Results - USDA Inspected Meat Establishments, 2007-2010

|  |  |  |
| --- | --- | --- |
| Spatial Probit Model |  Existing US Meat Plants 2007 |  New US Meat Plants 2008-2010 |
|   | Estimate | z-value | Pr(>|z|) | Estimate | z-value | Pr(>|z|) |
| WXB (p) | 0.01375 | 0.16273 |   | 0.31104 | 2.20293 | \* |
| Intercept | -0.29436 | -1.17431 |   | -1.89956 | -4.20617 | \*\*\* |
| **Agglomeration** |   |   |   |   |   |   |
| Large firms | 1.80547 | 7.79739 | \*\*\* | 0.89468 | 3.85216 | \*\*\* |
| Mid size firms | 1.11330 | 11.04041 | \*\*\* | 0.68912 | 6.83855 | \*\*\* |
| Small firms | 0.55495 | 10.37424 | \*\*\* | 0.45436 | 7.65819 | \*\*\* |
| **Consumer Market** |   |   |   |   |   |   |
| % Households >$75K | -0.02856 | -2.02302 | \* | 0.04090 | 2.25784 | \* |
| Population Density | -0.00008 | -0.99215 |   | 0.00000 | 0.95339 |   |
| **Labor Market** |   |   |   |   |   |   |
| Weekly Wages | -0.00013 | -1.03111 |   | -0.00025 | -1.71403 | . |
| % High School or Less | -0.02312 | -4.90484 | \*\*\* | 0.01028 | 1.80339 | . |
| **Output Markets** |   |   |   |   |   |   |
| Meat Processing | 0.01441 | 0.87536 |   | -0.00031 | -0.01261 |   |
| **Input Market** |   |   |   |   |   |   |
| Cattle Feeding Farms | 0.00126 | 0.90893 |   | -0.00398 | -2.15057 | \* |
| Beef Cow Farms | 0.00028 | 2.39547 | \* | 0.00040 | 3.36369 | \*\*\* |
| Dairy Farms | 0.00145 | 1.95738 | . | 0.00152 | 1.88749 | . |
| Hog and Pig Farms | 0.00105 | 0.81511 |   | 0.00379 | 2.34392 | \* |
| Sheep and Goat Farms | 0.00095 | 1.28092 |   | 0.00029 | 0.39787 |   |
| **Infrastructure** |  |  |  |   |   |   |
| Rendering | 0.16140 | 1.75014 | . | -0.10222 | -0.90452 |   |
| USDA Cold Storage | 0.03503 | 0.62238 |   | 0.13573 | 2.31224 | \* |
| Livestock Wholesalers  | 0.03785 | 0.84078 |   | 0.02527 | 0.55591 |   |
| Import Facilities | -0.04856 | 0.15854 |   | 0.01080 | 0.07528 |   |
| **Government** |  |  |   |  |  |   |
| States Inspected | -0.41154 | -5.37488 | \*\*\* | -0.21217 | -2.32664 | \* |
| Talmadge Inspected | 0.05400 | 0.64329 |   | 0.19227 | 1.72356 | . |
| Interstate Highway | 0.12650 | 2.36537 | \* | 0.03642 | 0.59334 |   |
| **Region** |  |  |   |  |  |   |
| North East | 0.37947 | 3.47988 | \*\*\* | 0.27639 | 2.25539 | \* |
| Southern | -0.09640 | -1.07612 |   | -0.26553 | -2.22749 | \* |
| Western | -0.06368 | -0.68302 |   | -0.39295 | -2.34023 | \* |
| observations 3,066 |  AIC 2114 / 8 iterations |   |  AIC 1039.1 / 23 iterations |
|   | Signif. codes: 0 ‘\*\*\*’ 0.001 ‘\*\*’ 0.01 ‘\*’ 0.05 ‘.’ 0.1 ‘ ’ 1 |   |