IASB agenda paper 2A / FASB memo 180 (IASB/FASB meeting week commencing 13 June 2011)
Appendix A1: Lessor examples: Lease where the lessor is a financial institution

The following example illustrates a lease where the lessor is a financing institution. That is, the fair value and cost basis of the underlying are identical at lease commencement, so there is no manufacturing gain to recognize. Under current guidance, the lessor is likely to apply operating lease accounting to this lease because the lease is for 50% of the economic life and 81% of the fair value of the asset.

The staff are split as to which model - 'receivable and residual' or operating lease accounting - should be applied in these cases. Note that under either approach, there is no Day 1 gain and the net income recognized over the term of the lease is identical. Note further, that the financial institution earns a constant return on assets under the 'receivable and residual' approach (10% or the rate in the lease) but an increasing return on assets under the operating lease accounting approach.

Lease Fact Pattern	
Lease Term	5
Useful Life	10
Annual Payment	2,147
Residual	3,000
FV of Underlying	10,000
Cost Basis of Underlying	10,000
PV of Payments / Value (FYI)	81.37%
Interest Rate	10.00%

Receivable and Residual Approach

Cost	10,000	Revenue	8,137
Residual	1,863	COGS	8,137
COGS	**8,137**	**Day 1 gain**	**-**

Year	Investment	Cash	Lease Receivable	Interest Income	Residual Asset	Residual Accretion	Net Income	Return on Assets
0	(10,000)		8,137		1,863		-	
1	2,147	2,147	6,804	814	2,049	186	1,000	10.00%
2	2,147	2,147	5,338	680	2,254	205	885	10.00%
3	2,147	2,147	3,725	534	2,479	225	759	10.00%
4	2,147	2,147	1,951	373	2,727	248	620	10.00%
5	5,147	2,147	-	195	3,000	273	468	10.00%
TOTAL		**10,733**		**2,596**		**1,137**	**3,733**	

Cash In	10,733	Day 1 Gain	-
Change in Underlying	(7,000)	Interest Income	3,733
Net Change in Assets	**3,733**	**Net Income**	**3,733**

Operating Lease Accounting Approach

Year	Investment	Cash (Lease Rev)	Underlying Asset	Depreciation Expense	Net Income	Return on Assets
0	(10,000)		10,000		-	
1	2,147	2,147	8,600	1,400	747	7.47%
2	2,147	2,147	7,200	1,400	747	8.68%
3	2,147	2,147	5,800	1,400	747	10.37%
4	2,147	2,147	4,400	1,400	747	12.87%
5	5,147	2,147	3,000	1,400	747	16.97%
TOTAL		**10,733**		**7,000**	**3,733**	

Cash In	10,733	Rental Income	10,733
Change in Underlying	(7,000)	Depreciation	(7,000)
Net Change in Assets	**3,733**	**Net Income**	**3,733**

IASB agenda paper 2A / FASB memo 180 (IASB/FASB meeting week commencing 13 June 2011)

Appendix A2: Lessor examples: Comparison of models

The following examples compare the single lessor accounting model (in the appendices, referred to as the 'receivable and residual' approach) to current operating lease accounting. The fact pattern is the same as in Appendix A1, except that the lessor is a manufacturer for which the cost of the asset is less than its fair value at lease commencement. The example highlights that:

1. The 'receivable and residual - allocated cost' approach results in a portion, but not all, of the CU1,250 manufacturing gain being recognized on Day 1 of the first lease. The profit recognized relates to the ROU asset transferred to the lessee.
2. The 'receivable and residual' approach resutls in all the CU 1,250 manufacturing gain being recognized on Day 1 because the residual is measured at its present value. The profit is equivalent to the sale of the entire asset.
3. In this example, current accounting would likely require the application of operating lease accounting (lease term is 50% of the useful life and the payments are 81% of the fair value). The lessor does not recognize a lease receivable when applying current operating lease accounting. Further, the asset is depreciated to its estimated residual value at the end of the lease term. It is the staff's understanding that some lessors that re-lease an asset several times over the course of its useful life could depreciate the asset straight-line over its useful life, which would not require an estimate of the residual value.

