

For predicting price on **March 2014**

S_t from January 2013

1. a_t in Jan 2014 = $(\alpha = 0.4)(223.69/1.0242) + (1 - 0.4)(198.63 - 0.04) = 206.51$
2. b_t in Jan 2014 = $(\beta = 0.3)(206.51 - 198.63) + (1 - 0.3)(-0.04) = -0.05$
3. $\hat{P}_{t+\tau,t}$ in Jan 2014 where $\tau = 1$ (prediction of Feb 2014 prices in Jan 2014) = $(206.51 + 2.34)(0.98132) = 204.95$

S_t from February 2013

For 2012–2013 use the seasonality factors as calculated from average monthly prices.

Year	Month	Choice 120 1 Brisket, deekle- off, bns	a_t	b_t	$\hat{P}_{t+1,t}$ Predicted Price next period		Adjusted	
					S_{t-N}	S_t	S_t	S_t
2013	7	204.39	199.70	-0.46	1.01470	201.34	1.01470	1.01296
2013	8	203.91	200.26	-0.16	1.01051	202.41	1.01051	1.00878
2013	9	198.82	198.69	-0.58	1.01150	201.11	1.01150	1.00976
2013	10	199.07	197.30	-0.82	1.01516	196.53	1.01516	1.01341
2013	11	199.53	197.68	-0.46	1.00025	198.16	1.00025	0.99853
2013	12	201.70	198.63	-0.04	1.00477	203.40	1.00477	1.00304
2014	1	223.69	206.51	2.34	1.02422	204.95	1.04485	1.04306
2014	2	226.75			0.98132			

For each month after 2013, each month at a time, calculate the new seasonality factor by

1. Use the updating equation to get new S_t . S_t for Jan 2014 = $(\gamma = 0.35)$
 $(223.69/206.51) + (1 - 0.35)(1.02422) = 1.04485$.
2. Calculate the sum of the new S_t and previous eleven S_t 's. Denote this sum as X .
3. Modify the new S_t to equal S_t times N/X where N = number of seasonality periods (here, $N = 12$). For Jan 2014, adjusted $S_t = (1.04485)(12/12.0206) = 1.0430$ (some differences due to rounding).

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Figure 10.10

30p0 wide X 28p6 High