In [2]:

Out[2]:

Initial Rating (26/12/06) 02/11/07 03/12/07 05/12/07 11/09/08

Adams Square Funding I Tranche Value (USD millions)

| 342.00 | Aaa | Ba2 | В3 | С | WR |
|--------|------|------|----|---|----|
| 48.00 | Aaa | Caa1 | | С | WR |
| 51.00 | Aa2 | Caa2 | | С | WR |
| 10.00 | Aa3 | Baa2 | | С | WR |
| 15.25 | A2 | Ca | | С | WR |
| 16.00 | Baa2 | Ca | | С | WR |
| 5.00 | Ba1 | Ca | | С | WR |

In [3]:

Out[3]:

Initial Rating (26/12/06) 01/11/07 04/04/08 20/09/10

Abacus Tranche Value (USD millions)

| 50 | Aaa | Baa2 | Ca | WR |
|-----|-----|------|----|----|
| 142 | Aaa | Baa3 | Ca | WR |

In [4]:

```
Adirondack = pd.DataFrame({'Adirondack Tranche Value (USD millions)':[1070.1,26
7.5,1070.1,60.8,57.7,30.4,24.3,5],\
                              'Initial Rating (06/06/05)':['Aaa','Aaa','Aa
a','Aa1','A2','Baa2','Ba3'],\
                              '11/12/07':['WR',' ',' ',' ',' ',' ',' ',' ',' '],\
                              '23/05/08':[' ','Aa1','Aa1','Aa3','A2','Ba2','B1',
'Caa2'],\
                              '20/11/08':[' ','Aa2','Aa2','Baa2','Ba1','C','C',
'C'1,\
                              '17/12/08':[' ','A2','A2','Ba2','B1',' ',' ',' '],
                              '26/03/09':[' ','B2','B2','Caa3','C',' ',' ',' '],
                              '25/06/10':[' ','Ca','Ca','C',' ',' ',' ',' ']})
neworder = ['Initial Rating (06/06/05)','11/12/07','23/05/08','20/11/08','17/12/
08', '26/03/09', '25/06/10']
Adirondack = Adirondack.set index('Adirondack Tranche Value (USD millions)')
Adirondack = Adirondack[neworder]
Adirondack
```

Out[4]:

Initial Rating (06/06/05) 11/12/07 23/05/08 20/11/08 17/12/08 26/03/09 25/06/10

| Adirondac | k |
|-------------------|----|
| Tranche Value (US | D |
| millions | s) |

| 1070.1 | Aaa | WR | | | | | |
|--------|------|----|------|------|-----|------|----|
| 267.5 | Aaa | | Aa1 | Aa2 | A2 | B2 | Ca |
| 1070.1 | Aaa | | Aa1 | Aa2 | A2 | B2 | Ca |
| 60.8 | Aaa | | Aa3 | Baa2 | Ba2 | Caa3 | С |
| 57.7 | Aa1 | | A2 | Ba1 | B1 | С | |
| 30.4 | A2 | | Ba2 | С | | | |
| 24.3 | Baa2 | | B1 | С | | | |
| 5.0 | Ba3 | | Caa2 | С | | | |

In [5]:

Out[5]:

| | Initial Rating (18/12/06) | 19/12/08 | 16/07/09 | 06/08/10 | |
|--|------------------------------|----------|----------|----------|--|
| Anthracite Euro CRE Tranche Value (EUR millions) | | | | | |
| 142.5 | Aaa | Aa3 | Ba1 | Caa3 | |
| 29.0 | Aa1 | A1 | Caa2 | Ca | |
| 48.5 | A1 | Baa1 | Ca | С | |
| 31.0 | Baa2 | Ba2 | С | | |
| 25.0 | Ba2 | B2 | С | | |

In [6]:

Out[6]:

Initial Rating (30/03/07) 11/09/09

Apidos Tranche Value (USD millions)

| Aa2 | Aaa | 130 |
|------|------|-----|
| | Aaa | 150 |
| Aa3 | Aa1 | 17 |
| А3 | Aa2 | 19 |
| Ba1 | A2 | 21 |
| B1 | Baa2 | 18 |
| Caa3 | Ba2 | 12 |

In [7]:

Out[7]:

Initial Rating (19/08/05) 30/11/05 29/07/09

Aria Tranche Value (EUR millions)

| 10 | Aaa | | A1 |
|----|-----|----|-----|
| 14 | | A2 | Ba2 |

In [8]:

Out[8]:

Initial Rating (11/10/06) 24/04/08 09/04/09 11/03/10

| 235 | Aaa | Aa1 | Ba2 | |
|-----|-----|------|------|----|
| 60 | Aaa | Aa3 | В3 | Ca |
| 55 | Aaa | A1 | Caa2 | С |
| 5 | Aaa | A1 | Caa2 | С |
| 20 | Aa2 | Ba3 | С | |
| 32 | A2 | Caa3 | С | |
| 22 | Ba3 | Ca | | |

In [9]:

```
Auriga = pd.DataFrame({'Auriga Tranche Value (USD millions)':[975,97.5,48,64.5,6
3,48,42,51,28.5,43.5,22.5],\
                           'Initial Rating (30/03/07)':['Aaa','Aaa','Aa
2','Aa3','A2','A3','Baa2','Baa3','Baa3','Ba2'],\
                           '31/10/07':['Aaa','A2','A3','Baa2','Baa3','Ba2','B
a3','Caa2','Ca','C','C'],\
                           '28/02/08':['Ba1','Caa3','Caa3','Ca','C','C','C',
'C','C',' ',' '],\
                           '09/05/08':['B3','Ca','Ca',' ',' ',' ',' ',' ',' ',' '
, ' ', ' '],\
                           '23/09/08':['Ca','C','C','C',' ',' ',' ',' ',' ',' ','
',' '],\
                           ',' '],\
                           ',' '1})
neworder = ['Initial Rating (30/03/07)','31/10/07','28/02/08','09/05/08','23/09/
08', '14/09/09', '17/07/09']
Auriga = Auriga.set_index('Auriga Tranche Value (USD millions)')
Auriga = Auriga[neworder]
Auriga
```

Out[9]:

| | Initial Rating (30/03/07) | 31/10/07 | 28/02/08 | 09/05/08 | 23/09/08 | 14/09/09 | 17/07/09 |
|---|------------------------------|----------|----------|----------|----------|----------|----------|
| Auriga Tranche Value (USD millions) | | | | | | | |
| 975.0 | Aaa | Aaa | Ba1 | В3 | Ca | С | W |
| 97.5 | Aaa | A2 | Caa3 | Ca | С | | |
| 48.0 | Aaa | A3 | Caa3 | Ca | С | | |
| 64.5 | Aa2 | Baa2 | Ca | | С | | |
| 63.0 | Aa3 | Baa3 | С | | | | |
| 48.0 | A2 | Ba2 | С | | | | |
| 42.0 | A3 | Ba3 | С | | | | |
| 51.0 | Baa2 | Caa2 | С | | | | |
| 28.5 | Baa3 | Ca | С | | | | |
| 43.5 | Baa3 | С | | | | | |
| 22.5 | Ba2 | С | | | | | |

In [10]:

Out[10]:

| Initial Rating | 00/05/00 | 17/10/00 | 02/02/00 | 12/07/10 |
|----------------|----------|----------|----------|----------|
| (24/01/06) | 09/05/06 | 17/12/06 | 02/02/09 | 13/07/10 |

| Broderick I | Tranche | Value | (USD |
|-------------|---------|-------|--------|
| | | mil | lione) |

| Ca | Caa2 | Baa1 | A1 | Aaa | 0.25 |
|----|------|------|-----|------|--------|
| Ca | Caa2 | Baa1 | A1 | Aaa | 354.75 |
| Ca | Caa2 | Baa1 | A1 | Aaa | 485.00 |
| | С | B1 | Ba1 | Aaa | 85.00 |
| | С | Caa2 | B2 | Aa2 | 43.00 |
| | С | | Ca | Baa2 | 23.00 |

