

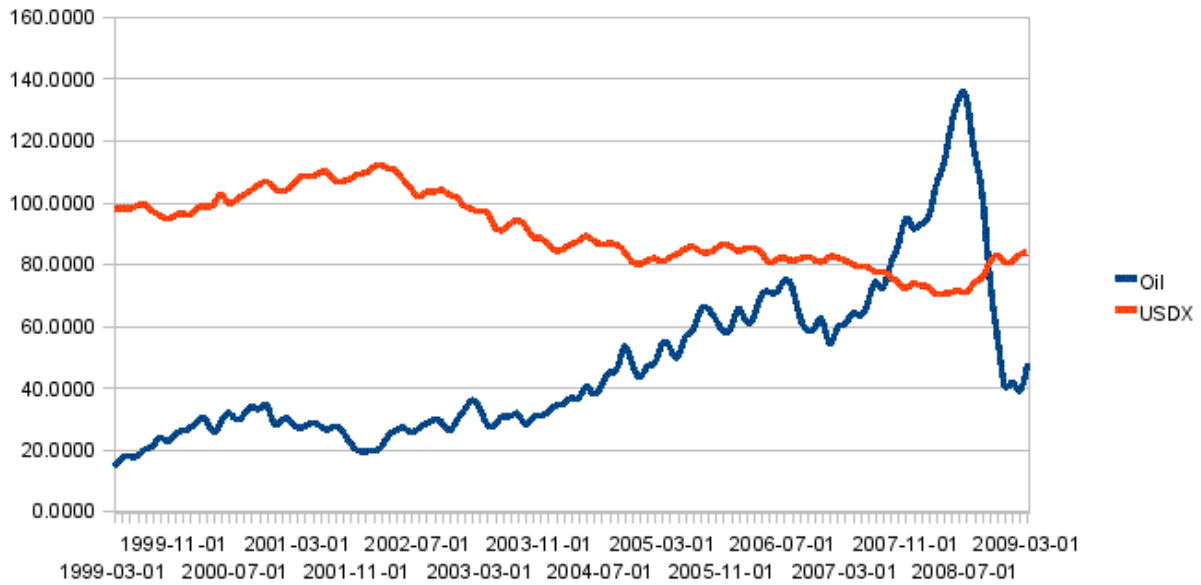
# **Comparing the U.S. Dollar to Oil**

**A Closer look at the REAL factor  
driving oil prices higher.**

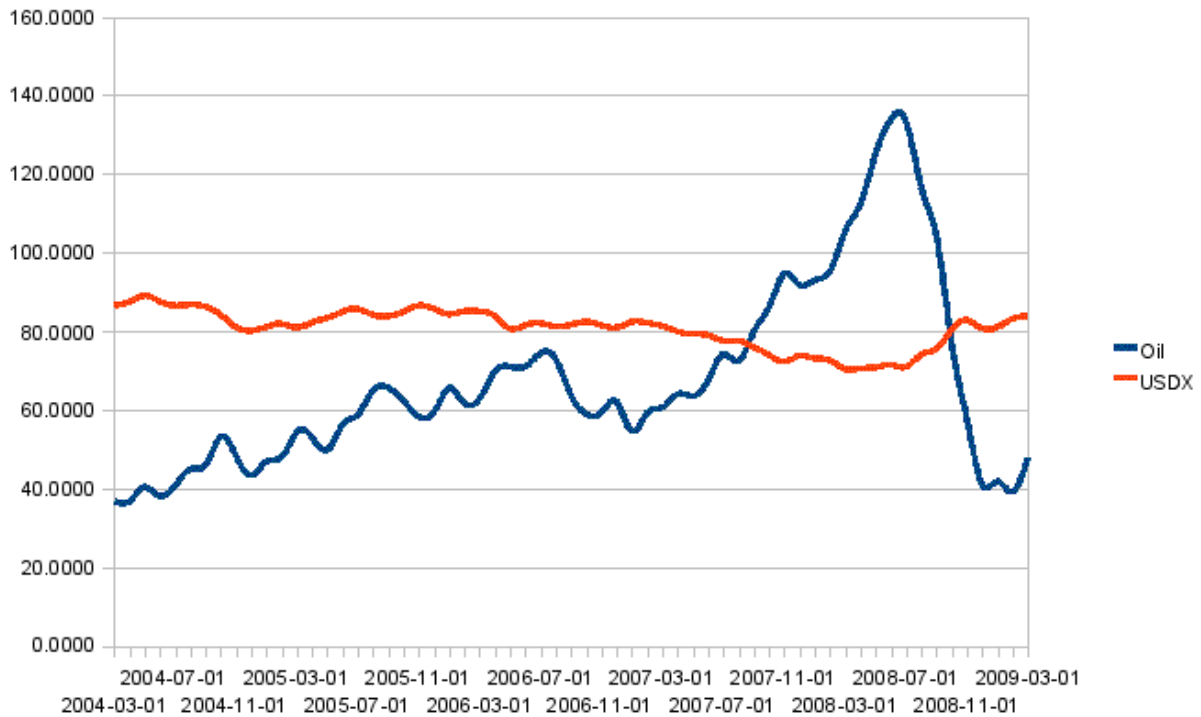
