Model Comparison

|  |  |  |  |
| --- | --- | --- | --- |
|  | (1) | (2) | (3) |
| Dep. Variable | Log\_PM25 | Log\_PM25 | Log\_PM25 |
| Estimator | IV-2SLS | IV-2SLS | IV-2SLS |
| No. Observations | 1010 | 1010 | 1010 |
| Cov. Est. | robust | robust | robust |
| R-squared | -1.1449 | -1.1932 | -3.6093 |
| Adj. R-squared | -1.3835 | -1.4398 | -4.1561 |
| F-statistic | 1.152e+04 | 1.148e+04 | 7318.7 |
| P-value (F-stat) | 0.0000 | 0.0000 | 0.0000 |
| ======================= | ============ | ============ | ============= |
| const | 7.2039\*\*\* | 10.933\* | -4.5732 |
|  | (1.5918) | (5.6578) | (5.4954) |
| Id.1 | 1.1007\* | 0.7693\* | 2.8914\* |
|  | (0.5773) | (0.4359) | (1.5135) |
| Id.2 | -0.0521 | -0.2313 | 0.7876\* |
|  | (0.1222) | (0.1961) | (0.4700) |
| Id.3 | 0.8000\*\* | 0.5033\* | 2.3017\*\* |
|  | (0.3346) | (0.2895) | (1.0525) |
| Id.4 | -0.2567\*\*\* | -0.4123\*\* | 0.3440 |
|  | (0.0768) | (0.2045) | (0.3014) |
| Id.5 | -1.3122\*\*\* | -1.5525\*\*\* | -0.8028 |
|  | (0.3814) | (0.5998) | (0.5879) |
| Id.6 | 2.8482\*\*\* | 1.5328 | 7.5497\*\* |
|  | (0.8824) | (1.1967) | (3.0719) |
| Id.7 | 2.2500\*\* | 2.2579\*\* | 3.3680\* |
|  | (0.9167) | (0.9331) | (1.8450) |
| Id.8 | 2.0896\*\*\* | 2.0313\*\*\* | 2.6102\*\* |
|  | (0.7516) | (0.7157) | (1.2676) |
| Id.9 | 2.3822\*\*\* | 2.3236\*\*\* | 2.5015\* |
|  | (0.8837) | (0.8487) | (1.3017) |
| Id.10 | 2.2904\*\*\* | 2.2879\*\* | 1.9314\* |
|  | (0.8866) | (0.8947) | (1.1344) |
| Id.11 | 0.2841 | 0.4310 | -0.2471 |
|  | (0.2026) | (0.3284) | (0.3081) |
| Id.12 | 0.6320\*\* | 0.5783\*\* | 0.9631\* |
|  | (0.3009) | (0.2688) | (0.5535) |
| Id.13 | 0.2416 | 0.3947 | -0.2494 |
|  | (0.1976) | (0.3210) | (0.3112) |
| Id.14 | 0.9239\*\* | 1.1230\* | 0.5314 |
|  | (0.4695) | (0.6558) | (0.7246) |
| Id.15 | 0.2443 | -0.0471 | 1.7847\*\* |
|  | (0.2190) | (0.2722) | (0.8999) |
| Id.16 | 0.6892\*\* | 0.6205\*\* | 1.1477\* |
|  | (0.3109) | (0.2681) | (0.6181) |
| Id.17 | -0.9631\*\*\* | -1.0005\*\*\* | -0.8441\*\*\* |
|  | (0.1613) | (0.1943) | (0.2505) |
| Id.18 | -1.8452\*\*\* | -1.9489\*\*\* | -2.0601\*\* |
|  | (0.5134) | (0.6084) | (0.9360) |
| Id.19 | 0.0998 | -0.0516 | 1.0346 |
|  | (0.2783) | (0.2131) | (0.7558) |
| Id.20 | 0.4266 | 0.4078 | 1.0724 |
|  | (0.3643) | (0.3540) | (0.8101) |
| Id.21 | -0.2373\*\*\* | 0.0172 | -1.1209\*\* |
|  | (0.0597) | (0.3169) | (0.4443) |
| Id.22 | -1.0188\*\*\* | -0.9472\*\*\* | -1.5712\*\*\* |
|  | (0.2630) | (0.2208) | (0.6023) |
