

Initiation à l'économétrie des données de panel

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Résultats des différentes proc du système Sas

Listing 1 – Résultat de l'estimation dans la dimension totale

| The REG Procedure | | | | | |
|---|-----|--------------------|----------|----------------|---------------|
| Model: MODEL1 | | | | | |
| Dependent Variable: lq | | | | | |
| Number of Observations Read 504 | | | | | |
| Number of Observations Used 504 | | | | | |
| NOTE: No intercept in model. R-Square is redefined. | | | | | |
| Analysis of Variance | | | | | |
| Source | DF | Sum of Squares | | Mean Square | |
| | | 2654.25856 | | 88.47529 | 711.42 <.0001 |
| Model | 30 | 58.94892 | | 0.12436 | |
| Error | 474 | | | | |
| Uncorrected Total | 504 | 2713.20749 | | | |
| Root MSE | | 0.35265 | R-Square | 0.9783 | |
| Dependent Mean | | 2.26461 | Adj R-Sq | 0.9769 | |
| Coeff Var | | 15.57237 | | | |
| Parameter Estimates | | | | | |
| Variable | DF | Parameter Estimate | | Standard Error | |
| | | 0.25262 | | 0.02140 | 11.81 <.0001 |
| lk | 1 | 0.38674 | | 0.03062 | 12.63 <.0001 |
| ll | 1 | -0.60568 | | 0.17747 | -3.41 0.0007 |
| dt1978 | 1 | -0.60164 | | 0.17713 | -3.40 0.0007 |
| dt1979 | 1 | | | | |
| ... | | | | | |
| dt2004 | 1 | -0.21827 | | 0.16574 | -1.32 0.1885 |
| dt2005 | 1 | -0.20028 | | 0.16503 | -1.21 0.2255 |

Listing 2 – Résultat de l'estimation dans la dimension intra-individuelle I

| The REG Procedure | | | | | |
|---|-----|--------------------|----------|----------------|----------------|
| Model: MODEL1 | | | | | |
| Dependent Variable: lq | | | | | |
| Number of Observations Read 504 | | | | | |
| Number of Observations Used 504 | | | | | |
| NOTE: No intercept in model. R-Square is redefined. | | | | | |
| Analysis of Variance | | | | | |
| Source | DF | Sum of Squares | | Mean Square | |
| | | 2695.10992 | | 57.34276 | 1448.02 <.0001 |
| Model | 47 | 18.09757 | | 0.03960 | |
| Error | 457 | | | | |
| Uncorrected Total | 504 | 2713.20749 | | | |
| Root MSE | | 0.19900 | R-Square | 0.9933 | |
| Dependent Mean | | 2.26461 | Adj R-Sq | 0.9926 | |
| Coeff Var | | 8.78735 | | | |
| Parameter Estimates | | | | | |
| Variable | DF | Parameter Estimate | | Standard Error | |
| | | 0.26170 | | 0.10229 | 2.56 0.0108 |
| lk | 1 | 0.97015 | | 0.08062 | 12.03 <.0001 |
| ll | 1 | -3.47109 | | 0.32033 | -10.84 <.0001 |
| di1 | 1 | -3.46548 | | 0.30225 | -11.47 <.0001 |
| di2 | 1 | | | | |
| ... | | | | | |
| di17 | 1 | -2.02654 | | 0.23223 | -8.73 <.0001 |
| di18 | 1 | -3.09851 | | 0.35848 | -8.64 <.0001 |
| dt1978 | 1 | -0.68102 | | 0.08915 | -7.64 <.0001 |
| dt1979 | 1 | -0.67069 | | 0.08739 | -7.67 <.0001 |
| ... | | | | | |
| dt2003 | 1 | -0.06556 | | 0.06643 | -0.99 0.3242 |
| dt2004 | 1 | -0.03504 | | 0.06636 | -0.53 0.5977 |

Listing 3 – Variance totale pour lq

| The UNIVARIATE Procedure | | | | | |
|----------------------------|------------|---------------------|-------------|------------|--|
| Variable: lq | | | | | |
| Moments | | | | | |
| N | 504 | Sum Weights | | 504 | |
| Mean | 2.2646137 | Sum Observations | | 1141.3653 | |
| Std Deviation | 0.50535105 | Variance | | 0.25537969 | |
| Skewness | 0.37780553 | Kurtosis | | -0.7530279 | |
| Uncorrected SS | 2713.20749 | Corrected SS | | 128.455983 | |
| Coeff Variation | 22.3151107 | Std Error Mean | | 0.02251013 | |
| Basic Statistical Measures | | | | | |
| Location | | | Variability | | |
| Mean | 2.264614 | Std Deviation | | 0.50535 | |
| Median | 2.173834 | Variance | | 0.25538 | |
| Mode | 3.245128 | Range | | 2.24996 | |
| | | Interquartile Range | | 0.77316 | |

