|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Independent variable | gw | v/u | catch-up | cf1 | gpty |
| Lags | -1 to -4 | -1 to -4 | -1 to -4 | -1 to -4 | -1 |
| Sum of coefficients | 0.460 | 0.693 | -0.024 | 0.540 | 0.031 |
| p-stat (sum) | 0.008 | 0.030 | 0.765 | 0.002 | 0.608 |
| p-stat (joint) | 0.071 | 0.023 | 0.994 | 0.022 | 0.608 |
| R-squared | 0.578 | | | | |
| No. observations | 120 | | | | |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Independent variable | gp | gw | grpe | grpf | shortage | gpty |
| Lags | -1 to -4 | 0 to -4 | 0 to -4 | 0 to -4 | 0 to -4 | -1 |
| Sum of coefficients | 0.335 | 0. 665 | 0.066 | 0.126 | 0.018 | -0.143 |
| p-stat (sum) | 0.037 | 0.000 | 0.000 | 0.050 | 0.281 | 0.026 |
| p-stat (joint) | 0.066 | 0.000 | 0.000 | 0.050 | 0.000 | 0.026 |
| R-squared | 0.947 | | | | | |
| No. observations | 133 | | | | | |

|  |  |  |  |
| --- | --- | --- | --- |
| Independent variable | cf1 | cf10 | gp |
| Lags | -1 to -4 | 0 to -4 | 0 to -4 |
| Sum of coefficients | 0.369 | 0.506 | 0.124 |
| p-stat (sum) | 0.014 | 0.000 | 0.001 |
| p-stat (joint) | 0.001 | 0.000 | 0.000 |
| R-squared | 0.908 | | |
| No. observations | 120 | | |

|  |  |  |
| --- | --- | --- |
| Independent variable | cf10 | gp |
| Lags | -1 to -4 | 0 to -4 |
| Sum of coefficients | 0.975 | 0.025 |
| p-stat (sum) | 0.000 | 0.208 |
| p-stat (joint) | 0.000 | 0.004 |
| R-squared | 0.931 | |
| No. observations | 120 | |

TABLE A2. ESTIMATION WITH PCE INFLATION RATHER THAN CPI INFLATION

Dependent variable: gw

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Independent variable | gw | v/u | catch-up | cf1 | gpty |
| Lags | -1 to -4 | -1 to -4 | -1 to -4 | -1 to -4 | -1 |
| Sum of coefficients | 0.345 | 0.774 | 0.008 | 0.655 | 0.068 |
| p-stat (sum) | 0.050 | 0.016 | 0.092 | 0.000 | 0.258 |
| p-stat (joint) | 0.226 | 0.037 | 0.404 | 0.003 | 0.258 |
| R-squared | 0.579 | | | | |
| No. observations | 120 | | | | |

Dependent variable: gpce

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Independent variable | gpce | gw | grpe | grpf | shortage | gpty |
| Lags | -1 to -4 | 0 to -4 | 0 to -4 | 0 to -4 | 0 to -4 | -1 |
| Sum of coefficients | 0.501 | 0.499 | 0.038 | 0.086 | 0.014 | -0.104 |
| p-stat (sum) | 0.001 | 0.001 | 0.002 | 0.133 | 0.442 | 0.116 |
| p-stat (joint) | 0.001 | 0.004 | 0.000 | 0.237 | 0.018 | 0.116 |
| R-squared | 0.844 | | | | | |
| No. observations | 133 | | | | | |

Dependent variable: cf1

|  |  |  |  |
| --- | --- | --- | --- |
| Independent variable | cf1 | cf10 | gp |
| Lags | -1 to -4 | 0 to -4 | 0 to -4 |
| Sum of coefficients | 0.375 | 0.527 | 0.098 |
| p-stat (sum) | 0.031 | 0.001 | 0.016 |
| p-stat (joint) | 0.001 | 0.000 | 0.000 |
| R-squared | 0.884 | | |
| No. observations | 120 | | |