**Kyle Peabody  
April 2009**

## Part 1: Charts:

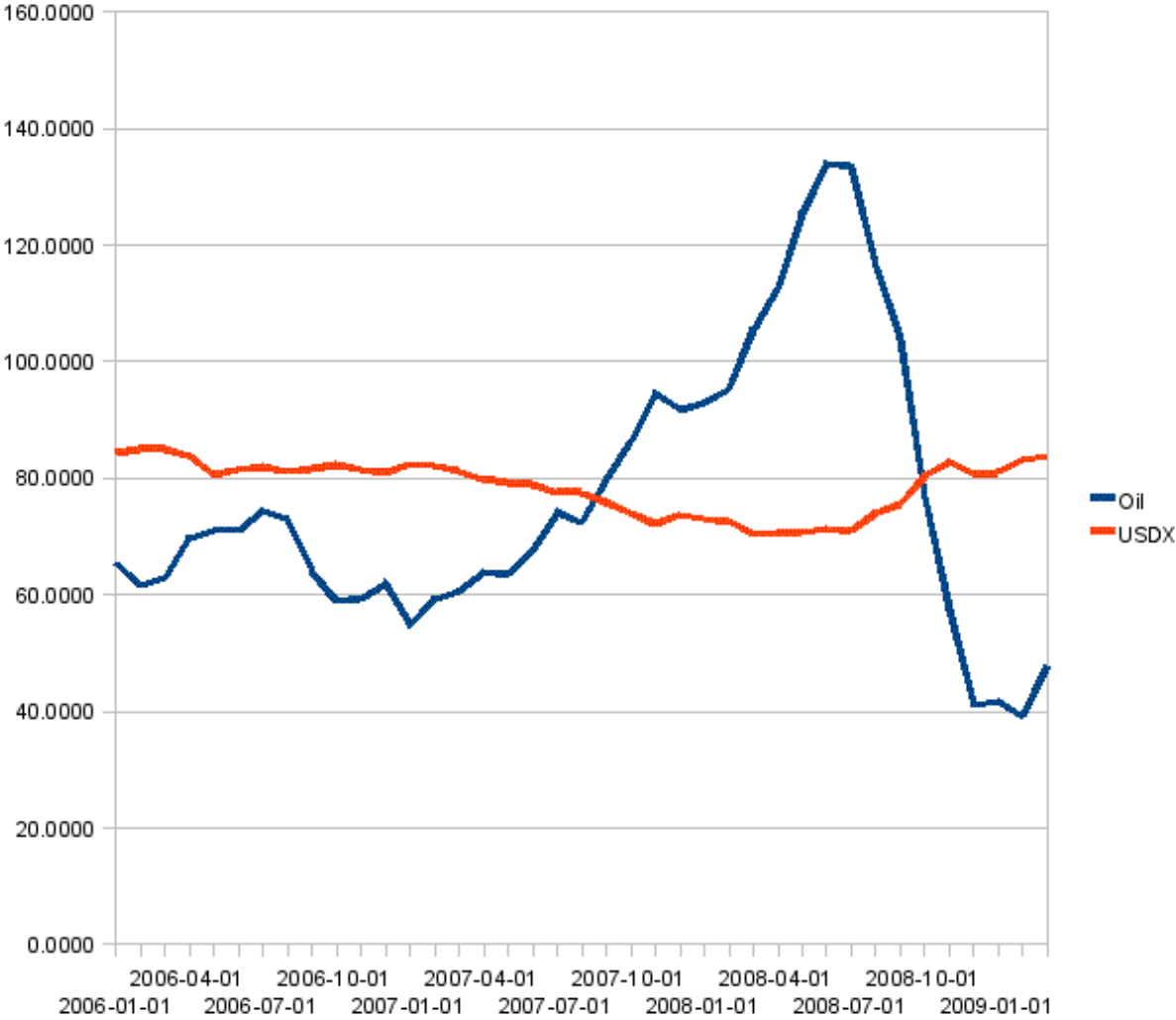
### Chart 1: 10 year US Dollar Index, West Texas Crude Oil Spot Price



