Figure 1
Mean Years of Completed Education, by Quarter of Birth

Source: Authors’ calculations from the 1980 Census.

Figure 2
Mean Log Weekly Earnings, by Quarter of Birth

Source: Authors’ calculations from the 1980 Census.
clear
set seed 1001
set obs 1000
local rho=-.5
gen u=.5*invnorm(uniform())
gen v=`rho'*u+.5*invnorm(uniform())
gen z=uniform()
gen x=z+v
gen y=.1*x+u
reg y x
ivreg y (x=z)
corr y x z, cov
dis .01078/.081107
dis -.077117/.37466
clear
.set seed 1001
.set obs 1000
obs was 0, now 1000
.local rho=-.5
.gen u=.5*invnorm(uniform())
.gen v=`rho'*u+.5*invnorm(uniform())
gen z=uniform()
gen x=z+v
.gen y=.1*x+u
.reg y x

Source |       SS       df       MS              Number of obs =    1000
-------------+------------------------------           F(  1,   998) =   74.37
Model |  15.8570487     1  15.8570487           Prob > F      =  0.0000
Residual |  212.791643   998  .213218079           R-squared     =  0.0694
-------------+------------------------------           Adj R-squared =  0.0684
Total |  228.648692   999  .228877569           Root MSE      =  .46176

------------------------------------------------------------------------------
y |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
x |  -.2058289   .0238675    ...     9.48   0.000     .1411804    .2148913
_cons |   .1780359   .0187813    9.48   0.000     .1411804    .2148913
. ivreg y (x=z)

Instrumental variables (2SLS) regression

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>Number of obs = 1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>-27.1067501</td>
<td>1</td>
<td>-27.1067501</td>
<td>F( 1, 998) = 5.48</td>
</tr>
<tr>
<td>Residual</td>
<td>255.755442</td>
<td>998</td>
<td>.256267978</td>
<td>Prob &gt; F = 0.0195</td>
</tr>
<tr>
<td>Total</td>
<td>228.648692</td>
<td>999</td>
<td>.228877569</td>
<td>R-squared = .</td>
</tr>
</tbody>
</table>

| y | Coef. | Std. Err. | t | P>|t| | [95% Conf. Interval] |
|---|-------|-----------|---|-----|----------------------|
| _cons | .0103644 | .0323574 | 0.32 | 0.749 | -.0531319 | .0738607 |
| x | .1329735 | .0568201 | 2.34 | 0.019 | .0214729 | .2444741 |

Instrumented: x
Instruments: z

. corr y x z, cov
(obs=1000)

<table>
<thead>
<tr>
<th></th>
<th>y</th>
<th>x</th>
<th>z</th>
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<tbody>
<tr>
<td>y</td>
<td>.228878</td>
<td></td>
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<tr>
<td>x</td>
<td>-.077117</td>
<td>.374666</td>
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<tr>
<td>z</td>
<td>.010785</td>
<td>.081107</td>
<td>.082792</td>
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</tbody>
</table>

. dis .010785/.081107 .13291085
. dis -.077117/.374666 -.20583195