Dependent variable: cf10

|  |  |  |
| --- | --- | --- |
| Independent variable | cf10 | gp |
| Lags | -1 to -4 | 0 to -4 |
| Sum of coefficients | 0.971 | 0.029 |
| p-stat (sum) | 0.000 | 0.129 |
| p-stat (joint) | 0.000 | 0.006 |
| R-squared | 0.929 | |
| No. observations | 120 | |

TABLE A3. ESTIMATION WITH SURVEY OF PROFESSIONAL FORECASTERS INSTEAD OF CLEVELAND FED FORECASTS

Dependent variable: gw

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Independent variable | gw | v/u | catch-up | spf1 | gpty |
| Lags | -1 to -4 | -1 to -4 | -1 to -4 | -1 to -4 | -1 |
| Sum of coefficients | 0.233 | 1.154 | 0.087 | 0.767 | 0.154 |
| p-stat (sum) | 0.205 | 0.002 | 0.285 | 0.000 | 0.024 |
| p-stat (joint) | 0.494 | 0.001 | 0.441 | 0.001 | 0.024 |
| R-squared | 0.599 | | | | |
| No. observations | 120 | | | | |

Dependent variable: gp

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Independent variable | gp | gw | grpe | grpf | shortage | gpty |
| Lags | -1 to -4 | 0 to -4 | 0 to -4 | 0 to -4 | 0 to -4 | -1 |
| Sum of coefficients | 0.335 | 0.665 | 0.066 | 0.126 | 0.018 | -0.143 |
| p-stat (sum) | 0.037 | 0.000 | 0.000 | 0.050 | 0.281 | 0.027 |
| p-stat (joint) | 0.066 | 0.000 | 0.000 | 0.050 | 0.000 | 0.027 |
| R-squared | 0.947 | | | | | |
| No.observations | 133 | | | | | |

Dependent variable: spf1

|  |  |  |  |
| --- | --- | --- | --- |
| Independent variable | spf1 | spf10 | gp |
| Lags | -1 to -4 | 0 to -4 | 0 to -4 |
| Sum of coefficients | 0.854 | 0.113 | 0.033 |
| p-stat (sum) | 0.000 | 0.031 | 0.067 |
| p-stat (joint) | 0.000 | 0.000 | 0.000 |
| R-squared | 0.952 | | |
| No.observations | 120 | | |

Dependent variable: spf10

|  |  |  |
| --- | --- | --- |
| Independent variable | spf10 | gp |
| Lags | -1 to -4 | 0 to -4 |
| Sum of coefficients | 0.969 | 0.031 |
| p-stat (sum) | 0.000 | 0.002 |
| p-stat (joint) | 0.000 | 0.029 |
| R-squared | 0.978 | |
| No. observations | 120 | |

