

SIDEBAR FIGURE 1

CALCULATING BOLLINGER BANDS										
	A	B	C	D	E	F	G	H	I	J
1	Date	High	Low	Close	Typical Price	CALCULATING BOLLINGER BANDS An Excel spreadsheet is used to calculate Bollinger Bands for the DJIA. The actual formula for each cell is shown at the bottom of the column; the formula presented is specific for the location of that cell. First, determine the typical price (column E), which is the high, low and close summed and divided by three. Then calculate the 20-day simple moving average (column F). Next, the standard deviation of the typical price over the 20-day period is calculated using the <i>population</i> formula in the spreadsheet (column G). The standard deviation of the population formula is used. The upper Bollinger Band is the 20-day moving average plus two times the standard deviation (column H). The middle band is the 20-day simple moving average (column I). The lower band is the 20-day simple moving average minus two times the standard deviation.				
2	910924	3043.38	2995.97	2995.97	3011.77					
3	910925	3048.52	3004.92	3004.92	3019.45					
4	910926	3040.70	2996.87	2996.87	3011.48					
5	910927	3040.70	2989.49	2989.49	3006.56					
6	910930	3032.87	2982.78	2982.78	2999.48					
7	911001	3043.60	3002.46	3018.34	3021.47					
8	911002	3040.25	2992.40	3012.52	3015.06					
9	911003	3021.24	2972.50	2984.79	2992.84					
10	911004	3007.16	2956.17	2961.76	2975.03					
11	911007	2973.17	2926.21	2942.75	2947.38					
12	911008	2983.68	2927.77	2963.77	2958.41					
13	911009	2984.79	2925.54	2946.33	2952.22					
14	911010	2985.47	2930.23	2976.52	2964.07					
15	911011	3000.89	2957.51	2983.68	2980.69					
16	911014	3026.39	2975.85	3019.45	3007.23					
17	911015	3057.69	3000.22	3041.37	3033.09					
18	911016	3082.29	3016.10	3061.72	3053.37					
19	911017	3077.15	3027.06	3053.00	3052.40					
20	911018	3089.45	3045.62	3077.15	3070.74	20 day Average	Standard Deviation	Upper Bollinger Band	Middle Bollinger Band	Lower Bollinger Band
21	911021	3085.20	3042.49	3060.38	3062.69	3006.77	35.54	3077.85	3006.77	2935.70
22	911022	3084.53	3020.57	3039.80	3048.30	3008.60	36.67	3081.94	3008.60	2935.26
23	911023	3065.52	3015.21	3040.92	3040.55	3009.65	37.26	3084.18	3009.65	2935.12
24	911024	3047.63	2991.73	3016.32	3018.56	3010.01	37.31	3084.63	3010.01	2935.38
25	911025	3034.44	2983.01	3004.92	3007.46	3010.05	37.31	3084.67	3010.05	2935.43
26	911028	3055.23	3001.57	3045.62	3034.14	3011.79	37.58	3086.95	3011.79	2936.62
27	911029	3077.82	3020.13	3061.94	3053.30	3013.38	38.62	3090.61	3013.38	2936.14
28	911030	3090.12	3038.24	3071.78	3066.71	3015.96	40.33	3096.63	3015.96	2935.29
29	911031	3091.01	3045.62	3069.10	3068.58	3019.75	41.52	3102.79	3019.75	2936.70
30	911101	3091.91	3031.75	3056.35	= (B30+C30+D30)/3	= AVERAGE(E11:E30)	= STDEV(P(E11:E30)	= F30+(2*G30)	= F30	= F30-(2*G30)