Lease Fact Pattern	
Lease Term	5
Useful Life	10
Annual Payment	2,147
Residual	3,000
FV of Underlying	10,000
Cost Basis of Underlying	8,750
PV of Payments / Value (FYI)	81.37%
Interest Rate	10.00%

Receivable and Residual - Allocated Cost Approach

Cost	8,750	Revenue	8,137
Residual	1,630	COGS	7,120
COGS	**7,120**	**Day 1 gain**	**1,017**

Year	Investment	Cash	Lease Receivable	Interest Income	Residual Asset	Residual Accretion	Net Income	Return on Assets
0	(10,000)		8,137		1,630		1,017	
1	2,147	2,147	6,804	814	1,793	163	977	10.00%
2	2,147	2,147	5,338	680	1,972	179	860	10.00%
3	2,147	2,147	3,725	534	2,169	197	731	10.00%
4	2,147	2,147	1,951	373	2,386	217	589	10.00%
5	5,147	2,147	-	195	2,625	239	434	10.00%
TOTAL		**10,733**		**2,596**		**995**	**4,608**	

Cash In	10,733	Day 1 Gain	1,017
Change in Underlying	(6,125)	Interest Income	3,591
Net Cash	**4,608**	**Lease 1 Income**	**4,608**

Receivable and Residual Approach

Cost	8,750	Revenue	8,137
Residual	1,863	COGS	6,887
COGS	**6,887**	**Day 1 gain**	**1,250**

Year	Investment	Cash	Lease Receivable	Interest Income	Residual Asset	Residual Accretion	Net Income	Return on Assets
0	(10,000)		8,137		1,863		1,250	
1	2,147	2,147	6,804	814	2,049	186	1,000	10.00%
2	2,147	2,147	5,338	680	2,254	205	885	10.00%
3	2,147	2,147	3,725	534	2,479	225	759	10.00%
4	2,147	2,147	1,951	373	2,727	248	620	10.00%
5	5,147	2,147	-	195	3,000	273	468	10.00%
TOTAL		**10,733**		**2,596**		**1,137**	**4,983**	

Cash In	10,733	Day 1 Gain	1,250
Change in Underlying	(5,750)	Interest Income	3,733
Net Cash	**4,983**	**Lease 1 Income**	**4,983**

Current Accounting Approach

There is no Day 1 gain under current operating lease accounting.

Year	Investment	Cash (Lease Rev)	Lease Receivable	Interest Income	Underlying Asset	Depreciation Expense	Net Income	Return on Assets
0	(10,000)				8,750		-	
1	2,147	2,147	-	-	7,600	1,150	997	11.39%
2	2,147	2,147	-	-	6,450	1,150	997	13.11%
3	2,147	2,147	-	-	5,300	1,150	997	15.45%
4	2,147	2,147	-	-	4,150	1,150	997	18.80%
5	5,147	2,147	-	-	3,000	1,150	997	24.01%
TOTAL		**10,733**		**-**		**5,750**	**4,983**	

Cash In	10,733	Rental Income	10,733
Change in Underlying	(5,750)	Depreciation	(5,750)
Net Cash	**4,983**	**Lease 1 Income**	**4,983**

IASB agenda paper 2A / FASB memo 180 (IASB/FASB meeting week commencing 13 June 2011)

Appendix A3: Lessor examples: Impact of residual estimate in the 'receivable and residual - allocated cost' approach

The following example illustrates the effect that a change in the estimated residual value of the underlying asset at the end of the lease term would have on the profit that a manufacturer / dealer lessor would recognize at lease commencement under the 'receivable and residual - allocated cost' approach. Two alternative scenarios are presented to illustrate the variability in the Day 1 gain recognized if the residual estimate were to vary downwards or upwards. If the residual were estimated to be lower on Day 1, then a larger gain would be recognized. If the residual were estimated to be higher on Day 1, then a smaller gain would be recognized. This is because, under the receivable and residual - allocated cost' approach, the estimated residual value of the underlying assets affects the pricing of the lease contract (impacting revenue) and the allocation of the asset cost basis (impacting cost of goods sold).

