



# Comparing share-price performance of a stock

A “How-to” write-up by Pamela Peterson Drake

Analysis of relative stock performance is challenging because stocks trade at different prices, indices are calculated using an index system, and some stocks pay dividends. A simple way to compare the performance of stocks or compare the performance of a stock with that of an index is to determine the value of \$1 invested in both over a period of time. This requires calculating the returns, including dividends, for all stocks or indices used in the comparison, and then calculating the compounded value of \$1 invested at a point in time.

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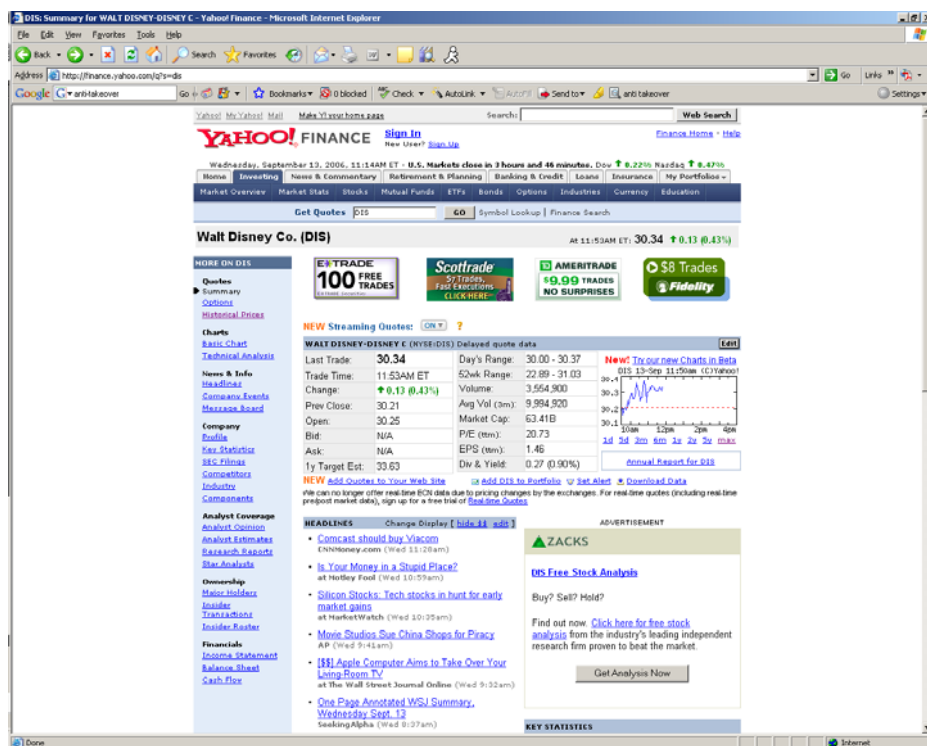
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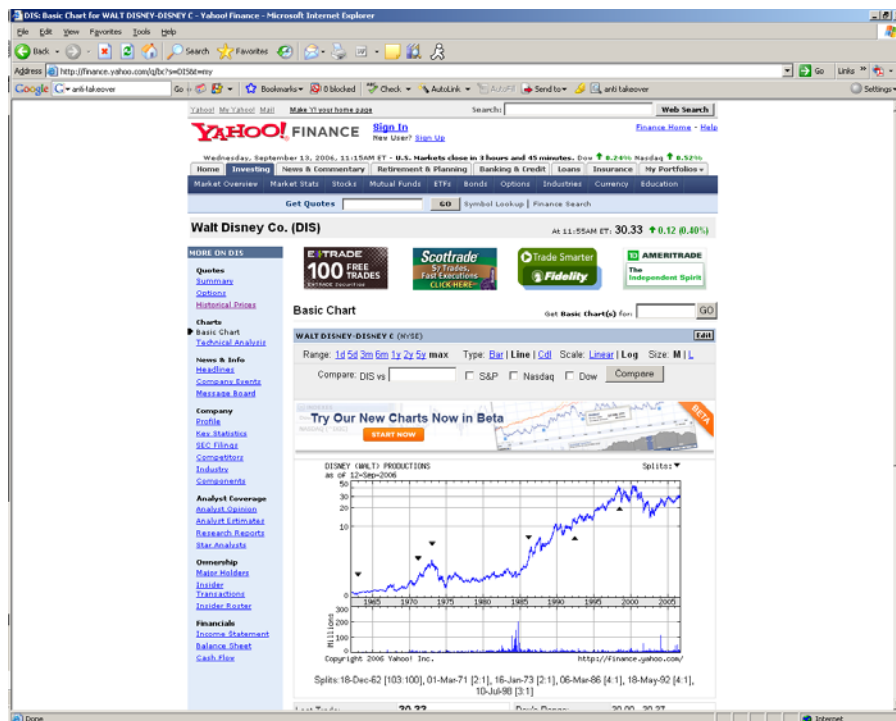
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## Step 1: Download stock prices and dividends

The easiest method of calculating returns from publicly-available information is to use a source such as [Yahoo! Finance](#). You will need to specify the stock’s ticker symbol, the range of time, and the interval. For example, suppose I want to calculate the relative stock performance for Walt Disney common stock. I would specify its symbol, DIS:



Then, under the chart, I click on the “Max” link. This produces the chart for all available data:



At the bottom of that page is the link to “Historical Prices”. Specify the range of dates and select “Monthly”, and then “Get Prices”:

Walt Disney Co. (DIS) AT 11:58AM ET: 30.33 ↑ 0.12 (0.40%)

Historical Prices

SET DATE RANGE

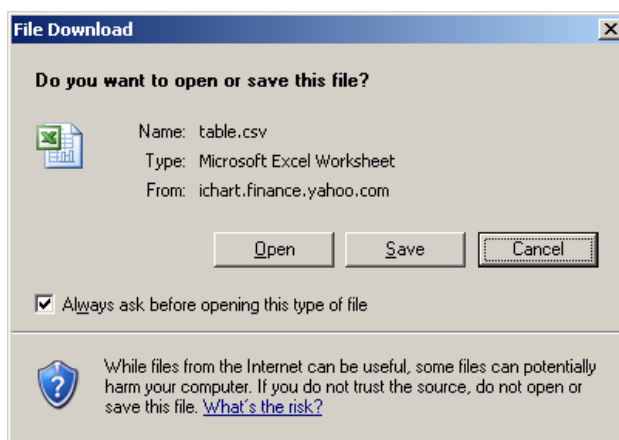
Start Date: Jan 1 2003 End Date: Dec 31 2005

Get Prices

PRICES

Date	Open	High	Low	Close	Avg Vol	Adj Close*
8-Dec-05				\$ 0.27 Dividend		
Dec-05	25.05	25.70	23.95	23.97	7,687,961	23.97
Nov-05	24.28	26.19	24.28	24.93	9,323,923	24.67
Oct-05	24.13	25.00	22.09	24.37	8,986,780	24.11
Sep-05	25.09	25.34	22.90	24.13	9,626,838	23.88
Aug-05	25.64	26.47	24.92	25.19	7,669,947	24.93
Jul-05	25.22	26.50	24.35	25.64	7,193,665	25.37
Jun-05	27.51	27.99	25.12	25.18	6,683,440	24.92
May-05	26.57	28.02	26.02	27.44	6,690,228	27.15
Apr-05	28.79	29.00	25.71	26.40	6,005,485	26.12
Mar-05	27.97	29.00	27.47	28.73	6,698,995	28.43
Feb-05	28.75	29.99	27.51	27.94	7,103,115	27.65
Jan-05	27.81	28.94	27.05	28.63	7,479,855	28.33

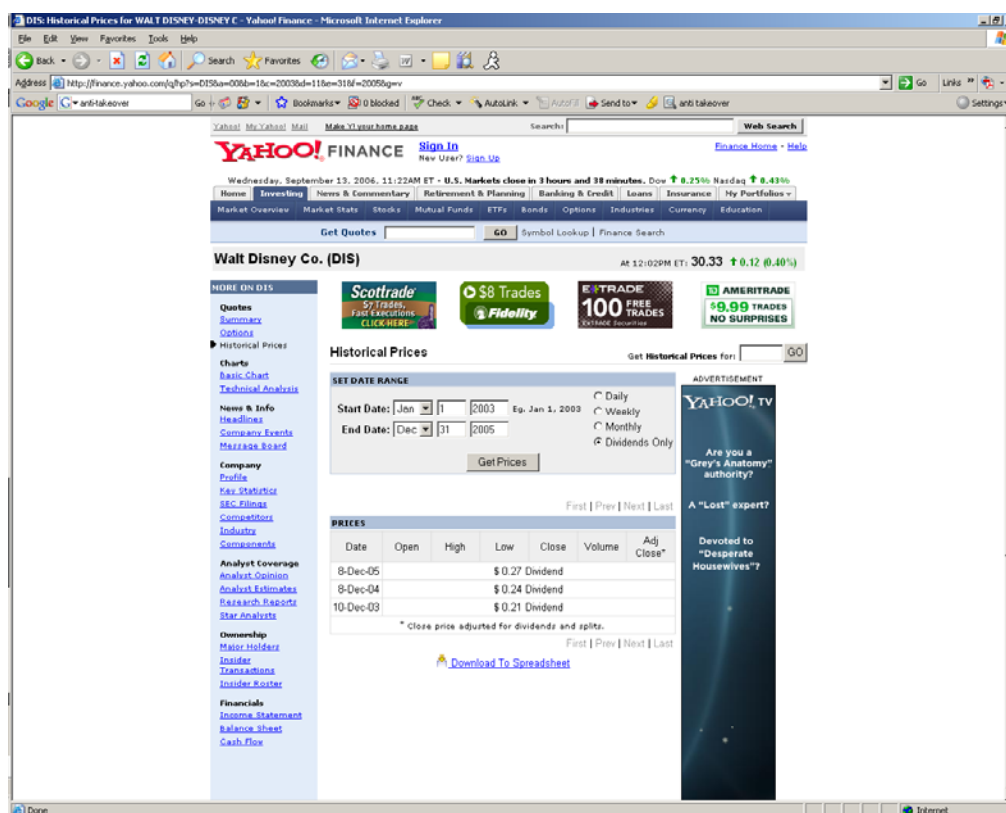
Then click on the link for downloading, which is at the bottom of the page, producing the following:



It is best to click on “Save” and then open the file in Microsoft Excel.<sup>1</sup>

Repeat the “Get Prices” with the “Dividends Only” option selected. This will produce a downloadable list of dividends for the same period.

