



1

2

1220

1220

A

38,700

3.2%

1100

120

9.8%

3

10.15 /

4

30

12

5

6

4

T +12	T +30	40%
T +24	T +42	30%
T +36	T +48	30%

T +24	T +42	50%
T +36	T +48	50%

7

2010 2012 3

2010	2009 15% 2010	
2011	2009 30% 2011	
2012	2009 70% 2012	

20%

8

9

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	2005
	2005

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5%

1

2

3

1220

1

1100

120

9.8%

A

1220

		20	1.6%	0.05%
		20	1.6%	0.05%
		20	1.6%	0.05%
		15	1.2%	0.04%
		15	1.2%	0.04%
	-	225	18.4%	0.6%
103	-	875	71.7%	2.3%
		120	9.8%	0.3%
		1220	100%	3.2%

1 225

2 103

875

1%

1. 30

2. 2

3. 2

1

2

10

1 10

2 2

3 2

“

” “

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1

2

3

1

10.15 /

10.15

2

1

10.15 /

2

30

9.30

/

1

2

1

2

30

1

1

2

3

2

1

2

3

1

2

	2009	15%	2010
	2009	30%	2011
	2009	70%	2012

1

$$Q = Q_0 \times \begin{matrix} 1 & n \end{matrix}$$

$$Q_0 \qquad n$$

Q

2

$$Q = Q_0 \times n$$

$$Q_0 \qquad n \qquad 1$$

$$n \qquad Q$$

3

$$Q = Q_0 \times P_1 \times \begin{matrix} 1 + n_2 \\ (P_1 + P_2 \times n_2) \end{matrix}$$

$$Q_0$$

$$P_1$$

$$P_2$$

$$n_2$$

$$Q$$

1

$$P=P_0\div 1+n$$

P_0

n

P

$$2 \qquad P=P_0/n_1$$

P_0

$$n_1 \qquad 1 \qquad n1$$

P

$$3 \qquad P=P_0\times P_1+P_2\times n_2 \quad / (P_1\times 1+n_2)$$

P_0

P_1

P_2

n_2

P

$$4 \qquad P= P_0-v$$

P_0

v

P

11

22

1

-

2

3

4

$$c = SN(d_1) - Xe^{-r(T-t)}N(d_2)$$

$$c =$$

$$d_1 = \left[\ln(S/X) + (r + \sigma^2/2)(T-t) \right] / \sigma\sqrt{T-t}$$

$$d_2 = d_1 - \sigma\sqrt{T-t}$$

$$\sigma =$$

2 T

3

1 T

2 T+1

1

3 T+2

1

4 T+3

1

1

2

3

4

2

5

6

7

8

9

10

11

30

1

2

3

4

5

1

2

3

4

5

6

1

2

3

4

5

6

7

12

8

9

2

2

10

1

2

3

4

5

1

1

2

3

2

1

2

3

1

2

2010 7 26