| Id.23 | 0.8233\* | 0.9057\* | 0.8596 |
|  | (0.4509) | (0.5233) | (0.7241) |
| Id.24 | -3.3978\*\* | -3.6183\*\* | -4.2285 |
|  | (1.4938) | (1.6474) | (2.7307) |
| Id.25 | 0.8656\*\* | 0.8348\*\* | 1.2221\* |
|  | (0.3518) | (0.3327) | (0.6642) |
| Id.26 | -0.1776\*\*\* | -0.1661\*\* | -0.0421 |
|  | (0.0605) | (0.0668) | (0.1403) |
| Id.27 | -2.0210\*\*\* | -2.1059\*\*\* | -2.4752\*\*\* |
|  | (0.5796) | (0.5832) | (0.8554) |
| Id.28 | -0.1232 | -0.3240\* | 0.7474 |
|  | (0.1211) | (0.1935) | (0.5338) |
| Id.29 | 0.8705\*\* | 0.8380\*\* | 1.3915\* |
|  | (0.3804) | (0.3605) | (0.7732) |
| Id.30 | 1.2983\*\* | 1.3773\*\* | 1.1661 |
|  | (0.5129) | (0.5836) | (0.7975) |
| Id.31 | 1.4293\*\*\* | 1.4770\*\*\* | 1.4270\*\* |
|  | (0.4528) | (0.4975) | (0.6983) |
| Id.32 | 0.3247 | -0.0997 | 2.2356\* |
|  | (0.3392) | (0.3820) | (1.2424) |
| Id.49 | 0.2012\* | 0.0255 | 1.1550\*\* |
|  | (0.1119) | (0.1755) | (0.5359) |
| Id.50 | -0.1352 | -0.2481 | 0.7316\* |
|  | (0.1323) | (0.1776) | (0.4328) |
| Id.51 | 0.2117 | 0.0193 | 1.4498\*\* |
|  | (0.1546) | (0.2123) | (0.6559) |
| Id.52 | -0.2126 | -0.3825 | -0.1867 |
|  | (0.2267) | (0.3650) | (0.4132) |
| Id.53 | 0.8378\*\*\* | 0.6978\*\*\* | 2.1520\*\* |
|  | (0.3072) | (0.2405) | (0.9262) |
| Id.54 | 0.5076\*\*\* | 0.3025 | 1.5760\*\* |
|  | (0.1505) | (0.2066) | (0.6198) |
| Id.55 | -0.6537\*\* | -0.8310\* | 0.0093 |
|  | (0.2797) | (0.4494) | (0.4082) |
| Id.56 | 0.3528\*\*\* | 0.1918 | 1.0131\*\* |
|  | (0.1160) | (0.1838) | (0.4113) |
| Id.57 | -0.4560\*\* | -0.6100\* | -0.1862 |
|  | (0.1827) | (0.3292) | (0.3214) |
| Id.58 | -0.0361 | -0.2621 | 1.2099\*\* |
|  | (0.0924) | (0.2980) | (0.5185) |
| Id.60 | 2.3316\*\*\* | 1.3282 | 7.3946\*\* |
|  | (0.7085) | (0.8964) | (2.9974) |
| Id.61 | 0.4353\*\*\* | 0.2624 | 1.2370\*\*\* |
|  | (0.1301) | (0.2096) | (0.4639) |
| Id.62 | 0.0681 | -0.1011 | 0.7061\*\* |
|  | (0.1187) | (0.2765) | (0.2908) |
| Id.63 | 0.6257\*\*\* | 0.4748\*\*\* | 1.6448\*\* |
|  | (0.1950) | (0.1698) | (0.6579) |
| Id.64 | 0.0738 | -0.1327 | 1.0236\*\* |
|  | (0.0681) | (0.2729) | (0.4017) |
| Id.65 | 1.9306\*\* | 1.1876\* | 5.6266\*\* |
|  | (0.7607) | (0.6949) | (2.5488) |
| Id.67 | 0.6755\*\*\* | 0.0691 | 3.2349\*\*\* |
|  | (0.0744) | (0.6947) | (1.1938) |
| Id.71 | 0.7319\*\*\* | 0.3822 | 2.6798\*\* |
|  | (0.2771) | (0.3154) | (1.1358) |
| Id.72 | 0.0260 | -0.4448 | 1.7710\*\* |
|  | (0.1824) | (0.6943) | (0.7243) |