<sup>1</sup> Some users experience difficulty when they choose the “Open” option in the File Download dialog.



Download this file as well.

## Step 2: Calculate returns for the stock and the comparative firm or index

Open the file of stock prices in Microsoft Excel.<sup>2</sup> The data is provided in reverse-chronological order. The calculation of returns will make more sense if you reorder the data chronologically. Highlight the rows with the dates and prices, and then use Data > Sort and sort by Date.

<sup>2</sup> This is a .csv file, so you may have to specify "All Files" in the file type. You can then "Save As" an Excel Workbook.

Microsoft Excel - DIS

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	A	B	C	D	E	F	G	H	I
1	Date	Open	High	Low	Close	Volume	Adj. Close*		
2	2-Jan-03	16.8	18.54	16.25	17.5	7530290	17		
3	3-Feb-03	17.66	17.8	15.88	17.06	6857568	16.57		
4	3-Mar-03	17.1	18.74	14.84	17.02	9529447	16.53		
5	1-Apr-03	17.02	19.28	16.92	18.66	9846514	18.13		
6	1-May-03	18.7	19.85	17.45	19.65	9094619	19.09		
7	2-Jun-03	19.9	21.55	18.85	19.75	10536695	19.19		
8	1-Jul-03	19.76	22.23	19.4	21.92	8425922	21.29		
9	1-Aug-03	22.38	23.8	20.15	20.5	8840804	19.92		
10	2-Sep-03	20.73	21.54	19.78	20.17	9852780	19.59		
11	1-Oct-03	20.42	22.95	20.36	22.64	7041182	21.99		
12	3-Nov-03	22.85	23.76	22.38	23.09	6276436	22.43		
13	1-Dec-03	23.09	23.56	21.56	23.33	8179554	22.88		
14	2-Jan-04	23.49	25.08	22.98	24	9980905	23.54		
15	2-Feb-04	23.8	28.41	22.9	26.53	21752863	26.02		
16	1-Mar-04	26.8	27.05	24.55	24.99	9025456	24.51		
17	1-Apr-04	25.1	26.65	22.9	23.03	10581428	22.59		
18	3-May-04	23.18	23.93	21.39	23.47	8442200	23.02		
19	1-Jun-04	23.8	25.6	23.38	25.49	7299357	25		
20	1-Jul-04	25.34	25.5	22.57	23.09	5698619	22.64		
21	2-Aug-04	23.1	23.18	20.88	22.45	6689850	22.02		
22	1-Sep-04	22.46	23.65	22	22.55	6565814	22.12		
23	1-Oct-04	22.56	25.3	22.51	25.22	7721214	24.73		
24	1-Nov-04	25.13	27.45	24.79	26.88	6158823	26.36		
25	1-Dec-04	26.97	28.03	26.68	27.8	5112790	27.51		
26	3-Jan-05	27.81	28.94	27.05	28.63	7479855	28.33		
27	1-Feb-05	28.75	29.99	27.51	27.94	7103115	27.65		
28	1-Mar-05	27.97	29	27.47	28.73	6858995	28.43		
29	1-Apr-05	28.79	29	25.71	26.4	6005485	26.12		
30	2-May-05	26.57	28.02	26.02	27.44	6650228	27.15		
31	1-Jun-05	27.51	27.99	25.12	25.18	6683440	24.92		
32	1-Jul-05	25.22	26.5	24.35	25.64	7193655	25.37		
33	1-Aug-05	25.64	26.47	24.92	25.19	7669947	24.93		
34	1-Sep-05	25.09	25.34	22.9	24.13	9626838	23.88		
35	3-Oct-05	24.13	25	22.89	24.37	8986780	24.11		
36	1-Nov-05	24.28	26.19	24.28	24.93	9323923	24.67		
37	1-Dec-05	25.05	25.7	23.95	23.97	7687961	23.97		
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Add the dividends into the file appropriately:

Microsoft Excel - DIS

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	A	B	C	D	E	F	G	H	I	J	K
1	Date	Open	High	Low	Close	Volume	Adj. Close	Dividends			
2	2-Jan-03	16.8	18.54	16.25	17.5	7530290	17				
3	3-Feb-03	17.66	17.8	15.88	17.06	6857568	16.57				
4	3-Mar-03	17.1	18.74	14.84	17.02	9529447	16.53				
5	1-Apr-03	17.02	19.28	16.92	18.66	9846514	18.13				
6	1-May-03	18.7	19.85	17.45	19.65	9094619	19.09				
7	2-Jun-03	19.9	21.55	18.85	19.75	10536695	19.19				
8	1-Jul-03	19.76	22.23	19.4	21.92	8425922	21.29				
9	1-Aug-03	22.38	23.8	20.15	20.5	8840804	19.92				
10	2-Sep-03	20.73	21.54	19.78	20.17	9852780	19.59				
11	1-Oct-03	20.42	22.95	20.36	22.64	7041182	21.99				
12	3-Nov-03	22.85	23.76	22.38	23.09	6276436	22.43				
13	1-Dec-03	23.09	23.56	21.56	23.33	8179554	22.88	0.21			
14	2-Jan-04	23.49	25.08	22.98	24	9980905	23.54				
15	2-Feb-04	23.8	28.41	22.9	26.53	21752863	26.02				
16	1-Mar-04	26.8	27.05	24.55	24.99	9025456	24.51				
17	1-Apr-04	25.1	26.65	22.9	23.03	10581428	22.59				
18	3-May-04	23.18	23.93	21.39	23.47	8442200	23.02				
19	1-Jun-04	23.8	25.6	23.38	25.49	7299357	25				
20	1-Jul-04	25.34	25.5	22.57	23.09	5698619	22.64				
21	2-Aug-04	23.1	23.18	20.88	22.45	6689850	22.02				
22	1-Sep-04	22.46	23.65	22	22.55	6565814	22.12				
23	1-Oct-04	22.56	25.3	22.51	25.22	7721214	24.73				
24	1-Nov-04	25.13	27.45	24.79	26.88	6158823	26.36				
25	1-Dec-04	26.97	28.03	26.68	27.8	5112790	27.51	0.24			
26	3-Jan-05	27.81	28.94	27.05	28.63	7479855	28.33				
27	1-Feb-05	28.75	29.99	27.51	27.94	7103115	27.65				
28	1-Mar-05	27.97	29	27.47	28.73	6858995	28.43				
29	1-Apr-05	28.79	29	25.71	26.4	6005485	26.12				
30	2-May-05	26.57	28.02	26.02	27.44	6650228	27.15				
31	1-Jun-05	27.51	27.99	25.12	25.18	6683440	24.92				
32	1-Jul-05	25.22	26.5	24.35	25.64	7193655	25.37				
33	1-Aug-05	25.64	26.47	24.92	25.19	7669947	24.93				
34	1-Sep-05	25.09	25.34	22.9	24.13	9626838	23.88				
35	3-Oct-05	24.13	25	22.89	24.37	8986780	24.11				
36	1-Nov-05	24.28	26.19	24.28	24.93	9323923	24.67				
37	1-Dec-05	25.05	25.7	23.95	23.97	7687961	23.97	0.27			
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Calculate the returns using the "Adj Close" prices and the dividends:

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Formula Bar:  $= (G3-G2+H3)/G2$

	A	B	C	D	E	F	G	H	I	J	K	L
	Date	Open	High	Low	Close	Volume	Adj. Close	Dividends	Return			
1												
2	2-Jan-03	16.8	18.54	16.25	17.5	7530290	17					
3	3-Feb-03	17.66	17.8	15.88	17.06	6857568	16.57		-2.529%			
4	3-Mar-03	17.1	18.74	14.84	17.02	9529447	16.53		-0.241%			
5	1-Apr-03	17.02	19.28	16.92	18.66	9846514	18.13		9.679%			
6	1-May-03	18.7	19.85	17.45	19.65	9094619	19.09		5.295%			
7	2-Jun-03	19.9	21.55	18.85	19.75	10535695	19.19		0.524%			
8	1-Jul-03	19.76	22.23	19.4	21.92	8425922	21.29		10.943%			
9	1-Aug-03	22.38	23.8	20.15	20.5	8840804	19.92		-6.435%			
10	2-Sep-03	20.73	21.54	19.78	20.17	9652780	19.59		-1.657%			
11	1-Oct-03	20.42	22.95	20.36	22.64	7041182	21.99		12.251%			
12	3-Nov-03	22.85	23.76	22.38	23.09	6276436	22.43		2.001%			
13	1-Dec-03	23.09	23.56	21.56	23.33	6179554	22.88	0.21	2.942%			
14	2-Jan-04	23.49	25.08	22.98	24	9980905	23.54		2.865%			
15	2-Feb-04	23.8	28.41	22.9	26.53	21752863	26.02		10.536%			
16	1-Mar-04	26.8	27.05	24.55	24.99	9025466	24.51		-5.803%			
17	1-Apr-04	25.1	26.65	22.9	23.03	10591428	22.59		-7.634%			
18	3-May-04	23.18	23.93	21.39	23.47	8442200	23.02		1.903%			
19	1-Jun-04	23.8	25.6	23.38	25.49	7239367	25		8.601%			
20	1-Jul-04	25.34	25.5	22.57	23.09	5698619	22.64		-9.440%			
21	2-Aug-04	23.1	23.18	20.88	22.45	6689860	22.02		-2.739%			
22	1-Sep-04	22.46	23.65	22	22.55	6565814	22.12		0.454%			
23	1-Oct-04	22.56	25.3	22.51	25.22	7721214	24.73		11.799%			
24	1-Nov-04	25.13	27.45	24.79	26.88	6158823	26.36		6.591%			
25	1-Dec-04	26.97	28.03	26.68	27.8	5112790	27.51	0.24	5.273%			
26	3-Jan-05	27.81	28.94	27.05	26.63	7479655	26.33		2.981%			
27	1-Feb-05	28.75	29.99	27.51	27.94	7103115	27.65		-2.400%			
28	1-Mar-05	27.97	29	27.47	26.73	6858995	26.43		2.821%			
29	1-Apr-05	28.79	29	25.71	26.4	6005485	26.12		-8.125%			
30	2-May-05	26.57	28.02	26.02	27.44	6650228	27.15		3.943%			
31	1-Jun-05	27.51	27.99	25.12	25.18	6883440	24.92		-8.214%			
32	1-Jul-05	25.22	26.5	24.35	25.64	7193655	25.37		1.806%			
33	1-Aug-05	25.64	26.47	24.92	25.19	7669947	24.93		-1.734%			
34	1-Sep-05	25.09	25.34	22.9	24.13	9626838	23.88		-4.212%			
35	3-Oct-05	24.13	25	22.89	24.37	8986780	24.11		0.963%			
36	1-Nov-05	24.28	26.19	24.28	24.93	9323923	24.67		2.323%			
37	1-Dec-05	25.05	25.7	23.95	23.97	7687961	23.97	0.27	-1.743%			
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The cell formula for the returns is:

$$\text{Return} = \frac{(\text{Price at end of the month} - \text{price at end of the previous month} + \text{dividend during the month})}{\text{price at end of previous month}}$$

Once the returns are computed for the stock of interest, we also need to add the returns for the comparable into the worksheet. For another stock, you would repeat the procedure that we just completed. For a market return, you need the monthly return (including dividends) for the index. The total monthly return on the [S&P 500](#) is available.<sup>3</sup>

<sup>3</sup> Please note that this data is sometimes not available on weekends from this website.

http://www2.standardandpoors.com/spf/xls/index/MONTHLY.xls - Microsoft Internet Explorer

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Back Forward Stop Home Search Favorites AutoLink AutoFill Send to monthly total return

Address http://www2.standardandpoors.com/spf/xls/index/MONTHLY.xls

Google monthly total return S&P 500 0 blocked Check AutoLink AutoFill Send to monthly total return

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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	<b>STANDARD &amp; POOR'S INDEX SERVICES</b>														
2	<b>S&amp;P 500 MONTHLY RETURNS, AUGUST 31, 2006</b>														
3															
4															
5	MONTH OF	PRICE	PRICE	1 MONTH	3 MONTH	6 MONTH	1 YEAR	3 YEAR	5 YEARS	10 YEARS	1 MONTH	12 MONTH			
6		CLOSE	CHANGE	CHANGE	CHANGE	CHANGE	CHANGE	CHANGE	CHANGE	CHANGE	TOTAL	TOTAL			
7											RETURN	RETURN			
8	08/2006	1303.82	27.16	2.13%	2.66%	1.81%	6.84%	29.35%	15.02%	99.98%	2.38%	8.88%			
9	07/2006	1276.66	6.46	0.51%	-2.59%	-0.27%	3.44%	28.92%	5.40%	99.49%	0.62%	5.38%			
10	06/2006	1270.20	0.11	0.01%	-1.90%	1.75%	6.62%	30.34%	3.74%	89.40%	0.14%	8.63%			
11	05/2006	1270.09	-40.52	-3.09%	-0.83%	1.65%	6.60%	31.81%	1.14%	89.81%	-2.88%	8.64%			
12	04/2006	1310.61	15.78	1.22%	2.39%	8.58%	13.29%	42.94%	4.89%	100.35%	1.34%	15.42%			
13	03/2006	1294.83	14.17	1.11%	3.73%	5.37%	9.68%	52.66%	11.59%	100.59%	1.25%	11.73%			
14	02/2006	1280.66	0.58	0.05%	2.50%	4.94%	6.40%	52.25%	3.28%	99.97%	0.27%	8.40%			
15	01/2006	1280.08	31.79	2.55%	6.05%	3.72%	8.36%	49.59%	-6.29%	101.26%	2.65%	10.38%			
16	12/2005	1248.29	-1.19	-0.09%	1.59%	4.78%	3.00%	41.88%	-5.45%	102.67%	0.03%	4.91%			
17	11/2005	1249.48	42.47	3.52%	2.39%	4.87%	6.45%	33.45%	-4.98%	106.40%	3.78%	8.44%			
18	10/2005	1207.01	-21.80	-1.77%	-2.20%	4.34%	6.80%	36.27%	-15.56%	107.57%	-1.67%	8.72%			
19	09/2005	1228.81	8.48	0.69%	3.15%	4.08%	10.25%	50.72%	-14.46%	110.27%	0.81%	12.25%			
20	08/2005	1220.33	-13.85	-1.12%	2.42%	1.39%	10.51%	21.06%	-19.69%	117.19%	-0.91%	12.56%			
21	07/2005	1234.18	42.85	3.60%	6.68%	4.48%	12.02%	24.63%	-13.74%	119.58%	3.72%	14.05%			
22	06/2005	1191.33	-0.17	-0.01%	0.91%	-1.70%	4.43%	22.25%	-18.10%	118.69%	0.14%	6.32%			
23	05/2005	1191.50	34.65	3.00%	-1.01%	1.51%	6.32%	23.65%	-16.13%	123.38%	3.18%	8.24%			
24	04/2005	1156.85	-23.74	-2.01%	-2.07%	2.36%	4.47%	26.17%	-20.35%	124.76%	-1.90%	6.34%			
25	03/2005	1180.59	-23.01	-1.91%	-2.59%	5.92%	4.83%	39.19%	-21.22%	135.78%	-1.77%	6.69%			
26	02/2005	1203.60	22.33	1.89%	2.54%	9.00%	5.12%	43.09%	-11.92%	146.95%	2.10%	6.98%			
27	01/2005	1181.27	-30.65	-2.53%	4.52%	7.22%	4.43%	38.05%	-15.29%	151.11%	-2.44%	6.23%			
28	12/2004	1211.92	38.10	3.25%	8.73%	6.23%	8.99%	37.75%	-17.51%	163.88%	3.40%	10.88%			
29	11/2004	1173.82	43.62	3.86%	6.30%	4.74%	10.93%	25.37%	-15.49%	158.73%	4.05%	12.86%			
30	10/2004	1130.20	15.62	1.40%	2.59%	2.07%	7.57%	27.60%	-17.08%	139.27%	1.53%	9.42%			
31	09/2004	1114.58	10.34	0.94%	-2.30%	-1.03%	11.91%	36.71%	-13.11%	140.88%	1.08%	13.87%			
32	08/2004	1104.24	2.52	0.23%	-1.47%	-3.55%	9.55%	20.54%	-16.37%	132.23%	0.40%	11.46%			
33	07/2004	1101.72	-39.12	-3.43%	-0.50%	-2.60%	11.25%	20.85%	-17.08%	140.41%	-3.31%	13.17%			
34	06/2004	1140.84	20.16	1.80%	1.30%	2.60%	17.07%	15.76%	-16.89%	156.79%	1.94%	19.11%			