In [11]:

```
BroderickII = pd.DataFrame({'BroderickII Tranche Value (USD millions)':[876,500,
42,70,67.6,23.5,8,4.9],\
                              'Initial Rating (22/09/06)':['Aaa','Aaa','Aaa','Aa
a','Aa2','A2','Baa2','Ba1'],\
                              '01/11/07':[' ',' ','Aaa','Aaa','Aa2','Baa2','Ba1'
,'B1'],\
                              '05/03/08':['Aa1','Aa1','Baa2','B2','Ca','C','C',
'C'],\
                              '29/05/08':['Ba1','Ba1','Caa3','Ca',' ',' ',' ','
 '],\
                              '23/09/08':['Ca','Ca','C','C','C',' ',' ',' ']})
neworder = ['Initial Rating (22/09/06)','01/11/07','05/03/08','29/05/08','23/09/
08']
BroderickII = BroderickII.set index('BroderickII Tranche Value (USD millions)')
BroderickII = BroderickII[neworder]
BroderickII
```

Out[11]:

Initial Rating (22/09/06) 01/11/07 05/03/08 29/05/08 23/09/08

BroderickII Tranche Value (USD millions)

| Ca | Ba1 | Aa1 | | Aaa | 876.0 |
|----|------|------|------|------|-------|
| Ca | Ba1 | Aa1 | | Aaa | 500.0 |
| С | Caa3 | Baa2 | Aaa | Aaa | 42.0 |
| С | Ca | B2 | Aaa | Aaa | 70.0 |
| С | | Ca | Aa2 | Aa2 | 67.6 |
| | | С | Baa2 | A2 | 23.5 |
| | | С | Ba1 | Baa2 | 8.0 |
| | | С | B1 | Ba1 | 4.9 |

In [12]:

```
Caldecott = pd.DataFrame({'Caldecott Tranche Value (USD millions)':[200,125,65,4
0.5,16.5,18,10.5,8.5],\
                               'Initial Rating (16/01/07)':['Aaa','Aaa','Aaa','Aa
2','A2','Baa2','Baa3','Ba1'],\
                               '05/09/07':[' ',' ','Aaa','Aa2','A2','Baa2','Baa3'
,'Ba1'],\
                               '01/11/07':['Aaa','Aaa','Baa1','Baa3','Ba2','Caa2'
,'Caa3','Ca'],\
                               '27/03/08':['A2','Ba2','B2','Caa1','Ca','Ca','Ca',
' '1,\
                               '02/06/08':['B2','Ca','C','C','C','C','C','C'],\
                               '16/12/08':['Caa2',' '
                               '24/04/09':['C','C',' ',' ',' ',' ',' '
neworder = ['Initial Rating (16/01/07)','05/09/07','01/11/07','27/03/08','02/06/
08', '16/12/08', '24/04/09']
Caldecott = Caldecott.set index('Caldecott Tranche Value (USD millions)')
Caldecott = Caldecott[neworder]
Caldecott
```

Out[12]:

Initial Rating (16/01/07) 05/09/07 01/11/07 27/03/08 02/06/08 16/12/08 24/04/09

Caldecott Tranche Value (USD millions)

| minons | | | | | | | |
|--------|------|------|------|------|----|------|---|
| 200.0 | Aaa | | Aaa | A2 | B2 | Caa2 | С |
| 125.0 | Aaa | | Aaa | Ba2 | Ca | | С |
| 65.0 | Aaa | Aaa | Baa1 | B2 | С | | |
| 40.5 | Aa2 | Aa2 | Baa3 | Caa1 | С | | |
| 16.5 | A2 | A2 | Ba2 | Ca | С | | |
| 18.0 | Baa2 | Baa2 | Caa2 | Ca | С | | |
| 10.5 | Baa3 | Baa3 | Caa3 | Ca | С | | |
| 8.5 | Ba1 | Ba1 | Ca | | С | | |

```
In [13]:
```

Out[13]:

Initial
Rating 10/12/07 03/04/08 04/06/08 07/11/08 17/12/08 18/02/09 24/04/09 17/0 (03/05/05)

Camber 3 Tranche Value (USD millions)

| 10.0 | Aaa | | | | | Aaa | Aaa | | |
|-------|------|------|------|-----|------|------|------|---|--|
| 422.5 | Aaa | | | Aa3 | Ва3 | В3 | Caa2 | С | |
| 110.5 | Aaa | | Aaa | A3 | Caa2 | Caa3 | | С | |
| 45.5 | Aa2 | Aa2 | A2 | Ba1 | Ca | | С | | |
| 26.0 | A2 | A2 | Baa3 | Ca | С | | | | |
| 19.5 | Baa2 | Baa2 | Ba2 | Ca | С | | | | |

In [14]:

Out[14]:

| | Initial Rating (30/07/04) | 09/07/08 | 22/12/08 | 10/02/09 | 26/05/10 | |
|--------------------------------------|------------------------------|----------|----------|----------|----------|--|
| Cascade Tranche Value (USD millions) | | | | | | |
| 328.0 | Aaa | | Baa3 | B1 | Caa3 | |
| 46.0 | Aaa | Ва3 | Caa3 | Ca | С | |
| 14.0 | Aa3 | В3 | С | | | |
| 7.0 | Baa2 | С | | | | |
| 7.7 | Baa3 | С | | | | |

```
In [15]:
```

Out[15]:

Initial
Rating 08/01/08 02/04/08 28/05/08 30/07/08 17/12/08 22/04/08 13/07/10 (20/05/05)

Class V Funding Tranche Value (USD millions)

| 100 | Aaa | | | Aa2 | A2 | Ba2 | Caa3 | Ca |
|-----|------|------|------|------|------|-----|------|----|
| 41 | Aaa | | Aaa | Baa3 | Caa2 | Ca | С | |
| 30 | Aa2 | | Aa2 | В3 | С | | | |
| 8 | A2 | A2 | Baa3 | С | | | | |
| 9 | Baa2 | Baa2 | Ba2 | С | | | | |
| 2 | Baa2 | Baa2 | Ba2 | С | | | | |
| 15 | | B2 | Ca | С | | | | |

In [16]:

```
Commodore = pd.DataFrame({'Commodore Tranche Value (USD millions)':[75,225,50,25
,70,13.25,24,8.5,201,\
                             'Initial Rating (28/09/06)':['Aaa','Aaa','Aaa','Aa
a','Aa2','A2','Baa2','Ba1','Aaa'],\
                             '11/07/07':[' ',' ',' ',' ',' ',' ',' Baa2','Ba1','
'],\
                             '29/08/07':[' ',' ',' ',' 'Aa2','A2',' ',' ',' '
],\
                             '31/10/07':['Aaa','Aaa','Aaa','Baa2','B3','C
aa1','Caa2',' '],\
                             '31/03/08':['Baa1','Baa1','Ba1','Ba2','B1','Ca','C
a','Ca',' '],\
                             '02/06/08':['B3','B3','Ca','Ca','Ca','C','C','C','
'],\
                             ' '<sub>1</sub>,\
                             '24/04/09':['C','C','C','C','C',',',',',',',']})
neworder = ['Initial Rating (28/09/06)','11/07/07','29/08/07','31/10/07','31/03/
08','02/06/08','16/12/08','24/04/09']
Commodore = Commodore.set index('Commodore Tranche Value (USD millions)')
Commodore = Commodore[neworder]
Commodore
```

Out[16]:

Initial
Rating 11/07/07 29/08/07 31/10/07 31/03/08 02/06/08 16/12/08 24/04/09 (28/09/06)

Commodore Tranche Value (USD millions)

| 75.00 | Aaa | | | Aaa | Baa1 | В3 | Caa3 | С |
|--------|------|------|-----|------|------|----|------|---|
| 225.00 | Aaa | | | Aaa | Baa1 | В3 | Caa3 | С |
| 50.00 | Aaa | | | Aaa | Ba1 | Ca | | С |
| 25.00 | Aaa | | | Aaa | Ba2 | Ca | | С |
| 70.00 | Aa2 | | Aa2 | Baa2 | B1 | Ca | | С |
| 13.25 | A2 | | A2 | В3 | Ca | С | | |
| 24.00 | Baa2 | Baa2 | | Caa1 | Ca | С | | |
| 8.50 | Ba1 | Ba1 | | Caa2 | Ca | С | | |
| 20.00 | Aaa | | | | | | | |

In [17]:

Out[17]:

Initial Rating (30/06/05) 04/06/08 10/01/08 17/12/08 04/03/09 23/03/10

Coolidge Tranche Value (USD millions)

| 274.700 | Aaa | | AAA | Aa3 | Ва3 | Caa3 |
|---------|------|------|-----|------|------|------|
| 45.100 | Aaa | Aa1 | | A1 | Caa2 | Ca |
| 37.515 | Aa2 | Aa2 | Aa3 | АЗ | Ca | С |
| 10.660 | A3 | Baa2 | Ва3 | В3 | С | |
| 25.625 | Baa2 | Ba1 | В3 | Caa3 | С | |
| 5.000 | Ba3 | Ca | С | | | |
| 16.400 | Ва3 | Ca | С | | | |

In [18]:

```
DavisSquare = pd.DataFrame({'Davis Square Funding Tranche Value (USD millions)':
[1166,274,300,85,105,35,25],\
                                'Initial Rating (31/03/06)':['Aaa','Aaa','Aaa','Aa
a','Aa2','A2','Baa2'],\
                                '24/10/07':[' ',' ',' ',' ',' ',' A2','Baa2'],\
'27/03/08':[' ',' ',' ','Aaa','A1','Baa2','B3'],\
                                '09/05/08':['A3','A3','B2','Caa2','Caa3','Caa
3'],\
                                '16/12/08':['Ba3','Ba3','Ba3','Caa3','Ca','',''
],\
                                '22/04/09':['C','C','C','C','C','C','C']})
neworder = ['Initial Rating (31/03/06)','24/10/07','27/03/08','09/05/08','16/12/
08','22/04/09']
DavisSquare = DavisSquare.set index('Davis Square Funding Tranche Value (USD mil
lions)')
DavisSquare = DavisSquare[neworder]
DavisSquare
```

Out[18]:

| Initial Rating | 24/10/07 | 07/02/09 | 00/05/09 | 16/10/00 | 00/04/00 | |
|----------------|----------|----------|----------|----------|----------|--|
| (31/03/06) | 24/10/07 | 21/03/06 | 09/05/06 | 10/12/06 | 22/04/09 | |

Davis Square Funding Tranche Value (USD millions)

| Tranche value (03D millions) | | | | | | |
|------------------------------|------|------|------|------|------|---|
| 1166 | Aaa | | | АЗ | Ba3 | С |
| 274 | Aaa | | | A3 | Ва3 | С |
| 300 | Aaa | | | A3 | Ba3 | С |
| 85 | Aaa | | Aaa | B2 | Caa3 | С |
| 105 | Aa2 | | A1 | Caa2 | Ca | С |
| 35 | A2 | A2 | Baa2 | Caa3 | | С |
| 25 | Baa2 | Baa2 | B3 | Caa3 | | С |

In [19]:

```
Delphinus = pd.DataFrame({'Delphinus Tranche Value (USD millions)': [640,73.5,86.
5,100,27,144.5,138.5,131,77.5,48,30.5,15,15],\
                            'Initial Rating (31/07/07)':['Aaa','Aaa','Aa
a','Aaa','Aaa','Aaa','Aa2','A2','Baa1','Baa3','Ba3','Ba3'],\
                            '07/11/07':['Aaa','Aaa','Aaa','Aaa','Aaa','A
aa','A3','Baa3','Ba2','B1','Caa3','Caa3'],\
                            '18/01/08':[' ','Ba1','Ba1','Ba2','Aaa','B1','B3',
'Caa1','Ca','Ca','Ca','Ca','Ca'],\
                            ,''',''',''','''1,\
                            '30/04/08':['Caa2','Caa2','Caa2','Caa3','Ba3','Ca'
,'Ca','Ca',' ',' ',' ',' ',' '],\
                            '26/08/08':['Ca','Ca','Ca','C','Ca','C','C',
'C','C','C','C','C'],\
                            '23/07/10':['C','C','C','','C','',','',','','','
 ',' ',' ',' '1})
neworder = ['Initial Rating (31/07/07)','07/11/07','18/01/08','23/01/08','30/04/
08','26/08/08','23/07/10']
Delphinus = Delphinus.set index('Delphinus Tranche Value (USD millions)')
Delphinus = Delphinus[neworder]
Delphinus
```

Out[19]:

Initial Rating (31/07/07) 07/11/07 18/01/08 23/01/08 30/04/08 26/08/08 23/07/10

| Delphinus Tranche |
|--------------------------|
| Value (USD |
| millions) |

| Aaa | Aaa | | Baa3 | Caa2 | Ca | С |
|------|--|---|--|--|--|---|
| Aaa | Aaa | Ba1 | | Caa2 | Ca | С |
| Aaa | Aaa | Ba1 | | Caa2 | Ca | С |
| Aaa | Aaa | Ba2 | | Caa3 | С | |
| Aaa | Aaa | Aaa | | Ba3 | Ca | С |
| Aaa | Aaa | B1 | | Ca | С | |
| Aaa | Aaa | В3 | | Ca | С | |
| Aa2 | АЗ | Caa1 | | Ca | С | |
| A2 | Baa3 | Ca | | | С | |
| Baa1 | Ba2 | Ca | | | С | |
| Baa3 | B1 | Ca | | | С | |
| Ba3 | Caa3 | Ca | | | С | |
| Ba3 | Caa3 | Ca | | | С | |
| | Aaa Aaa Aaa Aaa Aaa Aaa Aaa Aa2 A2 Baa1 Baa3 Ba3 | Aaa Aaa Baa3 Baa3 Baa3 Baa3 Baa3 Caa3 | Aaa Aaa Aaa Aaa Baaa Baaa Aaa Aaa Aaa Aaa Aaa Aaa Baaa Aaa Baaa Baaa Baaa Ca Baaa Baaa Baaa Ca Ca Ca Baaa Caaa Ca Caaa | Aaa Aaa Ba1 Aaa Aaa Ba1 Aaa Aaa Ba1 Aaa Aaa Ba2 Aaa Aaa Aaa Aaa Aaa B1 Aaa Aaa B3 Aaa Aaa B3 Aaa Aaa B3 Aa2 A3 Caa1 A2 Baa3 Ca Baa1 Ba2 Ca Baa3 B1 Ca Ba3 Ca3 Ca | Aaa Aaa Baa3 Caa2 Aaa Aaa Ba1 Caa2 Aaa Aaa Ba1 Caa2 Aaa Aaa Ba2 Caa3 Aaa Aaa Aaa Ba3 Aaa Aaa B1 Ca Aaa Aaa B3 Ca Aa2 A3 Caa1 Ca A2 Baa3 Ca Ca Baa1 Ba2 Ca Baa3 B1 Ca Ba3 Caa3 Ca | Aaa Aaa Baa3 Caa2 Ca Aaa Aaa Ba1 Caa2 Ca Aaa Aaa Ba1 Caa2 Ca Aaa Aaa Ba2 Caa3 C Aaa Aaa Aaa Ba3 Ca Aaa Aaa B1 Ca C Aaa Aaa B3 Ca C Aa2 A3 Caa1 Ca C Aa2 Baa3 Ca C Baa1 Ba2 Ca C Baa3 B1 Ca C Ba3 Caa3 C C |

In [20]:

```
Duke = pd.DataFrame({'Duke Tranche Value (USD millions)':[443.5,1.0365,1.0365,10
2,8,8,44,44,12,32],\
                               'Initial Rating (30/08/05)':['Aaa','Aaa','Aa
a','Aa1','Aa3','A1','A3','Baa2', 'Ba2'],\
                               '23/04/08':[' ',' ',' ','Aa3','A1','A2','Baa3','Ba
2','Caa2', 'Caa3'],\
                               '06/11/08':['Ba1','Ba1','Ba1','Ca','Ca','Ca','C',
'C','C','C'],\
                               '17/12/08':['B1','B1','B1',' ',' ',' ',' ',' ',' ',' ',' '
,' 'l,\
                              '22/04/09':['Caa2','Caa2','Caa2','C','C','C','.','
',' ',' '],\
                               '13/07/10':['Ca','Ca','Ca',' ',' ',' ',' ',' ',' ',' '
,' ']})
neworder = ['Initial Rating (30/08/05)','23/04/08','06/11/08','17/12/08','22/04/
09','13/07/10']
Duke = Duke.set index('Duke Tranche Value (USD millions)')
Duke = Duke[neworder]
Duke
```