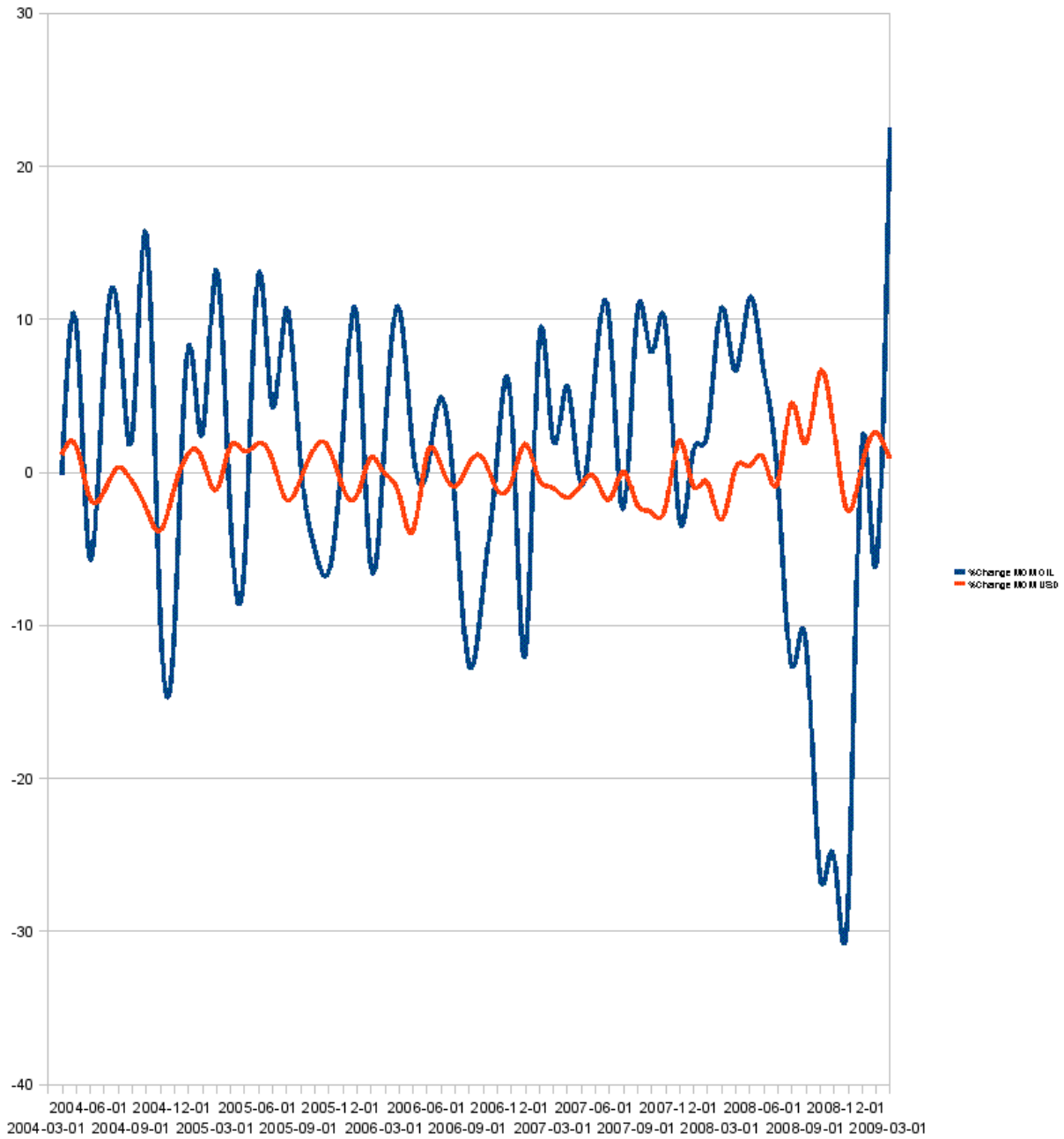
### Chart 2: 5 year US Dollar Index, West Texas Crude Oil Spot Price



