimis risk from a trans-

action, we must consider the totality of the circumstances in determining the transaction's substance.

Whether or not TIWAG or Dortmund exercises its purchase option, and here we assume they do not, the TIWAG and Dortmund transactions are nothing more than the acquisition of a future leasehold interest because they insulate John Hancock from all non-de-minimis risk before the purchase option date. On the closing date of the TIWAG transaction, John Hancock acquired no more than a future interest in the 21.6% undivided interest in Sellrain-Silz. Similarly, on the closing dates of the Dortmund transactions, John Hancock acquired no more than a future interest in the trade fair facility.

Petitioners argue that such a determination threatens the very existence of leveraged leasing, which has long been considered a legitimate form of financing. We find petitioners' argument to be unavailing. The circumstances here are very different from those of a traditional leveraged lease, and certainly far different from the transaction in *Frank Lyon*. In *Frank Lyon*, 435 U.S. at 583, the Supreme Court specifically found that the taxpayer assumed the risk that the lessee might default or fail. Nothing in the TIWAG and Dortmund initial lease and sublease agreements materially alters the parties' rights and obligations in a way that creates such risk to John Hancock. Therefore, unlike a lessor in a traditional leveraged lease, John Hancock stands to acquire a current interest in the subject assets, with the benefits and burdens that come with such an interest, only on each transaction's purchase option date. Therefore, we find that John Hancock is not entitled to the depreciation deductions claimed with respect to the TIWAG and Dortmund SILO transactions during the years at issue.

2. SNCB

The SNCB SILO transaction has two unique features that distinguish it from the TIWAG and Dortmund transactions. First, SNCB did not enter into a series B DPUA or similar agreement. With respect to the series B debt, SNCB entered into the CST, which is no more than a currency swap. Respondent argues that SNCB's calculation of its net present value benefit, which included the CST, shows that SNCB

deposited euro-denominated payments received from BofA pursuant to the CST in a separate transaction substantially similar to the series B DPUAs in the other SILO test transactions. Respondent further relies on various communications that are not specific to this transaction to establish the existence of this alleged series B DPUA. The record does not support respondent's argument. SNCB did not deposit the euro-denominated payments received pursuant to the CST in a series B DPUA or other similar arrangement. Further, unlike the currency swaps in the SNCB LILO transactions, SNCB did not prepay the CST. As a result, the proceeds of the series B loan were always available for SNCB's general business purposes.

Next, the SNCB SILO transaction is distinguishable from the TIWAG and Dortmund transactions because HSL is expected to yield value to the service provider during the service contract term in excess of the base service fees (i.e., the nonaccess and additional access fees). SNCB can capture this value only if it exercises its purchase option. Therefore, this distinction makes SNCB's purchase option significantly more attractive.

a. Purchase Option Decision

We begin our analysis of whether John Hancock acquired the benefits and burdens of ownership of the HSL with an examination of whether SNCB was reasonably likely to exercise its purchase option. Unlike with the TIWAG and Dortmund SILOs where we began with an analysis of whether John Hancock faced a risk of loss on its equity investment during the sublease terms, we begin with the purchase option decision because the purchase option decision is vital to determining whether John Hancock's equity investment in the HSL during the subgrant term was exposed to a risk of loss.

Similar to the TIWAG and Dortmund transactions, petitioners, relying on the appraisal, argue that it would be financially disadvantageous for SNCB to exercise its purchase option.⁷² According to the appraisal on the purchase

⁷²SNCB's management committee will decide whether to exercise its purchase option, and this decision will likely require the approval of its board of directors. As of the date of trial SNCB had not decided whether

option date the fair market value of the 50% undivided interest in HSL is expected to be \$890,941,344. The fixed price purchase option, or SNCB's cost to exercise its option, is \$945,627,477. On the other hand, assuming John Hancock would choose the service contract, SNCB's costs of nonexercise has two components: (1) the fair market value of the 50% undivided interest in HSL that SNCB will no longer possess, or \$890,941,344 and (2) the costs to arrange a service contract, refinance the section 467 loan, and pay any local tax indemnities under Belgian law, estimated in the appraisal to total \$21,771,925. Therefore, the appraisal concluded that SNCB will likely not exercise its purchase option because the advantage of not exercising is \$32,914,208 ($\$945,627,477 - \$890,941,344 - \$21,771,925$).

Respondent disagrees with the appraisal and relies on the expert testimony of Dr. Lys to rebut the appraisal's conclusions. Because SNCB cannot be the service purchaser under the service contract, Dr. Lys' analysis of SNCB's purchase option decision compares the costs and benefits of SNCB's exercising its purchase option and entering into its own service contract with a third-party service purchaser against the costs and benefits of relinquishing possession and use of HSL under the service contract option. In many ways, Dr. Lys' analysis is similar to his analyses for the TIWAG and Dortmund transactions. He again sought to correct perceived errors in the appraisal, first applying a 40% tax rate, the rate used in the appraisal's discounted cashflow analysis, to account for the Belgian tax consequences of SNCB's receipt of \$945,627,477⁷³ from the section 467 loan and EPUA under the service contract option. Next, he calculated the present value of the base service fees under the service contract using SNCB's borrowing rate. Additionally, his analysis again began with the assumption that nothing was sold on the closing date and that SNCB's purchase option is the equivalent of a European put option.

to exercise its purchase option.

⁷³Dr Lys' analysis and calculations are based on an amount realized of \$942 million, rather than SNCB's expected amount realized of \$945,627,477. It is not clear where this difference comes from. For consistency, we have adjusted Dr. Lys' calculations to conform with SNCB's expected amount realized. This change is not material to the analysis.

The primary difference between SNCB's purchase option decision and those of TIWAG and Dortmund is that HSL is expected to yield value to the service provider during the service contract term in excess of the base service fees. As seen in Dr. Lys' analysis, SNCB can capture this value only if it exercises its purchase option. In using the discounted cashflow method to determine the fair market value of the 50% undivided interest in HSL on the purchase option date, the appraisal considered four sources of revenue: (1) capacity use payments, representing the annual payments a service purchaser would be required to expend if it constructed a similar asset with borrowed funds; (2) operating expenses due under the service contract; (3) non-access-fee revenue, including additional revenue that could be generated from the installation and operation of fiber optic cables; and (4) additional access-fee revenue comprising the additional revenue an owner could achieve through the increased use of the asset. SNCB will capture the benefits of these revenue sources during the service contract term only if it exercises its purchase option. Accordingly, Dr. Lys included the present value of these benefits as of the purchase option date in the purchase option column of his analysis, which indicates as follows:⁷⁴

	<i>Purchase option plus service contract</i>	<i>Service contract</i>	<i>Purchase option advantage</i>
End of lease term:			
Sec. 467 loan and EPUA	-0-	\$567,376,486	(\$567,376,486)
Costs to refinance debt	-0-	(2,200,000)	2,200,000
Service contract term:			
Base service fees	\$683,800,000	-0-	683,800,000
Nonaccess and additional access fees	238,500,000	-0-	238,500,000
Initial lease tail period:			
Residual value	122,000,000	-0-	122,000,000
Total	1,044,300,000	565,176,486	479,123,514

Under Dr. Lys' analysis, SNCB's tax liability from nonexercise of its purchase option would be \$378,250,991

⁷⁴Unlike the appraisal, Dr. Lys does not count the costs to arrange for a service contract and local tax indemnities under Belgian law as costs to SNCB under the service contract. Dr. Lys excludes these costs because SNCB will incur them in both columns of his analysis, making them neutral factors.

(\$945,627,477 × 40%) and its after-tax proceeds from the section 467 loan and the EPUA would be \$567,376,486 (\$945,627,477 – \$378,250,991). The result is a total purchase option advantage to SNCB of \$479,123,514.

Petitioners argue that Dr. Lys’ conclusion is inaccurate and that SNCB may not pay any taxes to Belgium resulting from the nonexercise of the purchase option.⁷⁵ This argument, however, even if correct, is not enough to change the overall result. Even if we assume that SNCB will not pay any taxes on the proceeds of the section 467 loan and the EPUA, a purchase option advantage remains under Dr. Lys’ analysis of \$100,872,523 (\$479,123,514 – \$378,250,991). Further, this result does not account for the possibility that the tail period residual value in Dr. Lys’ analysis of \$122,000,000 is understated because it was calculated using a 40% tax rate under the discounted cashflow method.

Petitioners do not specifically dispute Dr. Lys’ conclusions, other than his application of a tax against the proceeds of the section 467 loan and the EPUA. Rather, petitioners argue that their alternative analysis under the TIWAG transaction would be equally applicable to SNCB. This analysis begins with the assumption that the 50% undivided interest in HSL was sold to John Hancock on the closing date and summarizes SNCB’s purchase option decision as follows:

	<i>Purchase option plus service contract</i>	<i>Service contract</i>	<i>Purchase option advantage</i>
End of lease term:			
Purchase price	(\$945,627,477)	-0-	(\$945,627,477)
Fair market value	890,941,344	-0-	890,941,344
Costs to refinance debt	-0-	(\$2,200,000)	2,200,000
Service contract term:			
Base service fees	-0-	-0-	-0-
Initial lease tail period:			
Residual value	-0-	-0-	-0-
Total	(54,686,133)	(2,200,000)	(52,486,133)

⁷⁵ As discussed earlier, it is not clear whether under its reorganization SNCB transferred ownership of HSL under Belgian law to a tax-exempt subsidiary. Additionally, Dr. Lys’ analysis does not consider the book value of the 50% undivided interest in HSL on the purchase option date or the possibility that SNCB will have losses or loss carryovers that could reduce or eliminate SNCB’s Belgian tax liability under the service contract option.

According to petitioners, if SNCB exercises its purchase option it will pay \$945,627,477 for an asset with a fair market value of \$890,941,344 and it will avoid the costs to refinance the section 467 loan. Under the discounted cashflow method, the appraisal accounted for base service fees, expenses, nonaccess fees, and additional access fees in determining the fair market value of the 50% undivided interest in HSL on the purchase option date. Therefore, to avoid double counting, no further adjustments are necessary for those items.

Under the service contract, SNCB would retain the proceeds it already owned from the section 467 loan and the EPUA and would not receive any benefit from the residual of the 50% undivided interest in HSL. Because SNCB cannot be the service purchaser, it would not pay the base service fees and expenses and would not benefit from the nonaccess fees and additional access fees. The result, according to petitioners, is a purchase option disadvantage of \$52,486,133.

As in TIWAG, petitioners' calculation does not apply a tax to the proceeds of the section 467 loan and the EPUA. However, it relied on the appraisal's estimated fair market value determination on the purchase option date that was calculated using a 40% tax under the discounted cashflow method. If, consistent with petitioners' approach to the tax consequences of not exercising the purchase option, the proper tax rate to be used in the appraisal's discounted cashflow analysis is lower than 40%, then the estimated fair market value of the 50% undivided interest in HSL would be higher, and the purchase option would become more attractive. Neither party has advanced alternative calculations to measure this impact.

That said, we find that Dr. Lys' analysis also provides inconclusive results.⁷⁶ It is unclear how the Belgian tax consequences on the purchase option date will affect SNCB's purchase option decision. Similarly, it is unclear what the proper effective tax rate is for purposes of determining the fair market value of the 50% undivided interest in HSL on the purchase option date. Nonetheless, Dr. Lys' analysis provides us with a framework through which we may evaluate a range of potential results.

⁷⁶We find the same to be true of the appraisal and petitioners' analysis.

In evaluating all the possibilities, we do not find there to be a realistic scenario where the purchase option is not advantageous to SNCB. First, petitioners have not disputed Dr. Lys' inclusion of the nonaccess and additional access fees as a benefit to SNCB under the purchase option. These benefits create an advantage to the purchase option that cannot be overcome through any reasonable discussion of tax consequences. More specifically, petitioners' argument would require us to find the most unlikely of scenarios to be realistic. For the purchase option to be financially disadvantageous, SNCB would have to face little or no tax on the proceeds of the section 467 loan and the EPUA under the service contract option. Additionally, at the same time, for purposes of its residual value calculations SNCB would have to expect to pay an effective tax rate of approximately 40% during the service contract term. This is a tale of two extremes, and it is wholly unrealistic. Therefore, though we find the precise numbers in Dr. Lys' analysis to be unreliable, his result cannot be disputed. As of the closing date, SNCB was reasonably likely to exercise its purchase option.

b. *Subgrant Term*

Having concluded that the SNCB SILO purchase option is reasonably likely to be exercised, we must now determine whether John Hancock's equity investment was at risk during the subgrant term. Petitioners argue that the lack of defeasance with respect to the series B debt places John Hancock's equity investment at risk during the subgrant term and that such risk of loss is evidence of John Hancock's acquiring the benefits and burdens of ownership of the HSL. We find that the lack of defeasance with respect to the series B debt does not place John Hancock's equity investment at risk during the subgrant term. During the subgrant term SNCB must pay John Hancock rent totaling \$483,249,874 and John Hancock must make debt service payments totaling \$470,442,859 to the lenders. SNCB's rent payments have three components. The first component is attributable to the series A debt, and Barclays will make payments totaling \$423,398,573 during the subgrant term to satisfy this component under the series A DPUA. The second component is the equity portion of subgrant rent. This amount is the excess of

the \$483,249,874 of subgrant rent payments John Hancock is scheduled to receive during the subgrant term over its total debt service payments of \$470,442,859. To satisfy the equity portion of subgrant rent, UBS will make payments totaling \$12,807,015 during the subgrant term pursuant to the CLDA. Therefore, the series A DPUA and the CLDA combine to account for \$436,205,588 of SNCB's subgrant rent payments, leaving \$47,044,286 ($\$483,249,874 - \$436,205,588$) as the third component of subgrant rent. This amount is attributable to the series B debt. SNCB's payment or nonpayment of this portion of subgrant rent does not affect John Hancock's series B loan debt service obligation. Accordingly, if SNCB defaults on its obligation to pay the series B debt portion of subgrant rent, John Hancock would have to contribute an additional \$47,044,286 of equity throughout the subgrant term to meet its series B debt service obligations.

The impact of this contribution is illustrated as follows. Including transaction costs, John Hancock invested \$64,976,950 on the closing date. If all parties to the transaction meet their obligations, the equity portion of subgrant rent, or \$12,807,015, will reduce the amount John Hancock needs to recoup from its investment to break even. Therefore, at the end of the subgrant term John Hancock expects that it will need to recoup an additional \$52,169,935 ($\$64,976,950 - \$12,807,015$) from the transaction to break even. However, if SNCB defaults on its obligations with respect to the portion of subgrant rent that is attributable to the series B debt (\$47,044,285), John Hancock would have to make additional contributions to satisfy its series B debt service obligations. In such a case, rather than having to recoup an additional \$52,169,935 from the transaction to break even, John Hancock would have to recoup \$99,214,220 ($\$52,169,935 + \$47,044,285$).

The purchase option price is \$945,627,477, far greater than the \$99,214,220 that would be needed to recover John Hancock's investment. Therefore, even if John Hancock is required to contribute an additional \$47,044,285 to service its series B debt, it will still earn a profit of \$846,413,257. We can take this one step further through the use of a present value calculation. As of the closing date, the present value of the purchase option price was approximately \$115,274,638. We calculated this value using the after-tax WACC of 7.5%

used in the appraisal and Dr. Lys' analysis over a 29.1-year period.⁷⁷ Therefore, without discounting the equity portion of subgrant rent or John Hancock's additional contributions to service the series B debt as it comes due, the result would be a profit to John Hancock of \$16,060,418 (\$115,274,638 – \$99,214,220).

The above calculation proves, without a need to assess the likelihood that SNCB would default on its subgrant rent obligations attributable to the series B debt, that John Hancock does not have any meaningful risk in the SNCB SILO transaction.

c. Conclusion

The risk of loss during the sublease term, even assuming SNCB defaults on its subgrant rent obligations attributable to the series B debt, combined with SNCB's likely exercise of their purchase options, insulates John Hancock from any risk of losing its initial investment in the SNCB SILO transaction. Moreover, the structure of the transaction guaranteed that John Hancock's return on its investment was fixed on the closing date of the transaction. Therefore, given that SNCB kept control of the HSL, we find that John Hancock did not acquire the benefits and burdens of ownership in the HSL. The transaction resembles a financial arrangement. Specifically, the transaction resembles a loan from John Hancock to SNCB for the duration of the subgrant term. As a result, John Hancock will receive a predetermined return without regard to the relevant value of the asset and will have no upside potential or downside risk tied to ownership of the HSL. Thus, we find that the substance of the SNCB SILO transaction is not consistent with its form. Accordingly, we deny John Hancock's depreciation deductions with respect to the SNCB SILO transaction.

Interest Deductions

Section 163(a) provides: "There shall be allowed as a deduction all interest paid or accrued within the taxable year on indebtedness." Indebtedness is an existing, unconditional, and legally enforceable obligation for the payment of a prin-

⁷⁷The subgrant term is slightly longer. It begins on November 14, 2001, and ends on January 2, 2031.

cipal sum. *E.g.*, *Landry v. Commissioner*, 86 T.C. 1284, 1308 (1986). Interest is “compensation for the use or forbearance of money.” *Deputy v. du Pont*, 308 U.S. 488, 498 (1940). It is well settled that the indebtedness referred to in section 163(a) must be genuine, and economic realities govern over the form in which a transaction is cast. *Knetsch v. United States*, 364 U.S. 361, 365–366 (1960). In particular, the fact that a purported borrower may sign a loan document that provides it has a legal obligation to repay a loan cannot alone give the debt substance. *See Wells Fargo*, 641 F.3d at 1321, 1330; *BB&T*, 523 F.3d at 476; *Goldstein v. Commissioner*, 364 F.2d 734, 740–742 (2d Cir. 1966) (“Section 163(a) does not ‘intend’ that taxpayers should be permitted deductions for interest paid on debts that were entered into solely in order to obtain a deduction.”), *aff’g* 44 T.C. 284 (1965).

Respondent argues that John Hancock’s nonrecourse loans in the test transactions are not genuine debt because John Hancock did not “use” the loans to acquire genuine interests in the subject assets. Respondent cites *Altria*, 694 F. Supp. 2d at 281–282, where the trial court held: “[A]lthough the taxpayer is legally obligated to repay the debt, its use of the debt is so far beyond the intent of the Code that it cannot support the deduction.”

In determining whether the nonrecourse loans in John Hancock’s test transactions qualify as genuine indebtedness under section 163(a), we must view the substance of each transaction as a whole, not in separate parts or step by step. *See Commissioner v. Court Holding Co.*, 324 U.S. at 334. In other words, we will not respect the substance of the nonrecourse loans unless John Hancock used the proceeds of those loans to acquire real capital. Petitioners do not dispute this analysis, stating in brief that “[t]he Court’s decision on whether John Hancock acquired the benefits and burdens of the leased properties is determinative of whether the loans are genuine for [F]ederal income tax purposes.” *See* Petitioners’ Reply Brief p. 214.

For the reasons previously discussed, John Hancock did not acquire a genuine interest in the subject assets of the LILO test transactions and the SNCB SILO transaction. Accordingly, we find that John Hancock’s nonrecourse loans with respect to the LILO test transactions and the SNCB SILO transaction are not genuine indebtedness for the pur-

poses of section 163(a), and John Hancock is not entitled to the interest deductions it claimed with respect to those loans. In the case of the SNCB SILO transaction, petitioners concede that the lack of defeasance in the series B debt is irrelevant to our determination.

With respect to the TIWAG and Dortmund SILO transactions, we have determined that on the respective closing dates John Hancock acquired no more than a future interest in the subject assets. If the lessee counterparties do not exercise their purchase options, the original loans must be paid in full and the section 467 loan must be refinanced. Therefore, the series A and B debt in each transaction will no longer be in existence if and when John Hancock acquires a current interest in the subject assets. Accordingly, petitioners are also not entitled to their claimed interest deductions from the TIWAG and Dortmund SILO transactions.

Original Issue Discount

OID income results when a debt instrument is issued for less than its face value. See *United States v. Midland-Ross Corp.*, 381 U.S. 54 (1965); *Capital One Fin. Corp. v. Commissioner*, 133 T.C. 136, 162 (2009), *aff'd*, 659 F.3d 316 (4th Cir. 2011); *Gaffney v. Commissioner*, T.C. Memo. 1997-249. The holder of a debt instrument with OID generally accrues and includes in gross income, as interest, the OID over the life of the obligation, even though the interest may not be received until the maturity of the instrument. Sec. 1272(a)(1).

With respect to the LILO test transactions and the SNCB SILO transaction, respondent argues that John Hancock's equity contributions must be recast as loans from John Hancock to the respective lessee counterparties. Under these deemed loans, respondent contends that each lessee counterparty agreed to repay John Hancock through the equity portion of sublease rent and the purchase option price. Respondent argues that these arrangements are akin to debt instruments creating guaranteed and fixed returns to John Hancock and should be treated as such for Federal tax purposes.

Petitioners argue that John Hancock's equity contributions should not be recharacterized as loans because they do not

represent unconditional and legally enforceable obligations for the payment of principal sums. Rather, petitioners argue that the alleged repayments are speculative and the transaction documents do not create fixed obligations. We disagree. As discussed above, the lessee counterparties are reasonably likely to exercise their fixed-price purchase options in the LILO test transactions and the SNCB SILO transaction. Additionally, each transaction features full defeasance. As a result, the purchase option price and the equity portions of sublease rent represent fixed obligations due from the lessee counterparties to John Hancock. Therefore, we find respondent's recast of the equity contributions in the LILO test transactions and the SNCB SILO transaction to be appropriate, and the OID rules must apply accordingly.

With respect to the TIWAG and Dortmund transactions, we agree with petitioners that the alleged repayments are speculative. On the closing dates of the TIWAG and Dortmund transactions, John Hancock paid an amount equal to its equity contributions and transaction costs for the right on the purchase option dates to either: (1) its expected return under the purchase options or (2) a current interest in the subject asset with a service contract in place. As we have discussed, under each service contract John Hancock is exposed to the risk of losing its equity contribution. Therefore, respondent's OID argument is inapplicable to the TIWAG and Dortmund SILO transactions.

Next, we must provide the parties with guidance with respect to the Rule 155 calculation of John Hancock's OID income from the LILO test transactions and the SNCB SILO transaction. The amount of OID income with respect to a debt instrument is the excess of the stated redemption price at maturity (SRPM) over the issue price of the debt instrument. Sec. 1273(a)(1). The SRPM includes all amounts payable at maturity. Sec. 1273(a)(2). In order to compute the amount of OID and the portion of OID allocable to a particular period, the SRPM and the time of maturity must be known. *Capital One Fin. Corp. v. Commissioner*, 130 T.C. 147. In determining the issue price, a payment from the lender to the borrower in a lending transaction is treated as an amount lent. Sec. 1.1273-2(g)(3), Income Tax Regs. Additionally, if the lender makes a payment to a third party,

that payment is treated in appropriate circumstances as an additional amount lent to the borrower. Sec. 1.1273-2(g)(4), Income Tax Regs.

In the case of the LILO test transactions and the SNCB SILO transaction, the issue price for the Rule 155 calculation is the amount deemed to have been lent from John Hancock to the lessee counterparty and includes the up-front payment under the initial leases. Pursuant to section 1.1273-2(g)(3) and (4), Income Tax Regs., this amount also includes John Hancock's transaction costs (excluding costs associated with debt that was not genuine) and all amounts representing the net present value benefit to the respective lessee counterparties. The SRPM in each transaction is the amount that will have been repaid to John Hancock on the maturity date, equal to the equity portion of rent payments during the sublease term and the purchase option price.

Transaction Expenses

Ordinary and necessary expenses paid or incurred in carrying on any trade or business are generally deductible. Sec. 162. In the TIWAG and Dortmund transactions, John Hancock incurred legitimate transaction costs as part of its acquisition of a future interest in the subject assets. However, any transaction costs with respect to the series A and B debt in each transactions are not deductible, as we have found that they were not genuine indebtedness.

In the LILO test transactions and the SNCB SILO transaction, we have found that John Hancock's equity investments are better characterized as loans from John Hancock to the lessee counterparties. Pursuant to section 1.1273-2(g)(4), Income Tax Regs., John Hancock's transaction costs must be included as an additional amount lent to the borrowers. As such, John Hancock's transaction costs associated with the LILO test transactions and the SNCB SILO transaction are not deductible.

Conclusion

The facts and circumstances of each of the test transactions are different, and we have given each independent consideration. In doing so, we have found that in each case the substance of the transaction is not consistent with its

form. Specifically, with respect to the LILO test transactions and the SNCB SILO transaction, we have found that the lack of non-de-minimis risk to John Hancock during the sublease terms, combined with the reasonable likelihood of the purchase options' being exercised, ensured from the closing dates that John Hancock would receive its expected return on its equity investments. This guaranteed return is not indicative of a leasehold or ownership interest. Rather, it is reflective of what is better described as a very intricate loan from John Hancock to the lessee counterparties. Consequently, we have also found respondent's determination of OID income to John Hancock to be appropriate.

The TIWAG and Dortmund transactions are slightly different. If TIWAG and Dortmund exercise their purchase options, John Hancock will receive its expected return on its equity investments. This is ensured because of the lack of non-de-minimis risk to John Hancock during the sublease terms. However, on the facts and circumstance before us, we cannot determine that TIWAG or Dortmund is reasonably likely to exercise its purchase option, and we have determined that John Hancock's equity investment would be at risk under each transaction's service contract option. Therefore, as of the closing dates of the TIWAG and Dortmund transactions and throughout the years at issue, John Hancock's equity investments were free from risk of loss. This lack of risk can only change if and when one of the lessee counterparties forgoes its purchase option. If that happens, as of the relevant purchase option date John Hancock will have a current interest in the subject asset and will be entitled to all the deductions associated with that interest. Unless and until that happens, however, the TIWAG and Dortmund transactions will have created no more than a future interest to John Hancock, an interest that does not entitle John Hancock to most of its claimed deductions.

The Court, in reaching its holdings, has considered all arguments made, and, to the extent not mentioned, concludes that they are moot, irrelevant, or without merit.

To reflect the foregoing,

Decisions will be entered pursuant to Rule 155.