| Id.74 | 0.2582\*\* | -0.0686 | 1.9151\*\* |
|  | (0.1021) | (0.3449) | (0.7920) |
| Id.75 | 1.8118\*\*\* | 1.6810\*\*\* | 3.3311\*\* |
|  | (0.5270) | (0.4447) | (1.3567) |
| Id.76 | 1.0759\*\*\* | 0.8458\*\*\* | 2.4962\*\*\* |
|  | (0.2091) | (0.2140) | (0.8470) |
| Id.77 | 1.4483\*\*\* | 1.0777\*\*\* | 3.8204\*\* |
|  | (0.5371) | (0.4138) | (1.6545) |
| Id.78 | -0.1479\* | -0.4827 | 1.1072\*\* |
|  | (0.0825) | (0.4445) | (0.5521) |
| Id.80 | 0.4464\*\*\* | 0.1621 | 1.6793\*\*\* |
|  | (0.0714) | (0.3718) | (0.5191) |
| Id.83 | 0.6743\*\*\* | 0.3153 | 2.6099\*\* |
|  | (0.2336) | (0.3300) | (1.0705) |
| Id.84 | 0.7324\*\*\* | 0.4849\*\* | 2.0728\*\*\* |
|  | (0.1169) | (0.2462) | (0.6868) |
| Id.85 | 0.0822 | -0.3233 | 1.6810\*\* |
|  | (0.1369) | (0.5791) | (0.6668) |
| Id.87 | 1.0642\*\*\* | 0.7351\*\* | 2.8591\*\*\* |
|  | (0.2157) | (0.3025) | (0.9896) |
| Id.88 | -0.4161 | -0.6791 | 0.3932 |
|  | (0.3256) | (0.5860) | (0.5208) |
| Id.91 | -0.2542 | -0.7491 | 1.6303\*\* |
|  | (0.1672) | (0.7097) | (0.7847) |
| Id.92 | 0.7299\*\*\* | 0.2442 | 2.9596\*\*\* |
|  | (0.1770) | (0.4869) | (1.1482) |
| Id.95 | 0.8639\*\*\* | 0.5999\*\* | 2.2779\*\*\* |
|  | (0.1527) | (0.2526) | (0.7458) |
| Id.96 | 0.8888\*\*\* | 0.6392\*\* | 2.3207\*\* |
|  | (0.3015) | (0.2608) | (0.9578) |
| Id.97 | 0.1084 | -0.1258 | 1.0829\*\*\* |
|  | (0.1532) | (0.3939) | (0.3918) |
| Id.98 | -0.3647\*\*\* | -0.7456 | 1.0101\* |
|  | (0.1338) | (0.5460) | (0.5983) |
| Id.101 | 0.8426\*\*\* | 0.1308 | 4.0719\*\* |
|  | (0.2471) | (0.7132) | (1.6751) |
| Id.102 | 0.9026\*\*\* | 0.3543 | 3.5775\*\* |
|  | (0.2854) | (0.5140) | (1.4680) |
| Id.103 | 0.2236\*\*\* | -0.2781 | 2.3646\*\* |
|  | (0.0749) | (0.5739) | (1.0064) |
| Id.104 | 0.4015\*\* | 0.0109 | 2.3736\*\* |
|  | (0.1837) | (0.3768) | (1.0326) |
| Id.105 | 0.3764\*\*\* | -0.0408 | 2.1697\*\* |
|  | (0.1070) | (0.4484) | (0.8920) |
| Id.106 | 0.2379\* | -0.1018 | 1.6086\*\*\* |
|  | (0.1313) | (0.4971) | (0.5656) |
| Id.107 | 0.3931\*\*\* | 0.1665 | 1.5238\*\*\* |
|  | (0.0563) | (0.2748) | (0.4864) |
| Id.109 | -0.0336 | -0.4214 | 1.3810\*\* |
|  | (0.1970) | (0.6106) | (0.5872) |
| Id.110 | 0.4596\*\*\* | 0.2109 | 1.6779\*\*\* |
|  | (0.0615) | (0.2906) | (0.5463) |
| Id.111 | 1.4126\*\*\* | 0.9585\*\* | 3.8282\*\*\* |
|  | (0.3594) | (0.4071) | (1.4419) |
| Id.112 | 0.1470 | -0.1932 | 1.4940\*\*\* |
|  | (0.1410) | (0.5054) | (0.5512) |
| Id.113 | 1.4127\*\* | 0.7204 | 5.0328\*\* |
