Δ(CA)_t

2017	2018	2019
(294.0)	(386.0)	14.0
(160.0)	3,115.9	(638.9)
8.3	(33.0)	(34.6)
(97.3)	(148.2)	35.1
16.5	38.3	(23.3)
151.7	(305.1)	(86.4)
(36.4)	(26.2)	56.4
32.6	(6.6)	60.1
55.4	(36.4)	(37.9)
(18.2)	17.8	47.6
0.3	156.9	28.5
94.6	(607.0)	(290.2)
(1,234.1)	129.7	(96.2)
592.1	161.3	(674.2)
(370.6)	(52.6)	29.0
93.4	3,199.0	(147.7)
203.2	(170.7)	(135.9)
13.8	251.9	41.5
(552.3)	569.4	590.1
(124.5)	78.6	21.8
(2,431.4)	(1,876.8)	(501.7)
1,194.6	538.6	(3,182.7)
2,040.6	549.8	(413.3)
(140.5)	147.5	(202.1)
(50.2)	(18.7)	(20.1)
95.6	(132.6)	92.4
91.0	42.7	(171.7)
(8.2)	(3.1)	(2.9)
(0.7)	1.3	(0.3)
(1.1)	1.3	(0.1)
118.1	61.1	(43.1)
30.7	14.5	34.1
1.9	(8.7)	2.6
0.6	9.4	7.6
1.3	(5.8)	(0.1)
0.2	(0.1)	0.0
5.1	0.4	(5.2)
12.0	3.9	(3.5)
2.6	2.4	2.0
(50.4)	23.9	(47.7)
(0.5)	1.4	1.5
12.9	35.7	(32.7)
1.7	(0.1)	0.7
2.8	5.6	4.4
(3.6)	(5.2)	15.2
(3.1)	(2.1)	(1.1)
4.5	(3.0)	(0.6)
2.4	7.4	10.2
60.1	(36.5)	4.7
9.7	9.0	10.1
(6.3)	(4.9)	1.7
5.8	(7.9)	11.5
13.6	(2.3)	(6.6)
(3.7)	(10.4)	1.2
3.2	2.7	(8.7)
(2.4)	(8.9)	35.8
(0.8)	(49.3)	43.2
3.7	0.7	(2.5)
25.8	(1.6)	3.0
4.5	(3.7)	(0.7)
86.9	54.3	6.4
1.7	(11.5)	(8.1)
2.6	(0.7)	1.7
1.7	5.2	7.1
20.2	(57.6)	55.7
(251.0)	(241.0)	301.2
3,151.8	1,889.6	(3,116.1)
620.6	3,746.7	(127.7)
(1.8)	(126.4)	(29.5)
(7.6)	10.5	47.9
16.2	(61.6)	(119.3)
27.9	26.3	(15.2)
175.9	442.9	(1,238.3)
10,137.6	(10,175.6)	(20,065.5)
(247.9)	1,057.7	(82.0)
(81.2)	1.5	(88.9)
(40.0)	(66.7)	(44.1)
(9.4)	21.1	81.5
12.2	(103.0)	396.2
(184.8)	79.3	147.6
40.7	20.7	9.5
(39.2)	56.2	233.4
66.5	(45.8)	82.3
(27.2)	(111.8)	22.7
106.3	34.1	87.2
(56.4)	205.0	(141.5)
643.9	695.3	(1,249.6)
213.0	(355.5)	(384.8)
(17.0)	(91.0)	(59.3)
328.5	(638.2)	1,127.8
697.2	2,379.2	(3,757.1)
180.0	101.6	(812.8)
156.9	(252.7)	77.7
25.8	18.1	175.9
(15.5)	(31.4)	69.0
(131.4)	(115.7)	(62.7)
(70.3)	121.8	21.5
7.5	9.7	22.8
1,165.2	200.1	(4,163.7)
(250.1)	44.6	31.3
(20.3)	9.8	(4.8)
19.9	(2.7)	(20.1)
16.6	13.9	(17.7)
33.2	(18.4)	15.4
18.2	54.2	14.7
(82.9)	29.7	(31.5)
(9.3)	73.9	(87.4)
225.2	(140.5)	(14.7)
(249.7)	(0.2)	(77.5)
(70.8)	(15.3)	(69.8)
(63.1)	28.0	135.2
(2.9)	13.7	7.2
(63.6)	58.0	(13.5)
9.6	(11.9)	272.4
(88.2)	(18.4)	18.0
(64.8)	(88.7)	(61.4)
13.8	(125.4)	170.2
(116.0)	(261.4)	(109.8)
(24.8)	8.5	(70.7)
(315.5)	(65.9)	(295.1)

ΔCash

2017	2018	2019
306.0	(201.0)	18.0
(1,048.0)	2,687.5	(726.9)
(1.1)	35.9	(27.2)
(75.4)	(23.7)	-
(1.5)	11.1	(6.5)
92.0	(192.4)	58.9
(7.2)	(14.3)	52.4
(36.2)	22.7	27.6
0.1	1.1	0.8
(6.1)	14.1	37.5
5.1	8.5	(40.0)
4.5	(80.7)	(29.0)
(205.2)	256.2	(86.6)
425.0	681.9	(679.4)
14.4	(56.9)	(16.0)
(350.5)	1,260.0	(48.0)
216.9	(301.3)	(398.0)
(96.4)	104.8	(56.1)
(646.6)	(45.2)	34.5
57.0	40.0	(109.2)
(728.9)	(246.5)	50.4
1,195.4	631.7	(1,981.5)
209.3	36.6	(24.3)
(139.9)	151.8	(215.9)
5.3	(8.5)	(18.3)
(38.7)	(143.9)	(38.9)
32.3	(2.1)	(103.6)
(0.4)	(0.1)	0.5
(0.1)	(0.7)	(1.0)
(0.2)	(0.5)	0.2
11.0	26.4	(22.5)
(13.7)	(15.9)	32.7
2.0	(9.5)	1.9
(3.3)	(3.4)	(0.8)
(0.0)	0.1	(0.4)
(0.4)	-	(0.0)
0.1	10.2	(2.2)
(1.5)	0.4	1.0
(2.6)	(0.6)	0.7
(7.7)	(1.6)	0.2
0.1	(0.6)	0.2
6.7	24.5	(44.5)
0.6	(0.6)	0.4
0.2	7.1	1.3
(4.0)	0.6	13.6
2.8	(1.1)	(0.5)
5.2	(3.8)	0.6
0.1	6.5	8.8
13.6	(5.4)	0.7
(0.1)	0.8	0.5
(2.4)	(3.2)	(0.0)
0.4	(2.4)	20.9
6.3	(2.3)	(7.4)
(2.4)	(1.6)	-
2.4	2.5	(8.7)
(2.0)	2.3	2.9
(0.6)	(2.1)	8.0
2.4	0.9	(3.0)
2.8	1.5	(3.2)
3.1	(2.4)	(0.7)
31.4	0.2	5.0
(1.6)	(2.0)	0.1
3.2	(1.6)	2.8
4.3	1.1	7.7
7.5	(0.0)	52.1
325.8	(269.0)	17.3
(1,254.8)	1,136.8	(947.6)
(18.1)	1,041.5	(1,788.3)
(55.0)	(66.0)	(27.2)
(23.2)	17.3	56.3
19.3	(121.3)	(6.7)
(6.8)	13.0	16.0
(355.5)	985.7	(765.9)
18,790.9	(53,912.2)	1,390.6
(40.4)	509.0	(61.0)
(1.7)	(31.6)	30.3
(35.8)	(1.0)	10.1
(80.3)	1.1	69.5
(4.2)	56.5	(129.8)
(98.3)	30.0	230.9
16.9	(7.1)	(7.9)
(115.1)	(8.2)	235.1
(13.1)	(46.5)	125.3
(38.6)	(50.1)	3.7
17.3	(26.8)	34.0
(56.9)	(63.1)	44.8
273.8	999.7	(448.6)
(624.0)	(1,026.1)	110.1
0.2	(1.4)	(10.9)
(99.9)	(709.2)	777.8
1,127.0	(137.4)	(1,463.9)
(192.7)	(67.5)	(144.8)
38.0	(241.7)	(42.3)
75.6	17.9	(240.0)
(19.3)	37.3	(27.1)
(29.2)	(78.6)	(43.9)
(63.9)	(50.3)	57.6
3.7	(3.1)	4.0
105.2	373.8	(185.8)
(66.5)	6.3	91.7
(27.9)	4.4	39.6
(14.5)	(18.9)	(18.4)
(7.2)	12.4	(17.9)
(3.4)	(2.2)	(5.6)
(18.2)	(2.5)	8.8
(19.0)	9.2	5.0
(10.4)	(7.6)	(18.6)
7.6	(3.3)	6.5
(54.0)	(32.8)	(20.2)
32.8	(32.2)	(3.8)
(0.8)	(9.9)	3.3
0.6	(3.0)	0.8
0.2	39.7	(23.4)
(35.4)	2.2	44.0
(42.3)	3.1	17.2
(12.7)	1.5	(1.4)
54.6	(31.3)	52.2
54.3	(68.1)	(8.4)
(18.4)	(3.2)	(68.6)
3.5	(26.3)	(3.5)

Δ(CL)_t

2017	2018	2019
(28.0)	(731.0)	350.0
1,935.8	2,611.4	(930.3)
188.4	59.9	(214.9)
(184.3)	74.4	6.4
21.6	(4.0)	23.8
(66.4)	10.7	55.0
(5.2)	(3.1)	(24.5)
62.9	758.5	11.8
77.6	(7.3)	56.2
(34.2)	(24.0)	(3.8)
(16.3)	113.9	120.5
41.9	566.1	(167.6)
(944.9)	(136.1)	88.4
107.3	904.6	32.4
(261.2)	72.1	7.0
201.1	(58.1)	(102.2)
78.4	20.1	(62.6)
139.2	(130.5)	(35.7)
(126.4)	212.0	538.0
(114.2)	37.6	59.6
######	(1,144.2)	114.8
1,018.0	207.5	(1,493.0)
3,076.1	3.9	(24.8)
41.5	47.8	(22.1)
2.8	1.2	14.0
31.2	(157.4)	78.7
52.9	13.0	(125.3)
10.7	(20.7)	1.0
(0.5)	2.0	0.2
0.0	0.2	(0.2)
0.6	122.7	156.0
21.9	(7.7)	192.9
0.3	(1.5)	(1.7)
(1.1)	6.7	44.3
2.2	(1.3)	0.6
1.0	(0.2)	(0.5)
3.6	(5.3)	(8.1)
7.2	3.2	(3.1)
(0.3)	(0.4)	0.6
(35.7)	(19.9)	(35.4)
(3.2)	4.1	7.1
2.4	38.3	(34.1)
1.1	0.4	0.4
0.2	(0.2)	(1.3)
(0.4)	(9.0)	(0.4)
(1.5)	(0.9)	0.4
(0.2)	0.2	0.6
0.8	0.1	(0.1)
75.0	(28.2)	(2.1)
5.9	12.1	(6.2)
(0.4)	(3.4)	0.8
(9.7)	(12.7)	(5.3)
10.4	(4.9)	(5.2)
5.7	(3.4)	(0.3)
(0.7)	5.7	(4.8)
13.5	(9.9)	29.1
9.6	(34.3)	26.5
0.8	4.6	(8.6)
29.3	(3.9)	(4.7)
(0.2)	1.0	(0.2)
103.5	(46.8)	(16.0)
0.1	(0.1)	(5.4)
1.0	(0.9)	1.1
0.7	(3.1)	0.4
91.2	352.1	(100.8)
(18.8)	69.8	268.3
2,540.9	11,015.9	3,056.3
12.5	173.8	662.3
3.4	(12.2)	12.1
(19.4)	20.2	25.5
44.6	(28.1)	(24.8)
(8.7)	90.4	39.0
145.8	1,197.8	(1,352.6)
6,919.1	(11,191.0)	434.8
(92.8)	70.0	(173.9)
97.9	61.9	44.0
(12.9)	(48.7)	306.9
6.0	16.6	(10.5)
17.9	(86.3)	431.9
(160.4)	29.6	29.6
(97.9)	10.4	15.4
(82.4)	(134.8)	(10.2)
(18.4)	25.5	(57.3)
(61.1)	(69.7)	(31.4)
(112.6)	35.8	25.2
42.1	413.6	(152.2)
385.4	1,159.0	(1,225.1)
(208.1)	(979.3)	(191.1)
(74.4)	79.6	(8.5)
(254.0)	83.4	6.0
(142.4)	(54.5)	(409.2)
42.7	1,032.0	(1,040.7)
12.0	(49.7)	61.1
(17.4)	(80.8)	(5.7)
(10.6)	14.4	6.3
0.4	20.1	48.8
94.8	86.5	1.8
5.5	0.8	15.8
(980.5)	2,169.4	(3,868.4)
(195.6)	(55.2)	(470.6)
(2.6)	(0.2)	0.8
24.9	29.8	(6.6)
6.8	13.9	14.9
6.6	(78.9)	66.4
(72.1)	94.0	11.7
3.6	(10.0)	(10.1)
42.7	23.8	(63.4)
244.2	(13.2)	(49.1)
451.0	109.1	(389.2)
(55.6)	(23.0)	(28.6)
(121.7)	100.5	275.6
(6.3)	14.8	7.4
(1.8)	1.1	(1.5)
(69.3)	67.1	312.1
(71.2)	(18.4)	13.4
(133.6)	(59.7)	(113.3)
213.6	(0.3)	(155.2)
(66.1)	(195.7)	(292.7)
3.2	8.4	(1.3)
(61.6)	34.5	42.7

Δ(DCL)_t

2017	2018	2019
-	-	-
-	-	-
-	332.2	(197.5)
-	-	-
6.3	3.2	1.7
45.9	2.1	30.2
1.2	(5.6)	(23.2)
(95.0)	703.4	90.6
4.4	14.0	26.9
(1.5)	(18.2)	0.7
(55.1)	(1.9)	34.0
-	-	-
(392.7)	(142.6)	45.4
186.9	1,019.5	(6.3)
-	-	-
-	-	-
-	-	-
-	-	-
(42.2)	36.9	(82.0)
(3.4)	40.8	26.7
(2,454.2)	(1,096.8)	(4.1)
735.7	(203.4)	(36.6)
0.4	0.4	25.4
(4.6)	0.5	(0.1)
-	-	-
-	0.5	(0.2)
11.0	(17.7)	(0.6)
-	-	-
-	-	-
-	-	-
(23.2)	52.5	78.4
5.4	0.0	0.8
1.0	1.0	(2.1)
-	1.1	18.8
(0.3)	0.7	(1.1)
(0.1)	(0.0)	-
-	-	-
1.1	(12.2)	-
-	-	-
(7.7)	(5.4)	(3.3)
(3.0)	2.0	3.4
(1.8)	(1.5)	(1.7)
-	-	-
-	-	7.1
-	2.6	(2.6)
-	-	-
-	-	-
3.7	1.0	0.2
(2.3)	(1.9)	(2.3)
(1.4)	(0.9)	0.1
0.0	(1.6)	0.6
(3.7)	-	-
-	-	-
2.5	(2.8)	(1.1)
-	-	-
5.5	(3.2)	21.8
-	-	-
(6.7)	(1.4)	3.2
0.7	(6.9)	1.3
-	-	-
80.8	(80.4)	(30.4)
(3.5)	(0.1)	0.4
-	-	-
-	-	-
19.0	191.6	18.5
74.1	(187.5)	(3.4)
582.3	9,293.3	4,345.2
443.7	227.3	(629.8)
-	-	0.9
-	-	0.3
72.5	(26.2)	(11.6)
(19.0)	(6.6)	10.2
27.4	6.7	(151.4)
(399.4)	(8,623.2)	4,466.6
0.0	0.1	13.4
13.2	126.7	(47.5)
0.7	(39.6)	310.2
4.0	18.0	(9.7)
0.5	1.1	8.6
(57.5)	-	1.2
(65.2)	17.6	18.3
-	-	-
(6.7)	(34.8)	0.4
(67.0)	(88.5)	(48.6)
10.3	21.7	11.6
(106.4)	9.0	26.6
27.4	6.7	(151.4)
(528.9)	(930.4)	14.1
3.2	87.0	18.3
(174.0)	271.1	(289.4)
(161.8)	(77.6)	17.3
(30.0)	(10.0)	1.2
36.8	(64.5)	25.2
-	-	2.7
-	-	-
-	-	-
-	-	79.0
-	-	7.2
(1,578.1)	2,405.1	(2,378.6)
35.0	(40.0)	55.0
-	-	-
2.2	(0.6)	5.1
1.2	11.3	(1.5)
10.8	4.0	18.7
(60.8)	9.1	11.4
(6.3)	45.6	3.0
8.0	(8.8)	2.8
20.3	22.0	(8.0)
(166.1)	(10.0)	(3.2)
(33.3)	(65.7)	3.2
(9.1)	3.5	22.2
-	-	0.5
-	-	0.0
(40.9)	(60.6)	2.7
-	-	0.7
(24.3)	(86.4)	1.1
208.2	100.7	(263.5)
0.3	(85.9)	(150.5)
(4.1)	8.1	(0.3)
38.1	52.8	(254.1)

DEP			TACC			A_(t-1)				TACC / A (t-1)		
2017	2018	2019	2017	2018	2019	2016 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
111.0	113.0	103.0	(683.0)	433.0	(457.0)	3,765.0	3,782.0	3,167.0	3,202.0	-0.18	0.11	-0.14
460.7	532.1	533.2	(1,508.5)	(2,715.1)	485.1	11,438.3	12,205.4	15,621.6	15,010.2	-0.13	-0.22	0.03
15.0	17.1	17.5	(194.1)	186.4	(7.4)	2,100.9	2,043.1	1,956.8	1,785.0	-0.09	0.09	0.00
23.3	31.5	26.9	139.2	(230.4)	1.8	1,260.9	1,159.8	938.3	977.0	0.11	-0.20	0.00
30.4	28.7	29.3	(27.7)	5.7	(68.1)	635.2	650.2	665.7	606.8	-0.04	0.01	-0.10
150.8	139.4	135.1	21.1	(260.8)	(305.3)	5,756.3	5,801.0	5,497.0	5,486.8	0.00	-0.04	-0.06
34.7	33.4	32.2	(57.4)	(47.8)	(26.9)	1,215.6	1,102.5	1,030.1	989.9	-0.05	-0.04	-0.03
81.4	75.8	72.7	(170.5)	(160.2)	38.5	3,492.0	3,408.8	3,333.3	3,481.4	-0.05	-0.05	0.01
10.2	8.3	6.7	(28.2)	(24.4)	(74.6)	691.7	720.6	642.6	599.2	-0.04	-0.03	-0.12
31.6	28.9	31.7	(11.0)	(19.4)	(17.0)	409.5	379.0	387.7	478.6	-0.03	-0.05	-0.04
54.7	56.3	63.7	(98.4)	(23.7)	(81.7)	1,791.7	1,835.2	2,032.2	2,155.3	-0.05	-0.01	-0.04
88.3	84.6	82.3	(40.1)	(1,177.0)	(175.9)	3,473.4	3,527.7	2,892.4	2,450.4	-0.01	-0.33	-0.06
9.9	10.0	12.9	(486.7)	(142.9)	(65.5)	10,014.9	8,669.8	9,046.2	9,020.6	-0.05	-0.02	-0.01
444.8	279.5	278.9	(198.1)	(685.2)	(312.4)	15,226.0	15,843.6	18,137.4	17,494.1	-0.01	-0.04	-0.02
6.0	5.7	5.2	(129.8)	(73.6)	32.9	1,054.5	1,397.8	1,370.1	1,422.2	-0.12	-0.05	0.02
225.4	237.4	237.4	17.4	1,759.7	(234.9)	35,185.8	35,225.8	37,069.7	35,870.3	0.00	0.05	-0.01
140.0	155.1	174.9	(232.1)	(44.7)	149.8	3,709.6	3,898.0	3,773.0	3,498.2	-0.06	-0.01	0.04
91.1	91.3	104.2	(120.2)	186.2	29.0	4,597.8	4,581.2	4,738.4	4,778.8	-0.03	0.04	0.01
487.3	489.1	434.4	(308.8)	(49.5)	(498.7)	11,117.4	10,428.5	10,342.9	10,766.9	-0.03	0.00	-0.05
25.4	25.1	23.5	(96.1)	16.7	74.6	2,039.7	2,062.3	2,291.0	2,527.8	-0.05	0.01	0.03
284.0	273.9	265.6	(1,596.5)	(1,856.8)	(936.6)	22,057.6	18,805.4	17,807.5	17,670.8	-0.07	-0.10	-0.05
197.8	190.0	209.1	(1,216.7)	(491.1)	82.7	11,339.7	12,431.3	13,774.8	12,653.2	-0.11	-0.04	0.01
75.9	96.9	92.0	(585.0)	209.0	(492.8)	7,731.9	11,561.5	12,999.3	13,436.8	-0.08	0.02	-0.04
57.7	66.1	111.2	(99.5)	(117.9)	(49.8)	2,209.3	2,219.4	2,400.0	2,545.8	-0.05	-0.05	-0.02
28.2	31.4	27.4	(91.0)	(42.2)	(43.3)	1,205.8	1,183.6	1,204.9	1,294.8	-0.08	-0.04	-0.04
59.8	70.8	60.0	43.3	97.9	(7.5)	2,142.9	2,242.3	2,068.2	2,142.1	0.02	0.04	0.00
4.7	4.0	4.1	1.1	28.3	52.9	520.9	615.2	641.4	510.8	0.00	0.05	0.08
2.6	5.7	5.5	(10.2)	(5.9)	(10.5)	188.8	171.0	162.3	154.1	-0.05	-0.03	-0.06
0.6	0.6	0.6	(0.8)	(0.7)	(0.2)	22.7	22.0	24.7	26.0	-0.03	-0.03	-0.01
0.3	0.4	0.4	(1.2)	1.1	(0.5)	14.5	13.8	14.3	15.2	-0.08	0.08	-0.03
71.4	64.8	80.3	11.8	(100.3)	(178.6)	1,173.7	1,686.2	2,208.9	2,420.3	0.01	-0.06	-0.08
66.3	70.1	66.2	(38.4)	(31.9)	(256.9)	950.9	932.5	912.4	992.9	-0.04	-0.03	-0.28
1.4	1.5	0.9	(0.7)	1.9	(0.6)	162.6	165.8	168.4	174.3	0.00	0.01	0.00
7.0	7.4	6.5	(2.0)	(0.3)	(23.6)	208.5	195.2	199.8	254.8	-0.01	0.00	-0.12
2.3	2.3	1.9	(3.5)	(6.1)	(3.3)	69.9	68.1	55.9	55.7	-0.05	-0.09	-0.06
0.7	0.7	0.8	(1.2)	(0.6)	(0.2)	12.4	13.3	12.9	12.8	-0.10	-0.04	-0.01
3.7	3.6	3.6	(2.2)	(8.2)	1.5	140.2	142.1	139.4	134.0	-0.02	-0.06	0.01
2.0	2.1	1.9	5.4	(13.9)	(3.3)	58.1	68.9	71.9	67.5	0.09	-0.20	-0.05
2.1	2.1	2.0	3.4	1.2	(1.3)	43.0	42.4	41.1	42.7	0.08	0.03	-0.03
20.3	14.5	17.7	(35.0)	25.4	(33.6)	484.8	426.3	419.5	304.4	-0.07	0.06	-0.08
1.1	1.8	3.0	(1.6)	(1.9)	(5.5)	75.0	80.6	89.5	92.1	-0.02	-0.02	-0.06
2.4	2.3	1.9	(0.4)	(30.9)	42.3	285.3	294.9	330.4	298.7	0.00	-0.10	0.13
2.2	2.0	2.0	(2.2)	(2.0)	(2.0)	65.9	63.9	61.4	60.3	-0.03	-0.03	-0.03
1.9	2.0	2.0	0.4	(3.2)	2.4	32.4	38.4	44.5	48.2	0.01	-0.08	0.05
1.2	0.9	0.8	(0.4)	4.9	(1.4)	51.2	48.5	33.7	32.1	-0.01	0.10	-0.04
0.9	0.8	0.6	(5.3)	(0.8)	(1.7)	27.9	22.9	20.1	15.7	-0.19	-0.03	-0.08
0.0	0.0	0.0	(0.6)	0.6	(1.8)	46.2	46.5	44.3	23.4	-0.01	0.01	-0.04
2.5	3.6	3.9	2.7	(1.7)	(2.1)	85.7	98.5	109.9	118.3	0.03	-0.02	-0.02
9.0	10.9	9.8	(39.7)	(15.7)	(6.1)	259.2	329.3	288.7	294.8	-0.15	-0.05	-0.02
6.3	8.4	9.0	(3.8)	(13.2)	7.0	147.7	161.6	180.8	189.2	-0.03	-0.08	0.04
1.2	1.1	1.2	(4.8)	(1.1)	0.3	30.7	27.6	20.6	20.7	-0.15	-0.04	0.01
1.4	1.1	1.0	10.1	6.2	(5.1)	177.2	177.9	177.2	194.4	0.06	0.03	-0.03
4.0	5.7	5.7	(7.0)	(0.8)	0.3	82.9	95.4	91.6	92.5	-0.08	-0.01	0.00
2.5	2.4	2.4	(6.9)	(10.6)	(2.1)	129.8	137.4	132.8	160.4	-0.05	-0.08	-0.02
0.8	0.8	0.7	0.6	(6.3)	4.2	43.5	53.2	71.2	119.6	0.01	-0.12	0.06
5.6	6.2	6.4	(14.0)	(10.7)	19.3	196.1	198.0	188.9	239.6	-0.07	-0.05	0.10
6.1	3.5	3.2	(16.0)	(16.4)	5.5	400.5	407.7	310.4	426.3	-0.04	-0.04	0.02
10.6	10.8	8.1	(16.7)	(17.1)	4.1	93.2	92.3	95.9	93.2	-0.18	-0.18	0.04
2.0	3.1	3.2	(7.6)	(9.3)	9.0	39.6	68.9	66.5	64.9	-0.19	-0.13	0.14
0.1	0.1	0.1	1.5	(2.3)	0.2	23.3	23.9	25.0	25.0	0.07	-0.10	0.01
29.8	31.4	60.5	3.0	(10.9)	(73.5)	1,544.0	1,728.9	1,843.2	2,082.1	0.00	-0.01	-0.04
8.9	8.3	9.8	(9.3)	(17.8)	(12.3)	300.4	305.7	301.9	316.0	-0.03	-0.06	-0.04
3.1	3.0	3.1	(4.7)	(1.2)	(5.4)	112.9	113.7	112.0	114.3	-0.04	-0.01	-0.05
0.0	0.0	0.0	(3.4)	7.2	(1.0)	374.5	380.8	441.0	465.0	-0.01	0.02	0.00
5.8	6.1	6.6	(65.3)	(224.2)	116.3	1,541.3	1,790.2	3,431.5	3,585.2	-0.04	-0.13	0.03
4.9	5.8	6.0	(488.7)	(235.1)	6.1	20,837.3	21,182.6	21,197.6	20,560.8	-0.02	-0.01	0.00
108.0	100.2	128.8	2,340.1	(1,069.8)	(1,008.4)	58,246.1	61,675.0	64,094.0	74,029.7	0.04	-0.02	-0.02
37.0	51.5	48.6	1,032.9	2,707.1	319.9	94,142.8	95,117.0	98,138.3	97,657.6	0.01	0.03	0.00
5.0	4.3	4.8	44.8	(52.5)	(18.3)	660.9	681.1	692.6	756.4	0.07	-0.08	-0.03
2.8	2.3	1.7	32.2	(29.3)	(35.3)	581.4	560.3	562.9	603.2	0.06	-0.05	-0.06
5.3	3.8	2.7	19.5	57.9	(102.0)	2,310.6	2,257.1	2,120.7	1,943.0	0.01	0.03	-0.05
2.4	1.7	1.6	22.1	(61.6)	(61.6)	1,221.1	1,215.6	1,152.2	1,118.9	0.02	-0.07	-0.05
21.0	10.8	9.3	391.9	(1,744.8)	719.5	22,259.6	21,612.5	21,018.8	19,015.7	0.02	-0.08	0.03
758.7	1,003.2	1,562.7	(16,730.6)	45,301.2	(18,987.1)	313,854.7	321,610.8	319,710.9	300,480.6	-0.05	0.14	-0.06
16.6	13.1	28.8	(131.3)	465.7	137.6	8,227.7	8,346.9	9,504.5	9,662.5	-0.02	0.06	0.01
4.4	5.6	4.0	(168.7)	92.3	(214.7)	2,342.2	2,178.8	2,105.7	1,966.4	-0.07	0.04	-0.10
2.3	1.8	1.7	7.0	(58.2)	(52.7)	2,867.8	2,731.2	2,577.5	2,484.3	0.00	-0.02	-0.02
2.1	1.5	0.3	66.8	19.9	12.6	1,367.4	1,322.5	1,285.6	1,313.9	0.05	0.02	0.01
4.2	5.1	3.7	(5.2)	(77.2)	98.9	1,251.3	1,250.2	1,150.1	1,552.1	0.00	-0.06	0.09
2.7	3.0	2.4	13.8	16.7	(114.1)	2,693.6	2,435.0	2,514.2	2,764.9	0.01	0.01	-0.05
2.3	2.3	2.3	54.1	32.6	18.0	1,927.6	1,884.2	1,874.2	1,813.9	0.03	0.02	0.01
1.4	1.4	1.4	156.9	197.8	7.1	4,273.6	4,156.7	4,115.6	4,200.2	0.04	0.05	0.00
2.7	2.7	3.0	88.6	(62.3)	11.8	4,022.1	3,942.4	3,734.3	3,690.5	0.02	-0.02	0.00
4.4	3.7	2.8	1.1	(84.2)	(0.9)	2,513.2	2,418.2	2,280.3	2,319.3	0.00	-0.03	0.00
0.3	0.4	0.3	211.5	46.5	39.2	1,157.2	1,231.0	1,229.8	1,266.6	0.18	0.04	0.03
25.0	22.6	31.9	(173.0)	(159.2)	(39.4)	5,810.6	5,681.7	5,763.2	5,643.4	-0.03	-0.03	-0.01
21.3	11.4	9.8	(9.3)	(1,468.1)	262.9	25,202.5	25,022.9	24,387.5	22,207.3	0.00	-0.06	0.01
12.9	20.4	38.0	503.3	699.2	(327.7)	20,185.8	19,764.5	19,072.1	18,070.4	0.02	0.04	-0.02
8.2	6.8	1.9	52.2	(89.0)	(23.5)	1,319.5	1,253.8	1,026.7	935.8	0.04	-0.07	-0.02
58.8	71.6	84.2	449.7	187.1	(29.6)	15,803.5	15,980.2	15,379.9	23,991.3	0.03	0.01	0.00
8.3	7.6	23.6	(457.4)	2,485.9	(1,890.2)	41,030.5	40,311.3	40,694.9	35,327.8	-0.01	0.06	-0.05
9.6	9.4	10.8	290.4	(882.2)	363.1	4,422.6	4,552.3	4,696.4	3,802.6	0.07	-0.19	0.08
5.8	5.5	5.1	137.9	(31.3)	79.0	3,816.4	3,934.1	3,586.1	3,646.9	0.04	-0.01	0.02
0.8	0.7	1.2	(33.2)	80.4	422.9	2,239.5	2,270.0	2,224.6	2,331.4	-0.01	0.04	0.19
0.5	0.9	1.0	13.9	(84.0)	88.9	2,026.7	1,988.9	1,898.7	2,056.7	0.01	-0.04	0.05
3.9	4.1	4.3	(106.6)	(61.3)	7.1	3,661.2	4,654.1	5,307.7	5,565.5	-0.03	-0.01	0.00
16.2	13.1	10.5	(117.4)	72.6	(41.2)	4,161.2	3,935.8	3,927.2	3,909.3	-0.03	0.02	-0.01
2.2	4.9	5.1	(3.9)	7.0	(2.2)	47.2	74.7	92.5	110.3	-0.08	0.09	-0.02
76.4	24.1	36.5	386.0	38.0	(2,524.6)	32,585.5	33,993.2	33,565.8	23,018.8	0.01	0.00	-0.08
6.3	6.7	6.6	40.6	46.8	458.7	3,251.6	3,113.5	3,190.0	3,218.8	0.01	0.02	0.14
0.6	0.6	0.6	9.6	5.0	(45.7)	485.7	450.7	467.6	464.3	0.02	0.01	-0.10
0.3	1.5	2.0	11.3	(15.6)	8.1	225.7	244.5	308.1	292.1	0.05	-0.06	0.03
0.8	0.9	1.0	17.3	(2.0)	(17.1)	721.3	808.6	804.8	739.2	0.02	0.00	-0.02
2.9	2.8	2.7	37.9	63.9	(29.3)	1,539.7	1,549.0	1,505.7	1,576.8	0.02	0.04	-0.02
0.3	0.3	0.7	47.5	(28.5)	5.0	390.6	403.1	477.8	489.8	0.12	-0.07	0.01
2.7	4.0	3.3	(76.5)	90.4	(26.7)	1,610.7	1,427.2	1,402.8	1,302.6	-0.05	0.06	-0.02
2.2	2.1	1.9	(35.9)	46.9	(4.4)	546.2	524.6	583.4	452.4	-0.07	0.09	-0.01
25.1	25.7	28.1	(31.4)	(127.6)	(8.2)	1,069.6	1,287.6	1,127.6	1,133.9	-0.03	-0.10	-0.01
9.4	12.6	13.3	(822.3)	(99.1)	315.4	3,123.6	2,966.9	2,839.5	2,820.6	-0.26	-0.03	0.11
6.5	5.5	5.0	(87.9)	(31.3)	(39.2)	1,181.9	1,108.3	1,091.0	1,016.6	-0.07	-0.03	-0.04
6.6	6.7	12.6	43.6	(65.9)	(134.1)	1,937.3	1,855.3	1,710.6	2,252.9	0.02	-0.04	-0.08
0.5	0.7	1.1	2.2	1.3	(1.6)	133.3	132.7	147.0	156.7	0.02	0.01	-0.01
0.3	0.3	0.3	(62.3)	16.9	11.0	116.2	19.1	76.7	62.8	-0.54	0.89	0.14
8.5	3.7	4.0	64.9	(145.5)	(85.0)	1,573.3	1,649.9	1,620.4	1,965.7	0.04	-0.09	-0.05
14.3	13.7	13.9	10.9	(16.8)	(25.8)	466.2	363.8	333.8	345.8	0.02	-0.05	-0.08
1.4	1.8	1.4	55.8	(118.7)	52.9	1,041.2	857.4	747.8	674.3	0.05	-0.14	0.07
18.9	17.6	27.4	(65.0)	(10.9)	(17.7)	3,045.6	2,909.2	2,866.2	2,989.1	-0.02	0.00	-0.01
20.0	12.1	6.0	(123.8)	(95.6)	34.8	2,245.5	1,954.1	1,396.6	1,247.5	-0.06	-0.05	0.02
3.6	3.6	4.1	(17.3)	7.7	(5.2)	643.9	643.2	710.7	673.8	-0.03	0.01	-0.01
8.4	7.6	7.6	(227.6)	(28.9)	(596.0)	3,411.3	3,178.9	2,869.0	2,418.8	-0.07	-0.01	-0.21

$1/A(t-1)$			$\Delta(REV)_t$			$\Delta(REC)(t)$			$(\Delta(REV)_t - \Delta(REC)_t)/A(t-1)$		
2017 A	**2018 A**	**2019 A**	**2017 A**	**2018 A**	**2019 A**	**2017 A**	**2018 A**	**2019 A**	**2017 A**	**2018 A**	**2019 A**
0.00	0.00	0.00	58.0	20.0	(11.0)	(743.0)	(76.0)	(28.0)	0.21	0.03	0.01
0.00	0.00	0.00	2,086.2	3,137.2	(1,556.5)	507.1	18.4	831.2	0.14	0.26	(0.15)
0.00	0.00	0.00	(48.6)	21.5	(35.6)	(5.7)	(11.8)	(19.7)	(0.02)	0.02	(0.01)
0.00	0.00	0.00	(215.7)	(258.6)	(133.8)	61.7	42.7	73.0	(0.22)	(0.26)	(0.22)
0.00	0.00	0.00	(30.3)	30.0	(47.5)	2.0	22.0	(0.6)	(0.05)	0.01	(0.07)
0.00	0.00	0.00	61.8	(126.4)	(154.0)	103.9	(118.1)	17.0	(0.01)	(0.00)	(0.03)
0.00	0.00	0.00	(53.9)	(25.1)	8.4	(23.1)	(18.5)	3.3	(0.03)	(0.01)	0.00
0.00	0.00	0.00	95.8	59.0	(65.2)	66.7	(20.7)	(3.4)	0.01	0.02	(0.02)
0.00	0.00	0.00	23.5	(5.0)	(17.2)	13.0	(6.9)	(10.0)	0.02	0.00	(0.01)
0.00	0.00	0.00	(0.4)	6.5	(29.7)	(5.3)	(0.9)	(11.1)	0.01	0.02	(0.05)
0.00	0.00	0.00	37.2	(53.1)	(29.3)	7.9	34.9	18.8	0.02	(0.05)	(0.02)
0.00	0.00	0.00	(299.9)	(434.8)	(418.3)	(13.1)	(487.9)	(191.0)	(0.08)	0.02	(0.08)
0.00	0.00	0.00	######	(317.7)	7.6	(560.5)	(83.6)	17.1	(0.07)	(0.03)	(0.00)
0.00	0.00	0.00	(32.4)	(600.3)	(204.5)	258.9	(460.0)	15.9	(0.02)	(0.01)	(0.01)
0.00	0.00	0.00	21.5	(42.9)	17.2	(0.8)	(18.7)	24.7	0.02	(0.02)	(0.01)
0.00	0.00	0.00	(45.8)	1,162.5	(695.2)	73.3	(878.3)	18.0	(0.00)	0.06	(0.02)
0.00	0.00	0.00	(110.8)	(185.6)	(145.1)	52.5	49.3	25.7	(0.04)	(0.06)	(0.05)
0.00	0.00	0.00	(86.0)	(37.2)	(73.2)	8.7	32.4	27.7	(0.02)	(0.02)	(0.02)
0.00	0.00	0.00	(585.9)	116.3	491.6	43.5	38.2	220.9	(0.06)	0.01	0.03
0.00	0.00	0.00	(695.7)	(38.8)	(6.2)	(198.6)	(26.1)	7.4	(0.24)	(0.01)	(0.01)
0.00	0.00	0.00	(60.3)	(71.2)	(18.5)	44.2	(62.6)	(37.5)	(0.00)	(0.00)	0.00
0.00	0.00	0.00	3,647.6	5,783.0	(708.6)	(48.8)	222.0	(1,032.6)	0.33	0.45	0.02
0.00	0.00	0.00	2,155.7	3,782.2	818.2	613.6	(5.2)	369.1	0.20	0.32	0.03
0.01	0.01	0.01	260.7	130.8	(10.8)	(1.7)	(5.4)	0.9	0.12	0.06	(0.00)
0.04	0.05	0.04	1.6	13.6	6.5	(32.6)	(20.0)	3.2	0.03	0.03	0.00
0.07	0.07	0.07	(13.3)	46.0	113.8	10.4	5.4	3.2	(0.01)	0.02	0.05
0.00	0.00	0.00	51.5	20.2	31.7	3.9	(2.1)	0.9	0.09	0.04	0.05
0.00	0.00	0.00	(0.9)	(0.4)	(3.3)	(2.3)	(3.4)	(2.3)	0.01	0.02	(0.01)
0.01	0.01	0.01	0.5	0.1	(0.0)	0.2	0.3	0.2	0.02	(0.01)	(0.01)
0.00	0.01	0.01	6.2	1.5	(0.5)	0.1	0.6	(0.1)	0.42	0.06	(0.03)
0.01	0.01	0.02	188.0	53.6	118.1	26.1	(9.4)	24.1	0.14	0.04	0.04
0.08	0.08	0.08	12.3	26.4	(4.4)	10.7	26.1	6.8	0.00	0.00	(0.01)
0.01	0.01	0.01	2.4	(0.4)	(0.4)	0.0	0.9	0.2	0.01	(0.01)	(0.00)
0.02	0.01	0.01	(20.7)	19.1	(6.9)	(2.5)	12.2	7.7	(0.09)	0.04	(0.07)
0.02	0.02	0.02	(0.9)	(2.9)	0.8	0.0	0.3	(0.2)	(0.01)	(0.05)	0.02
0.00	0.00	0.00	(0.2)	(0.2)	(1.0)	0.1	0.3	0.2	(0.02)	(0.04)	(0.09)
0.01	0.01	0.01	13.6	4.8	(36.9)	0.8	(3.0)	(8.6)	0.09	0.05	(0.20)
0.00	0.00	0.00	28.3	19.5	(12.2)	9.7	(2.4)	0.7	0.32	0.32	(0.18)
0.02	0.02	0.02	(0.6)	(1.7)	0.7	1.4	(0.3)	0.0	(0.05)	(0.03)	0.02
0.03	0.03	0.02	(47.8)	(3.9)	(40.3)	(28.0)	13.3	(58.4)	(0.04)	(0.04)	0.04
0.02	0.02	0.03	0.7	4.6	2.5	(0.5)	1.3	0.1	0.02	0.04	0.03
0.04	0.04	0.05	29.5	217.9	(97.0)	(5.5)	8.1	9.3	0.12	0.71	(0.32)
0.02	0.02	0.02	(5.2)	(1.0)	1.1	0.5	(0.7)	0.2	(0.09)	(0.00)	0.01
0.01	0.01	0.01	3.2	3.7	1.7	1.6	(3.8)	4.4	0.05	0.19	(0.06)
0.00	0.00	0.00	(5.1)	(1.5)	(0.6)	(0.0)	(3.0)	0.7	(0.10)	0.03	(0.04)
0.01	0.01	0.01	(1.3)	(0.3)	(0.2)	0.3	(2.5)	0.1	(0.06)	0.10	(0.01)
0.03	0.04	0.05	(0.2)	0.4	(0.1)	(0.7)	–	(0.0)	0.01	0.01	(0.00)
0.01	0.01	0.01	7.3	7.5	4.0	2.5	1.1	1.4	0.06	0.06	0.02
0.01	0.01	0.01	47.4	30.0	(62.1)	37.4	(42.1)	18.8	0.04	0.22	(0.28)
0.01	0.01	0.01	39.6	11.2	(5.0)	(0.3)	(13.2)	21.3	0.27	0.15	(0.15)
0.02	0.02	0.01	(6.0)	(3.1)	(0.8)	(1.4)	(0.8)	1.8	(0.15)	(0.08)	(0.12)
0.01	0.01	0.01	(27.5)	21.3	(13.6)	(8.2)	(0.0)	(1.0)	(0.11)	0.12	(0.07)
0.00	0.00	0.00	5.1	20.2	(20.7)	5.8	(6.1)	1.0	(0.01)	0.28	(0.24)
0.01	0.01	0.01	(1.3)	1.9	(12.3)	2.1	(4.1)	(1.6)	(0.03)	0.04	(0.08)
0.03	0.01	0.02	0.8	(0.3)	(0.3)	0.6	0.3	0.1	0.01	(0.01)	(0.01)
0.04	0.04	0.04	20.8	0.6	10.1	4.7	(6.8)	13.0	0.08	0.04	(0.02)
0.00	0.00	0.00	(70.5)	(3.0)	15.1	6.6	(18.0)	14.0	(0.19)	0.04	0.00
0.00	0.00	0.00	9.2	2.2	(12.4)	1.5	(1.8)	(1.6)	0.08	0.04	(0.11)
0.01	0.01	0.01	27.9	37.5	(14.2)	20.6	(5.4)	6.0	0.19	0.62	(0.30)
0.00	0.00	0.00	0.6	(0.3)	(0.0)	0.0	0.0	0.1	0.03	(0.01)	(0.01)
0.00	0.00	0.00	173.0	143.2	28.4	61.2	34.3	(6.6)	0.07	0.06	0.02
0.00	0.00	0.00	(1.3)	(1.0)	(14.4)	1.0	(1.8)	(5.4)	(0.01)	0.00	(0.03)
0.00	0.00	0.00	4.1	7.8	(4.7)	(1.3)	(0.2)	(0.4)	0.05	0.07	(0.04)
0.00	0.00	0.00	15.1	3.0	2.8	7.6	3.8	–	0.02	(0.00)	0.01
0.00	0.00	0.00	(51.8)	1,767.0	504.6	64.0	45.1	(38.0)	(0.08)	0.96	0.16
0.00	0.00	0.00	(691.0)	191.8	377.7	523.3	(75.1)	631.5	(0.06)	0.01	(0.01)
0.00	0.00	0.00	9,064.9	6,787.2	(6,936.2)	177.3	(146.6)	(81.7)	0.15	0.11	(0.11)
0.00	0.00	0.00	2,622.1	2,084.8	3,565.5	612.1	322.4	894.9	0.02	0.02	0.03
0.00	0.00	0.00	37.7	9.7	(70.6)	13.5	(3.0)	1.5	0.04	0.02	(0.10)
0.00	0.00	0.00	(113.3)	(41.8)	189.5	(1.0)	(17.0)	21.7	(0.19)	(0.04)	0.30
0.00	0.00	0.00	47.2	18.4	(174.4)	(7.4)	(6.3)	(57.9)	0.02	0.01	(0.05)
0.00	0.00	0.00	91.7	(50.2)	25.3	62.7	(0.2)	38.6	0.02	(0.04)	(0.01)
0.00	0.00	0.00	1,297.3	1,566.6	(1,495.7)	547.6	(69.2)	(134.8)	0.03	0.08	(0.06)
0.00	0.00	0.00	6,767.1	19,362.4	(29,391.0)	2,717.1	(782.3)	(5,228.8)	0.01	0.06	(0.08)
0.00	0.00	0.00	(96.5)	1,100.4	(572.3)	(131.4)	231.8	33.2	0.00	0.10	(0.06)
0.00	0.00	0.00	(185.1)	113.3	(154.3)	(38.4)	62.1	(66.2)	(0.06)	0.02	(0.04)
0.00	0.00	0.00	(285.0)	(67.8)	138.0	(5.2)	(19.0)	3.4	(0.10)	(0.02)	0.05
0.00	0.00	0.00	(107.6)	31.4	78.4	(5.2)	(2.1)	6.1	(0.07)	0.03	0.06
0.00	0.00	0.00	(398.3)	(370.2)	79.8	(20.2)	(8.0)	36.5	(0.30)	(0.29)	0.04
0.00	0.00	0.00	(216.0)	(74.9)	163.1	(70.4)	15.7	5.0	(0.05)	(0.04)	0.06
0.00	0.00	0.00	(79.9)	(17.2)	89.2	(12.7)	(0.6)	0.9	(0.03)	(0.01)	0.05
0.00	0.00	0.00	(712.2)	(176.1)	412.6	(8.0)	(0.2)	4.1	(0.16)	(0.04)	0.10
0.00	0.00	0.00	(369.7)	(149.5)	208.6	(12.0)	12.5	4.9	(0.09)	(0.04)	0.05
0.00	0.00	0.00	(54.0)	(128.2)	32.1	68.6	(41.8)	5.6	(0.05)	(0.04)	0.01
0.00	0.00	0.00	153.2	(28.8)	91.5	4.9	1.1	–	0.13	(0.02)	0.07
0.00	0.00	0.00	(525.4)	(90.2)	(35.4)	468.7	134.2	(109.6)	(0.17)	(0.04)	0.01
0.00	0.00	0.00	1,297.3	1,566.6	(1,495.7)	550.6	(65.9)	(134.0)	0.03	0.07	(0.06)
0.00	0.00	0.00	990.3	407.6	(1,563.6)	726.4	(517.3)	(351.9)	0.01	0.05	(0.06)
0.00	0.00	0.00	38.6	25.6	(14.3)	(16.3)	(45.0)	(25.2)	0.04	0.06	0.01
0.00	0.00	0.00	944.5	576.3	403.9	258.3	(219.4)	182.4	0.04	0.05	0.01
0.00	0.00	0.00	1,375.1	2,279.2	(2,726.8)	(0.3)	265.5	(288.7)	0.03	0.05	(0.06)
0.00	0.00	0.00	245.2	363.7	(153.7)	(30.4)	(25.7)	30.5	0.06	0.09	(0.04)
0.00	0.00	0.00	(351.2)	(305.0)	181.2	88.0	(49.2)	14.5	(0.12)	(0.07)	0.05
0.00	0.00	0.00	(66.5)	(190.5)	186.5	1.8	(14.6)	(1.7)	(0.03)	(0.08)	0.08
0.00	0.00	0.00	(226.1)	(200.2)	366.1	(19.0)	(48.6)	(7.4)	(0.10)	(0.08)	0.20
0.00	0.00	0.00	(377.0)	(226.8)	280.7	(33.4)	(20.5)	39.9	(0.09)	(0.04)	0.05
0.00	0.00	0.00	(593.6)	(65.0)	322.1	(22.1)	73.2	58.2	(0.14)	(0.04)	0.07
0.02	0.01	0.01	(10.5)	7.5	39.0	(1.0)	5.6	3.1	(0.20)	0.03	0.39
0.00	0.00	0.00	2,176.9	(7,731.1)	(46.4)	644.5	(75.8)	(1,068.7)	0.05	(0.23)	0.03
0.00	0.00	0.00	(288.2)	(70.1)	280.8	(28.9)	(23.8)	(5.8)	(0.08)	(0.01)	0.09
0.00	0.00	0.00	(39.3)	17.4	9.0	(6.9)	10.7	1.6	(0.07)	0.01	0.02
0.00	0.00	0.00	(11.5)	10.0	0.6	(5.0)	9.6	16.0	(0.03)	0.00	(0.05)
0.00	0.00	0.00	16.1	(18.2)	(22.3)	15.3	9.8	(7.7)	0.00	(0.03)	(0.02)
0.00	0.00	0.00	136.6	62.6	(142.5)	35.3	(52.7)	3.0	0.07	0.07	(0.10)
0.00	0.00	0.00	103.1	66.2	31.3	42.3	11.3	(18.8)	0.16	0.14	0.10
0.00	0.00	0.00	145.8	25.7	(98.4)	25.3	(5.4)	(14.4)	0.07	0.02	(0.06)
0.00	0.00	0.00	20.4	97.7	(127.9)	11.1	17.0	(18.6)	0.02	0.15	(0.19)
0.00	0.00	0.00	194.7	138.7	42.8	87.6	(18.9)	(81.5)	0.10	0.12	0.11
0.00	0.00	0.00	54.2	1.2	70.2	(9.5)	27.7	(141.3)	0.02	(0.01)	0.07
0.00	0.00	0.00	(14.9)	(163.9)	(128.3)	52.7	(4.0)	49.3	(0.06)	(0.14)	(0.16)
0.00	0.00	0.00	(189.9)	(175.3)	281.8	(18.6)	(31.9)	94.9	(0.09)	(0.08)	0.11
0.01	0.01	0.01	(14.8)	(6.2)	(0.8)	5.1	(1.1)	3.2	(0.15)	(0.04)	(0.03)
0.01	0.05	0.01	18.6	99.1	(37.7)	(61.5)	15.8	2.4	0.69	4.37	(0.52)
0.00	0.00	0.00	27.1	(362.7)	435.4	198.8	(63.5)	174.5	(0.11)	0.18	0.16
0.00	0.00	0.00	(129.3)	(46.4)	4.7	(34.9)	(9.0)	8.8	(0.20)	(0.10)	(0.01)
0.00	0.00	0.00	(84.3)	(83.3)	(123.7)	(16.0)	(60.2)	(64.0)	(0.07)	(0.03)	(0.08)
0.00	0.00	0.00	(163.8)	(111.7)	207.0	45.8	12.8	58.8	(0.07)	(0.04)	0.05
0.00	0.00	0.00	(222.1)	(477.5)	(483.8)	(134.8)	(133.6)	(59.4)	(0.04)	(0.18)	(0.30)
0.00	0.00	0.00	17.1	16.6	19.9	(4.0)	13.6	(6.6)	0.03	0.00	0.04
0.00	0.00	0.00	(571.7)	155.3	(167.2)	(151.1)	236.4	(150.7)	(0.12)	(0.03)	(0.01)

4   term3

(PPE)(t) / A (t-1)			FD			FP			FL		
2018 A	2019 A	2016 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2017 A	2018 A
0.66	0.63	0.77	(0.0)	(0.1)	(0.0)	0.409	(0.6)	0.7	0	1	0
0.73	0.74	0.61	3.1	0.1	(0.4)	(0.0)	0.0	0.0	0	0	0
0.52	0.54	0.57	0.0	(0.0)	(0.1)	(0.2)	(0.4)	0.5	0	1	0
0.44	0.46	0.57	(0.7)	1.7	0.0	0.1	(0.4)	0.2	0	1	1
1.33	1.30	1.29	0.1	(0.0)	0.0	(0.1)	0.2	(0.4)	1	0	1
0.67	0.65	0.67	(0.1)	0.0	0.1	0.1	(0.0)	(0.0)	0	0	0
0.67	0.75	0.79	(0.0)	(0.1)	(0.1)	(0.0)	(0.1)	0.0	0	0	0
1.00	1.04	1.11	(0.1)	(0.1)	0.1	0.1	0.0	(0.0)	0	0	0
0.64	0.61	0.63	0.3	0.1	0.4	(0.3)	(0.4)	(0.2)	1	1	1
1.24	1.34	1.54	(0.3)	(0.1)	0.1	0.0	0.1	0.0	0	0	0
1.00	1.07	1.00	(0.0)	0.2	0.0	(0.0)	(0.1)	(0.0)	0	0	0
0.59	0.59	0.07	0.1	0.7	1.1	(0.1)	(0.9)	(0.8)	0	1	1
0.06	0.07	0.07	(0.2)	0.0	(0.0)	0.1	0.0	(0.1)	0	0	0
0.76	0.71	0.62	(0.1)	(0.0)	0.0	0.0	0.1	0.0	0	0	0
0.06	0.05	0.06	(1.9)	0.3	(0.1)	(0.0)	(0.0)	(0.0)	0	0	0
0.19	0.20	0.19	(0.0)	(0.0)	0.0	0.1	0.2	(0.4)	0	0	0
1.13	1.11	1.15	0.0	(0.1)	(0.0)	(0.1)	0.1	(0.2)	0	0	0
0.62	0.62	0.62	(0.1)	(0.0)	(0.0)	0.0	(0.0)	(0.1)	0	0	0
0.95	1.02	1.02	(0.1)	0.1	0.1	0.0	(0.1)	0.1	0	1	0
0.49	0.57	0.62	0.0	0.1	0.2	0.3	0.0	(0.2)	0	0	0
0.30	0.36	0.39	(0.2)	(0.2)	(0.0)	(0.1)	0.0	0.0	0	0	0
0.27	0.34	0.35	0.1	(0.0)	(0.2)	(0.0)	(0.0)	0.0	0	0	0
0.17	0.14	0.13	1.3	0.7	0.1	(0.0)	(0.0)	(0.0)	0	0	0
0.62	0.66	0.64	0.0	0.1	0.1	(0.0)	(0.0)	0.0	0	0	0
0.98	1.05	1.10	(0.0)	0.0	0.1	0.0	0.0	(0.0)	0	0	0
0.51	0.51	0.54	(0.0)	(0.1)	0.0	0.0	0.0	(0.0)	0	0	0
0.13	0.11	0.12	0.1	0.0	(0.3)	0.0	(0.0)	(0.0)	0	0	0
0.83	0.91	0.96	0.7	0.8	1.1	(1.0)	0.7	(0.2)	1	1	1
0.76	0.80	0.71	(0.0)	0.1	(0.0)	0.6	(0.5)	0.1	0	0	0
0.83	0.90	0.94	0.0	0.0	0.0	0.1	0.0	(0.0)	1	0	1
2.16	1.81	1.53	0.4	0.5	0.2	0.0	(0.0)	(0.1)	0	0	0
0.77	0.77	0.84	0.1	(0.1)	0.1	(0.1)	0.1	0.0	0	0	0
0.20	0.20	0.07	(0.0)	(0.0)	0.0	(0.1)	0.0	0.0	0	0	0
0.91	0.98	1.09	(0.0)	0.1	0.4	(0.1)	(0.1)	0.0	0	0	0
0.71	0.72	0.90	0.1	0.1	0.1	(0.0)	0.0	0.0	1	1	0
1.13	1.06	1.11	0.1	(0.0)	(0.0)	(0.1)	(0.0)	(0.0)	0	0	0
0.51	0.50	0.53	0.0	(0.1)	(0.1)	(0.0)	0.0	(0.0)	0	0	0
0.69	0.60	0.58	0.1	0.1	(0.0)	(0.0)	(0.0)	(0.0)	0	0	0
0.88	0.90	0.95	(0.0)	(0.0)	0.0	0.0	(0.0)	0.1	0	0	0
0.54	0.57	0.56	(0.0)	0.1	(1.8)	0.0	0.0	(0.1)	1	0	1
1.07	1.08	0.99	0.2	0.3	0.3	(0.2)	0.0	(0.2)	0	0	1
0.19	0.18	0.18	(0.3)	0.4	(0.4)	0.0	0.0	0.0	0	0	0
1.10	1.12	1.15	0.0	0.0	0.0	(0.8)	(0.3)	0.5	1	1	1
0.84	0.77	0.68	(0.0)	(0.0)	(0.0)	0.0	0.0	0.0	0	0	0
0.25	0.16	0.25	0.1	(0.2)	(0.1)	1.4	0.4	(1.1)	1	0	1
0.44	0.45	0.53	(0.3)	(0.2)	0.2	0.5	(0.2)	(1.5)	0	1	1
0.17	0.17	0.18	(0.0)	0.0	0.0	4.6	(2.4)	(0.1)	0	0	0
0.73	0.71	0.64	(0.0)	(0.1)	(0.2)	0.0	0.0	0.0	0	0	0
0.33	0.27	0.30	1.3	(1.1)	0.1	0.0	0.0	0.0	0	0	0
0.85	0.88	0.82	(0.0)	0.0	(0.2)	(0.0)	0.0	0.0	0	0	0
0.64	0.72	0.93	0.6	0.2	(0.1)	(0.3)	0.1	0.4	1	1	1
0.23	0.23	0.25	(0.1)	(0.1)	(0.1)	0.1	(0.0)	(0.0)	0	0	0
0.45	0.45	0.52	0.2	(0.1)	(0.1)	0.0	(0.0)	(0.0)	0	0	0
0.36	0.40	0.28	(0.0)	(0.1)	0.2	0.0	(0.0)	(0.1)	0	0	0
0.03	0.02	0.01	(0.1)	(0.0)	0.2	0.1	0.0	(0.0)	0	0	0
0.70	0.68	0.74	(0.7)	(0.0)	0.9	0.1	(0.1)	(0.1)	0	0	1
0.34	0.18	0.62	0.2	(0.7)	1.0	0.2	(0.1)	(0.1)	0	0	0
1.38	1.49	1.46	(0.3)	(0.2)	(0.0)	0.0	0.1	(0.1)	0	0	0
0.76	0.46	0.49	1.2	(0.3)	(0.4)	(0.0)	0.0	0.0	0	0	0
0.21	0.20	0.20	(0.0)	0.0	(0.0)	0.1	0.0	(0.2)	0	0	0
0.35	0.29	0.27	0.1	0.0	0.1	0.0	0.0	(0.0)	0	0	0
0.93	0.93	0.95	(0.0)	0.0	(0.1)	(0.0)	(0.1)	(0.0)	0	0	0
0.98	1.02	1.07	0.0	(0.0)	0.0	0.1	0.0	0.0	0	0	0
0.00	0.00	0.00	0.0	(0.0)	(0.0)	34.1	0.3	0.0	0	0	0
1.01	1.87	1.02	0.3	2.6	(1.2)	(0.0)	(0.0)	0.0	0	0	0
1.08	1.09	1.04	0.1	0.0	(0.0)	(0.1)	(0.1)	0.0	0	0	0
1.08	1.06	1.27	(0.8)	(0.0)	1.3	0.0	(0.0)	(0.0)	0	0	1
0.98	0.99	1.00	(0.1)	(0.1)	(0.3)	0.1	0.1	(0.2)	0	0	1
0.95	1.16	1.32	0.0	(0.0)	0.0	(0.0)	(0.0)	(0.0)	0	0	0
0.48	0.51	0.52	(0.0)	0.0	0.1	(0.1)	(0.0)	0.0	0	0	0
1.40	1.45	1.58	0.0	(0.2)	(0.0)	0.1	0.1	(0.2)	1	0	1
0.86	0.89	0.94	(0.1)	0.4	0.1	0.1	(0.3)	0.2	0	1	1
0.92	0.95	0.98	(0.4)	(0.5)	(0.4)	0.1	0.0	(0.1)	0	0	0
1.09	1.09	1.16	(0.0)	(0.1)	(0.2)	0.0	0.0	(0.1)	0	0	0
1.24	1.29	1.20	(0.0)	(0.0)	0.0	(0.0)	0.1	(0.0)	0	0	0
0.81	0.87	0.93	0.4	0.1	0.2	(0.1)	0.1	(0.1)	1	1	1
1.08	1.14	1.21	(0.0)	(0.0)	(0.1)	(0.3)	(0.2)	0.4	1	1	0
0.89	0.93	0.96	(0.0)	(0.0)	(0.0)	(0.3)	(0.2)	0.3	0	1	0
0.62	0.63	0.72	0.0	(0.0)	0.8	(0.0)	(0.1)	(0.0)	0	1	1
1.20	1.32	1.28	(0.1)	0.0	0.0	(0.1)	(0.0)	0.1	0	0	0
1.25	1.27	1.28	(0.0)	(0.0)	(0.1)	(0.4)	(0.5)	0.8	1	1	0
1.54	1.60	1.62	(0.0)	(0.0)	(0.0)	(0.1)	(0.1)	0.1	0	0	0
1.61	1.49	1.59	0.0	0.0	(0.0)	(0.1)	(0.2)	0.1	0	0	0
0.54	0.97	1.06	(0.1)	0.0	0.0	(0.1)	(0.4)	0.3	0	1	0
0.94	0.89	0.90	(0.1)	(0.0)	(0.2)	0.6	(0.3)	0.3	0	0	0
0.53	0.54	0.55	(0.0)	0.7	0.3	(0.0)	(0.0)	(0.0)	0	1	1
0.81	0.82	0.84	(0.4)	(0.3)	(0.3)	0.2	(0.0)	(0.0)	0	0	0
1.03	1.09	1.16	(0.1)	(0.1)	0.0	(0.0)	(0.0)	(0.1)	0	0	0
1.12	1.14	1.41	0.5	5.8	2.6	0.1	(0.1)	0.2	1	1	1
1.03	1.06	1.43	(0.2)	(0.2)	(0.8)	0.1	0.0	(0.1)	0	0	0
1.13	1.16	1.16	(0.2)	(0.3)	(0.2)	0.0	0.1	(0.2)	0	0	1
0.80	0.84	0.81	0.0	(0.0)	(0.3)	(0.1)	(0.0)	0.0	0	0	0
1.37	1.35	1.51	0.2	(0.0)	(0.0)	(0.1)	(0.4)	0.3	0	1	0
1.06	1.00	1.03	(0.0)	(0.0)	(0.0)	(0.2)	0.2	0.0	0	0	0
1.15	1.18	1.25	(0.0)	0.0	0.0	(0.1)	(0.1)	0.2	0	0	0
1.85	1.66	1.55	0.3	0.2	(0.0)	(0.2)	(0.2)	0.4	0	1	0
1.81	1.93	1.98	0.1	0.0	0.0	(0.1)	(0.0)	(0.0)	0	0	0
1.02	0.82	0.66	(0.1)	0.0	(0.1)	0.0	0.0	(0.0)	0	0	0
0.57	0.47	0.20	(0.4)	(0.5)	(0.7)	0.1	0.0	(0.4)	0	0	1
0.75	0.80	0.80	(0.1)	0.0	(0.1)	(0.1)	(0.1)	0.1	0	0	0
1.42	1.60	1.59	(0.0)	(0.0)	0.0	(0.5)	0.6	(0.0)	1	0	0
1.08	0.04	1.04	0.1	0.4	0.1	(0.0)	(0.1)	(0.1)	0	1	1
0.72	0.64	0.58	(0.0)	(0.0)	0.0	0.3	(0.2)	(0.7)	0	0	1
1.14	1.18	1.31	(0.1)	(0.1)	0.2	(0.1)	(0.0)	(0.1)	0	0	0
0.73	0.81	0.73	(0.6)	0.3	(0.3)	(0.1)	(0.0)	0.0	0	0	0
1.33	1.51	1.68	(0.6)	(1.0)	0.0	1.8	0.1	(0.1)	1	0	0
0.91	0.94	0.86	0.1	0.2	(0.1)	(0.1)	0.1	(0.3)	1	0	1
0.74	0.62	0.75	0.3	0.2	(0.1)	(0.0)	(0.2)	0.2	0	1	0
0.45	0.47	0.63	(0.1)	0.3	(0.4)	0.1	(0.0)	0.0	0	0	0
0.49	0.54	0.56	(0.1)	0.1	0.0	0.0	(0.1)	(0.1)	0	0	1
0.46	0.52	0.89	(0.2)	0.6	0.8	(0.0)	(0.2)	0.1	0	1	0
0.59	0.57	0.56	(0.1)	0.2	0.1	(0.0)	(0.0)	(0.0)	0	0	0
0.04	0.27	0.08	0.6	(0.6)	0.0	17.1	5.8	(0.2)	1	0	1
0.54	0.44	0.45	(0.1)	0.1	0.3	(0.0)	(0.0)	(0.0)	0	0	0
1.13	1.45	1.61	(0.2)	(0.1)	0.1	(0.1)	(0.1)	0.0	0	0	0
0.51	0.62	0.72	(0.4)	0.1	(0.1)	(0.1)	(0.2)	0.1	0	1	1
1.19	1.39	1.44	0.1	0.2	0.1	(0.1)	(0.1)	0.2	1	1	0
0.89	0.76	1.05	1.8	(0.7)	4.6	0.1	(0.0)	(0.1)	1	1	1
0.53	0.56	0.53	0.0	0.0	(0.0)	0.1	0.1	(0.0)	1	0	0
0.44	0.45	0.50	(0.2)	1.0	2.9	0.0	(0.1)	(0.2)	1	1	1

	Coefficient
α1	-0.348
α2	0.12
α3	-0.017

Result Step 3

α1 1 / A (t-1)			α2 (Δ(REV)_t – Δ(REC)_t) / A (t-1)			α3 (PPE)(t) / A (t-1)			DACC - ε t			NDACC		
2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
(0.00)	(0.00)	(0.00)	0.03	0.00	0.00	(0.01)	(0.01)	(0.01)	(0.20)	0.12	(0.13)	0.01	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	0.02	0.03	(0.02)	(0.01)	(0.01)	(0.01)	(0.14)	(0.24)	0.06	0.00	0.02	(0.03)
(0.00)	(0.00)	(0.00)	(0.00)	0.00	(0.00)	(0.01)	(0.01)	(0.01)	(0.08)	0.10	0.01	(0.01)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	(0.03)	(0.03)	(0.03)	(0.01)	(0.01)	(0.01)	0.14	(0.16)	0.04	(0.03)	(0.04)	(0.04)
(0.00)	(0.00)	(0.00)	(0.01)	0.00	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)	0.03	(0.07)	(0.03)	(0.02)	(0.03)
(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	0.02	(0.03)	(0.04)	(0.01)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	0.00	0.00	(0.00)	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.01)	(0.02)	(0.01)	(0.02)
(0.00)	(0.00)	(0.00)	0.00	0.00	(0.00)	(0.01)	(0.01)	(0.01)	(0.03)	(0.02)	0.10	(0.01)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	0.00	0.00	(0.01)	(0.02)	(0.02)	(0.03)	(0.01)	0.03	(0.01)	(0.02)	(0.02)	(0.03)
(0.00)	(0.00)	(0.00)	0.00	(0.01)	0.00	(0.02)	(0.02)	(0.02)	(0.04)	0.01	(0.02)	(0.02)	(0.02)	(0.02)
(0.00)	(0.00)	(0.00)	(0.01)	0.00	(0.01)	(0.01)	(0.01)	(0.01)	0.01	(0.33)	(0.04)	(0.02)	(0.01)	(0.02)
(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.04)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)
(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	0.00	(0.03)	(0.01)	(0.02)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	0.00	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.12)	(0.05)	0.03	(0.00)	(0.00)	(0.00)
(0.00)	(0.00)	(0.00)	(0.00)	0.01	(0.00)	(0.00)	(0.00)	(0.00)	0.00	0.05	(0.00)	(0.00)	(0.00)	(0.01)
(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)	(0.02)	(0.04)	0.01	0.06	(0.02)	(0.03)	(0.03)
(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.01)	(0.02)	(0.01)	0.05	0.02	(0.01)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	(0.01)	0.00	0.00	(0.02)	(0.02)	(0.02)	0.00	0.01	(0.03)	(0.02)	(0.02)	(0.02)
(0.00)	(0.00)	(0.00)	(0.03)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	0.02	0.04	(0.04)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	0.04	0.05	0.00	(0.00)	(0.01)	(0.01)	(0.07)	(0.09)	(0.05)	(0.01)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	0.02	0.04	0.00	(0.00)	(0.00)	(0.00)	(0.14)	(0.09)	0.01	0.03	0.05	(0.00)
(0.00)	(0.00)	(0.00)	0.01	0.01	(0.00)	(0.01)	(0.01)	(0.01)	(0.10)	(0.02)	(0.04)	0.02	0.04	0.00
(0.00)	(0.00)	(0.00)	0.00	0.00	0.00	(0.02)	(0.02)	(0.02)	(0.05)	(0.05)	(0.01)	0.00	(0.00)	(0.01)
(0.00)	(0.00)	(0.00)	(0.00)	0.00	0.01	(0.01)	(0.01)	(0.01)	(0.06)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)
(0.00)	(0.00)	(0.00)	0.01	0.00	0.01	(0.00)	(0.00)	(0.00)	0.03	0.05	(0.00)	(0.01)	(0.01)	(0.00)
(0.02)	(0.02)	(0.01)	0.00	0.00	(0.00)	(0.01)	(0.02)	(0.02)	(0.04)	(0.02)	(0.05)	(0.02)	(0.02)	(0.02)
(0.02)	(0.03)	(0.02)	0.05	0.01	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	0.00	0.02	(0.03)	(0.03)	(0.03)
(0.00)	(0.00)	(0.00)	0.02	0.00	0.01	(0.04)	(0.03)	(0.03)	0.03	(0.03)	(0.06)	0.01	(0.03)	(0.04)
(0.00)	(0.00)	(0.00)	0.00	0.00	(0.00)	(0.01)	(0.01)	(0.01)	(0.03)	(0.02)	(0.27)	(0.02)	(0.03)	(0.02)
(0.00)	(0.00)	(0.00)	0.00	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	0.02	0.00	(0.01)	(0.01)	(0.02)
(0.00)	(0.00)	(0.00)	(0.01)	0.00	(0.01)	(0.02)	(0.02)	(0.02)	0.02	0.01	(0.09)	(0.00)	(0.01)	(0.00)
(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	0.00	(0.01)	(0.01)	(0.01)	(0.03)	(0.07)	(0.04)	(0.03)	(0.01)	(0.03)
(0.03)	(0.03)	(0.03)	(0.00)	(0.00)	(0.01)	(0.02)	(0.02)	(0.02)	(0.05)	0.00	0.04	(0.05)	(0.05)	(0.06)
(0.00)	(0.00)	(0.00)	0.01	0.01	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.05)	0.05	(0.00)	(0.00)	(0.04)
(0.01)	(0.01)	(0.00)	0.04	0.04	(0.02)	(0.01)	(0.01)	(0.01)	0.07	(0.23)	(0.01)	0.02	0.02	(0.04)
(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	0.00	(0.01)	(0.02)	(0.02)	0.11	0.06	(0.01)	(0.03)	(0.03)	(0.02)
(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	0.01	(0.01)	(0.01)	(0.01)	(0.06)	0.07	(0.08)	(0.01)	(0.02)	(0.01)
(0.00)	(0.00)	(0.00)	0.00	0.00	0.00	(0.02)	(0.02)	(0.02)	(0.00)	(0.01)	(0.04)	(0.02)	(0.02)	(0.02)
(0.00)	(0.00)	(0.00)	0.01	0.09	(0.04)	(0.00)	(0.00)	(0.00)	(0.01)	(0.19)	0.17	0.01	0.08	(0.04)
(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	0.00	(0.02)	(0.02)	(0.02)	0.00	(0.01)	(0.01)	(0.03)	(0.02)	(0.02)
(0.01)	(0.01)	(0.01)	0.01	0.02	(0.01)	(0.01)	(0.01)	(0.01)	0.03	0.09	0.08	(0.02)	0.00	(0.03)
(0.01)	(0.02)	(0.02)	(0.01)	0.01	(0.00)	(0.01)	(0.01)	(0.01)	0.02	0.11	(0.02)	(0.03)	(0.01)	(0.03)
(0.01)	(0.01)	(0.01)	0.00	0.00	(0.00)	(0.01)	(0.01)	(0.01)	(0.16)	0.02	(0.05)	(0.01)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	0.01	0.01	0.00	(0.01)	(0.00)	(0.01)	(0.00)	0.02	(0.03)	(0.01)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	0.00	0.03	(0.03)	(0.01)	(0.01)	(0.02)	(0.15)	(0.07)	0.02	0.02	0.00	(0.03)
(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.11)	(0.00)	0.06	(0.04)	(0.03)	(0.05)
(0.00)	(0.00)	(0.00)	(0.01)	0.01	(0.01)	(0.00)	(0.00)	(0.00)	0.08	0.03	(0.01)	(0.02)	0.01	(0.01)
(0.00)	(0.00)	(0.00)	(0.00)	0.03	(0.03)	(0.01)	(0.01)	(0.01)	(0.07)	(0.03)	0.04	(0.01)	0.02	(0.04)
(0.01)	(0.01)	(0.00)	0.00	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	0.02	(0.11)	0.06	(0.01)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	0.01	0.00	(0.00)	(0.01)	(0.01)	(0.01)	(0.07)	(0.05)	0.12	(0.00)	(0.01)	(0.02)
(0.00)	(0.00)	(0.00)	(0.02)	0.00	0.00	(0.01)	(0.00)	(0.01)	(0.01)	(0.04)	0.03	(0.03)	0.00	(0.01)
(0.01)	(0.01)	(0.01)	0.02	0.07	(0.04)	(0.02)	(0.03)	(0.02)	(0.16)	(0.16)	0.09	(0.02)	(0.02)	(0.04)
(0.01)	(0.01)	(0.01)	0.00	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.19)	(0.20)	0.19	0.00	0.06	(0.05)
(0.00)	(0.00)	(0.00)	0.01	0.01	0.00	(0.00)	(0.00)	(0.00)	0.08	(0.08)	0.02	(0.02)	(0.02)	(0.02)
(0.00)	(0.00)	(0.00)	(0.00)	0.00	(0.00)	(0.02)	(0.02)	(0.02)	(0.00)	(0.01)	(0.04)	0.00	0.00	(0.00)
(0.00)	(0.00)	(0.00)	0.01	0.01	(0.00)	(0.02)	(0.02)	(0.02)	(0.03)	0.00	(0.02)	(0.02)	(0.02)	(0.02)
(0.00)	(0.00)	(0.00)	0.00	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	0.04	0.03	(0.01)	(0.01)	(0.03)
(0.01)	(0.01)	(0.01)	0.02	0.07	(0.04)	(0.01)	(0.01)	(0.01)	(0.19)	(0.20)	0.19	(0.03)	0.00	(0.01)
(0.01)	(0.01)	(0.01)	0.00	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	0.08	(0.08)	0.02	(0.02)	(0.02)	(0.00)
(0.00)	(0.00)	(0.00)	0.01	0.01	0.00	(0.01)	(0.00)	(0.00)	(0.00)	(0.01)	(0.04)	0.00	0.00	(0.00)
(0.00)	(0.00)	(0.00)	(0.00)	0.00	(0.00)	(0.02)	(0.02)	(0.02)	(0.01)	(0.04)	(0.02)	(0.02)	(0.02)	(0.02)
(0.00)	(0.00)	(0.00)	0.01	0.00	(0.00)	(0.00)	(0.00)	(0.00)	(0.03)	0.00	(0.02)	(0.01)	(0.01)	(0.03)
(0.00)	(0.00)	(0.00)	(0.02)	0.00	0.00	(0.01)	(0.00)	(0.01)	(0.01)	0.04	0.03	0.00	(0.00)	(0.00)
(0.01)	(0.01)	(0.01)	0.01	0.01	(0.01)	(0.02)	(0.03)	(0.02)	(0.16)	(0.16)	0.09	(0.03)	0.08	0.00
(0.01)	(0.01)	(0.01)	0.02	0.07	(0.04)	(0.01)	(0.01)	(0.01)	(0.19)	(0.20)	0.19	(0.03)	(0.02)	(0.02)
(0.00)	(0.00)	(0.00)	0.01	0.01	0.00	(0.01)	(0.00)	(0.00)	0.08	(0.08)	0.02	0.00	(0.00)	(0.03)
(0.00)	(0.00)	(0.00)	(0.00)	0.00	(0.00)	(0.02)	(0.02)	(0.02)	(0.00)	(0.01)	(0.04)	(0.01)	(0.02)	(0.01)
(0.00)	(0.00)	(0.00)	0.01	0.00	(0.00)	(0.02)	(0.02)	(0.02)	0.08	(0.06)	0.01	(0.01)	(0.02)	(0.04)
(0.00)	(0.00)	(0.00)	0.01	0.01	0.00	(0.01)	(0.01)	(0.02)	0.07	0.02	0.04	(0.03)	(0.01)	0.03
(0.00)	(0.00)	(0.00)	0.00	(0.00)	(0.00)	(0.02)	(0.02)	(0.02)	0.01	0.06	0.20	(0.02)	(0.02)	(0.03)
(0.00)	(0.00)	(0.00)	0.00	0.01	(0.01)	(0.02)	(0.02)	(0.02)	0.04	(0.01)	0.04	(0.01)	(0.02)	(0.02)
(0.00)	(0.00)	(0.00)	0.00	0.01	(0.01)	(0.03)	(0.03)	(0.03)	0.01	0.02	0.02	(0.01)	(0.01)	(0.02)
(0.00)	(0.00)	(0.00)	0.00	0.01	(0.01)	(0.02)	(0.02)	(0.02)	(0.04)	0.15	(0.03)	(0.02)	(0.01)	(0.03)
(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	0.00	0.07	0.04	(0.02)	(0.01)	(0.03)
(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	0.01	(0.02)	(0.02)	(0.02)	(0.05)	0.05	(0.08)	(0.03)	(0.02)	(0.01)
(0.00)	(0.00)	(0.00)	(0.01)	0.00	0.01	(0.02)	(0.02)	(0.02)	0.03	0.00	(0.01)	(0.02)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	(0.04)	(0.03)	0.00	(0.01)	(0.01)	(0.01)	0.07	0.03	0.02	(0.05)	(0.05)	(0.01)
(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	0.01	(0.02)	(0.02)	(0.02)	0.04	(0.02)	0.09	(0.03)	(0.03)	(0.01)
(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	0.01	(0.02)	(0.02)	(0.02)	0.05	0.04	0.03	(0.03)	(0.02)	(0.02)
(0.00)	(0.00)	(0.00)	(0.02)	(0.01)	0.01	(0.03)	(0.03)	(0.03)	0.08	0.08	0.02	(0.05)	(0.03)	(0.02)
(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	0.00	(0.01)	(0.02)	(0.02)	0.06	0.01	0.02	(0.04)	(0.03)	(0.02)
(0.00)	(0.00)	(0.00)	0.02	(0.00)	0.01	(0.02)	(0.02)	(0.02)	0.02	(0.01)	0.02	(0.02)	(0.02)	(0.01)
(0.00)	(0.00)	(0.00)	(0.02)	(0.00)	0.00	(0.01)	(0.01)	(0.01)	0.18	0.06	0.04	(0.03)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	0.00	0.01	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.01)	0.00	(0.01)	(0.01)	(0.02)
(0.00)	(0.00)	(0.00)	0.00	0.01	(0.01)	(0.02)	(0.02)	(0.02)	0.01	(0.05)	0.03	(0.02)	(0.01)	(0.03)
(0.00)	(0.00)	(0.00)	0.00	0.01	0.00	(0.02)	(0.02)	(0.02)	0.04	0.05	0.01	(0.01)	(0.01)	(0.02)
(0.00)	(0.00)	(0.00)	0.01	0.01	0.00	(0.02)	(0.02)	(0.02)	0.05	(0.06)	0.00	(0.01)	(0.01)	(0.02)
(0.00)	(0.00)	(0.00)	0.00	0.01	(0.01)	(0.02)	(0.02)	(0.02)	0.04	0.02	0.02	(0.01)	(0.01)	(0.03)
(0.00)	(0.00)	(0.00)	0.01	0.01	(0.00)	(0.01)	(0.01)	(0.01)	0.07	(0.19)	0.10	(0.01)	(0.00)	(0.02)
(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	0.01	(0.02)	(0.02)	(0.03)	0.07	0.02	0.04	(0.04)	(0.03)	(0.02)
(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	0.01	(0.02)	(0.02)	(0.02)	0.01	0.06	0.20	(0.02)	(0.03)	(0.02)
(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	0.02	(0.02)	(0.02)	(0.02)	0.04	(0.01)	0.04	(0.03)	(0.03)	0.00
(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.03)	(0.03)	(0.03)	0.01	0.02	0.02	(0.04)	(0.03)	(0.02)
(0.00)	(0.02)	(0.00)	(0.02)	(0.00)	0.01	(0.01)	(0.01)	(0.01)	0.02	0.06	0.02	(0.05)	(0.04)	(0.03)
(0.01)	(0.00)	(0.00)	(0.02)	0.00	0.05	(0.02)	(0.01)	(0.01)	(0.03)	0.11	(0.05)	(0.05)	(0.02)	0.03
(0.00)	(0.00)	(0.00)	0.01	(0.03)	0.00	(0.01)	(0.01)	(0.00)	0.02	0.04	(0.08)	(0.00)	0.04	0.00
(0.00)	(0.00)	(0.00)	(0.01)	0.00	0.01	(0.01)	(0.01)	(0.01)	0.03	0.03	0.15	(0.02)	(0.02)	(0.00)
(0.00)	(0.00)	(0.00)	(0.01)	0.00	0.00	(0.02)	(0.03)	(0.03)	0.05	0.04	(0.07)	(0.03)	(0.03)	(0.03)
(0.00)	(0.00)	(0.00)	(0.00)	0.00	(0.01)	(0.02)	(0.00)	(0.01)	0.07	(0.06)	0.05	(0.01)	(0.00)	(0.02)
(0.00)	(0.00)	(0.00)	0.01	0.01	(0.01)	(0.02)	(0.02)	(0.01)	0.04	0.01	(0.01)	(0.01)	(0.03)	(0.01)
(0.00)	(0.00)	(0.00)	0.02	0.02	0.01	(0.01)	(0.01)	(0.01)	0.12	(0.07)	0.01	0.01	0.00	(0.00)
(0.00)	(0.00)	(0.00)	0.01	0.00	(0.01)	(0.02)	(0.03)	(0.03)	(0.03)	0.09	0.02	(0.01)	(0.02)	(0.04)
(0.00)	(0.00)	(0.00)	0.00	0.02	(0.02)	(0.02)	(0.02)	(0.01)	(0.05)	0.09	0.03	(0.01)	0.00	(0.04)
(0.00)	(0.00)	(0.00)	0.01	0.01	0.01	(0.01)	(0.01)	(0.01)	(0.03)	0.10	(0.01)	(0.00)	0.00	0.00
(0.00)	(0.00)	(0.00)	0.00	(0.00)	0.01	(0.01)	(0.01)	(0.01)	(0.26)	(0.02)	0.11	(0.01)	(0.01)	(0.00)
(0.00)	(0.00)	(0.00)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.06)	(0.00)	(0.01)	(0.03)	(0.03)	(0.03)
(0.00)	(0.02)	(0.00)	(0.01)	(0.01)	0.01	(0.01)	(0.01)	(0.02)	0.04	(0.02)	(0.08)	(0.02)	(0.02)	(0.00)
(0.00)	(0.00)	(0.00)	(0.02)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	0.05	0.03	0.00	(0.03)	(0.02)	(0.02)
(0.00)	(0.02)	(0.00)	0.08	0.52	(0.06)	(0.00)	(0.00)	(0.00)	(0.62)	0.39	0.21	0.08	0.50	(0.07)
(0.00)	(0.00)	(0.00)	(0.01)	(0.02)	0.02	(0.01)	(0.01)	(0.01)	0.06	(0.06)	(0.06)	(0.02)	(0.03)	0.01
(0.00)	(0.00)	(0.00)	(0.02)	(0.01)	(0.00)	(0.02)	(0.02)	(0.03)	0.07	0.01	(0.05)	(0.04)	(0.04)	(0.03)
(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	0.01	(0.02)	(0.02)	(0.02)	0.07	(0.12)	0.09	(0.02)	(0.02)	(0.02)
(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	0.01	(0.02)	(0.02)	(0.02)	0.01	0.03	0.01	(0.03)	(0.03)	(0.02)
(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.04)	(0.01)	0.08	(0.03)	(0.03)	(0.05)
(0.00)	(0.00)	(0.00)	0.00	0.00	0.00	(0.01)	(0.01)	(0.01)	(0.02)	0.02	(0.00)	(0.01)	(0.01)	(0.01)
(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	(0.04)	0.00	(0.20)	(0.02)	(0.01)	(0.01)

5.12.2 Saudi Arabia GCC Listed Companies DACC Results

58. Saudi Arabia Companies Figures

Δ(CA)_t			ΔCash			Δ(CL)_t			Δ(DCL)_t		
2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
(249.7)	(0.2)	(77.5)	(54.0)	(32.8)	(20.2)	451.0	109.1	(389.2)	(166.1)	(10.0)	(3.2)
(63.1)	28.0	135.2	(0.8)	(9.9)	3.3	(121.7)	100.5	275.6	(9.1)	3.5	22.2
(70.8)	(15.3)	(69.8)	32.8	(32.2)	(3.8)	(55.6)	(23.0)	(28.6)	(33.3)	(65.7)	3.2
13.8	(125.4)	170.2	54.6	(31.3)	52.2	213.6	(0.3)	(155.2)	208.2	100.7	(263.5)
(116.0)	(261.4)	(109.8)	54.3	(68.1)	(8.4)	(66.1)	(195.7)	(292.7)	0.3	(85.9)	(150.5)
(24.8)	8.5	(70.7)	(18.4)	(3.2)	(68.6)	3.2	8.4	(1.3)	(4.1)	8.1	(0.3)
(315.5)	(65.9)	(295.1)	3.5	(26.3)	(3.5)	(61.6)	34.5	42.7	38.1	52.8	(254.1)
9.6	(11.9)	272.4	(35.4)	2.2	44.0	(69.3)	67.1	312.1	(40.9)	(60.6)	2.7
(88.2)	(18.4)	18.0	(42.3)	3.1	17.2	(71.2)	(18.4)	13.4	-	-	0.7
(64.8)	(88.7)	(61.4)	(12.7)	1.5	(1.4)	(133.6)	(59.7)	(113.3)	(24.3)	(86.4)	1.1
(63.6)	58.0	(13.5)	0.2	39.7	(23.4)	(1.8)	1.1	(1.5)	-	-	0.0
(2.9)	13.7	7.2	0.6	(3.0)	0.8	(6.3)	14.8	7.4	-	-	0.5
1.7	5.2	7.1	4.3	1.1	7.7	0.7	(3.1)	0.4	-	-	-
3,151.8	1,889.6	(3,116.1)	(1,254.8)	1,136.8	(947.6)	2,540.9	11,015.9	3,056.3	582.3	9,293.3	4,345.2
(251.0)	(241.0)	301.2	325.8	(269.0)	17.3	(18.8)	69.8	268.3	74.1	(187.5)	(3.4)
20.2	(57.6)	55.7	7.5	(0.0)	52.1	91.2	352.1	(100.8)	19.0	191.6	18.5
(81.2)	1.5	(88.9)	(1.7)	(31.6)	30.3	97.9	61.9	44.0	13.2	126.7	(47.5)
33.2	(18.4)	15.4	(3.4)	(2.2)	(5.6)	6.6	(78.9)	66.4	10.8	4.0	18.7
(1.8)	(126.4)	(29.5)	(55.0)	(66.0)	(27.2)	3.4	(12.2)	12.1	-	-	0.9
620.6	3,746.7	(127.7)	(18.1)	1,041.5	(1,788.3)	12.5	173.8	662.3	443.7	227.3	(629.8)
(7.6)	10.5	47.9	(23.2)	17.3	56.3	(19.4)	20.2	25.5	-	-	0.3
12.2	(103.0)	396.2	(4.2)	56.5	(129.8)	17.9	(86.3)	431.9	0.5	1.1	8.6
27.9	26.3	(15.2)	(6.8)	13.0	16.0	(8.7)	90.4	39.0	(19.0)	(6.6)	10.2
16.2	(61.6)	(119.3)	19.3	(121.3)	(6.7)	44.6	(28.1)	(24.8)	72.5	(26.2)	(11.6)
175.9	442.9	(1,238.3)	(355.5)	985.7	(765.9)	145.8	1,197.8	(1,352.6)	27.4	6.7	(151.4)
10,137.6	(10,175.6)	(20,065.5)	18,790.9	(53,912.2)	1,390.6	6,919.1	(11,191.0)	434.8	(399.4)	(8,623.2)	4,466.6
(247.9)	1,057.7	(82.0)	(40.4)	509.0	(61.0)	(92.8)	70.0	(173.9)	0.0	0.1	13.4
1,165.2	200.1	(4,163.7)	105.2	373.8	(185.8)	(980.5)	2,169.4	(3,868.4)	(1,578.1)	2,405.1	(2,378.6)
(20.3)	9.8	(4.8)	(27.9)	4.4	39.6	(2.6)	(0.2)	0.8	-	-	-
16.6	13.9	(17.7)	(7.2)	12.4	(17.9)	6.8	13.9	14.9	1.2	11.3	(1.5)
19.9	(2.7)	(20.1)	(14.5)	(18.9)	(18.4)	24.9	29.8	(6.6)	2.2	(0.6)	5.1
225.2	(140.5)	14.7	7.6	(3.3)	6.5	244.2	(13.2)	(49.1)	20.3	22.0	(8.0)
(82.9)	29.7	(31.5)	(19.0)	(9.2)	5.0	3.6	(10.0)	(10.1)	(6.3)	45.6	3.0
(9.3)	73.9	(87.4)	(10.4)	(7.6)	(18.6)	42.7	23.8	(63.4)	8.0	(8.8)	2.8
(56.4)	205.0	(141.5)	(56.9)	(63.1)	44.8	42.1	413.6	(152.2)	(106.4)	9.0	26.6
643.9	695.3	(1,249.6)	273.8	999.7	(448.6)	385.4	1,159.0	(1,225.1)	27.4	6.7	(151.4)
213.0	(355.5)	(384.8)	(624.0)	(1,026.1)	110.1	(208.1)	(979.3)	(191.1)	(528.9)	(930.4)	14.1
(17.0)	(91.0)	(59.3)	0.2	(1.4)	(10.9)	(74.4)	79.6	(8.5)	3.2	87.0	18.3
328.5	(638.2)	1,127.8	(99.9)	(709.2)	777.8	(254.0)	83.4	6.0	(174.0)	271.1	(289.4)
180.0	101.6	(812.8)	(192.7)	(67.5)	(144.8)	42.7	1,032.0	(1,040.7)	(30.0)	(10.0)	1.2
697.2	2,379.2	(3,757.1)	1,127.0	(137.4)	(1,463.9)	(142.4)	(54.5)	(409.2)	(161.8)	(77.6)	17.3
(9.4)	21.1	81.5	(80.3)	1.1	69.5	6.0	16.6	(10.5)	4.0	18.0	(9.7)
(40.0)	(66.7)	(44.1)	(35.8)	(1.0)	10.1	(12.9)	(48.7)	306.9	0.7	(39.6)	310.2
25.8	18.1	175.9	75.6	17.9	(240.0)	(17.4)	(80.8)	(5.7)	-	-	2.7
(250.1)	44.6	31.3	(66.5)	6.3	91.7	(195.6)	(55.2)	(470.6)	35.0	(40.0)	55.0
106.3	34.1	87.2	17.3	(26.8)	34.0	(112.6)	35.8	25.2	10.3	21.7	11.6
18.2	54.2	14.7	(18.2)	(2.5)	8.8	(72.1)	94.0	11.7	(60.8)	9.1	11.4
7.5	9.7	22.8	3.7	(3.1)	4.0	5.5	0.8	15.8	-	-	-
156.9	(252.7)	77.7	38.0	(241.7)	(42.3)	12.0	(49.7)	61.1	36.8	(64.5)	25.2
(131.4)	(115.7)	(62.7)	(29.2)	(78.6)	(43.9)	0.4	20.1	48.8	-	-	79.0
(70.3)	121.8	21.5	(63.9)	50.3	57.6	94.8	86.5	1.8	-	-	7.2
(15.5)	(31.4)	69.0	(19.3)	37.3	(27.1)	(10.6)	14.4	6.3	-	-	-
(39.2)	56.2	233.4	(115.1)	(8.2)	235.1	(82.4)	(134.8)	(10.2)	-	-	-
66.5	(45.8)	82.3	(13.1)	(46.5)	125.3	(18.4)	25.5	(57.3)	(6.7)	(34.8)	0.4
(184.8)	79.3	147.6	(98.3)	30.0	230.9	(160.4)	29.6	29.6	(57.5)	-	1.2
40.7	20.7	9.5	16.9	(7.1)	(7.9)	(97.9)	10.4	15.4	(65.2)	17.6	18.3
(27.2)	(111.8)	22.7	(38.6)	(50.1)	3.7	(61.1)	(69.7)	(31.4)	(67.0)	(88.5)	(48.6)

DEP			TACC			A_(t-1)				TACC / A (t-1)		
2017	2018	2019	2017	2018	2019	2016 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
9.4	12.6	13.3	(822.3)	(99.1)	315.4	3,123.6	2,966.9	2,839.5	2,820.6	-0.26	-0.03	0.11
6.6	6.7	12.6	43.6	(65.9)	(134.1)	1,937.3	1,855.3	1,710.6	2,252.9	0.02	-0.04	-0.08
6.5	5.5	5.0	(87.9)	(31.3)	(39.2)	1,181.9	1,108.3	1,091.0	1,016.6	-0.07	-0.03	-0.04
18.9	17.6	27.4	(65.0)	(10.9)	(17.7)	3,045.6	2,909.2	2,866.2	2,989.1	-0.02	0.00	-0.01
20.0	12.1	6.0	(123.8)	(95.6)	34.8	2,245.5	1,954.1	1,396.6	1,247.5	-0.06	-0.05	0.02
3.6	3.6	4.1	(17.3)	7.7	(5.2)	643.9	643.2	710.7	673.8	-0.03	0.01	-0.01
8.4	7.6	7.6	(227.6)	(28.9)	(596.0)	3,411.3	3,178.9	2,869.0	2,418.8	-0.07	-0.01	-0.21
8.5	3.7	4.0	64.9	(145.5)	(85.0)	1,573.3	1,649.9	1,620.4	1,965.7	0.04	-0.09	-0.05
14.3	13.7	13.9	10.9	(16.8)	(25.8)	466.2	363.8	333.8	345.8	0.02	-0.05	-0.08
1.4	1.8	1.4	55.8	(118.7)	52.9	1,041.2	857.4	747.8	674.3	0.05	-0.14	0.07
0.3	0.3	0.3	(62.3)	16.9	11.0	116.2	19.1	76.7	62.8	-0.54	0.89	0.14
0.5	0.7	1.1	2.2	1.3	(1.6)	133.3	132.7	147.0	156.7	0.02	0.01	-0.01
0.0	0.0	0.0	(3.4)	7.2	(1.0)	374.5	380.8	441.0	465.0	-0.01	0.02	0.00
108.0	100.2	128.8	2,340.1	(1,069.8)	(1,008.4)	58,246.1	61,675.0	64,094.0	74,029.7	0.04	-0.02	-0.02
4.9	5.8	6.0	(488.7)	(235.1)	6.1	20,837.3	21,182.6	21,197.6	20,560.8	-0.02	-0.01	0.00
5.8	6.1	6.6	(65.3)	(224.2)	116.3	1,541.3	1,790.2	3,431.5	3,585.2	-0.04	-0.13	0.03
4.4	5.6	4.0	(168.7)	92.3	(214.7)	2,342.2	2,178.8	2,105.7	1,966.4	-0.07	0.04	-0.10
2.9	2.8	2.7	37.9	63.9	(29.3)	1,539.7	1,549.0	1,505.7	1,576.8	0.02	0.04	-0.02
5.0	4.3	4.8	44.8	(52.5)	(18.3)	660.9	681.1	692.6	756.4	0.07	-0.08	-0.03
37.0	51.5	48.6	1,032.9	2,707.1	319.9	94,142.8	95,117.0	98,138.3	97,657.6	0.01	0.03	0.00
2.8	2.3	1.7	32.2	(29.3)	(35.3)	581.4	560.3	562.9	603.2	0.06	-0.05	-0.06
4.2	5.1	3.7	(5.2)	(77.2)	98.9	1,251.3	1,250.2	1,150.1	1,552.1	0.00	-0.06	0.09
2.4	1.7	1.6	22.1	(85.4)	(61.6)	1,221.1	1,215.6	1,152.2	1,118.9	0.02	-0.07	-0.05
5.3	3.8	2.7	19.5	57.9	(102.0)	2,310.6	2,257.1	2,120.7	1,943.0	0.01	0.03	-0.05
21.0	10.8	9.3	391.9	(1,744.8)	719.5	22,259.6	21,612.5	21,018.8	19,015.7	0.02	-0.08	0.03
758.7	1,003.2	1,562.7	(16,730.6)	45,301.2	(18,987.1)	313,854.7	321,610.8	319,710.9	300,480.6	-0.05	0.14	-0.06
16.6	13.1	28.8	(131.3)	465.7	137.6	8,227.7	8,346.9	9,504.5	9,662.5	-0.02	0.06	0.01
76.4	24.1	36.5	386.0	38.0	(2,524.6)	32,585.5	33,993.2	33,565.8	23,018.8	0.01	0.00	-0.08
0.6	0.6	0.6	9.6	5.0	(45.7)	485.7	450.7	467.6	464.3	0.02	0.01	-0.10
0.8	0.9	1.0	17.3	(2.0)	(17.1)	721.3	808.6	804.8	739.2	0.02	0.00	-0.02
0.3	1.5	2.0	11.3	(15.6)	8.1	225.7	244.5	308.1	292.1	0.05	-0.06	0.03
25.1	25.7	28.1	(31.4)	(127.6)	(8.2)	1,069.6	1,287.6	1,127.6	1,133.9	-0.03	-0.10	-0.01
2.7	4.0	3.3	(76.5)	90.4	(26.7)	1,610.7	1,427.2	1,402.8	1,302.6	-0.05	0.06	-0.02
2.2	2.1	1.9	(35.9)	46.9	(4.4)	546.2	524.6	583.4	452.4	-0.07	0.09	-0.01
25.0	22.6	31.9	(173.0)	(159.2)	(39.4)	5,810.6	5,681.7	5,763.2	5,643.4	-0.03	-0.03	-0.01
21.3	11.4	9.8	(9.3)	(1,468.1)	262.9	25,202.5	25,022.9	24,387.5	22,207.3	0.00	-0.06	0.01
12.9	20.4	38.0	503.3	699.2	(327.7)	20,185.8	19,764.5	19,072.1	18,070.4	0.02	0.04	-0.02
8.2	6.8	1.9	52.2	(89.0)	(23.5)	1,319.5	1,253.8	1,026.7	935.8	0.04	-0.07	-0.02
58.8	71.6	84.2	449.7	187.1	(29.6)	15,803.5	15,980.2	15,379.9	23,991.3	0.03	0.01	0.00
9.6	9.4	10.8	290.4	(882.3)	363.1	4,422.6	4,552.3	4,696.4	3,802.6	0.07	-0.19	0.08
8.3	7.6	23.6	(457.4)	2,485.9	(1,890.2)	41,030.5	40,311.3	40,694.9	35,327.8	-0.01	0.06	-0.05
2.1	1.5	0.3	66.8	19.9	12.6	1,367.4	1,322.5	1,285.6	1,313.9	0.05	0.02	0.01
2.3	1.8	1.7	7.0	(58.2)	(52.7)	2,867.8	2,731.2	2,577.5	2,484.3	0.00	-0.02	-0.02
0.8	0.7	1.2	(33.2)	80.4	422.9	2,239.5	2,270.0	2,224.6	2,331.4	-0.01	0.04	0.19
6.3	6.7	6.6	40.6	46.8	458.7	3,251.6	3,113.5	3,190.0	3,218.8	0.01	0.02	0.14
0.3	0.4	0.3	211.5	46.5	39.2	1,157.2	1,231.0	1,229.8	1,266.6	0.18	0.04	0.03
0.3	0.3	0.7	47.5	(28.5)	5.0	390.6	403.1	477.8	489.8	0.12	-0.07	0.01
2.2	4.9	5.1	(3.9)	7.0	(2.1)	47.2	74.7	92.5	110.3	-0.08	0.09	-0.02
5.8	5.5	5.1	137.9	(31.3)	79.0	3,816.4	3,934.1	3,586.1	3,646.9	0.04	-0.01	0.02
3.9	4.1	4.3	(106.6)	(61.3)	7.1	3,661.2	4,654.1	5,307.7	5,565.5	-0.03	-0.01	0.00
16.2	13.1	10.5	(117.4)	72.6	(41.2)	4,161.2	3,935.8	3,927.2	3,909.3	-0.03	0.02	-0.01
0.5	0.9	1.0	13.9	(84.0)	88.9	2,026.7	1,988.9	1,898.7	2,056.7	0.01	-0.04	0.05
1.4	1.4	1.4	156.9	197.8	7.1	4,273.6	4,156.7	4,115.6	4,200.2	0.04	0.05	0.00
2.7	2.7	3.0	88.6	(62.3)	11.8	4,022.1	3,942.4	3,734.3	3,690.5	0.02	-0.02	0.00
2.7	3.0	2.4	13.8	16.7	(114.1)	2,693.6	2,435.0	2,514.2	2,764.9	0.01	0.01	-0.05
2.3	2.3	2.3	54.1	32.6	18.0	1,927.6	1,884.2	1,874.2	1,813.9	0.03	0.02	0.01
4.4	3.7	2.8	1.1	(84.2)	(0.9)	2,513.2	2,418.2	2,280.3	2,319.3	0.00	-0.03	0.00

1 / A (t-1)			Δ(REV)_t			Δ(REC)(t)			(Δ(REV)_t - Δ(REC)_t) / A (t-1)		
2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
0.00	0.00	0.00	54.2	1.2	70.2	(9.5)	27.7	(141.3)	0.02	(0.01)	0.07
0.00	0.00	0.00	(189.9)	(175.3)	281.8	(18.6)	(31.9)	94.9	(0.09)	(0.08)	0.11
0.00	0.00	0.00	(14.9)	(163.9)	(128.3)	52.7	(4.0)	49.3	(0.06)	(0.14)	(0.16)
0.00	0.00	0.00	(163.8)	(111.7)	207.0	45.8	12.8	58.8	(0.07)	(0.04)	0.05
0.00	0.00	0.00	(222.1)	(477.5)	(483.8)	(134.8)	(133.6)	(59.4)	(0.04)	(0.18)	(0.30)
0.00	0.00	0.00	17.1	16.6	19.9	(4.0)	13.6	(6.6)	0.03	0.00	0.04
0.00	0.00	0.00	(571.7)	155.3	(167.2)	(151.1)	236.4	(150.7)	(0.12)	(0.03)	(0.01)
0.00	0.00	0.00	27.1	(362.7)	435.4	198.8	(63.5)	174.5	(0.11)	(0.18)	0.16
0.00	0.00	0.00	(129.3)	(46.4)	4.7	(34.9)	(9.0)	8.8	(0.20)	(0.10)	(0.01)
0.00	0.00	0.00	(84.3)	(83.3)	(123.7)	(16.0)	(60.2)	(64.0)	(0.07)	(0.03)	(0.08)
0.01	0.05	0.01	18.6	99.1	(37.7)	(61.5)	15.8	2.4	0.69	4.37	(0.52)
0.01	0.01	0.01	(14.8)	(6.2)	(0.8)	5.1	(1.1)	3.2	(0.15)	(0.04)	(0.03)
0.00	0.00	0.00	15.1	3.0	2.8	7.6	3.8	-	0.02	(0.00)	0.01
0.00	0.00	0.00	9,064.9	6,787.2	(6,936.2)	177.3	(146.6)	(81.7)	0.15	0.11	(0.11)
0.00	0.00	0.00	(691.0)	191.8	377.7	523.3	(75.1)	631.5	(0.06)	0.01	(0.01)
0.00	0.00	0.00	(51.8)	1,767.0	504.6	64.0	45.1	(38.0)	(0.08)	0.96	0.16
0.00	0.00	0.00	(185.1)	113.3	(154.3)	(38.4)	62.1	(66.2)	(0.06)	0.02	(0.04)
0.00	0.00	0.00	136.6	62.6	(142.5)	35.3	(52.7)	3.0	0.07	0.07	(0.10)
0.00	0.00	0.00	37.7	9.7	(70.6)	13.5	(3.0)	1.5	0.04	0.02	(0.10)
0.00	0.00	0.00	2,622.1	2,084.8	3,565.5	612.1	322.4	894.9	0.02	0.02	0.03
0.00	0.00	0.00	(113.3)	(41.8)	189.5	(1.0)	(17.0)	21.7	(0.19)	(0.04)	0.30
0.00	0.00	0.00	(398.3)	(370.2)	79.8	(20.2)	(8.0)	36.5	(0.30)	(0.29)	0.04
0.00	0.00	0.00	91.7	(50.2)	25.3	62.7	(0.2)	38.6	0.02	(0.04)	(0.01)
0.00	0.00	0.00	47.2	18.4	(174.4)	(7.4)	(6.3)	(57.9)	0.02	0.01	(0.05)
0.00	0.00	0.00	1,297.3	1,566.6	(1,495.7)	547.6	(69.2)	(134.8)	0.03	0.08	(0.06)
0.00	0.00	0.00	6,767.1	19,362.4	(29,391.0)	2,717.1	(782.3)	(5,228.8)	0.01	0.06	(0.08)
0.00	0.00	0.00	(96.5)	1,100.4	(572.3)	(131.4)	231.8	33.2	0.00	0.10	(0.06)
0.00	0.00	0.00	2,176.9	(7,731.1)	(46.4)	644.5	(75.8)	(1,068.7)	0.05	(0.23)	0.03
0.00	0.00	0.00	(39.3)	17.4	9.0	(6.9)	10.7	1.6	(0.07)	0.01	0.02
0.00	0.00	0.00	16.1	(18.2)	(22.3)	15.3	9.8	(7.7)	0.00	(0.03)	(0.02)
0.00	0.00	0.00	(11.5)	10.0	0.6	(5.0)	9.6	16.0	(0.03)	0.00	(0.05)
0.00	0.00	0.00	194.7	138.7	42.8	87.6	(18.9)	(81.5)	0.10	0.12	0.11
0.00	0.00	0.00	145.8	25.7	(98.4)	25.3	(5.4)	(14.4)	0.07	0.02	(0.06)
0.00	0.00	0.00	20.4	97.7	(127.9)	11.1	17.0	(18.6)	0.02	0.15	(0.19)
0.00	0.00	0.00	(525.4)	(90.2)	(35.4)	468.7	134.2	(109.6)	(0.17)	(0.04)	0.01
0.00	0.00	0.00	1,297.3	1,566.6	(1,495.7)	550.6	(65.9)	(134.0)	0.03	0.07	(0.06)
0.00	0.00	0.00	990.3	407.6	(1,563.6)	726.4	(517.3)	(351.9)	0.01	0.05	(0.06)
0.00	0.00	0.00	38.6	25.6	(14.3)	(16.3)	(45.0)	(25.2)	0.04	0.06	0.01
0.00	0.00	0.00	944.5	576.3	403.9	258.3	(219.4)	182.4	0.04	0.05	0.01
0.00	0.00	0.00	245.2	363.7	(153.7)	(30.4)	(25.7)	30.5	0.06	0.09	(0.04)
0.00	0.00	0.00	1,375.1	2,279.2	(2,726.8)	(0.3)	265.5	(288.7)	0.03	0.05	(0.06)
0.00	0.00	0.00	(107.6)	31.4	78.4	(5.2)	(2.1)	6.1	(0.07)	0.03	0.06
0.00	0.00	0.00	(285.0)	(67.8)	138.0	(5.2)	(19.0)	3.4	(0.10)	(0.02)	0.05
0.00	0.00	0.00	(66.5)	(190.5)	186.5	1.8	(14.6)	(1.7)	(0.03)	(0.08)	0.08
0.00	0.00	0.00	(288.2)	(70.1)	280.8	(28.9)	(23.8)	(5.8)	(0.08)	(0.01)	0.09
0.00	0.00	0.00	153.2	(28.8)	91.5	4.9	1.1	-	0.13	(0.02)	0.07
0.00	0.00	0.00	103.1	66.2	31.3	42.3	11.3	(18.8)	0.16	0.14	0.10
0.02	0.01	0.01	(10.5)	7.5	39.0	(1.0)	5.6	3.1	(0.20)	0.03	0.39
0.00	0.00	0.00	(351.2)	(305.0)	181.2	88.0	(49.2)	14.5	(0.12)	(0.07)	0.05
0.00	0.00	0.00	(377.0)	(226.8)	280.7	(33.4)	(20.5)	39.9	(0.09)	(0.04)	0.05
0.00	0.00	0.00	(593.6)	(65.0)	322.1	(22.1)	73.2	58.2	(0.14)	(0.04)	0.07
0.00	0.00	0.00	(226.1)	(200.2)	366.1	(19.0)	(48.6)	(7.4)	(0.10)	(0.08)	0.20
0.00	0.00	0.00	(712.2)	(176.1)	412.6	(8.0)	(0.2)	4.1	(0.16)	(0.04)	0.10
0.00	0.00	0.00	(369.7)	(149.5)	208.6	(12.0)	12.5	4.9	(0.09)	(0.04)	0.05
0.00	0.00	0.00	(216.0)	(74.9)	163.1	(70.4)	15.7	5.0	(0.05)	(0.04)	0.06
0.00	0.00	0.00	(79.9)	(17.2)	89.2	(12.7)	(0.6)	0.9	(0.03)	(0.01)	0.05
0.00	0.00	0.00	(54.0)	(128.2)	32.1	68.6	(41.8)	5.6	(0.05)	(0.04)	0.01

4	term3

(PPE)(t) / A (t-1)			FD			FP			FL				
2018 A	2019 A	2016 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2017 A	2018 A		Coefficient
0.45	0.47	0.63	(0.1)	0.3	(0.4)	0.086	(0.0)	0.0	0	0	0	α1	4.874
0.46	0.52	0.89	(0.2)	0.6	0.8	(0.0)	(0.2)	0.1	0	1	0	α2	0.105
0.49	0.54	0.56	(0.1)	0.1	0.0	0.0	(0.1)	(0.1)	0	0	1	α3	-0.007
1.19	1.39	1.44	0.1	0.2	0.1	(0.1)	(0.1)	0.2	1	1	0		
0.89	0.76	1.05	1.8	(0.7)	4.6	0.1	(0.0)	(0.1)	1	1	1		
0.53	0.56	0.53	0.0	0.0	(0.0)	0.1	0.1	(0.0)	1	0	0		
0.44	0.45	0.50	(0.2)	1.0	2.9	0.0	(0.1)	(0.2)	1	1	1		
0.54	0.44	0.45	(0.1)	0.1	0.3	(0.0)	(0.0)	(0.0)	0	0	0		
1.13	1.45	1.61	(0.2)	(0.1)	0.1	(0.1)	(0.1)	0.0	0	0	0		
0.51	0.62	0.72	(0.4)	0.1	(0.1)	(0.1)	(0.2)	0.1	0	1	1		
0.04	0.27	0.08	0.6	(0.6)	0.0	17.1	5.8	(0.2)	1	0	1		
0.59	0.57	0.56	(0.1)	0.2	0.1	(0.0)	(0.0)	(0.0)	0	0	0		
0.00	0.00	0.00	0.0	(0.0)	(0.0)	34.1	0.3	0.0	0	0	0		
1.08	1.06	1.27	(0.8)	(0.0)	1.3	0.0	(0.0)	(0.0)	0	0	1		
1.08	1.09	1.04	0.1	0.0	(0.0)	(0.1)	(0.1)	0.0	0	0	0		
1.01	1.87	1.02	0.3	2.6	(1.2)	(0.0)	(0.0)	0.0	0	0	0		
0.81	0.87	0.93	0.4	0.1	0.2	(0.1)	0.1	(0.1)	1	1	1		
1.14	1.18	1.31	(0.1)	(0.1)	0.2	(0.1)	0.0	(0.1)	0	0	0		
0.95	1.16	1.32	0.0	(0.0)	0.0	(0.0)	(0.0)	(0.0)	0	0	0		
0.98	0.99	1.00	(0.1)	(0.1)	(0.3)	0.1	0.1	(0.2)	0	0	1		
0.48	0.51	0.52	(0.0)	0.0	0.1	(0.1)	(0.0)	0.0	0	0	0		
0.62	0.63	0.72	0.0	(0.0)	0.8	(0.0)	(0.1)	(0.0)	0	1	1		
0.86	0.89	0.94	(0.1)	0.4	0.1	0.1	(0.3)	0.2	0	1	1		
1.40	1.45	1.58	0.0	(0.2)	(0.0)	0.1	0.1	(0.2)	1	0	1		
0.92	0.95	0.98	(0.4)	(0.5)	(0.4)	0.1	0.0	(0.1)	0	0	0		
1.09	1.09	1.16	(0.0)	(0.1)	(0.2)	0.0	0.0	(0.1)	0	0	0		
1.24	1.29	1.20	(0.0)	(0.0)	0.0	(0.0)	0.1	(0.0)	0	0	0		
0.57	0.47	0.20	(0.4)	(0.5)	(0.7)	0.1	0.0	(0.4)	0	0	1		
1.42	1.60	1.59	(0.0)	(0.0)	0.0	(0.5)	0.6	(0.0)	1	0	0		
0.72	0.64	0.58	(0.0)	(0.0)	0.0	0.3	(0.2)	(0.7)	0	0	1		
1.08	0.04	1.04	0.1	0.4	0.1	(0.0)	(0.1)	(0.1)	0	1	1		
0.74	0.62	0.75	0.3	0.2	(0.1)	(0.0)	(0.2)	0.2	0	1	0		
1.33	1.51	1.68	(0.6)	(1.0)	0.0	1.8	0.1	(0.1)	1	0	0		
0.91	0.94	0.86	0.1	0.2	(0.1)	(0.1)	0.1	(0.3)	1	0	1		
0.53	0.54	0.55	(0.0)	0.7	0.3	(0.0)	(0.0)	(0.0)	0	1	1		
0.81	0.82	0.84	(0.4)	(0.3)	(0.3)	0.2	(0.0)	(0.0)	0	0	0		
1.03	1.09	1.16	(0.1)	(0.1)	0.0	(0.0)	(0.0)	(0.1)	0	0	0		
1.12	1.14	1.41	0.5	5.8	2.6	0.1	(0.1)	0.2	1	1	1		
1.03	1.06	1.43	(0.2)	(0.2)	(0.8)	0.1	0.0	(0.1)	0	0	0		
0.80	0.84	0.81	0.0	(0.0)	(0.3)	(0.1)	(0.0)	0.0	0	0	0		
1.13	1.16	1.16	(0.2)	(0.3)	(0.2)	0.0	0.1	(0.2)	0	0	1		
0.89	0.93	0.96	(0.0)	(0.0)	(0.0)	(0.3)	(0.2)	0.3	0	1	0		
1.08	1.14	1.21	(0.0)	(0.0)	(0.1)	(0.3)	(0.2)	0.4	1	1	0		
1.06	1.00	1.03	(0.0)	(0.0)	(0.0)	(0.2)	0.2	0.0	0	0	0		
0.75	0.80	0.80	(0.1)	0.0	(0.1)	(0.1)	(0.1)	0.1	0	0	0		
0.94	0.89	0.90	(0.1)	(0.0)	(0.2)	0.6	(0.3)	0.3	0	0	0		
0.73	0.81	0.73	(0.6)	0.3	(0.3)	(0.1)	(0.0)	0.0	0	0	0		
1.02	0.82	0.66	(0.1)	0.0	(0.1)	0.0	0.0	(0.0)	0	0	0		
1.37	1.35	1.51	0.2	(0.0)	(0.0)	(0.1)	(0.4)	0.3	0	1	0		
1.85	1.66	1.55	0.3	0.2	(0.0)	(0.2)	(0.2)	0.4	0	1	0		
1.81	1.93	1.98	0.1	0.0	0.0	(0.1)	(0.0)	(0.0)	0	0	0		
1.15	1.18	1.25	(0.0)	0.0	(0.0)	(0.1)	(0.1)	0.2	0	0	0		
1.54	1.60	1.62	(0.0)	(0.0)	(0.0)	(0.1)	(0.1)	0.1	0	0	0		
1.61	1.49	1.59	0.0	0.0	(0.0)	(0.1)	(0.2)	0.1	0	0	0		
1.20	1.32	1.28	(0.1)	0.0	0.0	(0.1)	(0.0)	0.1	0	0	0		
1.25	1.27	1.28	(0.0)	(0.0)	(0.1)	(0.4)	(0.5)	0.8	1	1	0		
0.54	0.97	1.06	(0.1)	0.0	0.0	(0.1)	(0.4)	0.3	0	1	0		

Result Step 2	α1 1 / A (t-1)			α2 (Δ(REV)_t - Δ(REC)_t) / A (t-1)			α3 (PPE)(t) / A (t-1)			DACC - ε t			Result Step 3 NDACC		
	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
	0.00	0.00	0.00	0.00	(0.00)	0.01	(0.00)	(0.00)	(0.00)	(0.26)	(0.03)	0.11	0.00	(0.00)	0.01
	0.00	0.00	0.00	(0.01)	(0.01)	0.01	(0.00)	(0.00)	(0.01)	0.03	(0.03)	(0.09)	(0.01)	(0.01)	0.01
	0.00	0.00	0.00	(0.01)	(0.02)	(0.02)	(0.00)	(0.00)	(0.00)	(0.07)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)
	0.00	0.00	0.00	(0.01)	(0.00)	0.01	(0.01)	(0.01)	(0.01)	(0.01)	0.01	(0.00)	(0.01)	(0.01)	(0.00)
	0.00	0.00	0.00	(0.00)	(0.02)	(0.03)	(0.01)	(0.01)	(0.01)	(0.05)	(0.03)	0.06	(0.01)	(0.02)	(0.04)
	0.01	0.01	0.01	0.00	0.00	0.00	(0.00)	(0.00)	(0.00)	(0.03)	0.01	(0.01)	0.01	0.00	0.01
	0.00	0.00	0.00	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.05)	(0.00)	(0.21)	(0.01)	(0.00)	(0.00)
	0.00	0.00	0.00	(0.01)	(0.02)	0.02	(0.00)	(0.00)	(0.00)	0.05	(0.07)	(0.07)	(0.01)	(0.02)	0.02
	0.01	0.01	0.01	(0.02)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	0.04	(0.04)	(0.08)	(0.02)	(0.01)	0.00
	0.00	0.01	0.01	(0.01)	(0.00)	(0.01)	(0.00)	(0.00)	(0.01)	0.06	(0.14)	0.08	(0.01)	(0.00)	(0.01)
	0.04	0.26	0.06	0.07	0.46	(0.05)	(0.00)	(0.00)	(0.00)	(0.65)	0.18	0.14	0.11	0.71	0.01
	0.04	0.04	0.03	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.04)	0.02	0.03	0.03
	0.01	0.01	0.01	0.00	(0.00)	0.00	(0.00)	(0.00)	(0.00)	(0.02)	0.01	(0.01)	0.02	0.01	0.01
	0.00	0.00	0.00	0.02	0.01	(0.01)	(0.01)	(0.01)	(0.01)	0.03	(0.02)	0.00	0.01	0.00	(0.02)
	0.00	0.00	0.00	(0.01)	0.00	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	0.01	(0.01)	(0.01)	(0.01)
	0.00	0.00	0.00	(0.01)	0.10	0.02	(0.01)	(0.01)	(0.01)	(0.03)	(0.22)	0.02	(0.01)	0.09	0.01
	0.00	0.00	0.00	(0.01)	0.00	(0.00)	(0.01)	(0.01)	(0.01)	(0.06)	0.04	(0.09)	(0.01)	(0.00)	(0.01)
	0.00	0.00	0.00	0.01	0.01	(0.01)	(0.01)	(0.01)	(0.01)	0.02	0.04	(0.00)	0.00	0.00	(0.02)
	0.01	0.01	0.01	0.00	0.00	(0.01)	(0.01)	(0.01)	(0.01)	0.06	(0.08)	(0.01)	0.00	0.00	(0.01)
	0.00	0.00	0.00	0.00	0.00	0.00	(0.01)	(0.01)	(0.01)	0.02	0.03	0.01	(0.00)	(0.00)	(0.00)
	0.01	0.01	0.01	(0.02)	(0.00)	0.03	(0.00)	(0.00)	(0.00)	0.07	(0.05)	(0.10)	(0.02)	0.00	0.04
	0.00	0.00	0.00	(0.03)	(0.03)	0.00	(0.00)	(0.00)	(0.01)	0.03	(0.03)	0.08	(0.03)	(0.03)	0.00
	0.00	0.00	0.00	0.00	(0.00)	(0.00)	(0.01)	(0.01)	(0.01)	0.02	(0.06)	(0.05)	0.00	(0.01)	(0.00)
	0.00	0.00	0.00	0.00	0.00	(0.01)	(0.01)	(0.01)	(0.01)	0.01	0.03	(0.03)	(0.01)	(0.01)	(0.01)
	0.00	0.00	0.00	0.00	0.01	(0.01)	(0.01)	(0.01)	(0.01)	0.02	0.08	0.05	(0.00)	0.00	(0.01)
	0.00	0.00	0.00	0.00	0.01	(0.01)	(0.01)	(0.01)	(0.01)	(0.05)	0.14	(0.04)	(0.01)	(0.00)	(0.02)
	0.00	0.00	0.00	0.00	0.01	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	0.05	0.03	(0.01)	0.00	(0.01)
	0.00	0.00	0.00	0.00	(0.02)	0.00	(0.00)	(0.00)	(0.00)	0.01	0.03	(0.08)	0.00	(0.03)	0.00
	0.01	0.01	0.01	(0.01)	0.00	0.00	(0.01)	(0.01)	(0.01)	0.03	0.01	(0.10)	(0.01)	0.00	0.00
	0.01	0.01	0.01	0.00	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	0.02	(0.00)	(0.02)	0.00	(0.00)	0.00
	0.02	0.02	0.02	(0.00)	0.00	(0.01)	(0.01)	(0.00)	(0.01)	0.04	(0.08)	0.02	0.01	0.02	0.00
	0.00	0.00	0.00	0.01	0.01	0.01	(0.01)	(0.00)	(0.01)	(0.04)	(0.11)	(0.02)	0.01	0.01	0.01
	0.00	0.00	0.00	0.01	0.00	(0.01)	(0.01)	(0.01)	(0.01)	(0.05)	0.07	(0.00)	0.00	(0.00)	(0.01)
	0.01	0.01	0.01	0.00	0.02	(0.02)	(0.01)	(0.01)	(0.01)	(0.07)	0.07	0.01	0.00	0.02	(0.02)
	0.00	0.00	0.00	(0.02)	(0.00)	0.00	(0.00)	(0.00)	(0.00)	(0.01)	(0.02)	(0.01)	(0.02)	(0.01)	(0.00)
	0.00	0.00	0.00	0.00	0.01	(0.01)	(0.01)	(0.01)	(0.01)	0.00	(0.06)	0.02	(0.00)	0.00	(0.01)
	0.00	0.00	0.00	0.00	0.00	(0.01)	(0.01)	(0.01)	(0.01)	0.03	0.04	(0.00)	(0.01)	(0.00)	(0.01)
	0.00	0.00	0.00	0.00	0.01	0.00	(0.01)	(0.01)	(0.01)	0.04	(0.07)	(0.02)	0.00	0.00	(0.00)
	0.00	0.00	0.00	0.00	0.01	0.00	(0.01)	(0.01)	(0.01)	0.03	0.01	0.01	(0.00)	0.00	(0.01)
	0.00	0.00	0.00	0.01	0.01	(0.00)	(0.01)	(0.01)	(0.01)	0.06	(0.20)	0.09	0.00	0.00	(0.01)
	0.00	0.00	0.00	0.00	0.01	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	0.06	(0.03)	(0.00)	(0.00)	(0.01)
	0.00	0.00	0.00	(0.01)	0.00	0.01	(0.01)	(0.01)	(0.01)	0.06	0.02	0.01	(0.01)	(0.00)	0.00
	0.00	0.00	0.00	(0.01)	(0.00)	0.01	(0.01)	(0.01)	(0.01)	0.02	(0.01)	(0.02)	(0.02)	(0.01)	(0.00)
	0.00	0.00	0.00	(0.00)	(0.01)	0.01	(0.01)	(0.01)	(0.01)	(0.01)	0.05	0.19	(0.01)	(0.01)	0.00
	0.00	0.00	0.00	(0.01)	(0.00)	0.01	(0.01)	(0.01)	(0.01)	0.02	0.02	0.14	(0.01)	(0.01)	0.01
	0.00	0.00	0.00	0.01	(0.00)	0.01	(0.01)	(0.01)	(0.01)	0.17	0.04	0.03	0.01	(0.00)	0.01
	0.01	0.01	0.01	0.02	0.01	0.01	(0.01)	(0.01)	(0.01)	0.10	(0.09)	(0.01)	0.02	0.02	0.02
	0.10	0.07	0.05	(0.02)	0.00	0.04	(0.01)	(0.01)	(0.00)	(0.16)	0.03	(0.11)	0.07	0.06	0.09
	0.00	0.00	0.00	(0.01)	(0.01)	0.00	(0.01)	(0.01)	(0.01)	0.06	0.01	0.03	(0.02)	(0.02)	(0.00)
	0.00	0.00	0.00	(0.01)	(0.00)	0.00	(0.01)	(0.01)	(0.01)	(0.01)	0.00	0.01	(0.02)	(0.02)	(0.01)
	0.00	0.00	0.00	(0.01)	(0.00)	0.01	(0.01)	(0.01)	(0.01)	(0.00)	0.03	(0.00)	(0.03)	(0.02)	(0.01)
	0.00	0.00	0.00	(0.01)	(0.01)	0.02	(0.01)	(0.01)	(0.01)	0.02	(0.03)	0.03	(0.02)	(0.01)	0.01
	0.00	0.00	0.00	(0.02)	(0.00)	0.01	(0.01)	(0.01)	(0.01)	0.06	0.06	0.00	(0.03)	(0.01)	0.00
	0.00	0.00	0.00	(0.01)	(0.00)	0.01	(0.01)	(0.01)	(0.01)	0.04	(0.00)	0.01	(0.02)	(0.01)	(0.00)
	0.00	0.00	0.00	(0.01)	(0.00)	0.01	(0.01)	(0.01)	(0.01)	0.02	0.02	(0.04)	(0.01)	(0.01)	(0.00)
	0.00	0.00	0.00	(0.00)	(0.00)	0.00	(0.01)	(0.01)	(0.01)	0.04	0.02	0.01	(0.01)	(0.01)	(0.00)
	0.00	0.00	0.00	(0.01)	(0.00)	0.00	(0.00)	(0.01)	(0.01)	0.01	(0.03)	0.00	(0.01)	(0.01)	(0.00)

5.12.3 Kuwait GCC Listed Companies DACC Results

59. Kuwait Companies Figures

ΔCash				Δ(CL)_t				Δ(DCL)_t				DEP		
2017	2018	2019		2017	2018	2019		2017	2018	2019		2017	2018	2019
6.7	24.5	(44.5)		2.4	38.3	(34.1)		(1.8)	(1.5)	(1.7)		2.4	2.3	1.9
0.6	(0.6)	0.4		1.1	0.4	0.4		-	-	-		2.2	2.0	2.0
0.2	7.1	1.3		0.2	(0.2)	(1.3)		-	-	-		1.9	2.0	2.0
(4.0)	0.6	13.6		(0.4)	(9.0)	(0.4)		-	2.6	(2.6)		1.2	0.9	0.8
2.8	(1.1)	(0.5)		(1.5)	(0.9)	0.4		-	-	-		0.9	0.8	0.6
5.2	(3.8)	0.6		(0.2)	0.2	0.6		-	-	-		0.0	0.0	0.0
0.1	6.5	8.8		0.8	0.1	(0.1)		3.7	1.0	0.2		2.5	3.6	3.9
13.6	(5.4)	0.7		75.0	(28.2)	(2.1)		(2.3)	(1.9)	(2.3)		9.0	10.9	9.8
(0.1)	0.8	0.5		5.9	12.1	(6.2)		(1.4)	(0.9)	0.1		6.3	8.4	9.0
(2.4)	(3.2)	(0.0)		(0.4)	(3.4)	0.8		0.0	(1.6)	0.6		1.2	1.1	1.2
0.4	(2.4)	20.9		(9.7)	(12.7)	(5.3)		(3.7)	-	-		1.4	1.1	1.0
6.3	(2.3)	(7.4)		10.4	(4.9)	(5.2)		2.5	(2.8)	(1.1)		4.0	5.7	5.7
(2.4)	(1.6)	-		5.7	(3.4)	(0.3)		-	-	-		2.5	2.4	2.4
2.4	2.5	(8.7)		(0.7)	5.7	(4.8)		5.5	(3.2)	21.8		0.8	0.8	0.7
(2.0)	2.3	2.9		13.5	(9.9)	29.1		-	-	-		5.6	6.2	6.4
(0.6)	(2.1)	8.0		9.6	(34.3)	26.5		(6.7)	(1.4)	3.2		6.1	3.5	3.2
2.4	0.9	(3.0)		0.8	4.6	(8.6)		0.7	(6.9)	1.3		10.6	10.8	8.1
2.8	1.5	(3.2)		29.3	(3.9)	(4.7)		-	-	-		2.0	3.1	3.2
3.1	(2.4)	(0.7)		(0.2)	1.0	(0.2)		-	-	-		0.1	0.1	0.1
31.4	0.2	5.0		103.5	(46.8)	(16.0)		80.8	(80.4)	(30.4)		29.8	31.4	60.5
(1.6)	(2.0)	0.1		0.1	(0.1)	(5.4)		(3.5)	(0.1)	0.4		8.9	8.3	9.8
3.2	(1.6)	2.8		1.0	(0.9)	1.1		-	-	-		3.1	3.0	3.1

Step 1 Results

1

2 term1

TACC				A_(t-1)					TACC / A (t-1)				1 / A (t-1)		
2017	2018	2019		2016 A	2017 A	2018 A	2019 A		2017 A	2018 A	2019 A		2017 A	2018 A	2019 A
(0.4)	(30.9)	42.3		285.3	294.9	330.4	298.7		0.00	-0.10	0.13		0.00	0.00	0.00
(2.2)	(2.0)	(2.0)		65.9	63.9	61.4	60.3		-0.03	-0.03	-0.03		0.02	0.02	0.02
0.4	(3.2)	2.4		32.4	38.4	44.5	48.2		0.01	-0.08	0.05		0.03	0.03	0.02
(0.4)	4.9	(1.4)		51.2	48.5	33.7	32.1		-0.01	0.10	-0.04		0.02	0.02	0.03
(5.3)	(0.8)	(1.7)		27.9	22.9	20.1	15.7		-0.19	-0.03	-0.08		0.04	0.04	0.05
(0.6)	0.6	(1.8)		46.2	46.5	44.3	23.4		-0.01	0.01	-0.04		0.02	0.02	0.02
2.7	(1.7)	(2.1)		85.7	98.5	109.9	118.3		0.03	-0.02	-0.02		0.01	0.01	0.01
(39.7)	(15.7)	(6.1)		259.2	329.3	288.7	294.8		-0.15	-0.05	-0.02		0.00	0.00	0.00
(3.8)	(13.2)	7.0		147.7	161.6	180.8	189.2		-0.03	-0.08	0.04		0.01	0.01	0.01
(4.8)	(1.1)	0.3		30.7	27.6	20.6	20.7		-0.15	-0.04	0.01		0.03	0.04	0.05
10.1	6.2	(5.1)		177.2	177.9	177.2	194.4		0.06	0.03	-0.03		0.01	0.01	0.01
(7.0)	(0.8)	0.3		82.9	95.4	91.6	92.5		-0.08	-0.01	0.00		0.01	0.01	0.01
(6.9)	(10.6)	(2.1)		129.8	137.4	132.8	160.4		-0.05	-0.08	-0.02		0.01	0.01	0.01
0.6	(6.3)	4.2		43.5	53.2	71.2	119.6		0.01	-0.12	0.06		0.02	0.02	0.01
(14.0)	(10.7)	19.3		196.1	198.0	188.9	239.6		-0.07	-0.05	0.10		0.01	0.01	0.01
(16.0)	(16.4)	5.5		400.5	407.7	310.4	426.3		-0.04	-0.04	0.02		0.00	0.00	0.00
(16.7)	(17.1)	4.1		93.2	92.3	95.9	93.2		-0.18	-0.18	0.04		0.01	0.01	0.01
(7.6)	(9.3)	9.0		39.6	68.9	66.5	64.9		-0.19	-0.13	0.14		0.03	0.01	0.02
1.5	(2.3)	0.2		23.3	23.9	25.0	25.0		0.07	-0.10	0.01		0.04	0.04	0.04
3.0	(10.9)	(73.5)		1,544.0	1,728.9	1,843.2	2,082.1		0.00	-0.01	-0.04		0.00	0.00	0.00
(9.3)	(17.8)	(12.3)		300.4	305.7	301.9	316.0		-0.03	-0.06	-0.04		0.00	0.00	0.00
(4.7)	(1.2)	(5.4)		112.9	113.7	112.0	114.3		-0.04	-0.01	-0.05		0.01	0.01	0.01

Δ(REV)_t				Δ(REC)(t)				3 term2 (Δ(REV)_t - Δ(REC)_t) / A (t-1)				4 term3 (PPE)(t) / A (t-1)		
2017 A	2018 A	2019 A		2017 A	2018 A	2019 A		2017 A	2018 A	2019 A		2018 A	2019 A	2016 A
29.5	217.9	(97.0)		(5.5)	8.1	9.3		0.12	0.71	(0.32)		0.19	0.18	0.18
(5.2)	(1.0)	1.1		0.5	(0.7)	0.2		(0.09)	(0.00)	0.01		1.10	1.12	1.15
3.2	3.7	1.7		1.6	(3.8)	4.4		0.05	0.19	(0.06)		0.84	0.77	0.68
(5.1)	(1.5)	(0.6)		(0.0)	(3.0)	0.7		(0.10)	0.03	(0.04)		0.25	0.16	0.25
(1.3)	(0.3)	(0.2)		0.3	(2.5)	0.1		(0.06)	0.10	(0.01)		0.44	0.45	0.53
(0.2)	0.4	(0.1)		(0.7)	-	(0.0)		0.01	0.01	(0.00)		0.17	0.17	0.18
7.3	7.5	4.0		2.5	1.1	1.4		0.06	0.06	0.02		0.73	0.71	0.64
47.4	30.0	(62.1)		37.4	(42.1)	18.8		0.04	0.22	(0.28)		0.33	0.27	0.30
39.6	11.2	(5.0)		(0.3)	(13.2)	21.3		0.27	0.15	(0.15)		0.85	0.88	0.82
(6.0)	(3.1)	(0.8)		(1.4)	(0.8)	1.8		(0.15)	(0.08)	(0.12)		0.64	0.72	0.93
(27.5)	21.3	(13.6)		(8.2)	(0.0)	(1.0)		(0.11)	0.12	(0.07)		0.23	0.23	0.25
5.1	20.2	(20.7)		5.8	(6.1)	1.0		(0.01)	0.28	(0.24)		0.45	0.45	0.52
(1.3)	1.9	(12.3)		2.1	(4.1)	(1.6)		(0.03)	0.04	(0.08)		0.36	0.40	0.28
0.8	(0.3)	(0.3)		0.6	0.3	0.1		0.01	(0.01)	(0.01)		0.03	0.02	0.01
20.8	0.6	10.1		4.7	(6.8)	13.0		0.08	0.04	(0.02)		0.70	0.68	0.74
(70.5)	(3.0)	15.1		6.6	(18.0)	14.0		(0.19)	0.04	0.00		0.34	0.18	0.62
9.2	2.2	(12.4)		1.5	(1.8)	(1.6)		0.08	0.04	(0.11)		1.38	1.49	1.46
27.9	37.5	(14.2)		20.6	(5.4)	6.0		0.19	0.62	(0.30)		0.76	0.46	0.49
0.6	(0.3)	(0.0)		0.0	0.0	0.1		0.03	(0.01)	(0.01)		0.21	0.20	0.20
173.0	143.2	28.4		61.2	34.3	(6.6)		0.07	0.06	0.02		0.35	0.29	0.27
(1.3)	(1.0)	(14.4)		1.0	(1.8)	(5.4)		(0.01)	0.00	(0.03)		0.93	0.93	0.95
4.1	7.8	(4.7)		(1.3)	(0.2)	(0.4)		0.05	0.07	(0.04)		0.98	1.02	1.07

FD	FD	FD		FP	FP	FP		FL	FL	FL
2017 A	2018 A	2019 A		2017 A	2018 A	2019 A		2017 A	2017 A	2018 A
(0.3)	0.4	(0.4)		0.002	(0.0)	0.0		0	0	0
0.0	0.0	0.0		(0.8)	(0.3)	0.5		1	1	1
(0.0)	(0.0)	(0.0)		0.0	0.0	(0.0)		0	0	0
0.1	(0.2)	(0.1)		1.4	0.4	(1.1)		1	0	1
(0.3)	(0.2)	0.2		0.5	(0.2)	(1.5)		0	1	1
(0.0)	0.0	0.0		4.6	(2.4)	(0.1)		0	0	0
(0.0)	(0.1)	(0.2)		0.0	0.0	0.0		0	0	0
1.3	(1.1)	0.1		0.0	0.0	0.0		0	0	0
(0.0)	0.0	(0.2)		(0.0)	0.0	0.0		0	0	0
0.6	0.2	(0.1)		(0.3)	0.1	0.4		1	1	1
(0.1)	(0.1)	(0.1)		0.1	(0.0)	(0.0)		0	0	0
0.2	(0.1)	(0.1)		0.0	(0.0)	(0.0)		0	0	0
(0.0)	(0.1)	0.2		0.0	(0.0)	(0.1)		0	0	0
(0.1)	(0.0)	0.2		0.1	0.0	(0.0)		0	0	0
(0.7)	(0.0)	0.9		0.1	(0.1)	(0.1)		0	0	1
0.2	(0.7)	1.0		0.2	(0.1)	(0.1)		0	0	0
(0.3)	(0.2)	(0.0)		0.0	0.1	(0.1)		0	0	0
1.2	(0.3)	(0.4)		(0.0)	0.0	0.0		0	0	0
(0.0)	0.0	(0.0)		0.1	0.0	(0.2)		0	0	0
0.1	0.0	0.1		0.0	0.0	(0.0)		0	0	0
(0.0)	0.0	(0.1)		(0.0)	(0.1)	(0.0)		0	0	0
0.0	(0.0)	0.0		0.1	0.0	0.0		0	0	0

	Coefficient
α1	-0.62
α2	-0.167
α3	-0.036

Result Step 2	α1 1 / A (t-1)			α2 (Δ(REV)_t - Δ(REC)_t) / A (t-1)			α3 (PPE)(t) / A (t-1)			DACC - ε t			NDACC		
	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
	(0.00)	(0.00)	(0.00)	(0.02)	(0.12)	0.05	(0.01)	(0.01)	(0.01)	0.03	0.02	0.08	(0.03)	(0.13)	0.05
	(0.01)	(0.01)	(0.01)	0.01	0.00	(0.00)	(0.04)	(0.04)	(0.04)	0.00	0.02	0.02	(0.03)	(0.05)	(0.05)
	(0.02)	(0.02)	(0.01)	(0.01)	(0.03)	0.01	(0.03)	(0.03)	(0.02)	0.07	(0.01)	0.08	(0.06)	(0.08)	(0.03)
	(0.01)	(0.01)	(0.02)	0.02	(0.01)	0.01	(0.01)	(0.01)	(0.01)	(0.00)	0.12	(0.02)	(0.00)	(0.02)	(0.02)
	(0.02)	(0.03)	(0.03)	0.01	(0.02)	0.00	(0.02)	(0.02)	(0.02)	(0.16)	0.03	0.03	(0.03)	(0.06)	(0.05)
	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)	0.00	(0.01)	(0.01)	(0.01)	0.01	0.03	0.02	(0.02)	(0.02)	(0.02)
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)	(0.03)	(0.03)	(0.02)	0.07	0.03	0.01	(0.04)	(0.04)	(0.03)
	(0.00)	(0.00)	(0.00)	(0.01)	(0.04)	0.05	(0.01)	(0.01)	(0.01)	(0.13)	0.00	(0.06)	(0.02)	(0.05)	0.03
	(0.00)	(0.00)	(0.00)	(0.05)	(0.03)	0.02	(0.03)	(0.03)	(0.03)	0.05	(0.02)	0.05	(0.08)	(0.06)	(0.01)
	(0.02)	(0.02)	(0.03)	0.02	0.01	0.02	(0.02)	(0.03)	(0.03)	(0.14)	(0.00)	0.06	(0.02)	(0.03)	(0.04)
	(0.00)	(0.00)	(0.00)	0.02	(0.02)	0.01	(0.01)	(0.01)	(0.01)	0.05	0.07	(0.03)	0.01	(0.03)	(0.00)
	(0.01)	(0.01)	(0.01)	0.00	(0.05)	0.04	(0.02)	(0.02)	(0.02)	(0.06)	0.06	(0.01)	(0.02)	(0.07)	0.01
	(0.00)	(0.00)	(0.00)	0.00	(0.01)	0.01	(0.01)	(0.01)	(0.01)	(0.04)	(0.05)	(0.01)	(0.01)	(0.03)	(0.00)
	(0.01)	(0.01)	(0.01)	(0.00)	0.00	0.00	(0.00)	(0.00)	(0.00)	0.03	(0.11)	0.07	(0.02)	(0.01)	(0.01)
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	0.00	(0.03)	(0.02)	(0.03)	(0.03)	(0.02)	0.13	(0.04)	(0.03)	(0.03)
	(0.00)	(0.00)	(0.00)	0.03	(0.01)	(0.00)	(0.01)	(0.01)	(0.02)	(0.06)	(0.03)	0.04	0.02	(0.01)	(0.02)
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	0.02	(0.05)	(0.05)	(0.05)	(0.11)	(0.12)	0.08	(0.07)	(0.07)	(0.04)
	(0.02)	(0.01)	(0.01)	(0.03)	(0.10)	0.05	(0.03)	(0.02)	(0.02)	(0.12)	(0.00)	0.11	(0.07)	(0.13)	0.02
	(0.03)	(0.03)	(0.02)	(0.00)	0.00	0.00	(0.01)	(0.01)	(0.01)	0.10	(0.07)	0.04	(0.04)	(0.03)	(0.03)
	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	0.03	0.01	(0.03)	(0.03)	(0.02)	(0.01)
	(0.00)	(0.00)	(0.00)	0.00	(0.00)	0.00	(0.03)	(0.03)	(0.03)	0.00	(0.02)	(0.01)	(0.03)	(0.04)	(0.03)
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	0.01	(0.04)	(0.04)	(0.04)	0.01	0.04	(0.01)	(0.05)	(0.05)	(0.04)

Oman GCC Listed Companies DACC Results

Oman Companies Figures

Δ(CA)_t			ΔCash			Δ(CL)_t			Δ(DCL)_t		
2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
0.6	9.4	7.6	(3.3)	(3.4)	(0.8)	(1.1)	6.7	44.3	-	1.1	18.8
1.3	(5.8)	(0.1)	(0.0)	0.1	(0.4)	2.2	(1.3)	0.6	(0.3)	0.7	(1.1)
0.2	(0.1)	0.0	(0.4)	-	(0.0)	1.0	(0.2)	(0.5)	(0.1)	(0.0)	-
5.1	0.4	(5.2)	0.1	10.2	(2.2)	3.6	(5.3)	(8.1)	-	-	-
12.0	3.9	(3.5)	(1.5)	0.4	1.0	7.2	3.2	(3.1)	1.1	(12.2)	-
2.6	2.4	2.0	(2.6)	(0.6)	0.7	(0.3)	(0.4)	0.6	-	-	-
(50.4)	23.9	(47.7)	(7.7)	(1.6)	0.2	(35.7)	(19.9)	(35.4)	(7.7)	(5.4)	(3.3)
(0.5)	1.4	1.5	0.1	(0.6)	0.2	(3.2)	4.1	7.1	(3.0)	2.0	3.4

DEP			Step 1 Results TACC			A_(t-1)				TACC / A (t-1)		
2017	2018	2019	2017	2018	2019	2016 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
7.0	7.4	6.5	(2.0)	(0.3)	(23.6)	208.5	195.2	199.8	254.8	-0.01	0.00	-0.12
2.3	2.3	1.9	(3.5)	(6.1)	(3.3)	69.9	68.1	55.9	55.7	-0.05	-0.09	-0.06
0.7	0.7	0.8	(1.2)	(0.6)	(0.2)	12.4	13.3	12.9	12.8	-0.10	-0.04	-0.01
3.7	3.6	3.6	(2.2)	(8.2)	1.5	140.2	142.1	139.4	134.0	-0.02	-0.06	0.01
2.0	2.1	1.9	5.4	(13.9)	(3.3)	58.1	68.9	71.9	67.5	0.09	-0.20	-0.05
2.1	2.1	2.0	3.4	1.2	(1.3)	43.0	42.4	41.1	42.7	0.08	0.03	-0.03
20.3	14.5	17.7	(35.0)	25.4	(33.6)	484.8	426.3	419.5	304.4	-0.07	0.06	-0.08
1.1	1.8	3.0	(1.6)	(1.9)	(5.5)	75.0	80.6	89.5	92.1	-0.02	-0.02	-0.06

2 term1   **3** term2

1 / A (t-1)			Δ(REV)_t			Δ(REC)(t)			(Δ(REV)_t - Δ(REC)_t) / A (t-1)		
2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
0.00	0.01	0.01	(20.7)	19.1	(6.9)	(2.5)	12.2	7.7	(0.09)	0.04	(0.07)
0.01	0.01	0.02	(0.9)	(2.9)	0.8	0.0	0.3	(0.2)	(0.01)	(0.05)	0.02
0.08	0.08	0.08	(0.2)	(0.2)	(1.0)	0.1	0.3	0.2	(0.02)	(0.04)	(0.09)
0.01	0.01	0.01	13.6	4.8	(36.9)	0.8	(3.0)	(8.6)	0.09	0.05	(0.20)
0.02	0.01	0.01	28.3	19.5	(12.2)	9.7	(2.4)	0.7	0.32	0.32	(0.18)
0.02	0.02	0.02	(0.6)	(1.7)	0.7	1.4	(0.3)	0.0	(0.05)	(0.03)	0.02
0.00	0.00	0.00	(47.8)	(3.9)	(40.3)	(28.0)	13.3	(58.4)	(0.04)	(0.04)	0.04
0.01	0.01	0.01	0.7	4.6	2.5	(0.5)	1.3	0.1	0.02	0.04	0.03

4 term3

(PPE)(t) / A (t-1)		
2018 A	2019 A	2016 A
0.91	0.98	1.09
0.71	0.72	0.90
1.13	1.06	1.11
0.51	0.50	0.53
0.69	0.60	0.58
0.88	0.90	0.95
0.54	0.57	0.56
1.07	1.08	0.99

FD	FD	FD
2017 A	2018 A	2019 A
(0.0)	0.1	0.4
0.1	0.1	0.1
0.1	(0.0)	(0.0)
0.0	(0.1)	(0.1)
0.1	0.1	(0.0)
(0.0)	(0.0)	0.0
(0.0)	0.1	(1.8)
0.2	0.3	0.3

FP	FP	FP
2017 A	2018 A	2019 A
(0.143)	(0.1)	0.0
(0.0)	0.0	0.0
(0.1)	(0.0)	(0.0)
(0.0)	0.0	(0.0)
(0.0)	(0.0)	(0.0)
0.0	(0.0)	0.1
0.0	0.0	(0.1)
(0.2)	0.0	(0.2)

FL	FL	FL
2017 A	2017 A	2018 A
0	0	0
1	1	0
0	0	0
0	0	0
0	0	0
0	0	0
1	0	1
0	0	1

Coefficient	
α1	-0.098
α2	-0.085
α3	-0.037

Result Step 2

α1 1 / A (t-1)			α2 (Δ(REV)_t - Δ(REC)_t) / A (t-1)			α3 (PPE)(t) / A (t-1)			DACC - ε t		
2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
(0.00)	(0.00)	(0.00)	0.01	(0.00)	0.01	(0.03)	(0.04)	(0.04)	0.02	0.04	(0.08)
(0.00)	(0.00)	(0.00)	0.00	0.00	(0.00)	(0.03)	(0.03)	(0.03)	(0.02)	(0.07)	(0.02)
(0.01)	(0.01)	(0.01)	0.00	0.00	0.01	(0.04)	(0.04)	(0.04)	(0.05)	(0.00)	0.03
(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	0.02	(0.02)	(0.02)	(0.02)	0.01	(0.03)	0.01
(0.00)	(0.00)	(0.00)	(0.03)	(0.03)	0.02	(0.03)	(0.02)	(0.02)	0.15	(0.15)	(0.04)
(0.00)	(0.00)	(0.00)	0.00	0.00	(0.00)	(0.03)	(0.03)	(0.04)	0.11	0.06	0.01
(0.00)	(0.00)	(0.00)	0.00	0.00	(0.00)	(0.02)	(0.02)	(0.02)	(0.06)	0.08	(0.06)
(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.04)	(0.04)	(0.04)	0.02	0.02	(0.02)

Result Step 3

NDACC		
2017 A	2018 A	2019 A
(0.03)	(0.04)	(0.03)
(0.03)	(0.02)	(0.04)
(0.05)	(0.04)	(0.04)
(0.03)	(0.02)	(0.00)
(0.05)	(0.05)	(0.01)
(0.03)	(0.03)	(0.04)
(0.02)	(0.02)	(0.02)
(0.04)	(0.04)	(0.04)

Qatar GCC Listed Companies DACC Results

Qatar Companies Figures

Δ(CA)_t			ΔCash			Δ(CL)_t			Δ(DCL)_t		
2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
(1,234.1)	129.7	(96.2)	(205.2)	256.2	(86.6)	(944.9)	(136.1)	88.4	(392.7)	(142.6)	45.4
592.1	161.3	(674.2)	425.0	681.9	(679.4)	107.3	904.6	32.4	186.9	1,019.5	(6.3)
(370.6)	(52.6)	29.0	14.4	(56.9)	(16.0)	(261.2)	72.1	7.0	-	-	-
93.4	3,199.0	(147.7)	(350.5)	1,260.0	(48.0)	201.1	(58.1)	(102.2)	-	-	-
203.2	(170.7)	(135.9)	216.9	(301.3)	(398.0)	78.4	20.1	(62.6)	-	-	-
13.8	251.9	41.5	(96.4)	104.8	(56.1)	139.2	(130.5)	(35.7)	-	-	-
(552.3)	569.4	590.1	(646.6)	(45.2)	34.5	(126.4)	212.0	538.0	(42.2)	36.9	(82.0)
(124.5)	78.6	21.8	57.0	40.0	(109.2)	(114.2)	37.6	59.6	(3.4)	40.8	26.7
(2,431.4)	(1,876.8)	(501.7)	(728.9)	(246.5)	50.4	(2,844.1)	(1,144.2)	114.8	(2,454.2)	(1,096.8)	(4.1)
1,194.6	538.6	(3,182.7)	1,195.4	631.7	(1,981.5)	1,018.0	207.5	(1,493.0)	-	-	-
2,040.6	549.8	(413.3)	209.3	36.6	(24.3)	3,076.1	3.9	(24.8)	735.7	(203.4)	(36.6)
(140.5)	147.5	(202.1)	(139.9)	151.8	(215.9)	41.5	47.8	(22.1)	0.4	0.4	25.4
(50.2)	(18.7)	(20.1)	5.3	(8.5)	(18.3)	2.8	1.2	14.0	(4.6)	0.5	(0.1)
95.6	(132.6)	92.4	(38.7)	(143.9)	(38.9)	31.2	(157.4)	78.7	-	-	-
91.0	42.7	(171.7)	32.3	(2.1)	(103.6)	52.9	13.0	(125.3)	-	0.5	(0.2)
(8.2)	(3.1)	(2.9)	(0.4)	(0.1)	0.5	10.7	(20.7)	1.0	11.0	(17.7)	(0.6)

Step 1 Results | 1

DEP			TACC			A_(t-1)				TACC / A (t-1)		
2017	2018	2019	2017	2018	2019	2016 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
9.9	10.0	12.9	(486.7)	(142.9)	(65.5)	10,014.9	8,669.8	9,046.2	9,020.6	-0.05	-0.02	-0.01
444.8	279.5	278.9	(198.1)	(685.2)	(312.4)	15,226.0	15,843.6	18,137.4	17,494.1	-0.01	-0.04	-0.02
6.0	5.7	5.2	(129.8)	(73.6)	32.9	1,054.5	1,397.8	1,370.1	1,422.2	-0.12	-0.05	0.02
225.4	237.4	237.4	17.4	1,759.7	(234.9)	35,185.8	35,225.8	37,069.7	35,870.3	0.00	0.05	-0.01
140.0	155.1	174.9	(232.1)	(44.7)	149.8	3,709.6	3,898.0	3,773.0	3,498.2	-0.06	-0.01	0.04
91.1	91.3	104.2	(120.2)	186.2	29.0	4,597.8	4,581.2	4,738.4	4,778.8	-0.03	0.04	0.01
487.3	489.1	434.4	(308.8)	(49.5)	(498.7)	11,117.4	10,428.5	10,342.9	10,766.9	-0.03	0.00	-0.05
25.4	25.1	23.5	(96.1)	16.7	74.6	2,039.7	2,062.3	2,291.0	2,527.8	-0.05	0.01	0.03
284.0	273.9	265.6	(1,596.5)	(1,856.8)	(936.6)	22,057.6	18,805.4	17,807.5	17,670.8	-0.07	-0.10	-0.05
197.8	190.4	209.1	(1,216.7)	491.1	82.7	11,339.7	12,431.3	13,774.8	12,653.2	-0.11	-0.04	0.01
75.9	96.9	92.0	(585.0)	209.0	(492.8)	7,731.9	11,561.5	12,999.3	13,436.8	-0.08	0.02	-0.04
57.7	66.1	111.2	(99.5)	(117.9)	(49.8)	2,209.3	2,219.4	2,400.9	2,545.8	-0.05	-0.05	-0.02
28.2	31.4	27.4	(91.0)	(42.2)	(43.3)	1,205.8	1,183.6	1,204.9	1,294.8	-0.08	-0.04	-0.04
59.8	70.8	60.0	43.3	97.9	(7.5)	2,142.9	2,242.3	2,068.2	2,142.1	0.02	0.04	0.00
4.7	4.0	4.1	1.1	28.3	52.9	520.9	615.2	641.4	510.8	0.00	0.05	0.08
2.6	5.7	5.5	(10.2)	(5.9)	(10.5)	188.8	171.0	162.3	154.1	-0.05	-0.03	-0.06

2 term1

1 / A (t-1)				Δ(REV)_t				Δ(REC)(t)				**3 term2** (Δ(REV)_t - Δ(REC)_t) / A (t-1)		
2017 A	2018 A	2019 A		2017 A	2018 A	2019 A		2017 A	2018 A	2019 A		2017 A	2018 A	2019 A
0.00	0.00	0.00		(1,224.9)	(317.7)	7.6		(560.5)	(83.6)	17.1		(0.07)	(0.03)	(0.00)
0.00	0.00	0.00		(32.4)	(600.3)	(204.5)		258.9	(460.0)	15.9		(0.02)	(0.01)	(0.01)
0.00	0.00	0.00		21.5	(42.9)	17.2		(0.8)	(18.7)	24.7		0.02	(0.02)	(0.01)
0.00	0.00	0.00		(45.8)	1,162.5	(695.2)		73.3	(878.3)	18.0		(0.00)	0.06	(0.02)
0.00	0.00	0.00		(110.8)	(185.6)	(145.1)		52.5	49.3	25.7		(0.04)	(0.06)	(0.05)
0.00	0.00	0.00		(86.0)	(37.2)	(73.2)		8.7	32.4	27.7		(0.02)	(0.02)	(0.02)
0.00	0.00	0.00		(585.9)	116.3	491.6		43.5	38.2	220.9		(0.06)	0.01	0.03
0.00	0.00	0.00		(695.7)	(38.8)	(6.2)		(198.6)	(26.1)	7.4		(0.24)	(0.01)	(0.01)
0.00	0.00	0.00		(60.3)	(71.2)	(18.5)		44.2	(62.6)	(37.5)		(0.00)	(0.00)	0.00
0.00	0.00	0.00		3,647.6	5,783.0	(708.6)		(48.8)	222.0	(1,032.6)		0.33	0.45	0.02
0.00	0.00	0.00		2,155.7	3,732.2	818.2		613.6	(5.2)	369.1		0.20	0.32	0.03
0.00	0.00	0.00		260.7	130.8	(10.8)		(1.7)	(5.4)	0.9		0.12	0.06	(0.00)
0.00	0.00	0.00		1.6	13.6	6.5		(32.6)	(20.0)	3.2		0.03	0.03	0.00
0.00	0.00	0.00		(13.3)	46.0	113.8		10.4	5.4	3.2		(0.01)	0.02	0.05
0.00	0.00	0.00		51.5	20.2	31.7		3.9	(2.1)	0.9		0.09	0.04	0.05
0.01	0.01	0.01		(0.9)	(0.4)	(3.3)		(2.3)	(3.4)	(2.3)		0.01	0.02	(0.01)

4 term3

(PPE)(t) / A (t-1)				FD	FD	FD		FP	FP	FP		FL	FL	FL		Coefficient	
2018 A	2019 A	2016 A		2017 A	2018 A	2019 A		2017 A	2018 A	2019 A		2017 A	2017 A	2018 A			
0.06	0.07	0.07		(0.2)	0.0	0.0		0.128	0.0	(0.1)		0	0	0			
0.76	0.71	0.62		(0.1)	(0.0)	0.0		0.0	0.1	0.0		0	0	0		α1	-2.96
0.06	0.05	0.06		(1.9)	0.3	(0.1)		(0.0)	(0.0)	(0.0)		0	0	0		α2	-0.076
0.19	0.20	0.19		(0.0)	(0.0)	0.0		0.1	0.2	(0.4)		0	0	0		α3	-0.028
1.13	1.11	1.15		0.0	(0.1)	(0.0)		(0.1)	0.1	(0.2)		0	0	0			
0.62	0.62	0.62		(0.1)	(0.0)	0.0		0.0	(0.0)	(0.1)		0	0	0			
0.95	1.02	1.02		(0.1)	0.1	0.1		0.0	(0.1)	0.1		0	1	0			
0.49	0.57	0.62		0.0	0.1	0.2		0.3	0.0	(0.2)		0	0	0			
0.30	0.36	0.39		(0.2)	(0.2)	(0.0)		(0.1)	0.0	0.0		0	0	0			
0.27	0.34	0.35		0.1	(0.0)	(0.2)		(0.0)	(0.0)	0.0		0	0	0			
0.17	0.14	0.13		1.3	0.7	0.1		(0.0)	(0.0)	(0.0)		0	0	0			
0.62	0.66	0.64		0.0	0.1	0.1		(0.0)	(0.0)	0.0		0	0	0			
0.98	1.05	1.10		(0.0)	0.0	0.1		0.0	0.0	(0.0)		0	0	0			
0.51	0.51	0.54		(0.0)	(0.1)	0.0		0.0	0.0	(0.0)		0	0	0			
0.13	0.11	0.12		0.1	0.0	(0.3)		0.0	(0.0)	(0.0)		0	0	0			
0.83	0.91	0.96		0.7	0.8	1.1		(1.0)	0.7	(0.2)		1	1	1			

Result Step 3

Result Step 2	α1 1 / A (t-1)			α2 (Δ(REV)_t - Δ(REC)_t) / A (t-1)			α3 (PPE)(t) / A (t-1)			DACC - ε t			NDACC		
	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
	(0.00)	(0.00)	(0.00)	0.01	0.00	0.00	(0.00)	(0.00)	(0.00)	(0.05)	(0.02)	(0.01)	0.00	(0.00)	(0.00)
	(0.00)	(0.00)	(0.00)	0.00	0.00	0.00	(0.02)	(0.02)	(0.02)	0.01	(0.02)	(0.00)	(0.02)	(0.02)	(0.02)
	(0.00)	(0.00)	(0.00)	(0.00)	0.00	0.00	(0.00)	(0.00)	(0.00)	(0.12)	(0.05)	0.03	(0.01)	(0.00)	(0.00)
	(0.00)	(0.00)	(0.00)	0.00	(0.00)	0.00	(0.01)	(0.01)	(0.01)	0.01	0.06	(0.00)	(0.01)	(0.01)	(0.00)
	(0.00)	(0.00)	(0.00)	0.00	0.00	0.00	(0.03)	(0.03)	(0.03)	(0.03)	0.02	0.07	(0.03)	(0.03)	(0.03)
	(0.00)	(0.00)	(0.00)	0.00	0.00	0.00	(0.02)	(0.02)	(0.02)	(0.01)	0.06	0.02	(0.02)	(0.02)	(0.02)
	(0.00)	(0.00)	(0.00)	0.00	(0.00)	0.00	(0.03)	(0.03)	(0.03)	(0.01)	0.02	0.02	(0.02)	(0.03)	(0.03)
	(0.00)	(0.00)	(0.00)	0.02	0.00	0.00	(0.01)	(0.02)	(0.02)	(0.05)	0.03	0.05	0.00	(0.02)	(0.02)
	(0.00)	(0.00)	(0.00)	0.00	0.00	(0.00)	(0.01)	(0.01)	(0.01)	(0.06)	(0.09)	(0.04)	(0.01)	(0.01)	(0.01)
	(0.00)	(0.00)	(0.00)	(0.02)	(0.03)	(0.00)	(0.01)	(0.01)	(0.01)	(0.07)	0.00	0.02	(0.03)	(0.04)	(0.01)
	(0.00)	(0.00)	(0.00)	(0.02)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.06)	0.05	(0.03)	(0.02)	(0.03)	(0.01)
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	0.00	(0.02)	(0.02)	(0.02)	(0.02)	(0.03)	(0.00)	(0.03)	(0.02)	(0.02)
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.03)	(0.03)	(0.03)	(0.04)	(0.00)	(0.00)	(0.03)	(0.03)	(0.03)
	(0.00)	(0.00)	(0.00)	0.00	(0.00)	(0.00)	(0.01)	(0.01)	(0.02)	0.03	0.06	0.02	(0.01)	(0.02)	(0.02)
	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	0.02	0.06	0.09	(0.02)	(0.01)	(0.01)
	(0.02)	(0.02)	(0.02)	(0.00)	(0.00)	0.00	(0.02)	(0.03)	(0.03)	(0.01)	0.01	(0.02)	(0.04)	(0.04)	(0.04)

Bahrain GCC Listed Companies DACC Results

Bahrain Companies Figures

Δ(CA)_t		
2017	2018	2019
(0.7)	1.3	(0.3)
(1.1)	1.3	(0.1)
118.1	61.1	(43.1)
30.7	14.5	34.1
1.9	(8.7)	2.6

ΔCash		
2017	2018	2019
(0.1)	(0.7)	(1.0)
(0.2)	(0.5)	0.2
11.0	26.4	(22.5)
(13.7)	(15.9)	32.7
2.0	(9.5)	1.9

Δ(CL)_t		
2017	2018	2019
(0.5)	2.0	0.2
0.0	0.2	(0.2)
0.6	122.7	156.0
21.9	(7.7)	192.9
0.3	(1.5)	(1.7)

Δ(DCL)_t		
2017	2018	2019
-	-	-
-	-	-
(23.2)	52.5	78.4
5.4	0.0	0.8
1.0	1.0	(2.1)

Step 1 Results

1

DEP		
2017	2018	2019
0.6	0.6	0.6
0.3	0.4	0.4
71.4	64.8	80.3
66.3	70.1	66.2
1.4	1.5	0.9

TACC		
2017	2018	2019
(0.8)	(0.7)	(0.2)
(1.2)	1.1	(0.5)
11.8	(100.3)	(178.6)
(38.4)	(31.9)	(256.9)
(0.7)	1.9	(0.6)

A_(t-1)			
2016 A	2017 A	2018 A	2019 A
22.7	22.0	24.7	26.0
14.5	13.8	14.3	15.2
1,173.7	1,686.2	2,208.9	2,420.3
950.9	932.5	912.4	992.9
162.6	165.8	168.4	174.3

TACC / A (t-1)		
2017 A	2018 A	2019 A
-0.03	-0.03	-0.01
-0.08	0.08	-0.03
0.01	-0.06	-0.08
-0.04	-0.03	-0.28
0.00	0.01	0.00

2   term1

3   term2

1 / A (t-1)		
2017 A	2018 A	2019 A
0.04	0.05	0.04
0.07	0.07	0.07
0.00	0.00	0.00
0.00	0.00	0.00
0.01	0.01	0.01

Δ(REV)_t		
2017 A	2018 A	2019 A
0.5	0.1	(0.0)
6.2	1.5	(0.5)
188.0	53.6	118.1
12.3	26.4	(4.4)
2.4	(0.4)	(0.4)

Δ(REC)(t)		
2017 A	2018 A	2019 A
0.2	0.3	0.2
0.1	0.6	(0.1)
26.1	(9.4)	24.1
10.7	26.1	6.8
0.0	0.9	0.2

(Δ(REV)_t - Δ(REC)_t) / A (t-1)		
2017 A	2018 A	2019 A
0.02	(0.01)	(0.01)
0.42	0.06	(0.03)
0.14	0.04	0.04
0.00	0.00	(0.01)
0.01	(0.01)	(0.00)

4   term3

(PPE)(t) / A (t-1)		
2018 A	2019 A	2016 A
0.76	0.80	0.71
0.83	0.90	0.94
2.16	1.81	1.53
0.77	0.77	0.84
0.20	0.20	0.07

FD	FD	FD
2017 A	2018 A	2019 A
(0.0)	0.1	(0.0)
0.0	0.0	0.0
0.4	0.5	0.2
0.1	(0.1)	0.1
(0.0)	(0.0)	0.0

FP	FP	FP
2017 A	2018 A	2019 A
0.591	(0.5)	0.1
0.1	0.0	(0.0)
0.0	(0.0)	(0.1)
(0.1)	0.1	0.0
(0.1)	0.0	0.0

FL	FL	FL
2017 A	2017 A	2018 A
0	0	0
1	0	1
0	0	0
0	0	0
0	0	0

Coefficient	
α1	0.37
α2	-0.049
α3	-0.04

Result Step 3

Result Step 2	α1 1 / A (t-1)			α2 (Δ(REV)_t - Δ(REC)_t) / A (t-1)			α3 (PPE)(t) / A (t-1)			DACC - ε t			NDACC		
	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A	2017 A	2018 A	2019 A
	0.02	0.02	0.01	(0.00)	0.00	0.00	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)	0.01	(0.02)	(0.01)	(0.01)
	0.03	0.03	0.03	(0.02)	(0.00)	0.00	(0.03)	(0.04)	(0.04)	(0.05)	0.09	(0.02)	(0.03)	(0.01)	(0.01)
	0.00	0.00	0.00	(0.01)	(0.00)	(0.00)	(0.09)	(0.07)	(0.06)	0.10	0.01	(0.02)	(0.09)	(0.07)	(0.06)
	0.00	0.00	0.00	(0.00)	(0.00)	(0.00)	(0.03)	(0.03)	(0.03)	(0.01)	(0.00)	(0.25)	(0.03)	(0.03)	(0.03)
	0.00	0.00	0.00	(0.00)	0.00	0.00	(0.01)	(0.01)	(0.00)	0.00	0.02	(0.00)	(0.01)	(0.01)	(0.00)

UAE GCC Listed Companies DACC Results

UAE Companies Figures

Δ(CA)_t		
2017	2018	2019
(294.0)	(386.0)	14.0
(160.0)	3,115.9	(638.9)
8.3	(33.0)	(34.6)
(97.3)	(148.2)	35.1
16.5	38.3	(23.3)
151.7	(305.1)	(86.4)
(36.4)	(26.2)	56.4
32.6	(6.6)	60.1
55.4	(36.4)	(37.9)
(18.2)	17.8	47.6
0.3	156.9	28.5
94.6	(607.0)	(290.2)

ΔCash		
2017	2018	2019
306.0	(201.0)	18.0
(1,048.0)	2,687.5	(726.9)
(1.1)	35.9	(27.2)
(75.4)	(23.7)	-
(1.5)	11.1	(6.5)
92.0	(192.4)	58.9
(7.2)	(14.3)	52.4
(36.2)	22.7	27.6
0.1	1.1	0.8
(6.1)	14.1	37.5
5.1	8.5	(40.0)
4.5	(80.7)	(29.0)

Δ(CL)_t		
2017	2018	2019
(28.0)	(731.0)	350.0
1,935.8	2,611.4	(930.3)
188.4	59.9	(214.9)
(184.3)	74.4	6.4
21.6	(4.0)	23.8
(66.4)	10.7	55.0
(5.2)	(3.1)	(24.5)
62.9	758.5	11.8
77.6	(7.3)	56.2
(34.2)	(24.0)	(3.8)
(16.3)	113.9	120.5
41.9	566.1	(167.6)

Δ(DCL)_t		
2017	2018	2019
-	-	-
-	-	-
-	332.2	(197.5)
-	-	-
6.3	3.2	1.7
45.9	2.1	30.2
1.2	(5.6)	(23.2)
(95.0)	703.4	90.6
4.4	14.0	26.9
(1.5)	(18.2)	0.7
(55.1)	(1.9)	34.0
-	-	-

DEP

2017	2018	2019
111.0	113.0	103.0
460.7	532.1	533.2
15.0	17.1	17.5
23.3	31.5	26.9
30.4	28.7	29.3
150.8	139.4	135.1
34.7	33.4	32.2
81.4	75.8	72.7
10.2	8.3	6.7
31.6	28.9	31.7
54.7	56.3	63.7
88.3	84.6	82.3

TACC

2017	2018	2019
(683.0)	433.0	(457.0)
(1,508.5)	(2,715.1)	485.1
(194.1)	186.4	(7.4)
139.2	(230.4)	1.8
(27.7)	5.7	(68.1)
21.1	(260.8)	(305.3)
(57.4)	(47.8)	(26.9)
(170.5)	(160.2)	38.5
(28.2)	(24.4)	(74.6)
(11.0)	(19.4)	(17.0)
(98.4)	(23.7)	(81.7)
(40.1)	(1,177.0)	(175.9)

A_(t-1)

2016 A	2017 A	2018 A	2019 A
3,765.0	3,782.0	3,167.0	3,202.0
11,438.3	12,205.4	15,621.6	15,010.2
2,100.9	2,043.1	1,956.8	1,785.0
1,260.9	1,159.8	938.3	977.0
635.2	650.2	665.7	606.8
5,756.3	5,801.0	5,497.0	5,486.8
1,215.6	1,102.5	1,030.1	989.9
3,492.0	3,408.8	3,333.3	3,481.4
691.7	720.6	642.6	599.2
409.5	379.0	387.7	478.6
1,791.7	1,835.2	2,032.2	2,155.3
3,473.4	3,527.7	2,892.4	2,450.4

TACC / A (t-1)

2017 A	2018 A	2019 A
-0.18	0.11	-0.14
-0.13	-0.22	0.03
-0.09	0.09	0.00
0.11	-0.20	0.00
-0.04	0.01	-0.10
0.00	-0.04	-0.06
-0.05	-0.04	-0.03
-0.05	-0.05	0.01
-0.04	-0.03	-0.12
-0.03	-0.05	-0.04
-0.05	-0.01	-0.04
-0.01	-0.33	-0.06

2   term1   **3   term2**

1 / A (t-1)

2017 A	2018 A	2019 A
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Δ(REV)_t

2017 A	2018 A	2019 A
58.0	20.0	(11.0)
2,086.2	3,137.2	(1,556.5)
(48.6)	21.5	(35.6)
(215.7)	(258.6)	(133.8)
(30.3)	30.0	(47.5)
61.8	(126.4)	(154.0)
(53.9)	(25.1)	8.4
95.8	59.0	(65.2)
23.5	(5.0)	(17.2)
(0.4)	6.5	(29.7)
37.2	(53.1)	(29.3)
(299.9)	(434.8)	(418.3)

Δ(REC)(t)

2017 A	2018 A	2019 A
(743.0)	(76.0)	(28.0)
507.1	18.4	831.2
(5.7)	(11.8)	(19.7)
61.7	42.7	73.0
2.0	22.0	(0.6)
103.9	(118.1)	17.0
(23.1)	(18.5)	3.3
66.7	(20.7)	(3.4)
13.0	(6.9)	(10.0)
(5.3)	(0.9)	(11.1)
7.9	34.9	18.8
(13.1)	(487.9)	(191.0)

(Δ(REV)_t - Δ(REC)_t) / A (t-1)

2017 A	2018 A	2019 A
0.21	0.03	0.01
0.14	0.26	(0.15)
(0.02)	0.02	(0.01)
(0.22)	(0.26)	(0.22)
(0.05)	0.01	(0.07)
(0.01)	(0.00)	(0.03)
(0.03)	(0.01)	0.00
0.01	0.02	(0.02)
0.02	0.00	(0.01)
0.01	0.02	(0.05)
0.02	(0.05)	(0.02)
(0.08)	0.02	(0.08)

4   term3

(PPE)(t) / A (t-1)

2018 A	2019 A	2016 A
0.66	0.63	0.77
0.73	0.74	0.61
0.52	0.54	0.57
0.44	0.46	0.57
1.33	1.30	1.29
0.67	0.65	0.67
0.67	0.75	0.79
1.00	1.04	1.11
0.64	0.61	0.63
1.24	1.34	1.54
1.00	1.07	1.00
0.59	0.59	0.70

FD 2017 A	FD 2018 A	FD 2019 A
(0.0)	(0.1)	(0.0)
3.1	0.1	(0.4)
0.0	(0.0)	(0.1)
(0.7)	1.7	0.0
0.1	(0.0)	0.0
(0.1)	0.0	0.1
(0.0)	(0.1)	(0.1)
(0.1)	(0.1)	0.1
0.3	0.1	0.4
(0.3)	(0.1)	0.1
(0.0)	0.2	0.1
0.1	0.7	1.1

FP 2017 A	FP 2018 A	FP 2019 A
0.409	(0.6)	0.7
(0.0)	0.0	0.0
(0.2)	(0.4)	0.5
0.1	(0.4)	0.2
(0.1)	0.2	(0.4)
0.1	(0.0)	(0.0)
(0.0)	(0.1)	0.0
0.1	0.0	(0.0)
(0.3)	(0.4)	(0.2)
0.0	0.1	0.0
(0.0)	(0.1)	(0.0)
(0.1)	(0.9)	(0.8)

FL 2017 A	FL 2017 A	FL 2018 A
0	1	0
0	0	0
0	1	0
0	1	1
1	0	1
0	0	0
0	0	0
0	0	0
1	1	1
0	0	0
0	0	0
0	1	1

	Coefficient
α1	8.332
α2	-0.253
α3	-0.067

Result Step 2   **Result Step 3**

α1 1 / A (t-1)

2017 A	2018 A	2019 A
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.01	0.01	0.01
0.01	0.01	0.01
0.00	0.00	0.00
0.01	0.01	0.01
0.00	0.00	0.00
0.01	0.01	0.01
0.02	0.02	0.02
0.00	0.00	0.00
0.00	0.00	0.00

α2 (Δ(REV)_t - Δ(REC)_t) / A (t-1)

2017 A	2018 A	2019 A
(0.05)	(0.01)	(0.00)
(0.03)	(0.06)	0.04
0.01	(0.00)	(0.00)
0.06	0.07	0.06
0.01	(0.00)	0.02
0.00	0.00	0.01
0.01	0.00	(0.00)
(0.00)	(0.01)	0.00
(0.00)	(0.00)	0.00
(0.00)	(0.00)	0.01
(0.00)	0.01	0.01
0.02	(0.00)	0.02

α3 (PPE)(t) / A (t-1)

2017 A	2018 A	2019 A
(0.04)	(0.04)	(0.05)
(0.05)	(0.05)	(0.04)
(0.04)	(0.04)	(0.04)
(0.03)	(0.03)	(0.04)
(0.09)	(0.09)	(0.09)
(0.04)	(0.04)	(0.05)
(0.04)	(0.05)	(0.05)
(0.07)	(0.07)	(0.07)
(0.04)	(0.04)	(0.04)
(0.08)	(0.09)	(0.10)
(0.07)	(0.07)	(0.07)
(0.04)	(0.04)	(0.05)

DACC - ε t

2017 A	2018 A	2019 A
(0.09)	0.16	(0.09)
(0.05)	(0.11)	0.03
(0.07)	0.13	0.03
0.08	(0.24)	(0.02)
0.02	0.09	(0.05)
0.05	(0.00)	(0.02)
(0.02)	(0.00)	0.02
0.02	0.03	0.08
(0.01)	(0.00)	(0.09)
0.04	0.02	0.03
0.01	0.04	0.02
0.00	(0.29)	(0.04)

NDACC

2017 A	2018 A	2019 A
(0.10)	(0.05)	(0.05)
(0.08)	(0.11)	(0.00)
(0.03)	(0.04)	(0.03)
0.03	0.04	0.03
(0.06)	(0.08)	(0.06)
(0.04)	(0.04)	(0.04)
(0.03)	(0.04)	(0.05)
(0.07)	(0.07)	(0.07)
(0.03)	(0.03)	(0.03)
(0.07)	(0.07)	(0.07)
(0.07)	(0.05)	(0.06)
(0.02)	(0.04)	(0.02)