Time Series Analysis: Cash Welfare Guarantee and Hours Worked Among Single Mothers


Time series analysis: Analysis of two series over time.

## When Is Time Series Analysis Useful? Cigarette Prices and Youth Smoking



- Sharp, simultaneous changes in prices and smoking rates in 1993 and 1998-onward
- Known causes: price war, tobacco settlements


## Cross-Sectional Regression Analysis: Labor Supply and TANF Benefit



## Example with Real-World Data: Labor Supply and TANF Benefits



Benefits and Labor Supply in Arkansas and Louisiana

| Arkansas |  |  |  |
| :--- | :---: | :---: | :---: |
|  | 1996 | 1998 | Difference |
| Benefit guarantee (\$) | 5,000 | 4,000 | $-1,000$ |
| Hours worked | 1,000 | 1,200 | 200 |
| Louisiana |  |  |  |
|  | 1996 | 1998 | Difference |
| Benefit guarantee (\$) | 5,000 | 5,000 | 0 |
| Hours worked | 1,050 | 1,100 | 50 |



Figure 2. Proportion with Positive Earnings for Nonwinners, Winners, and Big Winners Note $:$ Solid line $=$ nonwinners; dashed line $=$ winners; dotted line $=$ big winners.

All Unmarried Females