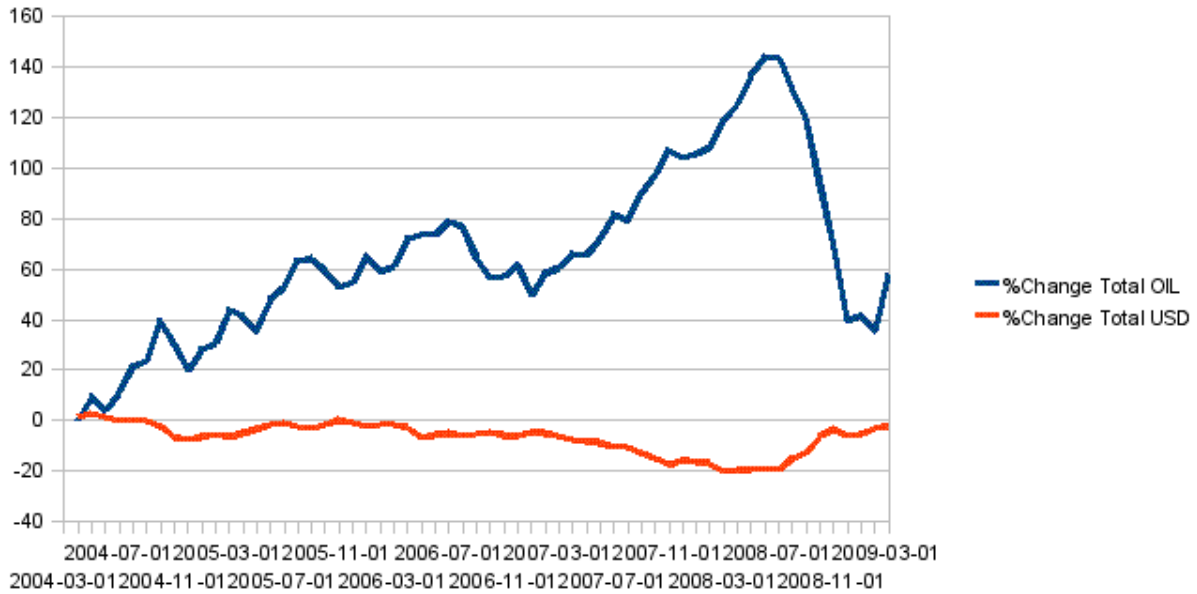
**Chart 3: Jan 2006-March 2009 US Dollar Index, West Texas Crude Oil Spot Price**