|  | (0.5635) | (0.6181) | (2.2111) |
| Id.114 | 0.1865\*\*\* | -0.1740 | 1.7899\*\* |
|  | (0.0592) | (0.4396) | (0.7027) |
| Id.115 | 0.1637\*\* | -0.1594 | 1.7090\*\* |
|  | (0.0719) | (0.3713) | (0.7035) |
| Id.116 | -0.1285\* | -0.5615 | 1.6927\*\* |
|  | (0.0695) | (0.5504) | (0.7810) |
| Id.118 | 0.7829\*\*\* | 0.3797 | 2.9825\*\* |
|  | (0.2901) | (0.3655) | (1.2515) |
| Id.120 | -0.0278 | -0.3432 | 1.3032\*\* |
|  | (0.1141) | (0.4527) | (0.5314) |
| Id.122 | 1.1794\*\*\* | 0.5018 | 4.5393\*\* |
|  | (0.3978) | (0.6218) | (1.8942) |
| Id.123 | 0.6813\*\*\* | 0.0030 | 3.7632\*\* |
|  | (0.1946) | (0.7007) | (1.5451) |
| Id.124 | 0.0220 | -0.7667 | 3.1006\*\* |
|  | (0.1214) | (1.0196) | (1.3422) |
| Id.125 | 0.7235\*\*\* | 0.3089 | 2.6111\*\*\* |
|  | (0.1042) | (0.4434) | (0.9159) |
| Id.126 | -0.1346 | -0.5914 | 1.7687\*\* |
|  | (0.0830) | (0.5866) | (0.8111) |
| Id.128 | 0.1664 | -0.4639 | 2.5477\*\* |
|  | (0.1525) | (0.8565) | (1.0185) |
| Id.129 | 1.3342\*\*\* | 1.0420\*\*\* | 3.2305\*\* |
|  | (0.4749) | (0.3613) | (1.3982) |
| Id.130 | 0.2597\*\* | -0.0683 | 1.5880\*\*\* |
|  | (0.1138) | (0.4660) | (0.5459) |
| Id.132 | 0.9787\*\*\* | 0.7709\*\*\* | 2.3954\*\* |
|  | (0.3607) | (0.2740) | (1.0464) |
| Id.134 | 0.5085\*\*\* | 0.3129 | 1.5557\*\*\* |
|  | (0.0642) | (0.2244) | (0.4810) |
| Id.135 | 0.1831\*\*\* | -0.1812 | 1.7966\*\* |
|  | (0.0676) | (0.4173) | (0.7399) |
| Id.136 | -0.0663 | -0.5138 | 1.9163\*\* |
|  | (0.0628) | (0.5515) | (0.8573) |
| Id.139 | 0.1671 | -0.1546 | 1.4476\*\*\* |
|  | (0.1369) | (0.4794) | (0.5194) |
| Id.140 | 0.0135 | -0.2955 | 1.2071\*\* |
|  | (0.1684) | (0.4941) | (0.4856) |
| Id.141 | 0.1409 | -0.2348 | 1.8121\*\* |
|  | (0.1126) | (0.3967) | (0.8465) |
| Log\_Buses | -0.6399\*\*\* | -0.6475\*\*\* | -0.9628\* |
|  | (0.2385) | (0.2475) | (0.4982) |
| Log\_green\_area |  | -0.1486 | 0.5418\*\* |
|  |  | (0.1775) | (0.2602) |
| Average\_wind\_speed |  |  | -0.1021\*\* |
|  |  |  | (0.0464) |
| Average\_precipitation |  |  | 0.0011\*\* |
|  |  |  | (0.0005) |
| Maximum\_temperature |  |  | 0.0096 |
|  |  |  | (0.0147) |
| Motorcycles |  |  | 1.826e-08 |
|  |  |  | (3.018e-08) |
| Trucks |  |  | 2.059e-06\*\* |
|  |  |  | (9.126e-07) |
| ========================= | ===================== | ===================== | ===================== |
| Instruments | Lag\_log\_urban\_areas | Lag\_log\_urban\_areas | Lag\_log\_urban\_areas |

Std. Errors reported in parentheses