TABLE A4 FULL ESTIMATION RESULTS

Dependent variable: gw

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Using gcpi | | Using gpce | | Using spf | |
| gw (-1) | 0.16 | gw (-1) | 0.14 | gw (-1) | 0.08 |
|  | (0.10) |  | (0.10) |  | (0.10) |
| gw (-2) | 0.12 | gw (-2) | 0.08 | gw (-2) | 0.10 |
|  | (0.10) |  | (0.10) |  | (0.10) |
| gw (-3) | 0.17\* | gw (-3) | 0.15 | gw (-3) | 0.12 |
|  | (0.10) |  | (0.10) |  | (0.10) |
| gw (-4) | 0.00 | gw (-4) | -0.03 | gw (-4) | -0.06 |
|  | (0.10) |  | (0.10) |  | (0.10) |
| cf1 (-1) | 0.34\*\* | cf1 (-1) | 0.38\*\*\* | spf1 (-1) | -0.11 |
|  | (0.14) |  | (0.13) |  | (0.40) |
| cf1 (-2) | -0.03 | cf1 (-2) | 0.00 | spf1 (-2) | 0.22 |
|  | (0.15) |  | (0.14) |  | (0.46) |
| cf1 (-3) | 0.20 | cf1 (-3) | 0.27\* | spf1 (-3) | 0.35 |
|  | (0.16) |  | (0.15) |  | (0.45) |
| cf1(-4) | 0.03 | cf1(-4) | -0.01 | spf1(-4) | 0.30 |
|  | (0.16) |  | (0.15) |  | (0.39) |
| magpty (-1) | 0.03 | magpty (-1) | 0.07 | magpty (-1) | 0.15\*\* |
|  | (0.06) |  | (0.06) |  | (0.07) |
| vu(-1) | 3.77\* | vu(-1) | 3.31\* | vu(-1) | 3.38\* |
|  | (1.98) |  | (1.94) |  | (1.96) |
| vu (-2) | -1.81 | vu (-2) | -1.69 | vu (-2) | -0.67 |
|  | (3.63) |  | (3.58) |  | (3.57) |
| vu. (-3) | -3.64 | vu. (-3) | -3.58 | vu. (-3) | -3.77 |
|  | (3.66) |  | (3.61) |  | (3.60) |
| vu (-4) | 2.38 | vu (-4) | 2.74 | vu (-4) | 2.21 |
|  | (2.10) |  | (2.07) |  | (2.10) |
| Catchup (-1) | -0.01 | Catchup (-1) | -0.11 | Catchup (-1) | 0.12 |
|  | (0.08) |  | (0.13) |  | (0.08) |
| Catchup (-2) | 0.01 | Catchup (-2) | 0.13 | Catchup (-2) | 0.04 |
|  | (0.08) |  | (0.15) |  | (0.09) |
| Catchup (-3) | -0.00 | Catchup (-3) | -0.05 | Catchup (-3) | -0.07 |
|  | (0.08) |  | (0.14) |  | (0.09) |
| Catchup (-4) | -0.02 | Catchup (-4) | 0.04 | Catchup (-4) | -0.00 |
|  | (0.07) |  | (0.11) |  | (0.08) |
| Constant | -0.27 | Constant | -0.93\* | Constant | -0.75\*\*\* |
|  | (0.20) |  | (0.50) |  | (0.24) |
| R-squared | 0.578 | R-squared | 0. 579 | R-squared | 0. 599 |
| No. observations | 120 | No. observations | 120 | No. observations | 120 |