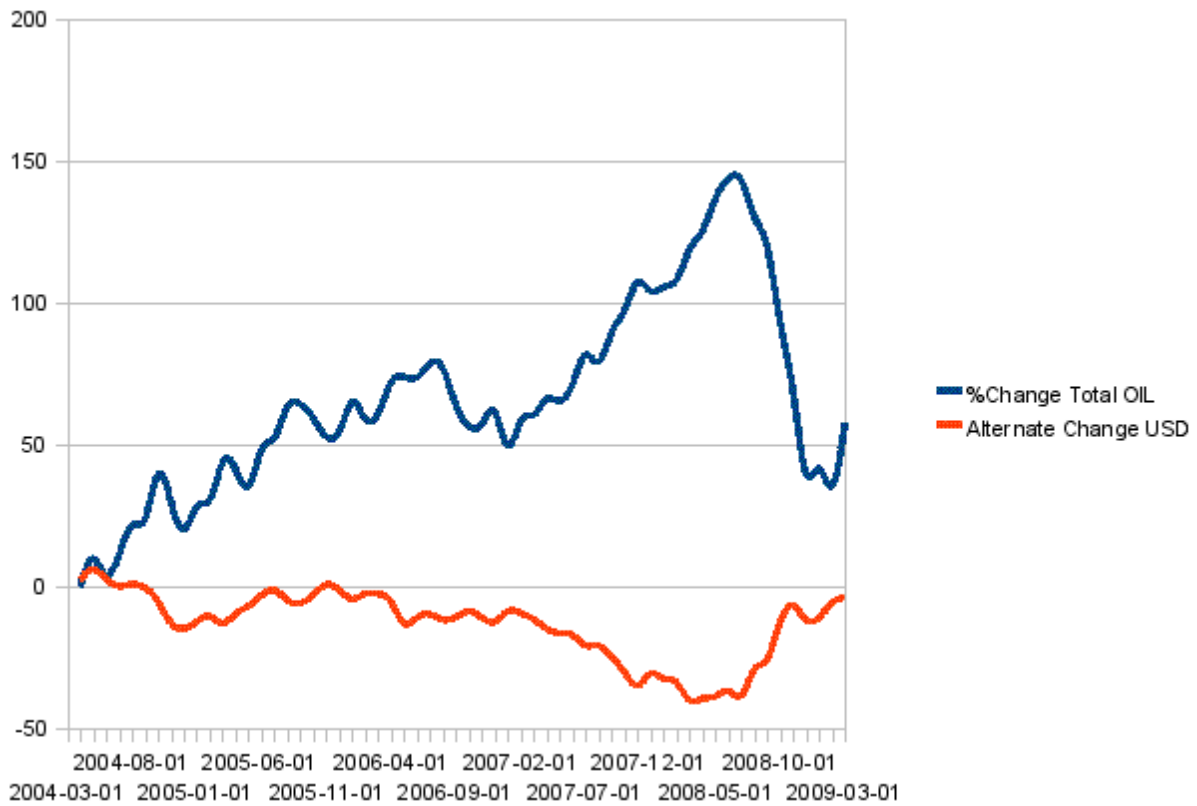
**Chart 4: 5 year Month-to-Month % Change in Price; US Dollar Index, West Texas Crude Oil Spot Price**



**Chart 5: 5 Year Cumulative Change in Price; US Dollar Index, West Texas Crude Oil Spot Price**



**Chart 6: 5 Year Alternate Cumulative Change in Price; US Dollar Index, West Texas Crude Oil Spot Price**



\*Alternate Data for US Dollar Index only; calculated by multiplying cumulative change by a factor of 2.