Out[20]:

| Initia (3 | al Rating 80/08/05) | 23/04/08 | 06/11/08 | 17/12/08 | 22/04/09 | 13/07/10 | |
|-------------------------|------------------------|----------|----------|----------|----------|----------|--|
| Duka Transka Valua (UCD | | | | | | | |

| Duke | iranche | value | (USL |) |
|------|---------|-------|------|---|
| | | mill | ions | ١ |

| millions) | | | | | | |
|-----------|------|------|-----|----|------|----|
| 443.5000 | Aaa | | Ba1 | B1 | Caa2 | Ca |
| 1.0365 | Aaa | | Ba1 | B1 | Caa2 | Ca |
| 1.0365 | Aaa | | Ba1 | B1 | Caa2 | Ca |
| 102.0000 | Aaa | Aa3 | Ca | | С | |
| 8.0000 | Aa1 | A1 | Ca | | С | |
| 8.0000 | Aa3 | A2 | Ca | | С | |
| 44.0000 | A1 | Baa3 | С | | | |
| 44.0000 | А3 | Ba2 | С | | | |
| 12.0000 | Baa2 | Caa2 | С | | | |
| 32.0000 | Ba2 | Caa3 | С | | | |

In [21]:

Out[21]:

Initial Rating (11/01/05) 18/05/08 22/12/08 02/02/08 17/07/08 13/05/09

E Trade ABS CDO III Tranche Value (USD millions)

| | | | | | | millonsy |
|------|------|------|------|-----|------|----------|
| Caa1 | Ba1 | Baa2 | Aa1 | | Aaa | 201.00 |
| Ca | Caa2 | B2 | A1 | Aa1 | Aaa | 37.75 |
| | | С | Baa1 | A1 | Aa2 | 37.90 |
| | | С | B1 | Ba1 | Baa2 | 13.25 |
| | | Ca | CC | Ca | Ba1 | 12.90 |
| | | | | WR | Baa2 | 14.60 |
| | | С | B2 | Ba2 | Ba1 | 5.00 |

In [22]:

Out[22]:

Initial Rating (27/12/05) 06/09/07 04/01/08 03/04/08 02/06/08 17/12/08 22/04/09

| E Trade ABS CDO | ΙV |
|-------------------|-----|
| Tranche Value (US | SD |
| million | าร) |

| 7.0 | Aaa | Baa2 | | | Ba1 | B1 | Ca |
|-------|------|------|-----|------|------|------|----|
| 152.8 | Aaa | | | | Baa2 | Ba2 | Ca |
| 38.2 | Aaa | | | | Ва3 | В3 | С |
| 21.0 | Aaa | | | Aa2 | Caa2 | Caa3 | С |
| 52.0 | Aa2 | | Aa2 | Baa1 | Ca | | С |
| 17.0 | Baa2 | | Ba3 | В3 | С | | |
| 5.0 | Ba1 | | B2 | Ca | С | | |

In [23]:

Out[23]:

Initial Rating (10/08/05) 04/04/08 02/06/08 17/12/08 04/02/09 13/07/10

Fort Sheridan Tranche Value (USD millions)

| 880 | Aaa | | Aa3 | Baa3 | Caa1 | Ca |
|-----|------|-----|------|------|------|----|
| 40 | Aaa | | Baa1 | B1 | С | |
| 52 | Aa2 | A1 | Ba1 | Caa1 | С | |
| 13 | Baa2 | Ba1 | Ca | | С | |
| 2 | Baa2 | Ba2 | Ca | | С | |
| 4 | Baa2 | Ba2 | Ca | | С | |

In [24]:

```
Fortius = pd.DataFrame({'Fortius II Funding Tranche Value (USD millions)':[12.7,
325,50,45,20,27.5,7.5,101,\
                             'Initial Rating (19/12/06)':['Aaa','Aaa','Aaa','Aa
2','A2','Baa2','Ba1','Aa3'],\
                             '06/11/07':[' ',' ',' ','A2','Baa3','Ba3','Caa3',
'Ba3'],\
                             '26/03/08':[' ','A2','Ba1','B1','Caa2','Ca','Ca',
'Caa2'],\
                             '09/05/08':[' ','B2','Ca','Ca','C','C','C','C'],\
                             ',',',',',',',',',',',',\\
                             '13/07/10':['W',' ','C',' ',' ',' ',' '
neworder = ['Initial Rating (19/12/06)','06/11/07','26/03/08','09/05/08','15/10/
08','16/12/08','12/05/09','13/07/10']
Fortius = Fortius.set index('Fortius II Funding Tranche Value (USD millions)')
Fortius = Fortius[neworder]
Fortius
```

Out[24]:

Initial
Rating 06/11/07 26/03/08 09/05/08 15/10/08 16/12/08 12/05/09 13/07/10 (19/12/06)

| Fortius II |
|------------|
| Funding |
| Tranche |
| Value (USD |
| millions) |

| , | | | | | | | | |
|-------|------|------|------|----|----|------|------|---|
| 12.7 | Aaa | | | | А3 | Baa3 | Caa1 | W |
| 325.0 | Aaa | | A2 | B2 | Ca | | | |
| 50.0 | Aaa | | Ba1 | Ca | | | | С |
| 45.0 | Aa2 | A2 | B1 | Ca | | | С | |
| 20.0 | A2 | Baa3 | Caa2 | С | | | | |
| 27.5 | Baa2 | Ва3 | Ca | С | | | | |
| 7.5 | Ba1 | Caa3 | Ca | С | | | | |
| 10.0 | Aa3 | ВаЗ | Caa2 | С | | | | |

In [25]:

```
GStreet = pd.DataFrame({'G Street Finance Tranche Value (USD millions)':[1064,26
6,1064,50.9,57,30,24,5,9],\
                               'Initial Rating (28/10/05)':['P1','Aaa','Aaa','Aa
a','Aa2','A2','Baa2','Ba3',' '],\
                               '28/02/08':['WR',' ',' ',' ',' ',' ',' ',' ',' Ba1'
],\
                               '09/06/08':[' ',' ',' ',' ','A1','Baa2','Ba1','Ca'
,'Ca'],\
                               '10/11/08':[' ','A1','A1','Ba2','Caa2','C','C','C'
,'C'],\
                               '17/12/08':[' ','Baa1','Baa1','B2','Caa3',' ',' ',
'',''],\
                               '10/02/09':[' ','Caa1','Caa1','C','C',' ',' ',' ',' ',
' '],\
                               '13/07/10':[' ','Ca','Ca',' ',' ',' ',' ',' ',' ',' '
] } )
neworder = ['Initial Rating (28/10/05)','28/02/08','09/06/08','10/11/08','17/12/
08','10/02/09','13/07/10']
GStreet = GStreet.set index('G Street Finance Tranche Value (USD millions)')
GStreet = GStreet[neworder]
GStreet
```

Out[25]:

| Initial Rating | 20/02/00 | 00/06/09 | 10/11/09 | 17/12/09 | 10/02/00 | 12/07/10 |
|----------------|----------|----------|----------|----------|----------|----------|
| (28/10/05) | 20/02/00 | 09/00/08 | 10/11/06 | 17/12/00 | 10/02/09 | 13/01/10 |

| G Street Finance |
|--------------------|
| Tranche Value (USD |
| millions) |

| millions) | | | | | | | |
|-----------|------|-----|------|------|------|------|----|
| 1064.0 | P1 | WR | | | | | _ |
| 266.0 | Aaa | | | A1 | Baa1 | Caa1 | Ca |
| 1064.0 | Aaa | | | A1 | Baa1 | Caa1 | Ca |
| 50.9 | Aaa | | | Ba2 | B2 | С | |
| 57.0 | Aa2 | | A1 | Caa2 | Caa3 | С | |
| 30.0 | A2 | | Baa2 | С | | | |
| 24.0 | Baa2 | | Ba1 | С | | | |
| 5.0 | Ва3 | | Ca | С | | | |
| 9.0 | | Ba1 | Ca | С | | | |

In [26]:

Out[26]:

| Initial Rating | 11/11/00 | 22/12/09 | 06/02/00 | 21/09/00 | 10/06/10 |
|----------------|----------|----------|----------|----------|----------|
| (31/03/04) | 11/11/06 | 22/12/00 | 00/02/09 | 21/00/09 | 16/06/10 |

