## Bound et al. 1995: Table 1

|  | (1)<br>OLS     | (2)<br>IV              | (3)<br>OLS     | (4)<br>IV             | (5)<br>OLS     | (6)<br>IV             |
|--|----------------|------------------------|----------------|-----------------------|----------------|-----------------------|
| Coefficient  | .063<br>(.000) | .142<br>(.033)         | .063<br>(.000) | .081<br>(.016)        | .063<br>(.000) | .060<br>(.029         |
| F (excluded instruments)<br>Partial $R^2$ (excluded instruments, ×100)<br>F (overidentification) |                | 13.486<br>.012<br>.932 |                | 4.747<br>.043<br>.775 |                | 1.613<br>.014<br>.725 |
|  | Age Co         | ntrol Variables        |                |                       |                |                       |
| Age, Age <sup>2</sup><br>9 Year of birth dummies   | x              | x                      | x              | x                     | x<br>x         | x<br>x                |
|  | Exclude        | ed Instruments         | :              |                       |                |                       |
| Quarter of birth   |                | x                      |                | x                     |                | x                     |
| Quarter of birth $\times$ year of birth<br>Number of excluded instruments                        |                | 3                      |                | x<br>30               |                | x<br>28               |

NOTE: Calculated from the 5% Public-Use Sample of the 1980 U.S. Census for men born 1930–1939. Sample size is 329,509. All specifications include Race (1 = black), SMSA (1 = central city), Married (1 = married, living with spouse), and 8 Regional dummies as control variables. *F* (first stage) and partial *R*<sup>2</sup> are for the instruments in the first stage of IV estimation. *F* (overidentification) is that suggested by Basmann (1960).

## Bound et al. 1995: Table 2

| Table 2. Estimated Effect of Completed Years of Education onMen's Log Weekly Earnings, Controlling for State of Birth(standard errors of coefficients in parentheses) |                |                       |                |                       |  |  |  |
|---|----------------|-----------------------|----------------|-----------------------|--|--|--|
|   | (1)<br>OLS     | (2)<br>IV             | (3)<br>OLS     | (4)<br>IV             |  |  |  |
| Coefficient   | .063<br>(.000) | .083<br>(.009)        | .063<br>(.000) | .081<br>(.011)        |  |  |  |
| F (excluded instruments)<br>Partial $R^2$ (excluded instruments, ×100)<br>F (overidentification)  |                | 2.428<br>.133<br>.919 |                | 1.869<br>.101<br>.917 |  |  |  |
| Age Control Variables   |                |                       |                |                       |  |  |  |
| Age, Age <sup>2</sup><br>9 Year of birth dummies  | x              | x                     | x<br>x         | x<br>x                |  |  |  |
| Excluded Instru   | ments          |                       |                |                       |  |  |  |
| Quarter of birth<br>Quarter of birth $\times$ year of birth<br>Quarter of birth $\times$ state of birth<br>Number of excluded instruments                             |                | x<br>x<br>x<br>180    |                | x<br>x<br>x<br>178    |  |  |  |

NOTE: Calculated from the 5% Public-Use Sample of the 1980 U.S. Census for men born 1930– 1939. Sample size is 329,509. All specifications include Race (1 = black), SMSA (1 = central city), Married (1 = married, living with spouse), 8 Regional dummies, and 50 State of Birth dummies as control variables. *F* (first stage) and partial  $R^2$  are for the instruments in the first stage of IV estimation. *F* (overidentification) is that suggested by Basmann (1960). Bound et al. 1995: Table 3

| Completed N<br>Using Simu<br>0 replication | rears of Edu<br>lated Quarte<br>ns)   | ication on<br>er of Birth   | Men's  |
|--|---|---|--|
| 1 (4)                                      | 1 (6)   | 2 (2)   | 2 (4)  |
| ated Coeffic                               | ient  |   |  |
| .062                                       | .061  | .060  | .060   |
| .038                                       | .039  | .015  | .015   |
| 001<br>.061<br>.119                        | 002<br>.061<br>.127   | .034<br>.060<br>.083  | .035<br>.060<br>.082   |
| ed Standard                                | l Error   |   |  |
| .037                                       | .039  | .015  | .015   |
|  | Completed N<br>Using Simu<br>0 replication<br>1 (4)<br>ated Coeffic<br>.062<br>.038<br>001<br>.061<br>.119<br>ed Standard<br>.037 | Completed Years of Edu           Using Simulated Quarter           0 replications)           1 (4)         1 (6)           nated Coefficient           .062         .061           .038         .039          001        002           .061         .061           .119         .127           ed Standard Error         .037           .037         .039 | Completed Years of Education on<br>Using Simulated Quarter of Birth<br>0 replications)           1 (4)         1 (6)         2 (2)           nated Coefficient         .062         .061         .060           .038         .039         .015          001        002         .034         .060           .119         .127         .083           ed Standard Error         .037         .039         .015 |

 TABLE 4.6.2

 Alternative IV estimates of the economic returns to schooling

|  | (1)                      | (2)                      | (3)           | (4)            | (5)            | (6)                                      |
|--|--------------------------|--------------------------|---------------|----------------|----------------|--|
| 2SLS   | .105                     | .435                     | .089          | .076           | .093           | .091                                     |
| LIML   | (.020)<br>.106<br>(.020) | (.430)<br>.539<br>(.627) | .093<br>(018) | (.029)<br>.081 | (.009)<br>.106 | (.011)                                   |
| <i>F</i> -statistic (excluded instruments)   | 32.27                    | .42                      | 4.91          | 1.61           | 2.58           | (.015)<br>1.97                           |
| <i>Controls</i><br>Year of birth<br>State of birth<br>Age, age squared   | $\checkmark$             | $\checkmark$             | $\checkmark$  | √<br>√         | $\checkmark$   | $\checkmark \\ \checkmark \\ \checkmark$ |
| <i>Excluded instruments</i><br>Quarter-of-birth dummies<br>Quarter of birth*year of birth<br>Quarter of birth*state of birth | $\checkmark$             | $\checkmark$             | $\checkmark$  | $\checkmark$   | $\checkmark$   | $\checkmark$                             |
| Number of excluded instruments   | 3                        | 2                        | 30            | 28             | 180            | 178                                      |

Notes: The table compares 2SLS and LIML estimates using alternative sets of instruments and controls. The age and age squared variables measure age in quarters. The OLS estimate corresponding to the models reported in columns 1–4 is .071; the OLS estimate corresponding to the models reported in columns 5 and 6 is .067. Data are from the Angrist and Krueger (1991) 1980 census sample. The sample size is 329,509. Standard errors are reported in parentheses.