

HEIKIN-ASHI OHLC VALUES

To illustrate the calculation of heikin-ashi OHLC values in a spreadsheet (sidebar Figure 1), I used daily data for the US Dollar Index (4/24/03–8/22/03). You can use intraday, weekly, or any other time frame for the data.

To build the data table and the chart associated with it, follow these steps:

Step 1: Copy daily data (date, open, high, low, close) into columns A, B, C, D, and E, through to the last column.

Step 2: Reserve columns F, G, H, and I as heikin-ashi values for modified open, high, low, and close: haOpen, haHigh, haLow, haClose.

Step 3: Enter the following formulas corresponding to the first day in the data table:

In cell F2: =B2

In cell G2: =MAX(C2,F2,I2)

In cell H2: =MIN(D2,F2,I2)

In cell I2: =SUM(B2:E2)/4

Observe that cell F2 contains the value for the real open for day 1.

You also have the option to enter zero in cell F2 and MIN(D2,I2) in cell H2. But in this case the range used to display the chart will be the date for the x axis, and haOpen, haHigh, haLow, and haClose for the y axis.

Step 4: Enter the following formulas:

In cell F3: =(F2+I2)/2

In cell G3: =MAX(C3,F3,I3)

In cell H3: =MIN(D3,F3,I3)

In cell I3: =SUM(B3:E3)/4

Step 5: Select cells F3, G3, H3, and I3 and copy them down to the end of price data. Columns F, G, H, and I now contain the heikin-ashi values for open, high, low, and close.

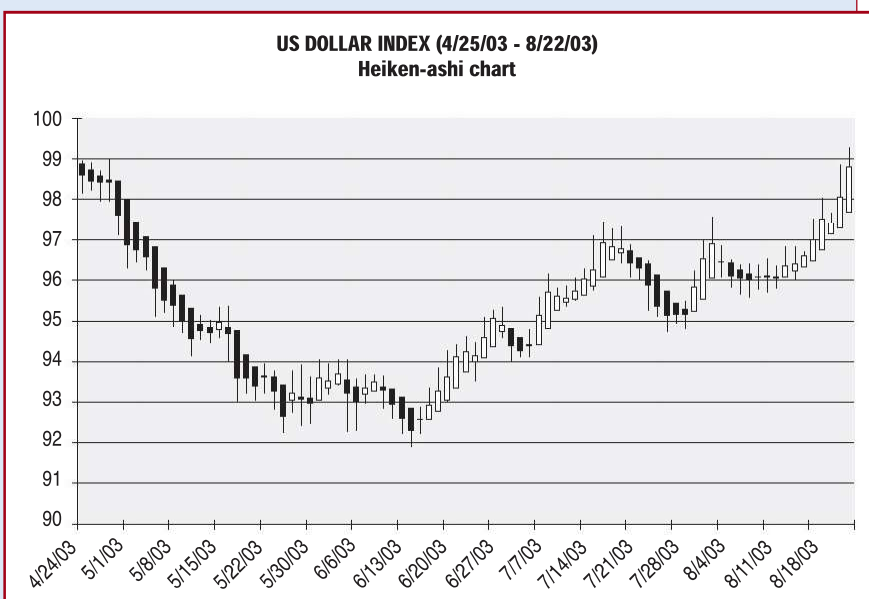
Step 6: Create a candlestick chart in Excel using the date (column A) for the x axis and range F2 to the last value in column I as the data range. The chart should look like the one in sidebar Figure 2.

—DV

Microsoft Excel - HA-Calc-Sidebar.xls

	A	B	C	D	E	F	G	H	I
1	Date	Open	High	Low	Close	haOpen	haHigh	haLow	haClose
2	4/24/03	98.87	98.94	98.14	98.33	98.870	98.940	98.140	98.570
3	4/25/03	98.23	98.88	98.19	98.36	98.720	98.880	98.190	98.415
4	4/28/03	98.29	98.69	97.92	98.67	98.568	98.690	97.920	98.393
5	4/29/03	98.65	98.98	97.93	98.02	98.480	98.980	97.930	98.395
6	4/30/03	97.99	98.03	97.10	97.19	98.438	98.438	97.100	97.578
7	5/1/03	97.18	97.25	96.27	96.70	98.008	98.008	96.270	96.850
8	5/2/03	96.58	97.08	96.43	96.76	97.429	97.429	96.430	96.713
9	5/5/03	96.80	96.84	96.23	96.37	97.071	97.071	96.230	96.560
10	5/6/03	96.27	96.41	95.09	95.34	96.815	96.815	95.090	95.778
11	5/7/03	95.28	95.90	95.20	95.58	96.296	96.296	95.200	95.490
12	5/8/03	95.69	96.01	94.83	94.93	95.893	96.010	94.830	95.365
13	5/9/03	95.02	95.35	94.68	94.98	95.629	95.629	94.680	95.008
14	5/12/03	94.55	94.94	94.11	94.55	95.318	95.318	94.110	94.538
15	5/13/03	94.56	95.14	94.50	94.72	94.928	95.140	94.500	94.730
16	5/14/03	94.66	95.02	94.44	94.58	94.829	95.020	94.440	94.675
17	5/15/03	94.75	95.35	94.56	95.22	94.752	95.350	94.560	94.970
18	5/16/03	95.28	95.38	93.99	93.99	94.861	95.380	93.990	94.660
19	5/19/03	93.56	93.93	92.98	93.78	94.760	94.760	92.980	93.563
20	5/20/03	93.78	94.01	93.20	93.26	94.161	94.161	93.200	93.563
21	5/21/03	93.09	93.71	93.03	93.71	93.862	93.862	93.030	93.395
22	5/22/03	93.76	93.95	93.21	93.56	93.623	93.950	93.210	93.620
23	5/23/03	93.58	93.76	92.82	92.82	93.622	93.760	92.820	93.245
24	5/27/03	92.65	93.01	92.21	92.72	93.433	93.433	92.210	92.648
25	5/28/03	92.99	93.78	92.73	93.15	93.040	93.780	92.730	93.238

SIDEBAR FIGURE 1: CALCULATING HEIKIN-ASHI USING A SPREADSHEET



SIDEBAR FIGURE 2: THE US DOLLAR INDEX. White candles show an ascending trend, while black candles indicate a descending trend. Smaller bodies are an indication that the current trend may weaken or that the index is consolidating.