Listing 4 – Variance intra-individuelle pour lq

| The UNIVARIATE Procedure | | | |
|----------------------------|---------------|---------------------|------------|
| | Variable: lqw | | |
| Moments | | | |
| N | 504 | Sum Weights | 504 |
| Mean | 0 | Sum Observations | 0 |
| Std Deviation | 0.27864683 | Variance | 0.07764406 |
| Skewness | 0.84507508 | Kurtosis | 3.73078323 |
| Uncorrected SS | 39.0549606 | Corrected SS | 39.0549606 |
| Coeff Variation | . | Std Error Mean | 0.01241192 |
| Basic Statistical Measures | | | |
| Location | | Variability | |
| Mean | 0.00000 | Std Deviation | 0.27865 |
| Median | -0.01472 | Variance | 0.07764 |
| Mode | 0.06686 | Range | 2.24362 |
| | | Interquartile Range | 0.24662 |

Listing 5 – Variance inter-individuelle pour lq

| The UNIVARIATE Procedure | | | |
|----------------------------|---------------|---------------------|------------|
| | Variable: lqb | | |
| Moments | | | |
| N | 18 | Sum Weights | 18 |
| Mean | 2.2646137 | Sum Observations | 40.7630466 |
| Std Deviation | 0.4333789 | Variance | 0.18781727 |
| Skewness | 0.74207412 | Kurtosis | -0.1701245 |
| Uncorrected SS | 95.5054474 | Corrected SS | 3.19289366 |
| Coeff Variation | 19.1369903 | Std Error Mean | 0.10214839 |
| Basic Statistical Measures | | | |
| Location | | Variability | |
| Mean | 2.264614 | Std Deviation | 0.43338 |
| Median | 2.130406 | Variance | 0.18782 |
| Mode | . | Range | 1.55318 |
| | | Interquartile Range | 0.44590 |

Listing 6 – Résultat de l'estimation dans la dimension intra-individuelle II

| The REG Procedure | | | | | |
|---|-----|--------------------|----------|----------------|--------------|
| Model: MODEL1 | | | | | |
| Dependent Variable: lqw | | | | | |
| Number of Observations Read 504 | | | | | |
| Number of Observations Used 504 | | | | | |
| NOTE: No intercept in model. R-Square is redefined. | | | | | |
| Analysis of Variance | | | | | |
| Source | DF | Sum of Squares | | Mean Square | |
| | | 20.95739 | | 0.72267 | 18.97 <.0001 |
| Model | 29 | 18.09757 | | 0.03810 | |
| Error | 475 | | | | |
| Uncorrected Total | 504 | 39.05496 | | | |
| Root MSE | | 0.19519 | R-Square | 0.5366 | |
| Dependent Mean | | 1.22477E-16 | Adj R-Sq | 0.5083 | |
| Coeff Var | | 1.593708E17 | | | |
| Parameter Estimates | | | | | |
| Variable | DF | Parameter Estimate | | Standard Error | |
| | | 0.26170 | | 0.10033 | 2.61 0.0094 |
| lkw | 1 | 0.97015 | | 0.07908 | 12.27 <.0001 |
| llw | 1 | -0.68102 | | 0.08744 | -7.79 <.0001 |
| dtw1978 | 1 | -0.67069 | | 0.08572 | -7.82 <.0001 |
| dtw1979 | 1 | | | | |
| ... | | | | | |
| dtw2003 | 1 | -0.06556 | | 0.06516 | -1.01 0.3149 |
| dtw2004 | 1 | -0.03504 | | 0.06509 | -0.54 0.5906 |

Listing 7 – Résultat de l'estimation dans la dimension inter-individuelle

| The REG Procedure | | | | | |
|--------------------------------|----|--------------------|----------|----------------|--------------|
| Model: MODEL1 | | | | | |
| Dependent Variable: lqb | | | | | |
| Number of Observations Read 18 | | | | | |
| Number of Observations Used 18 | | | | | |
| Analysis of Variance | | | | | |
| Source | DF | Sum of Squares | | Mean Square | |
| | | 1.88860 | | 0.94430 | 10.86 0.0012 |
| Model | 2 | 1.30429 | | 0.08695 | |
| Error | 15 | | | | |
| Corrected Total | 17 | 3.19289 | | | |
| Root MSE | | 0.29488 | R-Square | 0.5915 | |
| Dependent Mean | | 2.26461 | Adj R-Sq | 0.5370 | |
| Coeff Var | | 13.02111 | | | |
| Parameter Estimates | | | | | |
| Variable | DF | Parameter Estimate | | Standard Error | |
| | | -0.21423 | | 0.69148 | -0.31 0.7610 |
| Intercept | 1 | 0.25376 | | 0.09535 | 2.66 0.0178 |
| lkb | 1 | 0.33999 | | 0.14010 | 2.43 0.0283 |
| llb | 1 | | | | |