We now have a spreadsheet that has the returns on DIS and returns on the S&P 500:

Microsoft Excel - DIS

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	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2													
3	Month	Open	High	Low	Close	Volume	Adj. Close*	Dividend per share	Return on DIS	Return on the S&P 500			
4	2-Jan-03	16.8	18.54	16.25	17.5	7530290	\$ 17.00						
5	3-Feb-03	17.66	17.8	15.88	17.06	6857568	\$ 16.57		-2.529%	-1.50%			
6	3-Mar-03	17.1	18.74	14.84	17.02	9529447	\$ 16.53		-0.241%	0.97%			
7	1-Apr-03	17.02	19.28	16.92	18.66	9846514	\$ 18.13		9.679%	8.24%			
8	1-May-03	18.7	19.85	17.45	19.65	9094619	\$ 19.09		5.295%	5.27%			
9	2-Jun-03	19.9	21.55	18.85	19.75	10536695	\$ 19.19		0.524%	1.26%			
10	1-Jul-03	19.76	22.23	19.4	21.92	8425922	\$ 21.29		10.943%	1.76%			
11	1-Aug-03	22.38	23.8	20.15	20.5	8840804	\$ 19.92		-6.435%	1.95%			
12	2-Sep-03	20.73	21.54	19.78	20.17	9852780	\$ 19.59		-1.657%	-1.06%			
13	1-Oct-03	20.42	22.95	20.36	22.64	7041182	\$ 21.99		12.251%	5.66%			
14	3-Nov-03	22.85	23.76	22.38	23.09	6276436	\$ 22.43		2.001%	0.86%			
15	1-Dec-03	23.09	23.56	21.56	23.33	8179554	\$ 22.88	\$ 0.21	2.942%	5.24%			
16	2-Jan-04	23.49	25.08	22.98	24	9880905	\$ 23.54		2.885%	1.64%			
17	2-Feb-04	23.8	28.41	22.9	26.53	21752863	\$ 26.02		10.535%	1.39%			
18	1-Mar-04	26.8	27.05	24.55	24.98	9025456	\$ 24.51		-5.803%	-1.51%			
19	1-Apr-04	25.1	26.65	22.9	23.03	10591428	\$ 22.59		-7.634%	-1.57%			
20	3-May-04	23.18	23.93	21.39	23.47	8442200	\$ 23.02		1.903%	1.37%			
21	1-Jun-04	23.8	25.6	23.38	25.49	7239357	\$ 25.00		8.601%	1.94%			
22	1-Jul-04	25.34	25.5	22.57	23.09	5689819	\$ 22.64		-9.440%	-3.31%			
23	2-Aug-04	23.1	23.18	20.88	22.45	6689850	\$ 22.02		-2.739%	0.40%			
24	1-Sep-04	22.46	23.65	22	22.55	6565814	\$ 22.12		0.454%	1.08%			
25	1-Oct-04	22.56	25.3	22.51	25.22	7721214	\$ 24.73		11.799%	1.53%			
26	1-Nov-04	25.13	27.45	24.79	26.88	6158623	\$ 26.36		6.591%	4.05%			
27	1-Dec-04	26.97	28.03	26.68	27.8	5112790	\$ 27.51	\$ 0.24	5.273%	3.40%			
28	3-Jan-05	27.81	28.94	27.05	28.63	7479655	\$ 28.33		2.981%	-2.44%			
29	1-Feb-05	28.75	29.99	27.51	27.94	7103115	\$ 27.65		-2.400%	2.10%			
30	1-Mar-05	27.97	29	27.47	28.73	6858995	\$ 28.43		2.821%	-1.77%			
31	1-Apr-05	28.79	29	25.71	26.4	8005485	\$ 26.12		-8.125%	-1.90%			
32	2-May-05	26.57	28.02	26.02	27.44	8650228	\$ 27.15		3.943%	3.18%			
33	1-Jun-05	27.51	27.99	25.12	25.18	6883440	\$ 24.92		-8.214%	0.14%			
34	1-Jul-05	25.22	26.5	24.35	25.64	7193655	\$ 25.37		1.806%	3.72%			
35	1-Aug-05	25.64	26.47	24.92	25.19	7669947	\$ 24.93		-1.734%	-0.91%			
36	1-Sep-05	25.09	25.34	22.9	24.13	9626838	\$ 23.88		-4.212%	0.81%			
37	3-Oct-05	24.13	25	22.89	24.37	8986780	\$ 24.11		0.963%	-1.67%			
38	1-Nov-05	24.28	26.19	24.28	24.93	9323923	\$ 24.67		2.323%	3.78%			
39	1-Dec-05	25.05	25.7	23.95	23.97	7887961	\$ 23.97	\$ 0.27	-1.743%	0.03%			
40													
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Note that since we collected prices started at the month end of January 2, 2003, we can only calculate returns starting in month-end February 3, 2003.<sup>4</sup>

### Step 3: Compound the value of \$1 invested in the stock

The value of \$1 is used as a measure of the relative performance because it is one way to standardize the returns from two investments that may have different trading prices. The calculation is simple:

$$\text{Value at end of month} = \text{Value at end of previous month} (1 + \text{Return for month})$$

Month	Open	High	Low	Close	Volume	Adj. Close*	Dividend per share	Return on DIS	Return on the S&P 500	Value in DIS	Value in S&P500
2-Jan-03	16.8	18.54	16.25	17.5	7530290	\$ 17.00				\$ 1.0000	\$ 1.0000
3-Feb-03	17.66	17.8	15.88	17.06	6857568	\$ 16.57		-2.529%	-2.62%	\$ 0.9747	\$ 0.9738
3-Mar-03	17.1	18.74	14.84	17.02	9529447	\$ 16.53		-0.241%	-1.50%	\$ 0.9724	\$ 0.9592
1-Apr-03	17.02	19.28	16.92	18.66	9846514	\$ 18.13		9.679%	0.97%	\$ 1.0665	\$ 0.9685
1-May-03	18.7	19.85	17.45	19.65	9094619	\$ 19.09		5.295%	8.24%	\$ 1.1229	\$ 1.0483
2-Jun-03	19.9	21.55	18.85	19.75	10535695	\$ 19.19		0.524%	5.27%	\$ 1.1288	\$ 1.1035
1-Jul-03	19.76	22.23	19.4	21.92	8425922	\$ 21.29		10.943%	1.28%	\$ 1.2524	\$ 1.1176
1-Aug-03	22.38	23.8	20.15	20.5	8840804	\$ 19.92		-6.435%	1.76%	\$ 1.1718	\$ 1.1373
2-Sep-03	20.73	21.54	19.78	20.17	9852780	\$ 19.59		-1.657%	1.95%	\$ 1.1524	\$ 1.1595
1-Oct-03	20.42	22.95	20.36	22.64	7041182	\$ 21.99		12.251%	-1.06%	\$ 1.2935	\$ 1.1472
3-Nov-03	22.85	23.76	22.38	23.09	6276436	\$ 22.43		2.001%	5.66%	\$ 1.3194	\$ 1.2121
1-Dec-03	23.09	23.56	21.56	23.33	8179554	\$ 22.88	\$ 0.21	2.942%	0.88%	\$ 1.3582	\$ 1.2228
2-Jan-04	23.49	25.08	22.98	24	9980905	\$ 23.54		2.885%	5.24%	\$ 1.3974	\$ 1.2869
2-Feb-04	23.8	26.41	22.9	26.53	21752863	\$ 26.02		10.535%	1.84%	\$ 1.5446	\$ 1.3105
1-Mar-04	26.8	27.05	24.55	24.99	9025456	\$ 24.51		-5.803%	1.39%	\$ 1.4550	\$ 1.3267
1-Apr-04	25.1	26.65	22.9	23.03	10581428	\$ 22.59		-7.834%	-1.51%	\$ 1.3410	\$ 1.3087
3-May-04	23.18	23.93	21.39	23.47	8442200	\$ 23.02		1.903%	-1.57%	\$ 1.3665	\$ 1.2881
1-Jun-04	23.8	25.6	23.38	25.49	7299357	\$ 25.00		8.601%	1.37%	\$ 1.4841	\$ 1.3058
1-Jul-04	25.34	25.5	22.57	23.09	5698619	\$ 22.64		-9.440%	1.94%	\$ 1.3440	\$ 1.3312
2-Aug-04	23.1	23.18	20.88	22.45	6889850	\$ 22.02		-2.739%	-3.31%	\$ 1.3072	\$ 1.2871
1-Sep-04	22.46	23.65	22	22.55	6565814	\$ 22.12		0.454%	0.40%	\$ 1.3131	\$ 1.2923
1-Oct-04	22.56	25.3	22.51	25.22	7721214	\$ 24.73		11.799%	1.08%	\$ 1.4681	\$ 1.3063
1-Nov-04	25.13	27.45	24.79	26.88	6158823	\$ 26.36		6.591%	1.53%	\$ 1.5648	\$ 1.3263
1-Dec-04	26.97	28.03	26.68	27.8	5112790	\$ 27.51	\$ 0.24	5.273%	4.05%	\$ 1.6473	\$ 1.3799
3-Jan-05	27.81	28.94	27.05	28.63	7479855	\$ 28.33		2.981%	3.40%	\$ 1.6964	\$ 1.4269
1-Feb-05	28.75	29.99	27.51	27.94	7103115	\$ 27.65		-2.400%	-2.44%	\$ 1.6557	\$ 1.3921
1-Mar-05	27.97	29	27.47	28.73	6858995	\$ 28.43		2.821%	2.10%	\$ 1.7024	\$ 1.4214
1-Apr-05	28.79	29	25.71	26.4	6005485	\$ 26.12		-8.125%	-1.77%	\$ 1.5641	\$ 1.3962
2-May-05	26.57	28.02	26.02	27.44	6650228	\$ 27.15		3.943%	-1.90%	\$ 1.6258	\$ 1.3697
1-Jun-05	27.51	27.99	25.12	25.18	6683440	\$ 24.92		-8.214%	3.18%	\$ 1.4922	\$ 1.4133
1-Jul-05	25.22	26.5	24.35	25.64	7193655	\$ 25.37		1.806%	0.14%	\$ 1.5192	\$ 1.4153
1-Aug-05	25.64	26.47	24.92	25.19	7669947	\$ 24.93		-1.734%	3.72%	\$ 1.4928	\$ 1.4679
1-Sep-05	25.09	25.34	22.9	24.13	9626838	\$ 23.88		-4.212%	-0.91%	\$ 1.4300	\$ 1.4545
3-Oct-05	24.13	25	22.89	24.37	8986780	\$ 24.11		0.963%	0.81%	\$ 1.4437	\$ 1.4663
1-Nov-05	24.28	26.19	24.28	24.93	9323923	\$ 24.67		2.323%	-1.67%	\$ 1.4773	\$ 1.4419
1-Dec-05	25.05	25.7	23.95	23.97	7687961	\$ 23.97	\$ 0.27	-1.743%	3.78%	\$ 1.4515	\$ 1.4964

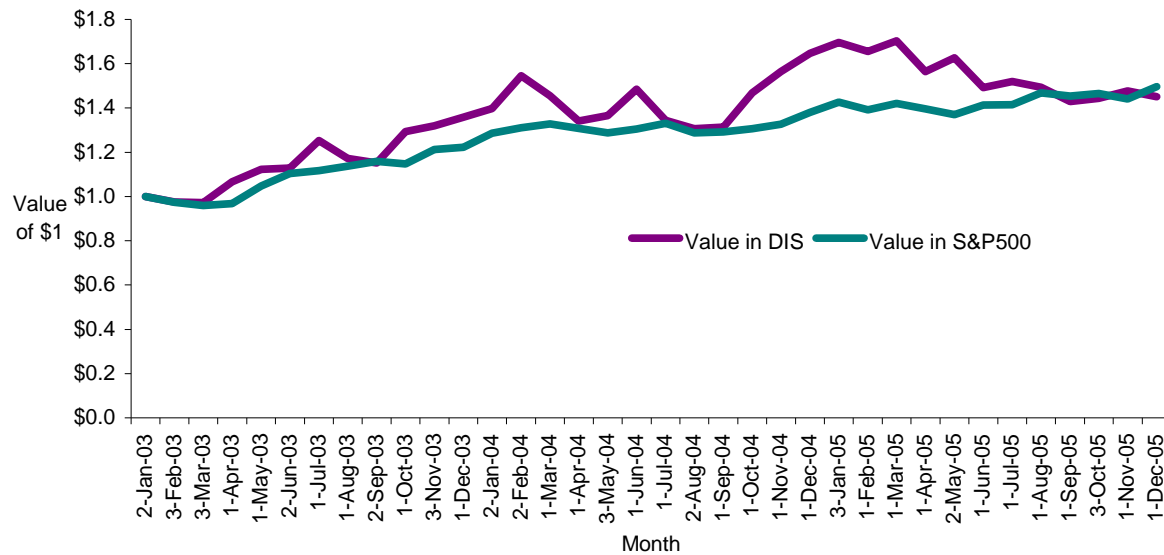
### Step 4: Represent performance graphically

Highlight the Value of \$1 columns for the stock and the comparative and then Insert > Chart and create the chart. For the case of the DIS stock relative to the S&P 500, we see that the performance of both is very similar by the end of the period of study, but there were deviations, especially during the late-2004 and early-2005 months.

<sup>4</sup> This is a draw back of using Yahoo! Finance data: the month end is defined relative to when you draw the data. Drawing the data near the beginning of a month will elicit month ends that are the first trading day of the month. Take care in lining up the S&P500 returns with those of the stock because the month end for the S&P500 data is the last trading day of the month. Hence, there will be a small amount of out-of-"synchness" in the comparison that is unavoidable.



### Relative Performance of Walt Disney stock (DIS) and the Standard & Poor's 500 (S&P 500) Index



Source: Yahoo! Finance and Standard and Poor's 500.

## References

1. Standard and Poor's, [www2.standardandpoors.com/spf/xls/index/MONTHLY.xls](http://www2.standardandpoors.com/spf/xls/index/MONTHLY.xls)
2. Yahoo! Finance, <http://finance.yahoo.com/>