	Base Scenario	Scenario 1	Scenario 2
Lease Term	5	5	5
Annual Payment	2,147	2,228	2,065
FV of Underlying	10,000	10,000	10,000
Cost Basis of Underlying	8,750	8,750	8,750
Manufacturing Margin	1,250	1,250	1,250
Residual	3,000	2,500	3,500
Resulting Day 1 Gain (from below)	1,017	1,056	978
Change in Day 1 Gain	n/a	39	(39)
PV of Payments / Value (FYI)	81.37%	84.48%	78.27%
Interest Rate	10.00%	10.00%	10.00%

Base Scenario

Cost	8,750	Revenue	8,137
Residual	1,630	COGS	7,120
COGS	**7,120**	**Day 1 gain**	**1,017**

Year		Investment	Cash	Lease Receivable	Interest Income	Residual Asset	Residual Accretion	Net Income
	0	(10,000)		8,137		1,630		1,017
	1	2,147	2,147	6,804	814	1,793	163	977
	2	2,147	2,147	5,338	680	1,972	179	860
	3	2,147	2,147	3,725	534	2,169	197	731
	4	2,147	2,147	1,951	373	2,386	217	589
	5	5,147	2,147	-	195	2,625	239	434
TOTAL			**10,733**		**2,596**		**995**	**4,608**

Cash In	10,733	Day 1 Gain	1,017
Change in Underlying	(6,125)	Interest Income	3,591
Net Change in Assets	**4,608**	**Net Income**	**4,608**

Scenario 1

Cost	8,750	Revenue	8,448
Residual	1,358	COGS	7,392
COGS	**7,392**	**Day 1 gain**	**1,056**

Year		Investment	Cash	Lease Receivable	Interest Income	Residual Asset	Residual Accretion	Net Income
	0	(10,000)		8,448		1,358		1,056
	1	2,228	2,228	7,064	845	1,494	136	981
	2	2,228	2,228	5,542	706	1,644	149	856
	3	2,228	2,228	3,868	554	1,808	164	719
	4	2,228	2,228	2,026	387	1,989	181	568
	5	4,728	2,228	-	203	2,188	199	401
TOTAL			**11,142**		**2,695**		**829**	**4,580**

Cash In	11,142	Day 1 Gain	1,056
Change in Underlying	(8,545)	Interest Income	3,524
Net Change in Assets	**2,597**	**Net Income**	**4,580**

Scenario 2

Cost	8,750	Revenue	7,827
Residual	1,902	COGS	6,848
COGS	**6,848**	**Day 1 gain**	**978**

Year		Investment	Cash	Lease Receivable	Interest Income	Residual Asset	Residual Accretion	Net Income
	0	(10,000)		7,827		1,902		978
	1	2,065	2,065	6,545	783	2,092	190	973
	2	2,065	2,065	5,135	654	2,301	209	864
	3	2,065	2,065	3,583	513	2,531	230	744
	4	2,065	2,065	1,877	358	2,784	253	611
	5	5,565	2,065	-	188	3,063	278	466
TOTAL			**10,323**		**2,497**		**1,161**	**4,636**

Cash In	10,323	Day 1 Gain	978
Change in Underlying	(8,080)	Interest Income	3,658
Net Change in Assets	**2,244**	**Net Income**	**4,636**

IASB agenda paper 2A / FASB memo 180 (IASB/FASB meeting week commencing 13 June 2011)
Appendix A4: Lessor examples: Real estate lease

The following example illustrates a lease of a building or a portion of a building.
Some staff think that if the lease is for the entire building, it would be practicable to apply the 'receivable and residual' approach. For simplicity in this example, it is assumed that the estimated residual is CU787,500 (35 years / 40 years x CU900,000 current fair value). This results in the cost basis of the underlying being CU612,500 at the end of the lease term, which is equivalent to the other two approaches presented below.