Dependent variable: gp = (gcpi or gpce)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Using gcpi | | Using gpce | | Using spf | |
| gcpi (-1) | 0.04 | gpce (-1) | 0.03 | gcpi (-1) | 0.04 |
|  | (0.11) |  | (0.09) |  | (0.11) |
| gcpi (-2) | 0.18\* | gpce (-2) | 0.23\*\* | gcpi (-2) | 0.18\* |
|  | (0.10) |  | (0.09) |  | (0.10) |
| gcpi (-3) | 0.23\*\* | gpce (-3) | 0.29\*\*\* | gcpi (-3) | 0.23\*\* |
|  | (0.11) |  | (0.09) |  | (0.11) |
| gcpi (-4) | -0.11 | gpce (-4) | -0.04 | gcpi (-4) | -0.11 |
|  | (0.10) |  | (0.08) |  | (0.10) |
| gw | 0.37\*\*\* | gw | 0.21\*\* | gw | 0.37\*\*\* |
|  | (0.09) |  | (0.10) |  | (0.09) |
| gw (-1) | 0.18 | gw (-1) | 0.08 | gw (-1) | 0.18 |
|  | (0.11) |  | (0.11) |  | (0.11) |
| gw (-2) | 0.04 | gw (-2) | 0.24\*\* | gw (-2) | 0.04 |
|  | (0.11) |  | (0.11) |  | (0.11) |
| gw (-3) | 0.04 | gw (-3) | -0.04 | gw (-3) | 0.04 |
|  | (0.11) |  | (0.11) |  | (0.11) |
| gw (-4) | 0.05 | gw (-4) | 0.00 | gw (-4) | 0.05 |
|  | (0.10) |  | (0.11) |  | (0.10) |
| magpty | -0.14\*\* | magpty | -0.10 | magpty | -0.14\*\* |
|  | (0.06) |  | (0.07) |  | (0.06) |
| grpe | 0.09\*\*\* | grpe | 0.04\*\*\* | grpe | 0.09\*\*\* |
|  | (0.00) |  | (0.00) |  | (0.00) |
| grpe (-1) | 0.00 | grpe (-1) | 0.03\*\*\* | grpe (-1) | 0.00 |
|  | (0.01) |  | (0.00) |  | (0.01) |
| grpe (-2) | -0.01 | grpe (-2) | -0.01 | grpe (-2) | -0.01 |
|  | (0.01) |  | (0.01) |  | (0.01) |
| grpe (-3) | -0.02\*\* | grpe (-3) | -0.02\*\*\* | grpe (-3) | -0.02\*\* |
|  | (0.01) |  | (0.01) |  | (0.01) |
| grpe (-4) | 0.01 | grpe (-4) | -0.01 | grpe (-4) | 0.01 |
|  | (0.01) |  | (0.00) |  | (0.01) |
| grpf | 0.11\*\*\* | grpf | 0.03 | grpf | 0.11\*\*\* |
|  | (0.04) |  | (0.03) |  | (0.04) |
| grpf (-1) | -0.02 | grpf (-1) | 0.03 | grpf (-1) | -0.02 |
|  | (0.04) |  | (0.03) |  | (0.04) |
| grpf (-2) | -0.00 | grpf (-2) | -0.04 | grpf (-2) | -0.00 |
|  | (0.04) |  | (0.03) |  | (0.04) |
| grpf (-3) | -0.00 | grpf (-3) | -0.01 | grpf (-3) | -0.00 |
|  | (0.04) |  | (0.03) |  | (0.04) |
| grpf (-4) | 0.04 | grpf (-4) | 0.07\*\* | grpf (-4) | 0.04 |
|  | (0.04) |  | (0.03) |  | (0.04) |
| Shortage | 0.11\*\*\* | Shortage | 0.04\* | Shortage | 0.11\*\*\* |
|  | (0.02) |  | (0.02) |  | (0.02) |
| Shortage (-1) | -0.03 | Shortage (-1) | 0.04\*\* | Shortage (-1) | -0.03 |
|  | (0.02) |  | (0.02) |  | (0.02) |
| Shortage (-2) | 0.00 | Shortage (-2) | 0.01 | Shortage (-2) | 0.00 |
|  | (0.02) |  | (0.02) |  | (0.02) |
| Shortage (-3) | -0.03 | Shortage (-3) | -0.04\*\* | Shortage (-3) | -0.03 |
|  | (0.02) |  | (0.02) |  | (0.02) |
| Shortage (-4) | -0.02 | Shortage (-4) | -0.04\* | Shortage (-4) | -0.02 |
|  | (0.02) |  | (0.02) |  | (0.02) |
| Constant | -0.11 | Constant | -0.27 | Constant | -0.11 |
|  | (0.16) |  | (0.20) |  | (0.16) |
| R-squared | 0.947 | R-squared | 0.844 | R-squared | 0.947 |
| No. observations | 133 | No. observations | 133 | No. observations | 133 |