## Part 2: Tables:

### Table 1: 10 year US Dollar Index, West Texas Crude Oil Spot Price

Date	Oil	USDIX
1999-03-01	14.660	97.8640
1999-04-01	17.340	97.9895
1999-05-01	17.750	97.9993
1999-06-01	17.890	98.8843
1999-07-01	20.070	99.1687
1999-08-01	21.260	97.1555
1999-09-01	23.880	95.8006
1999-10-01	22.640	94.7792
1999-11-01	24.970	95.7890
1999-12-01	26.080	96.2078
2000-01-01	27.180	96.0647
2000-02-01	29.350	98.2739
2000-03-01	29.890	98.6556
2000-04-01	25.740	99.3482
2000-05-01	28.780	102.4749
2000-06-01	31.830	99.8712
2000-07-01	29.770	100.8238
2000-08-01	31.220	102.3689
2000-09-01	33.880	104.0872
2000-10-01	33.080	105.6932
2000-11-01	34.400	106.5775
2000-12-01	28.460	104.6455
2001-01-01	29.580	103.5074
2001-02-01	29.610	104.8178
2001-03-01	27.240	107.3166
2001-04-01	27.410	108.4627
2001-05-01	28.640	108.5259
2001-06-01	27.600	109.5472
2001-07-01	26.450	109.6077
2001-08-01	27.470	107.1670
2001-09-01	25.880	106.7232
2001-10-01	22.210	107.6588
2001-11-01	19.670	109.0070

2001-12-01	19.330	109.5119
2002-01-01	19.670	111.2101
2002-02-01	20.740	111.9864
2002-03-01	24.420	110.9614
2002-04-01	26.270	110.1579
2002-05-01	27.020	107.1568
2002-06-01	25.520	104.3345
2002-07-01	26.940	101.7747
2002-08-01	28.380	103.2225
2002-09-01	29.670	103.4415
2002-10-01	28.850	103.9046
2002-11-01	26.270	102.4528
2002-12-01	29.420	101.4752
2003-01-01	32.940	98.7718
2003-02-01	35.870	97.7077
2003-03-01	33.550	97.0074
2003-04-01	28.250	96.6598
2003-05-01	28.140	92.1449
2003-06-01	30.720	91.0553
2003-07-01	30.760	92.9198
2003-08-01	31.590	94.0682
2003-09-01	28.290	92.2705
2003-10-01	30.330	88.7912
2003-11-01	31.090	88.4749
2003-12-01	32.150	86.2142
2004-01-01	34.270	84.3794
2004-02-01	34.740	84.9501
2004-03-01	36.760	86.4542
2004-04-01	36.690	87.4415
2004-05-01	40.280	88.9926
2004-06-01	38.020	87.5533
2004-07-01	40.690	86.4177
2004-08-01	44.940	86.6637
2004-09-01	45.950	86.1735
2004-10-01	53.130	84.2224
2004-11-01	48.460	80.9935
2004-12-01	43.330	80.1016

2005-01-01	46.840	81.0461
2005-02-01	47.970	81.8103
2005-03-01	54.310	80.8618
2005-04-01	53.040	82.2029
2005-05-01	49.830	83.3312
2005-06-01	56.260	84.8791
2005-07-01	58.700	85.6397
2005-08-01	64.970	84.1186
2005-09-01	65.570	83.7105
2005-10-01	62.370	84.9831
2005-11-01	58.300	86.4134
2005-12-01	59.430	85.6518
2006-01-01	65.510	84.2852
2006-02-01	61.630	85.0458
2006-03-01	62.900	85.0075
2006-04-01	69.690	83.8834
2006-05-01	70.940	80.6318
2006-06-01	70.960	81.5094
2006-07-01	74.410	81.9442
2006-08-01	73.050	81.1778
2006-09-01	63.870	81.5917
2006-10-01	58.880	82.3569
2006-11-01	59.370	81.4847
2006-12-01	62.030	80.8898
2007-01-01	54.570	82.3656
2007-02-01	59.260	82.0674
2007-03-01	60.560	81.2262
2007-04-01	63.970	79.8717
2007-05-01	63.460	79.2003
2007-06-01	67.480	78.9312
2007-07-01	74.180	77.5055
2007-08-01	72.390	77.5133
2007-09-01	79.930	75.9109
2007-10-01	86.200	73.9310
2007-11-01	94.620	72.2024
2007-12-01	91.730	73.6903
2008-01-01	92.950	73.0565

2008-02-01	95.350	72.5747
2008-03-01	105.560	70.3205
2008-04-01	112.570	70.4683
2008-05-01	125.390	70.7486
2008-06-01	133.930	71.4202
2008-07-01	133.440	70.9117
2008-08-01	116.610	74.0869
2008-09-01	103.900	75.5106
2008-10-01	76.650	80.4186
2008-11-01	57.440	82.7427
2008-12-01	41.020	80.6853
2009-01-01	41.740	81.0122
2009-02-01	39.160	83.1065
2009-03-01	47.980	83.8370

**Table 2: All Data Used for West Texas Crude Oil Spot Price, 1999-2009**

Date	Oil	%Change MOM OIL	%Change Total OIL
2004-03-01	36.760		
2004-04-01	36.690	-0.19	-0.19
2004-05-01	40.280	9.78	9.59
2004-06-01	38.020	-5.61	3.98
2004-07-01	40.690	7.02	11.01
2004-08-01	44.940	10.44	21.45
2004-09-01	45.950	2.25	23.7
2004-10-01	53.130	15.63	39.32
2004-11-01	48.460	-8.79	30.53
2004-12-01	43.330	-10.59	19.95
2005-01-01	46.840	8.1	28.05
2005-02-01	47.970	2.41	30.46
2005-03-01	54.310	13.22	43.68
2005-04-01	53.040	-2.34	41.34
2005-05-01	49.830	-6.05	35.29
2005-06-01	56.260	12.9	48.19
2005-07-01	58.700	4.34	52.53
2005-08-01	64.970	10.68	63.21

2005-09-01	65.570	0.92	64.13
2005-10-01	62.370	-4.88	59.25
2005-11-01	58.300	-6.53	52.73
2005-12-01	59.430	1.94	54.67
2006-01-01	65.510	10.23	64.9
2006-02-01	61.630	-5.92	58.97
2006-03-01	62.900	2.06	61.03
2006-04-01	69.690	10.79	71.83
2006-05-01	70.940	1.79	73.62
2006-06-01	70.960	0.03	73.65
2006-07-01	74.410	4.86	78.51
2006-08-01	73.050	-1.83	76.69
2006-09-01	63.870	-12.57	64.12
2006-10-01	58.880	-7.81	56.31
2006-11-01	59.370	0.83	57.14
2006-12-01	62.030	4.48	61.62
2007-01-01	54.570	-12.03	49.59
2007-02-01	59.260	8.59	58.19
2007-03-01	60.560	2.19	60.38
2007-04-01	63.970	5.63	66.01
2007-05-01	63.460	-0.8	65.21
2007-06-01	67.480	6.33	71.55
2007-07-01	74.180	9.93	81.48
2007-08-01	72.390	-2.41	79.06
2007-09-01	79.930	10.42	89.48
2007-10-01	86.200	7.84	97.32
2007-11-01	94.620	9.77	107.09
2007-12-01	91.730	-3.05	104.04
2008-01-01	92.950	1.33	105.37
2008-02-01	95.350	2.58	107.95
2008-03-01	105.560	10.71	118.66
2008-04-01	112.570	6.64	125.3
2008-05-01	125.390	11.39	136.69
2008-06-01	133.930	6.81	143.5
2008-07-01	133.440	-0.37	143.13
2008-08-01	116.610	-12.61	130.52
2008-09-01	103.900	-10.9	119.62

2008-10-01	76.650	-26.23	93.39
2008-11-01	57.440	-25.06	68.33
2008-12-01	41.020	-28.59	39.74
2009-01-01	41.740	1.76	41.5
2009-02-01	39.160	-6.18	35.32
2009-03-01	47.980	22.52	57.84