Listing 8 – Résultat de l'estimation des moindres carrés quasi généralisés

| The REG Procedure | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----------|--------------------|----------------|---------|---------|----------|---------|--------------------|----------------|---------|---------|----------------|---------|----------|---------|-------|--------|-----------|----------|----------|---------|-------|--------|-------------------|-----|----------|---------|--------|--------|---------|---|----------|---------|--------|--------|-----|--|--|--|--|--|---------|---|----------|---------|-------|--------|---------|---|----------|---------|-------|--------|
| Model: MODEL1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependent Variable: lqg | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Number of Observations Read 504 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Number of Observations Used 504 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NOTE: No intercept in model. R-Square is redefined. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Analysis of Variance | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table> <thead> <tr> <th>Source</th> <th>DF</th> <th>Sum of Squares</th> <th>Mean Square</th> <th>F Value</th> <th>Pr > F</th> </tr> </thead> <tbody> <tr> <td>Model</td> <td>30</td> <td>62.96033</td> <td>2.09868</td> <td>51.03</td> <td><.0001</td> </tr> <tr> <td>Error</td> <td>474</td> <td>19.49211</td> <td>0.04112</td> <td></td> <td></td> </tr> <tr> <td>Uncorrected Total</td> <td>504</td> <td>82.45244</td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | | | | | Source | DF | Sum of Squares | Mean Square | F Value | Pr > F | Model | 30 | 62.96033 | 2.09868 | 51.03 | <.0001 | Error | 474 | 19.49211 | 0.04112 | | | Uncorrected Total | 504 | 82.45244 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Model | 30 | 62.96033 | 2.09868 | 51.03 | <.0001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Error | 474 | 19.49211 | 0.04112 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Uncorrected Total | 504 | 82.45244 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table> <thead> <tr> <th>Root MSE</th> <th>0.20279</th> <th>R-Square</th> <th>0.7636</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Dependent Mean</td> <td>0.28849</td> <td>Adj R-Sq</td> <td>0.7486</td> <td></td> <td></td> </tr> <tr> <td>Coeff Var</td> <td>70.29216</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> | | | | | | Root MSE | 0.20279 | R-Square | 0.7636 | | | Dependent Mean | 0.28849 | Adj R-Sq | 0.7486 | | | Coeff Var | 70.29216 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Root MSE | 0.20279 | R-Square | 0.7636 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dependent Mean | 0.28849 | Adj R-Sq | 0.7486 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Coeff Var | 70.29216 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Parameter Estimates | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table> <thead> <tr> <th>Variable</th> <th>DF</th> <th>Parameter Estimate</th> <th>Standard Error</th> <th>t Value</th> <th>Pr > t </th> </tr> </thead> <tbody> <tr> <td>lkg</td> <td>1</td> <td>0.24973</td> <td>0.07109</td> <td>3.51</td> <td>0.0005</td> </tr> <tr> <td>llg</td> <td>1</td> <td>0.86776</td> <td>0.06689</td> <td>12.97</td> <td><.0001</td> </tr> <tr> <td>dtg1978</td> <td>1</td> <td>-3.28279</td> <td>0.31759</td> <td>-10.34</td> <td><.0001</td> </tr> <tr> <td>dtg1979</td> <td>1</td> <td>-3.27335</td> <td>0.31675</td> <td>-10.33</td> <td><.0001</td> </tr> <tr> <td>...</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>dtg2004</td> <td>1</td> <td>-2.67941</td> <td>0.29101</td> <td>-9.21</td> <td><.0001</td> </tr> <tr> <td>dtg2005</td> <td>1</td> <td>-2.64748</td> <td>0.28949</td> <td>-9.15</td> <td><.0001</td> </tr> </tbody> </table> | | | | | | Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > t | lkg | 1 | 0.24973 | 0.07109 | 3.51 | 0.0005 | llg | 1 | 0.86776 | 0.06689 | 12.97 | <.0001 | dtg1978 | 1 | -3.28279 | 0.31759 | -10.34 | <.0001 | dtg1979 | 1 | -3.27335 | 0.31675 | -10.33 | <.0001 | ... | | | | | | dtg2004 | 1 | -2.67941 | 0.29101 | -9.21 | <.0001 | dtg2005 | 1 | -2.64748 | 0.28949 | -9.15 | <.0001 |
| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > t | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| lkg | 1 | 0.24973 | 0.07109 | 3.51 | 0.0005 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| llg | 1 | 0.86776 | 0.06689 | 12.97 | <.0001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| dtg1978 | 1 | -3.28279 | 0.31759 | -10.34 | <.0001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| dtg1979 | 1 | -3.27335 | 0.31675 | -10.33 | <.0001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ... | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| dtg2004 | 1 | -2.67941 | 0.29101 | -9.21 | <.0001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| dtg2005 | 1 | -2.64748 | 0.28949 | -9.15 | <.0001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |