



Warren & Selbert

Simple as ABC.

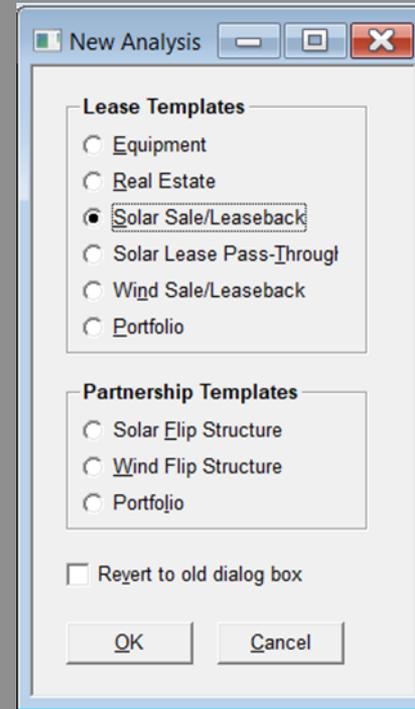
Solar Lease Pass-Through in ABC

Warren & Selbert's Lease Pass-Through (Inverted Lease) model

What is ABC?



- Equipment finance **modeling** software
- Used for **optimizing** and **pricing**
 - Leveraged Leases
 - Sale/Leasebacks
 - Lease Pass-Throughs
 - Partnership flips
- Lease Pass-Through
 - Sale/Leaseback model built on ABC
 - Commonly used in renewable energy finance and project finance



Lease Pass-Through Uses



- **Structure** solar and lease pass-through transactions
- **FAS 13** reports
- **Lease portfolios**
- Evaluate **Lessee** and **Lessor** cash and tax flows

ABC

- PD Assumptions
- Solar Assumptions
- Solar EBITDAs
- Lessee Assumptions
- **General**
- Purchases
- Federal Depreciation
- Loans
- Revenues
- Fees
- Tax Elections
- Federal Tax
- Evaluation
- Formatting
- User Variable
- Optimization
- IRS
- Macros

Warre

General Information

Show All Questions | Section Operations | Custom Questions | Process | Optimize

1.1	General Information		
1.1.1	Title		...
1.2	Type of Alternative (0-8)	Lessor: US (5)	▼
1.4	Total Cost - Basis for Percentages (\$)	1,000,000.00	
1.5	Base Term Start Date - BT	1/ 1/2018	
1.101	Purchase Date - DATE1	BT	... (1/ 1/2018)
1.102	End of Rent Holiday - DATE2	No Rent Holiday (Default)	...
1.111	US_Rent_Dates	1/1/2018, 4/1/2018, ..., 1/1/2038 (Default)	...
1.112	Lease Term (Years)	20.0	...
1.113	Lease Term Measured From (BT, DATE1, or M/D/Y)	Date1	... (1/ 1/2018)
1.114	Periodicity (M,Q,S,A)	Quarterly	▼
1.115	Dates for Changing Periodicity (Date or Periodicity,Date)	BT	...

Lease Pass-Through Workflow



Input

assumptions

Year	EBITDA
2018	0.00
2019	12,000.00
2020	12,250.00
2021	12,500.00
2022	12,750.00
2023	13,000.00
2024	13,250.00
2025	13,500.00
2026	13,750.00
2027	14,000.00
2028	14,250.00
2029	14,500.00
2030	14,750.00
2031	15,000.00
2032	15,250.00
2033	15,500.00
2034	15,750.00
2035	16,000.00
2036	16,250.00
2037	16,500.00
2038	16,750.00

Assumption ID	Assumption Name	Value
A300.1	Solar Assumptions	
A300.101	Project Term (Years)	Default
A300.103	Prepayment Limit (\$%)	20%

Run

to evaluate inputs

Process

Optimize



Output

reports to show results

Reports

- SOLAR/SUMMARY Summary of Assumptions and Results
- SOLAR/COVERAGE Coverage Report
- SOLAR/REPORTS Report Package

OK

Cancel

Help



- Input project flows

- Purchases
- Depreciation
- Loans
- Revenues
- Expenses
- Fees

The screenshot shows a software interface with a navigation menu on the left and a 'Revenue Streams' table on the right. The navigation menu is titled 'ABC' and lists various categories: PD Assumptions, Solar Assumptions, Solar EBITDAs, Lessee Assumptions, General, Purchases, Federal Depreciation, Loans, Revenues (highlighted), Arrears_Rent, Loan467_Rent, Residual, Lessee_EBITDA, Lessor_EBITDA, and Fees. The 'Revenue Streams' table has columns for 'Stream' and 'Alias' and lists five entries.

Stream	Alias
1	Arrears_Rent
2	Loan467_Rent
3	Residual
4	Lessee_EBITDA
5	Lessor_EBITDA

- Paste amounts from **Excel**



Input **Solar** Assumptions

- Project Term
- Prepayment Mode
- Prepayment Limit/Credit Price

Input **General Lease** Assumptions

- Lease Term
- Periodicity

ABC

- Custom Assumptions
- PD Assumptions
- Solar Assumptions
- Solar EBITDAs
- Lessee Assumptions
- General
- Purchases
- Federal Depreciation
- Loans
- Revenues

Solar Assumptions

Show All Questions
Section Operations ▾
Custom Questions ▾
Process
Optimize

	Solar Assumptions	
300.1	Project Term (Years)	20
300.101	Prepayment Mode	Credit Price <input type="checkbox"/>
300.102	Credit Price	1.2

ABC

- PD Assumptions
- Solar Assumptions
- Solar EBITDAs
- Lessee Assumptions
- General
- Purchases
- Federal Depreciation
- Loans
- Revenues
- Fees
- Tax Elections
- Federal Tax
- Evaluation
- Formatting
- User Variable
- Optimization
- IRS
- Macros

General Information

Show All Questions
Section Operations ▾
Custom Questions ▾
Process
Optimize

	General Information	
1.1	Title	
1.1.1	Type of Alternative (0-8)	Lessor: US (5)
1.4	Total Cost - Basis for Percentages (\$)	1,000,000.00
1.5	Base Term Start Date - BT	1/ 1/2018
1.101	Purchase Date - DATE1	BT
1.102	End of Rent Holiday - DATE2	No Rent Holiday (Default)
1.111	US_Rent_Dates	1/1/2018, 4/1/2018, ..., 1/1/2038 (Default)
1.112	Lease Term (Years)	20.0
1.113	Lease Term Measured From (BT, DATE1, or MID/Y)	Date1
1.114	Periodicity (M,Q,S,A)	Quarterly
1.115	Dates for Changing Periodicity (Date or Periodicity,Date)	BT



- Add and manage project EBITDA
- Set each EBITDA's:
 - Amounts
 - Dates
 - Rent Coverage
 - Debt Coverage

Solar EBITDAs

Stream Operations ▾
Custom Questions ▾
Process
Optimize

Stream	Alias	EBITDA
1	EBITDA	0.00, 12,000.00, ..., 31,750.00

Solar EBITDA 1

Show Fewer Questions
Process
Optimize

305.100	Alias	EBITDA
		<div style="border: 1px solid #ccc; padding: 2px;"> 0.00 12,000.00 12,250.00 12,500.00 12,750.00 13,000.00 13,250.00 13,500.00 13,750.00 14,000.00 14,250.00 14,500.00 14,750.00 15,000.00 15,250.00 15,500.00 15,750.00 16,000.00 16,250.00 16,500.00 16,750.00 </div>
305.101	EBITDA Use Editor Window	
305.102	EBITDA Dates	1/1/2018, 4/1/2018, ..., 1/1/2038 (Default)
305.103	Rent Coverage	1.15
305.104	Debt Coverage	1.25



- Model the **cash** and **tax** flows for the lessee
- Calculate/Target IRR** for the lessee
- Specify lessee **optimization objective** (e.g., do opt/maxcost)

ABC

- PD Assumptions
- Solar Assumptions
- Solar EBITDAs
- Lessee Assumptions**
- General
- Purchases
- Federal Depreciation
- Loans
- Revenues
- Fees
- Tax Elections
- Federal Tax
- Evaluation
- Formatting
- User Variable
- Optimization
- IRS
- Macros

Lessee Assumptions

Show All Questions Section Operations Custom Questions Process Optimize

Code	Assumption Name	Value	Options
A500.1	Lessee Assumptions		
A500.101	Lessee: Analysis Type (LVB,SLB)	SLB	<input checked="" type="checkbox"/>
A500.103	Lessee: Buy Asset at LE?	No	<input checked="" type="checkbox"/>
A500.105	Lessee: Residual Amount (Buy/Retain)	0%	...
A500.106	Lessee: Sale Proceeds	100%	...
A500.150	Lessee: Loan Amount (Buy/Retain)	100%	...
A500.151	Lessee: Loan Rate (Buy/Retain)	10%	...
A500.200	Lessee: NPV Discount Rate	7.5%	...
A500.201	Lessee: NPV Discount Rate Type (1-4)	1 (Nominal Pre-Tax)	<input checked="" type="checkbox"/>
A500.202	Lessee: NPV Discount Method	1 (NPV)	<input checked="" type="checkbox"/>
A500.300	Lessee: Federal Tax Rate (or Rate* for multiple rates)	35%	...
A500.400	Lessee: Federal AMT Position?	No	<input checked="" type="checkbox"/>
A500.500	Lessee: Federal NOL Position?	No	<input checked="" type="checkbox"/>
A500.900	Lessee: Keystrokes for LESSEE/OPT	p0,o (Default)	...



- ABC models a **467 Loan Structure**
- Tracks the **cumulative difference** between cash rent and allocated rent
- Proof report of **allocated rent and interest**

Allocated Rent and Interest Proof Report

[1]	[2]	[3]	[4] =[3]-[2] (Prepaid)/ Deferred Rent	[5]	[6]	[7] =[3]+[5] Allocated Rent and Interest
Year	Cash Rent	Allocated Rent		Allocated Interest @ 5%	(Prepaid)/Deferred Balance	
2018	55,678.67	65,954.23	10,275.56	0.00	10,275.56	65,954.23
2019	45,652.17	65,954.23	20,302.05	513.78	31,091.39	66,468.01
2020	49,130.43	65,954.23	16,823.79	1,554.57	49,469.76	67,508.80
2021	52,608.70	65,954.23	13,345.53	2,473.49	65,288.78	68,427.72
2022	56,086.96	65,954.23	9,867.27	3,264.44	78,420.49	69,218.67
2023	59,565.22	65,954.23	6,389.01	3,921.02	88,730.52	69,875.25
2024	63,043.48	65,954.23	2,910.75	4,436.53	96,077.80	70,390.75
2025	66,521.74	65,954.23	-567.51	4,803.89	100,314.18	70,758.12
2026	70,000.00	65,954.23	-4,045.77	5,015.71	101,284.12	70,969.94
2027	73,478.26	65,954.23	-7,524.03	5,064.21	98,824.29	71,018.43
2028	76,956.52	80,610.72	3,654.20	4,941.21	107,419.71	85,551.94
2029	80,434.78	80,610.72	175.94	5,370.99	112,966.63	85,981.71
2030	83,913.04	80,610.72	-3,302.32	5,648.33	115,312.65	86,259.06
2031	87,391.30	80,610.72	-6,780.58	5,765.63	114,297.70	86,376.36
2032	90,869.57	80,610.72	-10,258.84	5,714.88	109,753.74	86,325.61
2033	94,347.83	80,610.72	-13,737.10	5,487.69	101,504.33	86,098.41
2034	97,826.09	80,610.72	-17,215.36	5,075.22	89,364.18	85,685.94
2035	101,304.35	80,610.72	-20,693.62	4,468.21	73,138.76	85,078.93
2036	104,782.61	80,610.72	-24,171.89	3,656.94	52,623.82	84,267.66
2037	108,260.87	80,610.72	-27,650.15	2,631.19	27,604.86	83,241.91
2038	27,608.70	0.00	-27,608.70	3.83	0.00	3.83
	1,545,461.28	1,465,649.52	-79,811.75	79,811.75		1,545,461.28



- **Asset Depreciation** for the lessor
- **Phantom income** for the lessee
 - Equal to ITC over the owner's depreciable life
- **Phantom depreciation** if the asset were to be bought or retained

- Custom Assumptions
- PD Assumptions
- Solar Assumptions
- Solar EBITDAs
- Lessee Assumptions
- General
- Purchases
- ▼ **Federal Depreciation**
 - Equipment
 - ITC Pass-Through
 - Equipment Buy/Retain
- Loans

Federal Depreciation Streams

Reports ▾
Stream Operations ▾
Custom Questions ▾
Process
Optimize

Stream	Alias	Title
1	(No alias)	Equipment
2	(No alias)	ITC Pass-Through
3	(No alias)	Equipment Buy/Retain

- Custom Assumptions
- PD Assumptions
- Solar Assumptions
- Solar EBITDAs
- Lessee Assumptions
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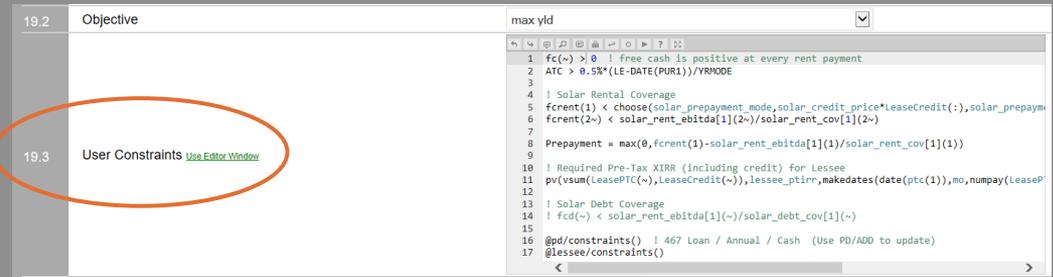
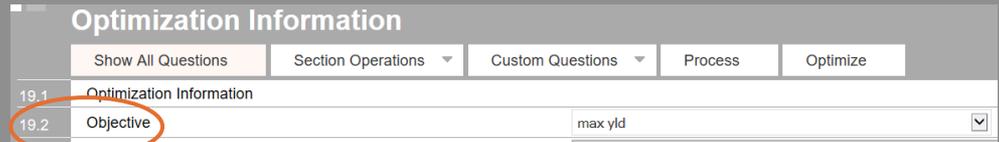
Federal Depreciation Stream 2

Show All Questions
Process
Optimize
◀ 1 2 3 ▶

A3.1.1	Title	ITC Pass-Through						
A3.3	Federal Basis (\$,%)	100%						
A3.3.1	Federal Basis Reduction (\$,%)	115%						
A3.3.2	Federal Tax Credits	<div style="border: 1px solid #ccc; padding: 2px; margin: 5px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Level</th> <th>Amount</th> <th>Date Available</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>30.00%</td> <td>BT</td> </tr> </tbody> </table> </div>	Level	Amount	Date Available	1	30.00%	BT
Level	Amount	Date Available						
1	30.00%	BT						
A3.3.3	Percent of Federal Depreciation Taxable	0%						
A3.3.4	Federal Special Depreciation Allowance	0%						
A3.3.7	Include Federal Tax Credit in Cash and Yield/NPV? (Y,N)	Yes (Default) Yes No CALC Expression						
A3.4	Federal Depreciation Method	Straight-Line: Facts & Circumstances (SL FC) ▾						
A3.5	Federal Life (Years)	5.0						
A3.6	Federal In-Service Date	Purchase Date ... (Default) (1/1/2018)						
A3.501	Lessee: Type of Flow (Lease/Buy)	Lease/SLB (Direct Allocation) ▾						
A3.502	Lessee: Percent Taxable for Federal (or Rate+ for multiple rates)	100% (Default)						
A3.503	Lessee: Include Federal Credit?	Yes (Default) ▾						



- Run ABC using linear optimization
- Choose an **Objective** such as:
 - Min PV
 - Min Cash Rent
 - Max Yield
 - CALC Expression (Custom Objective – e.g., Min Prepayment)
- Input **Constraints** in order to...
 - Maintain coverage ratios
 - Limit the prepayment
 - Meet lessee requirements





- ABC offers a number of **reports** including:

- Yield Proof
 - Cash Detail
 - Tax Detail
 - FAS 13 Accounting
 - Termination Values
-
- Create **custom** reports
 - View** reports within ABC
 - Save** reports as an **Excel** or **PDF** file

Report List

Find Report

Containing text: Search

In category: All Categories

OK

Cancel

Help

Reports available:

Report	Description
1	Summary Report
2	Yield Proof
3	Statement of Cash Flow
4	Statement of State Tax Liability
5	Statement of Federal Tax Liability
6	IRS Tests (Revenue Procedure 75-28 or Sec
7	FAS 13 Accounting
8	FAS Classification Test
9	Termination or Stipulated Loss
10	Revenue Stream Schedule

Reports selected:

Alternative: A

Send selected reports directly to printer



FAS 13 Accounting Report



Detailed Statement of Cash Flow

Period Ending	Purchase 1	Residual	Lessor EBITDA	Rent	Total Pre-Tax Cash Flow	Federal Tax	After-Tax Cash Flow
Dec 30 2018	-1,000,000.00	0.00	0.00	391,956.52	-608,043.48	148,103.34	-459,940.14
Dec 30 2019	0.00	0.00	0.00	45,652.17	45,652.17	38,467.75	84,119.92
Dec 30 2020	0.00	0.00	0.00	49,130.43	49,130.43	10,950.05	60,080.48
Dec 30 2021	0.00	0.00	0.00	52,608.70	52,608.70	-5,786.67	46,822.03
Dec 30 2022	0.00	0.00	0.00	56,086.96	56,086.96	-13,897.54	42,189.42
Dec 30 2023	0.00	0.00	0.00	59,565.22	59,565.22	-26,916.49	32,648.73
Dec 30 2024	0.00	0.00	0.00	63,043.48	63,043.48	-39,920.73	23,122.75
Dec 30 2025	0.00	0.00	0.00	66,521.74	66,521.74	-40,813.50	25,708.24
Dec 30 2026	0.00	0.00	60,750.00	14,904.79	75,654.79	-21,263.22	54,391.56
Dec 30 2027	0.00	0.00	84,500.00	0.00	84,500.00	-29,575.00	54,925.00
Dec 30 2028	0.00	0.00	88,500.00	0.00	88,500.00	-30,975.00	57,525.00
Dec 30 2029	0.00	0.00	92,500.00	0.00	92,500.00	-32,375.00	60,125.00
Dec 30 2030	0.00	0.00	96,500.00	0.00	96,500.00	-33,775.00	62,725.00
Dec 30 2031	0.00	0.00	100,500.00	0.00	100,500.00	-35,175.00	65,325.00
Dec 30 2032	0.00	0.00	104,500.00	0.00	104,500.00	-36,575.00	67,925.00
Dec 30 2033	0.00	0.00	108,500.00	0.00	108,500.00	-37,975.00	70,525.00
Dec 30 2034	0.00	0.00	112,500.00	0.00	112,500.00	-39,375.00	73,125.00
Dec 30 2035	0.00	0.00	116,500.00	0.00	116,500.00	-40,775.00	75,725.00
Dec 30 2036	0.00	0.00	120,500.00	0.00	120,500.00	-42,175.00	78,325.00
Dec 30 2037	0.00	0.00	124,500.00	0.00	124,500.00	-43,575.00	80,925.00
Dec 30 2038	0.00	100,000.00	31,750.00	0.00	131,750.00	-46,112.50	85,637.50
Dec 30 2039	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	-1,000,000.00	100,000.00	1,242,000.00	799,470.01	1,141,470.01	-399,514.50	741,955.50