Glacier Funding CDO I Tranche Value (USD millions)

| 190.0 | Aaa | | Aa1 | Aa3 | Ba1 | |
|-------|------|------|-----|------|------|------|
| 44.0 | Aaa | Aa2 | A2 | Baa1 | B1 | Caa1 |
| 43.5 | Aa2 | Baa2 | Ba2 | B1 | Caa3 | С |
| 9.0 | Baa2 | С | | | | |

In [27]:

Out[27]:

Initial Rating (01/11/04) 26/12/07 03/04/08 30/04/08 22/12/08 22/04/09 26/05/10

Glacier Funding CDO II Tranche Value (USD millions)

| value (USD millions) | | | | | | |
|----------------------|------|------|------|-----|------|------|
| 0.10 | Aaa | | | Ba1 | B1 | Caa1 |
| 324.90 | Aaa | | | Ba1 | B1 | Caa1 |
| 70.00 | Aaa | | Baa1 | В3 | Caa3 | С |
| 65.75 | Aa2 | Baa2 | Caa1 | Ca | | С |
| 20.25 | Baa2 | B2 | Ca | С | | |
| 4.00 | Ba2 | Caa2 | Ca | С | | |

In [28]:

```
GlacierV = pd.DataFrame({'Glacier Funding CDO V Tranche Value (USD millions)':[2
00,122,46,44,15,20.5,26.5,5.5,6.5],\
                               'Initial Rating (30/03/07)':['Aaa','Aaa','Aa
2','Aa3','A2','Baa2','Baa3','Ba1'],\
                              '06/11/07':[' ',' ',' ','Baa1','Baa3','Ba2','B1',
'B2','Caa1'],\
                              '27/03/08':[' ','Baa3','Ba3','B3','Caa2','Ca','Ca'
,'Ca','Ca'],\
                              '30/05/08':['Ba2 ','B3','Caa2','Caa3','Caa3',' ','
',' ',' '],\
                              '11/12/08':['B2','Caa3','Caa3',' ',' ',' ',' ',' ',' '
,''],\
                              '22/04/09':['C','C','C','C','C','C','C','C','C',
],})
neworder = ['Initial Rating (30/03/07)','06/11/07','27/03/08','30/05/08','11/12/
08','22/04/09']
GlacierV = GlacierV.set index('Glacier Funding CDO V Tranche Value (USD million
s)')
GlacierV = GlacierV[neworder]
GlacierV
```

Out[28]:

Initial Rating (30/03/07) 06/11/07 27/03/08 30/05/08 11/12/08 22/04/09

Glacier Funding CDO V Tranche Value (USD millions)

| 200.0 | Aaa | | | Ba2 | B2 | С |
|-------|------|------|------|------|------|---|
| 122.0 | Aaa | | Baa3 | В3 | Caa3 | С |
| 46.0 | Aaa | | Ва3 | Caa2 | Caa3 | С |
| 44.0 | Aa2 | Baa1 | В3 | Caa3 | | С |
| 15.0 | Aa3 | Baa3 | Caa2 | Caa3 | | С |
| 20.5 | A2 | Ba2 | Ca | | | С |
| 26.5 | Baa2 | B1 | Ca | | | С |
| 5.5 | Baa3 | B2 | Ca | | | С |
| 6.5 | Ba1 | Caa1 | Ca | | | С |

In [29]:

```
GCS = pd.DataFrame({'GSC ABS Tranche Value (USD millions)':[225,125,13.5,56.5,1
4.5,22.5,21,5,5,12],\
                            'Initial Rating (05/06/06)':['Aaa','Aaa','Aaa','Aa
2','Aa3','A2','Baa2','Ba1','Ba2','Aaa'],\
                            '11/07/07':[' ',' ',' ',' ',' ',' Baa2','Ba1',
'Ba2',' '],\
                            '25/10/07':[' ',' ',' ',' ',' Ba3','C','C','C',
' '],\
                            '27/03/08':['A2','Ba1','Ba2','B1','B3','Ca',' ','
 ',' ',' '],\
                            '09/06/08':['Ba2','Caa3','Ca','Ca','Ca','C',' ','
 ',' ',' '1,\
                            '<sub>],})</sub>
neworder = ['Initial Rating (05/06/06)','11/07/07','25/10/07','27/03/08','09/06/
08','22/04/09']
GCS = GCS.set index('GSC ABS Tranche Value (USD millions)')
GCS = GCS[neworder]
GCS
```

Out[29]:

Initial Rating (05/06/06) 11/07/07 25/10/07 27/03/08 09/06/08 22/04/09

GSC ABS Tranche Value (USD millions)

| (OSD IIIIIIOIIS) | | | | | | |
|------------------|------|------|-----|-----|------|---|
| 225.0 | Aaa | | | A2 | Ba2 | С |
| 125.0 | Aaa | | | Ba1 | Caa3 | С |
| 13.5 | Aaa | | | Ba2 | Ca | С |
| 56.5 | Aa2 | | | B1 | Ca | С |
| 14.5 | Aa3 | | | В3 | Ca | С |
| 22.5 | A2 | | Ва3 | Ca | С | |
| 21.0 | Baa2 | Baa2 | С | | | |
| 5.0 | Ba1 | Ba1 | С | | | |
| 5.0 | Ba2 | Ba2 | С | | | |
| 12.0 | Aaa | | | | | |

In [30]:

```
Huntingdon = pd.DataFrame({'Huntington Tranche Value (USD millions)':[461.750,0.
25,112,70,26.5,5,1.250,10,35],\
                               'Initial Rating (05/04/05)':['Aaa','Aaa','Aaa','Aa
2', 'Baa2', 'Baa2', 'Aaa', 'Aaa', 'Aaa'], \
                               '30/10/08':[' ',' ',' ','Aa3','Ba1','Ba1',' ',' ',
' '],\
                               '17/12/08':['Aa2','Aa2','Aa3','A3','B1','B1',' ','
',' '],\
                               '18/03/09':['Baa1','Baa1','Caa1','Ca','C','C','
' ',' '1,\
                               '05/02/10':['Caa2','Caa2','Ca',' ',' ',' ',' ',' '
,' '],})
neworder = ['Initial Rating (05/04/05)','30/10/08','17/12/08','18/03/09','05/02/
Huntingdon = Huntingdon.set index('Huntington Tranche Value (USD millions)')
Huntingdon = Huntingdon[neworder]
Huntingdon
```

Out[30]:

Initial Rating (05/04/05) 30/10/08 17/12/08 18/03/09 05/02/10

| Huntington Tranche Value (USD millions) | | | | | |
|---|------|-----|-----|------|------|
| 461.75 | Aaa | | Aa2 | Baa1 | Caa2 |
| 0.25 | Aaa | | Aa2 | Baa1 | Caa2 |
| 112.00 | Aaa | | Aa3 | Caa1 | Ca |
| 70.00 | Aa2 | Aa3 | А3 | Ca | |
| 26.50 | Baa2 | Ba1 | B1 | С | |
| 5.00 | Baa2 | Ba1 | B1 | С | |
| 1.25 | Aaa | | | | |
| 10.00 | Aaa | | | | |

Aaa

35.00

In [31]:

Out[31]:

| | Initial Rating (27/02/04) | 28/02/08 | 26/03/08 | 05/06/08 | 22/12/08 | 22/04/09 |
|---|------------------------------|----------|----------|----------|----------|----------|
| IndependenceV V Tranche Value (USD millions) | | | | | | |
| 396.0 | Aaa | А3 | | | Ba3 | Ca |
| 84.0 | Aaa | Ba1 | Ba3 | Ca | | С |
| 15.0 | Aaa | Ba1 | Ba3 | Ca | | С |
| 56.4 | Aa2 | Caa2 | Ca | С | | |
| 26.0 | Baa2 | С | | | | |
| 19.1 | Ba3 | С | | | | |
| 5.5 | Ba3 | С | | | | |

In [32]:

```
IndependenceVI = pd.DataFrame({'Independence VI Tranche Value (USD millions)':[6
75,94.5,92,15.95,21.25,19,38.3,0.621,5.226],\
                               'Initial Rating (18/07/05)':['Aaa','Aaa','Aa2','A
2', 'Baa2', 'Baa3', 'Ba2', 'Aaa', 'Aaa'], \
                               '14/12/07':[' ',' ',' ',' ',' ',' ',' B2',' ',' '],
                               '06/05/08':['A1','Baa3','B1','Ca','Ca','C','C',' '
,''],\
                               '02/06/08':[' ',' ','Caa1','C','C',' ',' ','
1,\
                               '17/12/08':['Ba1','B3','Ca',' ',' ',' ','
 '1,\
                               '22/04/09':['Caa3','C','C',' ',' ',' ',' ',' '
],\
                               '13/07/10':['Ca',' ',' ',' ',' ',' ',' ',' ',' ',' '
],})
neworder = ['Initial Rating (18/07/05)','14/12/07','06/05/08','02/06/08','17/12/
08','22/04/09','13/07/10']
IndependenceVI = IndependenceVI.set index('Independence VI Tranche Value (USD mi
llions)')
IndependenceVI = IndependenceVI[neworder]
IndependenceVI
```

Out[32]:

Initial
Rating 14/12/07 06/05/08 02/06/08 17/12/08 22/04/09 13/07/10 (18/07/05)

Independence VI Tranche Value (USD millions)

| | | | | | | illilloilo, | |
|------|-----|------|------|----|------|-------------|--|
| Caa3 | Ba1 | | A1 | | Aaa | 675.000 | |
| С | В3 | | Baa3 | | Aaa | 94.500 | |
| С | Ca | Caa1 | B1 | | Aa2 | 92.000 | |
| | | С | Ca | | A2 | 15.950 | |
| | | С | Ca | | Baa2 | 21.250 | |
| | | | С | | Baa3 | 19.000 | |
| | | | С | B2 | Ba2 | 38.300 | |
| | | | | | Aaa | 0.621 | |
| | | | | | Aaa | 5,226 | |

In [33]:

```
IndependenceVII = pd.DataFrame({'Independence VII Tranche Value (USD millions)':
[360,60,30.6,60,28.5,15,24.9,5.4]
                              'Initial Rating (31/03/06)':['Aaa','Aaa','Aa
2','Aa3','A3','Baa2','Ba1'],\
                              '26/10/07':[' ',' ',' ',' ',' Ba2','Caa3','Ca'
],\
                              '10/04/08':['A3','A3','Baa3','Ba2','Ba3','Caa2','C
a',' '],\
                              '12/05/08':['Ba3','Ba3','Ca','Ca','Ca','C','C','C'
],\
                              '23/09/08':['Ca','Ca','C','C','C',' ',' ',' '],\
                              '28/10/10':['C','C',' ',' ',' ',' ',' ',' '],})
neworder = ['Initial Rating (31/03/06)','26/10/07','10/04/08','12/05/08','23/09/
08','28/10/10']
IndependenceVII = IndependenceVII.set index('Independence VII Tranche Value (USD)
millions)')
IndependenceVII = IndependenceVII[neworder]
IndependenceVII
```

Out[33]:

| | Initial Rating (31/03/06) | 26/10/07 | 10/04/08 | 12/05/08 | 23/09/08 | 28/10/10 |
|--|------------------------------|----------|----------|----------|----------|----------|
| Independence VII Tranche Value (USD millions) | | | | | | |
| 360.0 | Aaa | | АЗ | Ba3 | Ca | С |
| 60.0 | Aaa | | А3 | Ba3 | Ca | С |
| 30.6 | Aaa | | Baa3 | Ca | С | |
| 60.0 | Aa2 | | Ba2 | Ca | С | |
| 28.5 | Aa3 | | Ba3 | Ca | С | |
| 15.0 | A3 | Ba2 | Caa2 | С | | |
| 24.9 | Baa2 | Caa3 | Ca | С | | |
| 5.4 | Ba1 | Ca | | С | | |

In [34]:

Out[34]:

Initial Rating (30/01/07) 04/03/09 12/03/09 03/09/09

Inwood Park Tranche Value (USD millions)

| ţ | 565.000 | Aaa | |
|---|---------|------|-----|
| 1 | 141.375 | Aaa | |
| 1 | 177.500 | Aaa | |
| | 90.625 | Aa2 | Aa2 |
| | 68.750 | A2 | |
| | 50.000 | Baa2 | |
| | 50.000 | Ba2 | |

In [35]:

Out[35]:

| Initial Rating | 04/06/08 | 14/11/08 | 22/12/08 | 10/02/09 | 21/05/10 |
|----------------|----------|----------|----------|----------|----------|
| (04/02/05) | 04/00/00 | 14/11/00 | 22/12/00 | 10/02/09 | 21/03/10 |

Jupiter High Grade Tranche Value (USD millions)

| value (OOD IIIIIIOIIS) | | | | | | |
|------------------------|------|-----|------|------|------|------|
| 489.95 | Aaa | | | Aa3 | Ba2 | Caa2 |
| 113.80 | Aaa | | | Aa3 | Ba2 | Caa2 |
| 82.50 | Aaa | Aa1 | A1 | Baa1 | Caa3 | Ca |
| 41.25 | Aa2 | A1 | Baa1 | Ba1 | С | |
| 14.25 | Baa2 | В3 | Ca | | С | |

In [36]:

Out[36]:

Initial Rating (25/05/05) 02/06/08 07/11/08 17/12/08 22/04/09

Jupiter High Grade II Tranche Value (USD millions)

| | | | | | (GGD IIIIIIGIIG) |
|----|------|------|-----|------|------------------|
| Ca | Ba1 | Baa1 | | Aaa | 880.0 |
| С | Caa2 | B2 | Aa2 | Aaa | 40.0 |
| С | Caa3 | Caa1 | A1 | Aa2 | 46.0 |
| | | С | Ba1 | Baa2 | 11.5 |
| | | С | Ba1 | Baa2 | 4.0 |
| | | С | Ba1 | Baa2 | 7.5 |

In [37]:

Out[37]:

Initial Rating (18/08/05) 09/06/08 17/12/08 10/02/09 13/07/10

Jupiter High Grade III Tranche Value (USD millions)

| | | | | | (CCD millions) | |
|----|------|------|------|------|----------------|--|
| Ca | Caa2 | A3 | Aa3 | Aaa | 1700 | |
| | С | Ba3 | Baa3 | Aaa | 80 | |
| | С | Ba3 | Baa3 | Aaa | 70 | |
| | С | Caa3 | В3 | Aa2 | 90 | |
| | С | | Ca | Baa2 | 43 | |
| | С | | Ca | Ba1 | 27 | |

In [38]:

Out[38]:

Initial Rating (20/04/06) 30/05/08 17/12/08 02/04/09

Khaleej II Tranche Value (USD millions)

In [39]:

Out[39]:

Initial Rating (26/04/07) 02/11/07 25/02/08 30/05/08 25/08/08

Kleros Preferred Funding VII Tranche Value (USD millions)

| Ca | Caa1 | A1 | | Aaa | 900.0 |
|----|------|------|------|------|-------|
| С | Ca | B1 | | Aaa | 375.0 |
| С | Ca | Caa3 | | Aaa | 75.0 |
| С | Ca | Caa3 | | Aaa | 69.0 |
| С | Ca | Caa3 | | Aa2 | 41.0 |
| | | С | Baa1 | A2 | 15.5 |
| | | С | Ba2 | Baa2 | 14.5 |

In [40]:

Out[40]:

| Initial Rating | 04/04/09 | 20/05/09 | 22/12/09 | 10/02/00 | 05/02/10 |
|----------------|----------|----------|----------|----------|----------|
| (28/04/04) | 04/04/06 | 30/05/06 | 22/12/06 | 10/03/09 | 05/03/10 |

Lakeside Tranche Value (USD millions)

| 1 | 170 | Aaa | | | Aa3 | B1 | Caa1 |
|---|-----|------|------|------|------|------|------|
| : | 279 | Aaa | | Aa1 | A1 | Caa3 | Ca |
| | 15 | Aa3 | Baa1 | Ba1 | B1 | С | |
| | 15 | Baa2 | Ba3 | Caa2 | Caa3 | С | |

In [41]:

Out[41]:

| Initial Rating | 08/05/08 | 17/10/00 | 27/02/00 |
|----------------|----------|----------|----------|
| (27/12/05) | 06/03/06 | 17/12/00 | 21/03/09 |

Lexington Capital Funding Tranche Value (USD millions)

| 135.000 | Aaa | A3 | Baa3 | Ca |
|---------|------|------|------|----|
| 199.750 | Aaa | АЗ | Baa3 | Ca |
| 0.250 | Aaa | АЗ | Baa3 | Ca |
| 72.000 | Aaa | Ba1 | B1 | С |
| 44.000 | Aa2 | Ba3 | В3 | С |
| 10.000 | A2 | Caa1 | Caa3 | С |
| 19.000 | Baa2 | Ca | | С |
| 5.000 | Ba1 | Ca | | С |
| 10.000 | Aaa | | | |
| 2.000 | Aaa | | | |
| 3.000 | Aaa | | | |
| 2.000 | Aaa | | | |
| 0.375 | Aaa | | | |
| 0.250 | Aaa | | | |

In [42]:

Out[42]:

| Initial Rating | 26/02/09 | 29/06/08 | 16/10/00 | 22/04/00 |
|----------------|----------|----------|----------|----------|
| (08/06/06) | 20/03/00 | 29/00/00 | 10/12/00 | 22/04/09 |

Libertas Preferred Funding Tranche Value (USD millions)

| 420.0 | Aaa | | Ва3 | В3 | С |
|-------|------|------|------|------|---|
| 66.0 | Aaa | Baa2 | Caa2 | Caa3 | С |
| 32.4 | Aa2 | Ba1 | Caa3 | | С |
| 5.4 | Aa3 | Ba2 | Ca | | С |
| 24.0 | A2 | Ва3 | Ca | | С |
| 13.8 | Baa2 | B1 | Ca | | С |
| 12.0 | Baa3 | B2 | Ca | | С |
| 9.0 | Ba1 | В3 | Ca | | С |

In [43]:

Out[43]:

Initial Rating (22/03/06) 25/07/08 09/03/09 06/04/10

LNR Tranche Value (USD millions)

| 474.385 Aaa | ı | Ba1 | Ca |
|---------------------------------|------|------|----|
| 10.000 Aa2 | 2 | B1 | С |
| 204.174 Aa2 | 2 | B1 | С |
| 54.950 A2 | 2 | Caa1 | С |
| 73.154 A2 | 2 | Caa1 | С |
| 54.052 A3 | 3 | Caa2 | С |
| 10.000 A3 | 3 | Caa2 | С |
| 72.058 Baa ⁻¹ | Baa2 | Caa3 | С |
| 25.000 Baa2 | Baa3 | Caa3 | С |
| 31.046 Baa2 | Baa3 | Caa3 | С |
| 78.063 Baa3 | Ba1 | Caa3 | С |
| 90.073 Ba | Ba3 | Caa3 | С |
| 38.031 Ba2 | 2 B1 | Caa3 | С |
| 64.052 Ba3 | B2 | Caa3 | С |

In [44]:

Out[44]:

Initial
Rating 01/11/07 17/03/08 31/07/08 06/10/08 11/12/08 24/04/09 24/12/09 (29/03/07)

Newbury Street CDO Tranche Value (USD millions)

| 1000.000 | Aaa | | Aa1 | Aa3 | Caa1 | Caa3 | | Ca |
|----------|------|-----|------|------|------|------|---|----|
| 800.000 | Aaa | | Ba2 | B1 | Ca | | С | |
| 50.625 | Aaa | | Caa2 | Caa3 | Ca | | С | |
| 59.375 | Aaa | | Caa3 | | Ca | | С | |
| 48.000 | Aa2 | A3 | Ca | | | | С | |
| 15.000 | A2 | Ba1 | С | | | | | |
| 17.000 | Baa2 | B1 | С | | | | | |

In [45]:

```
Octans = pd.DataFrame({'Octans I CDO Tranche Value (USD millions)':[975, 82.5, 6
7.5, 60, 80, 15, 15, 31, 39],\
                          'Initial Rating (28/09/06)':['Aaa','Aaa','Aa
2','Aa3','A2','A3','Baa2','Baa3'],\
                          '30/10/07':[' ',' ','Aa3','A3','Baa1','Baa3','Ba1'
,'Ba3','B3'],\
                          '27/03/08':[' ','A3','Baa1','Baa2','Ba1','Ba3','B
1','B3','Ca'],\
                          '15/04/08':['B3','C','C','C','C','C','C','C','C','C'],
                          ],\
                          '11/09/08':['WR','WR','WR','WR','WR','WR','WR','W
R', 'WR']})
neworder = ['Initial Rating (28/09/06)','06/09/07','30/10/07','27/03/08','15/04/
08','20/08/08', '11/09/08']
Octans = Octans.set index('Octans I CDO Tranche Value (USD millions)')
Octans = Octans[neworder]
Octans
```

Out[45]:

Initial Rating (28/09/06) 06/09/07 30/10/07 27/03/08 15/04/08 20/08/08 11/09/08

| Oct | ans I | CDO |
|-----------|-------|--------|
| Tranche V | alue | (USD |
| | mil | lions) |

| minoris) | | | | | | |
|----------|------|------|------|----|----|----|
| 975.0 | Aaa | | | ВЗ | Ca | WR |
| 82.5 | Aaa | | А3 | С | | WR |
| 67.5 | Aaa | Aa3 | Baa1 | С | | WR |
| 60.0 | Aa2 | A3 | Baa2 | С | | WR |
| 80.0 | Aa3 | Baa1 | Ba1 | С | | WR |
| 15.0 | A2 | Baa3 | Ba3 | С | | WR |
| 15.0 | A3 | Ba1 | B1 | С | | WR |
| 31.0 | Baa2 | Ba3 | В3 | С | | WR |
| 39.0 | Baa3 | В3 | Ca | С | | WR |

In [46]:

Out[46]:

| | Initial Rating (30/10/06) | 30/10/07 | 03/12/07 | 27/02/08 | 12/05/08 | 11/09/08 |
|--|------------------------------|----------|----------|----------|----------|----------|
| Pampelonne CDO Tranche Value (USD millions) | | | | | | |
| 50.00 | Aaa | | Ba1 | С | | WR |
| 50.00 | Aaa | | Ba1 | С | | WR |
| 43.75 | Aa2 | | В3 | С | | WR |
| 18.75 | A2 | | Caa3 | С | | WR |
| 11.50 | Baa2 | | Ca | С | | WR |
| 5.00 | Ba1 | B1 | Ca | С | | WR |
| 1062.50 | Aaa | | Aa3 | В3 | С | WR |

In [47]:

```
#Add zero valued tranche
Pioneer = pd.DataFrame({'Pioneer Valley Structured Credit CDO Tranche Value (USD
millions)':[23.478, 870, 46.5, 29, 29.5],\
                                 'Initial Rating (30/09/05)':['Aaa','Aaa','Aaa','Aa
2','A3'1,\
                                 '08/05/08':[' ',' ',' ','A3','Caal'],\
                                 '02/06/08':[' ',' ','A1','Ba3','Caa3'],\
                                 '31/10/08':[' ','Aa1','Ba1','Ca','Ca'],\
                                 '17/12/08':[' ','A1','B1',' ',' '],\
'13/02/09':[' ','Caa2','Ca','C','C'],\
                                 '27/03/09':['A1',' ',' ',' ',' '],\
'24/08/09':['Ba1',' ',' ',' ',' '],
                                 '22/01/10':['Ca','Ca','C',' ',' '],\
                                 '29/01/10':['WR','WR','WR','WR','WR']})
neworder = ['Initial Rating (30/09/05)','08/05/08','02/06/08','31/10/08','17/12/
08', '13/02/09', '27/03/09', '24/08/09', '22/01/10', '29/01/10']
Pioneer = Pioneer.set index('Pioneer Valley Structured Credit CDO Tranche Value
 (USD millions)')
Pioneer = Pioneer[neworder]
Pioneer
```

Out[47]:

Initial
Rating 08/05/08 02/06/08 31/10/08 17/12/08 13/02/09 27/03/09 24/08/09 22 (30/09/05)

Pioneer Valley Structured Credit CDO Tranche Value (USD

millions)

| 23.478 | Aaa | | | | | | A1 | Ba1 |
|---------|-----|------|------|-----|----|------|----|-----|
| 870.000 | Aaa | | | Aa1 | A1 | Caa2 | | |
| 46.500 | Aaa | | A1 | Ba1 | B1 | Ca | | |
| 29.000 | Aa2 | A3 | Ba3 | Ca | | С | | |
| 29.500 | АЗ | Caa1 | Caa3 | Ca | | С | | |

In [48]:

Out[48]:

Initial
Rating 11/11/07 04/04/08 30/05/08 08/08/08 02/09/08 11/12/08 22/04/09 (28/06/07)

Point Pleaseant CDO Tranche Value (USD millions)

| 6.00 | Aaa | | | | B1 | Caa1 | С |
|--------|------|------|-----|----|----|------|---|
| 254.93 | Aaa | | Ba1 | Ca | C | ; | |
| 170.00 | Aaa | | Ba2 | Ca | C | ; | |
| 100.00 | Aa2 | A3 | B1 | Ca | C | ; | |
| 28.00 | A2 | Ba3 | Ca | С | | | |
| 32.00 | Baa2 | Caa3 | Ca | С | | | |

In [49]:

Out[49]:

Initial Rating (06/12/07) 20/08/09

St. James Park CDO Tranche Value (EUR millions)

| 122 | Aaa | |
|-----|------|------|
| 50 | Aaa | Aa3 |
| 28 | Aa2 | Baa1 |
| 24 | A2 | Ba2 |
| 26 | Baa3 | В3 |
| 12 | Ba3 | Caa3 |

In [50]:

```
Timberwolf = pd.DataFrame({'Timberwolf CDO Tranche Value (USD millions)':[9, 8.3
, 100, 200, 100, 100, 305, 107, 36, 30],\
                             'Initial Rating (30/03/07)':['Aaa','Aaa','Aa
a','Aaa','Aaa','Aaa','Aa2','A2','Baa2'],\
                             '07/11/07':[' ','Baa2',' ','Aa3','A3','Baa1','Baa
3', 'Ba1', 'Caa1', 'Caa3'], \
                             '31/03/08':['Aa2','C','A2','Ba3','Caa1','Caa3','C'
,'C','C','C'],\
                             '06/05/08':[' ',' ','Caa2','C','C','C','',' ',' '
,' '],\
                             '31/07/08':['Caa1','C',' ',' ',' ',' ',' ',' '.' '
,' '],\
                             '<sub>1</sub>,\
                             '14/07/09':['C',' ',' ',' ',' ',' ',' ',' ',' ','
 '1,\
                             '17/07/09':['WR','WR','WR','WR','WR','WR','WR','W
R', 'WR', 'WR']})
neworder = ['Initial Rating (30/03/07)','07/11/07','31/03/08','06/05/08','31/07/
08','20/08/08', '14/07/09', '17/07/09']
Timberwolf = Timberwolf.set index('Timberwolf CDO Tranche Value (USD millions)')
Timberwolf = Timberwolf[neworder]
Timberwolf
```

Out[50]:

Initial
Rating 07/11/07 31/03/08 06/05/08 31/07/08 20/08/08 14/07/09 17/07/09 (30/03/07)

Timberwolf CDO Tranche Value (USD millions)

| • | | | | | | | | |
|-------|------|------|------|------|------|----|---|----|
| 9.0 | Aaa | | Aa2 | | Caa1 | Ca | С | WR |
| 8.3 | Aaa | Baa2 | С | | С | | | WR |
| 100.0 | Aaa | | A2 | Caa2 | | | | WR |
| 200.0 | Aaa | Aa3 | Ва3 | С | | | | WR |
| 100.0 | Aaa | A3 | Caa1 | С | | | | WR |
| 100.0 | Aaa | Baa1 | Caa3 | С | | | | WR |
| 305.0 | Aaa | Baa3 | С | | | | | WR |
| 107.0 | Aa2 | Ba1 | С | | | | | WR |
| 36.0 | A2 | Caa1 | С | | | | | WR |
| 30.0 | Baa2 | Caa3 | С | | | | | WR |
| | | | | | | | | |

In [51]:

Out[51]:

Initial Rating (30/09/03) 01/09/09

Union Square CDO Tranche Value (USD millions)

| 291.00 | Aaa | |
|--------|------|------|
| 35.00 | Aa2 | A3 |
| 18.75 | A2 | Ba2 |
| 16.00 | Baa2 | Caa2 |

In [52]:

```
Vertical = pd.DataFrame({'Vertical ABS CDO Tranche Value (USD millions)':[42, 87
3, 229, 157, 57, 70, 32, 22],\
                              'Initial Rating (26/04/07)':['Aaa','Aaa','Aa
2','A2','Baa2','Baa3','Ba2'],\
                              '13/08/07':[' ',' ',' ',' ',' ',' ',' ',' '],\
                              '25/10/07':[' ','Ba1','B2','Caa1','Caa3','Ca','Ca'
,'CA'],\
                              '14/01/08':[' ','B1','Ca','Ca','Ca',' ',' ',' '],\
                              '22/06/08':['C','C','C','C','C','C','C','C'],\
                              '11/09/08':['WR','WR','WR','WR','WR','WR','WR','W
R'1})
neworder = ['Initial Rating (26/04/07)','13/08/07','25/10/07','14/01/08','22/06/
08','11/09/08']
Vertical = Vertical.set index('Vertical ABS CDO Tranche Value (USD millions)')
Vertical = Vertical[neworder]
Vertical
```

Out[52]:

Initial Rating (26/04/07) 13/08/07 25/10/07 14/01/08 22/06/08 11/09/08

Vertical ABS CDO Tranche Value (USD millions)

| 42 | Aaa | | | С | WR |
|-----|------|------|----|---|----|
| 873 | Aaa | Ba1 | B1 | С | WR |
| 229 | Aaa | B2 | Ca | С | WR |
| 157 | Aa2 | Caa1 | Ca | С | WR |
| 57 | A2 | Caa3 | Ca | С | WR |
| 70 | Baa2 | Ca | | С | WR |
| 32 | Baa3 | Ca | | С | WR |
| 22 | Ba2 | CA | | С | WR |

In [53]:

Out[53]:

Initial Rating (30/03/07) 05/11/07 29/01/08 27/03/08 26/08/08 28/10/10

Volans Funding CDO Tranche Value (USD millions)

| • | | | | | | |
|-------|-------|------|------|------|----|---|
| 770.0 | Aaa | | Baa3 | Caa2 | Ca | С |
| 77.5 | . Aaa | | Ва3 | С | | |
| 74.0 | Aa2 | А3 | B1 | С | | |
| 49.0 | A2 | Baa3 | B2 | С | | |
| 44.0 | Baa2 | Caa1 | Caa3 | С | | |
| 34.0 | Baa3 | Caa3 | Ca | С | | |
| 13.5 | Baa3 | Caa3 | Ca | С | С | |

In [54]:

Out[54]:

| | Initial Rating (17/11/06) | 08/05/08 | 16/12/07 | 24/04/09 |
|---|------------------------------|----------|----------|----------|
| West Coast Funding CDO Tranche Value (USD millions) | | | | |
| 1187.95 | Aaa | Baa3 | Ba3 | Ca |
| 1187.95 | Aaa | Baa3 | Ba3 | Ca |
| 0.10 | Aaa | Baa3 | Ba3 | Ca |
| 81.00 | Aaa | Ba1 | B1 | С |
| 81.00 | Aaa | Ba1 | B1 | С |
| 54.00 | Aa2 | B2 | Caa2 | С |
| 60.75 | A2 | Caa1 | Caa3 | С |
| 33.75 | Baa2 | Caa3 | | С |
| 10.00 | A3 | Caa1 | Caa3 | С |

In [55]:

Out[55]:

| | Initial Rating (30/04/07) | 13/03/09 | 23/06/09 | 01/10/10 |
|---|------------------------------|----------|----------|----------|
| Westwood CDO Tranche Value (USD millions) | | | | |
| 237.825 | Aaa | | A1 | Aa2 |
| 26.425 | Aa1 | | Baa2 | Baa1 |
| 8.750 | Aa2 | | Ba1 | Baa3 |
| 19.250 | A2 | Ba1 | B1 | Ва3 |
| 17.500 | Baa2 | B1 | Ca | |
| 14.000 | Ba2 | Caa3 | С | |
| 2.000 | Baa2 | | Ca | |