Descriptions of Variables.

Variable	Description
MidHDD	Heating Degree Days, Midway
Year	Year.

Descriptive Statistics.

```
. summarize MidHDD

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      MidHDD |        75    6176.387    451.4775       4884       7137

. summarize MidHDD if year <1976

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      MidHDD |        47    6238.894    403.3801       5449       7137

. summarize MidHDD if year >=1976

    Variable |       Obs        Mean    Std. Dev.       Min        Max
-------------+--------------------------------------------------------
      MidHDD |        28    6071.464    513.0435       4884       7071
```

Regression Results: 1929-1975, 1975-2003.

Note: I performed first-order autocorrelation correction for all the regressions. For this purpose, I used the Prais-Winsten transformed regression estimator, which is supported by STATA.

1929-1975.

```
. prais MidHDD year if year<1976

Iteration 0:  rho = 0.0000
Iteration 1:  rho = -0.0255
Iteration 2:  rho = -0.0257
Iteration 3:  rho = -0.0257
Iteration 4:  rho = -0.0257

Prais-Winsten AR(1) regression -- iterated estimates

      Source |       SS       df       MS              Number of obs =      47
-------------+------------------------------           F(  1,    45) =    0.43
       Model |  67932.4605     1  67932.4605           Prob > F      =  0.5167
    Residual |  7155775.58    45  159017.235           R-squared     =  0.0094
-------------+------------------------------           Adj R-squared = -0.0126
       Total |  7223708.04    46  157037.131           Root MSE      =  398.77

------------------------------------------------------------------------------
      MidHDD |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        year |  -6.063426   4.187458    -1.45   0.155     -14.4974    2.370547
       _cons |   18074.34   8174.114     2.21   0.032     1610.828    34537.85
-------------+----------------------------------------------------------------
         rho |  -.0256709
------------------------------------------------------------------------------
Durbin-Watson statistic (original)    1.969946
Durbin-Watson statistic (transformed) 1.927625
```

Prepared by:
Cesar Herrera, PhD
National Economic Research Associates, Inc.

```
. dwstat

Durbin-Watson d-statistic(  2,    47) =   1.96995
```

Predicted values.

```
. predict MD_HDDl
(option xb assumed; fitted values)

. list year MD_HDDl if year <1976
```

	year	MD_HDDl
1.	1929	6377.991
2.	1930	6371.927
3.	1931	6365.864
4.	1932	6359.801
5.	1933	6353.737
6.	1934	6347.674
7.	1935	6341.61
8.	1936	6335.547
9.	1937	6329.483
10.	1938	6323.42
11.	1939	6317.356
12.	1940	6311.293
13.	1941	6305.23
14.	1942	6299.167
15.	1943	6293.103
16.	1944	6287.04
17.	1945	6280.976
18.	1946	6274.913
19.	1947	6268.849
20.	1948	6262.786
21.	1949	6256.722
22.	1950	6250.659
23.	1951	6244.596
24.	1952	6238.532
25.	1953	6232.469
26.	1954	6226.405
27.	1955	6220.342
28.	1956	6214.278
29.	1957	6208.215
30.	1958	6202.151
31.	1959	6196.088
32.	1960	6190.025
33.	1961	6183.961
34.	1962	6177.898
35.	1963	6171.834
36.	1964	6165.771
37.	1965	6159.708
38.	1966	6153.644
39.	1967	6147.581
40.	1968	6141.517
41.	1969	6135.454
42.	1970	6129.391
43.	1971	6123.327
44.	1972	6117.264
45.	1973	6111.2
46.	1974	6105.137
47.	1975	6099.073

<u>1976-2003.</u>

Prepared by:
Cesar Herrera, PhD
National Economic Research Associates, Inc.

```
. prais MidHDD year if year>=1976

Iteration 0:  rho = 0.0000
Iteration 1:  rho = 0.2541
Iteration 2:  rho = 0.2568
Iteration 3:  rho = 0.2569
Iteration 4:  rho = 0.2569

Prais-Winsten AR(1) regression -- iterated estimates

      Source |       SS       df       MS              Number of obs =      28
-------------+------------------------------           F(  1,    26) =   28.28
       Model |  4583635.97     1  4583635.97           Prob > F      =  0.0000
    Residual |  4213717.83    26  162066.071           R-squared     =  0.5210
-------------+------------------------------           Adj R-squared =  0.5026
       Total |  8797353.81    27  325827.919           Root MSE      =  402.57

------------------------------------------------------------------------------
      MidHDD |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
        year |  -36.42849   12.21907    -2.98   0.006    -61.54515   -11.31184
       _cons |   78552.91   24310.05     3.23   0.003     28582.89    128522.9
-------------+----------------------------------------------------------------
         rho |   .2568682
------------------------------------------------------------------------------
Durbin-Watson statistic (original)    1.456664
Durbin-Watson statistic (transformed) 1.806646
```

Predicted values.

```
. predict MD_HDDh
(option xb assumed; fitted values)

. list year MD_HDDh if year >=1976
```

	year	MD_HDDh
48.	1976	6570.201
49.	1977	6533.772
50.	1978	6497.344
51.	1979	6460.916
52.	1980	6424.487
53.	1981	6388.059
54.	1982	6351.63
55.	1983	6315.202
56.	1984	6278.773
57.	1985	6242.345
58.	1986	6205.916
59.	1987	6169.488
60.	1988	6133.059
61.	1989	6096.631
62.	1990	6060.202
63.	1991	6023.774
64.	1992	5987.345
65.	1993	5950.917
66.	1994	5914.488
67.	1995	5878.06
68.	1996	5841.631
69.	1997	5805.203
70.	1998	5768.774
71.	1999	5732.346
72.	2000	5695.917
73.	2001	5659.489
74.	2002	5623.061
75.	2003	5586.632
76.	2004	5550.203
77.	2005	5513.775

Prepared by:
Cesar Herrera, PhD
National Economic Research Associates, Inc.