If the lease is for a portion of the building, it might be more practicable to apply one of the other two approaches - a 'modified receivable and residual' approach or operating lease accounting. Note that under either of those approaches, the carrying value of the underlying asset at the end of the lease term has decreased from CU700,000 to CU612,500. The total net income recognised under the 'modified receivable and residual' approach during the lease term is always the same as current operating lease accounting because the residual asset is accreted to the depreciated amount of the underlying at the end of the lease term.

Lease Fact Pattern	
Lease Term	5
Useful Life	40
Annual Payment	65,000
Residual	787,500
FV of Underlying	900,000
Cost Basis of Underlying	700,000
PV of Payments / Value (FYI)	31.30%
Interest Rate	4.96%
Modified Approach Rate on Residual	7.93%

Receivable and Residual -Allocated Cost Approach

Cost	700,000	Revenue	281,742
Residual	480,867	COGS	219,133
COGS	**219,133**	**Day 1 gain**	**62,609**

Year	Investment	Cash	Lease Receivable	Interest Income	Residual Asset	Residual Accretion	Net Income
0	(900,000)		281,742		480,867		62,609
1	65,000	65,000	230,711	13,969	504,710	23,842	37,811
2	65,000	65,000	177,150	11,439	529,734	25,024	36,463
3	65,000	65,000	120,933	8,783	555,999	26,265	35,048
4	65,000	65,000	61,929	5,996	583,566	27,567	33,563
5	852,500	65,000	-	3,071	612,500	28,934	32,005
TOTAL		**325,000**		**43,258**		**131,633**	**237,500**

Cash In	325,000	Day 1 Gain	62,609
Change in Underlying	(87,500)	Interest Income	174,891
Net Change in Assets	**237,500**	**Net Income**	**237,500**

Modified Receivable and Residual Approach

Annual Depreciation	17,500	Revenue	281,742
Years	5	COGS	281,742
Total Depreciation	**87,500 [1]**	**Day 1 gain**	**-**

Year	Investment	Cash	Lease Receivable	Interest Income	Residual Asset	Residual Accretion	Net Income
0	(900,000)		281,742		418,258		-
1	65,000	65,000	230,711	13,969	451,416	33,158	47,127
2	65,000	65,000	177,150	11,439	487,202	35,786	47,225
3	65,000	65,000	120,933	8,783	525,825	38,623	47,407
4	65,000	65,000	61,929	5,996	567,510	41,685	47,681
5	852,500	65,000	-	3,071	612,500	44,990	48,060
TOTAL		**325,000**		**43,258**		**194,242**	**237,500**

		Day 1 Gain	-
Cash In	325,000	Interest Income	43,258
Change in Underlying	(87,500) **[1]**	Residual Accretion	194,242
Net Change in Assets	**237,500**	**Net Income**	**237,500**

Note:
[1] This is the amount of depreciation that would have been recorded on the asset during the lease under operating lease accounting. It is deducted from the carrying value at the start of the lease to determine the number to which to accrete the residual asset (CU 700,000 less CU 87,500 = CU 612,500).

Operating Lease Accounting Approach

Year	Investment	Cash (Lease Rev)	Lease Receivable	Interest Income	Underlying Asset	Depreciation Expense	Net Income
0	(900,000)				700,000		-
1	65,000	65,000	-	-	682,500	17,500	47,500
2	65,000	65,000	-	-	665,000	17,500	47,500
3	65,000	65,000	-	-	647,500	17,500	47,500
4	65,000	65,000	-	-	630,000	17,500	47,500
5	852,500	65,000	-	-	612,500	17,500	47,500
TOTAL		**325,000**		**-**		**87,500**	**237,500**

		Day 1 Gain	-
Cash In	325,000	Rental Income	325,000
Change in Underlying	(87,500)	Depreciation	(87,500)
Net Change in Assets	**237,500**	**Net Income**	**237,500**