Statements of Earnings in Accordance with FASB Accounting Standard No. 13 with 0 Days of Income Allocated to the First Month

Year Ending	Lessor's Net Investment At End of Year	Total Cash Flow	Pre-Tax Cash Flow Allocated to Investment @ 9.49812%	Pre-Tax Income	Pre-Tax Income w/o IDC	Amortized IDC	Tax Effect of Pre-Tax Income	Investment Tax Credit	After-Tax Income
Dec 2018	664,744	-608,043	-24,744	56,700	56,700	0	-19,845	0	36,855
Dec 2019	682,662	45,652	-17,918	63,570	63,570	0	-22,250	0	41,321
Dec 2020	698,696	49,130	-16,034	65,164	65,164	0	-22,807	0	42,357
Dec 2021	712,658	52,609	-13,962	66,571	66,571	0	-23,300	0	43,271
Dec 2022	724,343	56,087	-11,685	67,772	67,772	0	-23,720	0	44,052
Dec 2023	733,526	59,565	-9,182	68,748	68,748	0	-24,062	0	44,686
Dec 2024	739,957	63,043	-6,431	69,475	69,475	0	-24,316	0	45,158
Dec 2025	743,364	66,522	-3,407	69,929	69,929	0	-24,475	0	45,454
Dec 2026	737,678	75,655	5,685	69,969	69,969	0	-24,489	0	45,480
Dec 2027	721,933	84,500	15,745	68,755	68,755	0	-24,064	0	44,690
Dec 2028	700,413	88,500	21,520	66,980	66,980	0	-23,443	0	43,537
Dec 2029	672,546	92,500	27,867	64,633	64,633	0	-22,622	0	42,012
Dec 2030	637,703	96,500	34,844	61,656	61,656	0	-21,580	0	40,077
Dec 2031	595,190	100,500	42,513	57,987	57,987	0	-20,295	0	37,692
Dec 2032	544,246	104,500	50,943	53,557	53,557	0	-18,745	0	34,812
Dec 2033	484,036	108,500	60,210	48,290	48,290	0	-16,902	0	31,389
Dec 2034	413,640	112,500	70,396	42,104	42,104	0	-14,736	0	27,367
Dec 2035	332,047	116,500	81,593	34,907	34,907	0	-12,217	0	22,689
Dec 2036	238,146	120,500	93,901	26,599	26,599	0	-9,310	0	17,289
Dec 2037	130,715	124,500	107,431	17,069	17,069	0	-5,974	0	11,095
Dec 2038	0	131,750	130,715	1,035	1,035	0	-362	0	673
Totals		1,141,470	640,000	1,141,470	1,141,470	0	-399,515	0	741,956



Cash Detail Report

Technical Details and Support



- ABC runs on Warren & Selbert's **servers** in Santa Barbara
- **Connect** using LINK software
- **Secure** connection
- Comprehensive, swift, unmetered **support**
- Experienced and knowledgeable staff

LINK
Warren & Selbert

Version 3.03
Registered to:

Username:

Password:

Project:

Connection:

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Click on the logo for contact information.



Warren & Selbert

Simple as ABC.

Thank You

For any questions or comments, please do not hesitate to contact us

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