**Table 3: All Data Used for US Dollar Index, 1999-2009**

Date	USDX	%Change MOM USD	%Change Total USD	Alternate Change USD
2004-03-01	86.4542			
2004-04-01	87.4415	1.142	1.14	2.28
2004-05-01	88.9926	1.774	2.92	5.83
2004-06-01	87.5533	-1.617	1.3	2.6
2004-07-01	86.4177	-1.297	0	0
2004-08-01	86.6637	0.285	0.29	0.57
2004-09-01	86.1735	-0.566	-0.28	-0.56
2004-10-01	84.2224	-2.264	-2.54	-5.09
2004-11-01	80.9935	-3.834	-6.38	-12.75
2004-12-01	80.1016	-1.101	-7.48	-14.96
2005-01-01	81.0461	1.179	-6.3	-12.6
2005-02-01	81.8103	0.943	-5.36	-10.71
2005-03-01	80.8618	-1.159	-6.52	-13.03
2005-04-01	82.2029	1.659	-4.86	-9.71
2005-05-01	83.3312	1.373	-3.48	-6.97
2005-06-01	84.8791	1.858	-1.63	-3.25
2005-07-01	85.6397	0.896	-0.73	-1.46
2005-08-01	84.1186	-1.776	-2.51	-5.01
2005-09-01	83.7105	-0.485	-2.99	-5.99
2005-10-01	84.9831	1.520	-1.47	-2.94
2005-11-01	86.4134	1.683	0.21	0.42
2005-12-01	85.6518	-0.881	-0.67	-1.34
2006-01-01	84.2852	-1.596	-2.27	-4.53
2006-02-01	85.0458	0.902	-1.36	-2.73
2006-03-01	85.0075	-0.045	-1.41	-2.82
2006-04-01	83.8834	-1.322	-2.73	-5.46

2006-05-01	80.6318	-3.876	-6.61	-13.21
2006-06-01	81.5094	1.088	-5.52	-11.04
2006-07-01	81.9442	0.533	-4.99	-9.97
2006-08-01	81.1778	-0.935	-5.92	-11.84
2006-09-01	81.5917	0.510	-5.41	-10.82
2006-10-01	82.3569	0.938	-4.47	-8.95
2006-11-01	81.4847	-1.059	-5.53	-11.06
2006-12-01	80.8898	-0.730	-6.26	-12.52
2007-01-01	82.3656	1.824	-4.44	-8.88
2007-02-01	82.0674	-0.362	-4.8	-9.6
2007-03-01	81.2262	-1.025	-5.82	-11.65
2007-04-01	79.8717	-1.668	-7.49	-14.98
2007-05-01	79.2003	-0.841	-8.33	-16.67
2007-06-01	78.9312	-0.340	-8.67	-17.35
2007-07-01	77.5055	-1.806	-10.48	-20.96
2007-08-01	77.5133	0.010	-10.47	-20.94
2007-09-01	75.9109	-2.067	-12.54	-25.07
2007-10-01	73.9310	-2.608	-15.14	-30.29
2007-11-01	72.2024	-2.338	-17.48	-34.97
2007-12-01	73.6903	2.061	-15.42	-30.84
2008-01-01	73.0565	-0.860	-16.28	-32.56
2008-02-01	72.5747	-0.659	-16.94	-33.88
2008-03-01	70.3205	-3.106	-20.05	-40.09
2008-04-01	70.4683	0.210	-19.84	-39.67
2008-05-01	70.7486	0.398	-19.44	-38.88
2008-06-01	71.4202	0.949	-18.49	-36.98
2008-07-01	70.9117	-0.712	-19.2	-38.4
2008-08-01	74.0869	4.478	-14.72	-29.45
2008-09-01	75.5106	1.922	-12.8	-25.61
2008-10-01	80.4186	6.500	-6.3	-12.61
2008-11-01	82.7427	2.890	-3.41	-6.83
2008-12-01	80.6853	-2.487	-5.9	-11.8
2009-01-01	81.0122	0.405	-5.49	-10.99
2009-02-01	83.1065	2.585	-2.91	-5.82
2009-03-01	83.8370	0.879	-2.03	-4.06

### **Part 3: Conclusions:**

From this data, we can conclude that the largest single factor influencing the price of oil is the relative strength of the US Dollar.

## Part 4: Sources:

*St. Louis Federal Reserve Data (FRED)*

<http://research.stlouisfed.org/fred2/>

*US Dollar Index Calculation*

$$\text{USDIX} = 50.14348112 \times \text{EURUSD}^{-0.576} \times \text{USDJPY}^{0.136} \times \text{GBPUSD}^{-0.119} \times \text{USDCAD}^{0.091} \times \text{USDSEK}^{0.042} \times \text{USDCHF}^{0.036}$$