Dependent variable: cf1/spf1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Using gcpi | | Using gpce | | Using spf | |
| cf1 (-1) | 0.30\*\*\* | cf1 (-1) | 0.25\*\*\* | spf1 (-1) | 0.63\*\*\* |
|  | (0.09) |  | (0.10) |  | (0.09) |
| cf1 (-2) | -0.23\*\* | cf1 (-2) | -0.21\*\* | spf1 (-2) | 0.17 |
|  | (0.10) |  | (0.10) |  | (0.11) |
| cf1 (-3) | 0.18\* | cf1 (-3) | 0.15 | spf1 (-3) | 0.21\* |
|  | (0.10) |  | (0.10) |  | (0.11) |
| cf1 (-4) | 0.12 | cf1 (-4) | 0.19\*\* | spf1 (-4) | -0.15\* |
|  | (0.07) |  | (0.09) |  | (0.09) |
| cf10 | 1.20\*\*\* | cf10 | 1.23\*\*\* | spf10 | 0.67\*\*\* |
|  | (0.14) |  | (0.16) |  | (0.15) |
| cf10 (-1) | -0.47\*\* | cf10 (-1) | -0.40 | spf10 (-1) | -0.04 |
|  | (0.23) |  | (0.25) |  | (0.18) |
| cf10 (-2) | 0.02 | cf10 (-2) | -0.14 | spf10 (-2) | -0.58\*\*\* |
|  | (0.23) |  | (0.26) |  | (0.19) |
| cf10 (-3) | 0.14 | cf10 (-3) | 0.20 | spf10 (-3) | -0.11 |
|  | (0.23) |  | (0.25) |  | (0.18) |
| cf10 (-4) | -0.38\*\* | cf10 (-4) | -0.36\* | spf10 (-4) | 0.18 |
|  | (0.17) |  | (0.20) |  | (0.15) |
| gcpi | 0.04\*\*\* | gpce | 0.09\*\*\* | gcpi | 0.03\*\*\* |
|  | (0.01) |  | (0.02) |  | (0.01) |
| gcpi (-1) | 0.10\*\*\* | gpce (-1) | 0.08\*\*\* | gcpi (-1) | 0.02\*\*\* |
|  | (0.01) |  | (0.03) |  | (0.01) |
| gcpi (-2) | 0.00 | gpce (-2) | -0.01 | gcpi (-2) | -0.01 |
|  | (0.02) |  | (0.03) |  | (0.01) |
| gcpi (-3) | 0.01 | gpce (-3) | -0.01 | gcpi (-3) | -0.00 |
|  | (0.02) |  | (0.03) |  | (0.01) |
| gcpi (-4) | -0.02 | gpce (-4) | -0.05\*\* | gcpi (-4) | -0.01 |
|  | (0.02) |  | (0.03) |  | (0.01) |
| R-squared | 0.908 | R-squared | 0.929 | R-squared | 0.952 |
| No. observations | 120 | No. observations | 120 | No. observations | 120 |

Dependent variable: cf10/spf10

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Using gcpi | | Using gpce | | Using spf | |
| cf10 (-1) | 0.85\*\*\* | cf10 (-1) | 0.82\*\*\* | spf10 (-1) | 0.70\*\*\* |
|  | (0.09) |  | (0.09) |  | (0.09) |
| cf10 (-2) | -0.05 | cf10 (-2) | -0.06 | spf10 (-2) | 0.26\*\* |
|  | (0.12) |  | (0.12) |  | (0.11) |
| cf10 (-3) | 0.20 | cf10 (-3) | 0.25\*\* | spf10 (-3) | 0.00 |
|  | (0.12) |  | (0.12) |  | (0.11) |
| cf10 (-4) | -0.03 | cf10 (-4) | -0.05 | spf10 (-4) | -0.00 |
|  | (0.09) |  | (0.09) |  | (0.09) |
| gcpi | 0.03\*\*\* | gpce | 0.05\*\*\* | gcpi | 0.01 |
|  | (0.01) |  | (0.01) |  | (0.00) |
| gcpi (-1) | 0.01 | gpce (-1) | -0.02 | gcpi (-1) | 0.01\*\* |
|  | (0.01) |  | (0.02) |  | (0.00) |
| gcpi (-2) | -0.01 | gpce (-2) | -0.00 | gcpi (-2) | 0.01\* |
|  | (0.01) |  | (0.01) |  | (0.00) |
| gcpi (-3) | -0.00 | gpce (-3) | -0.01 | gcpi (-3) | 0.00 |
|  | (0.01) |  | (0.01) |  | (0.00) |
| gcpi (-4) | -0.00 | gpce (-4) | 0.01 | gcpi (-4) | 0.01\* |
|  | (0.01) |  | (0.01) |  | (0.00) |
| R-squared | 0. 931 | R-squared | 0.932 | R-squared | 0.978 |
| No. observations | 120 | No. observations | 120 | No. observations | 120 |