```
  ___  ____  ____  ____  ____(R)
 /__    /   ____/   /   ____/
___/   /   /___/   /   /___/
  Statistics/Data Analysis
```

User: Keisi Kapaj
Project: Thesis - Part 2

```
1 . ivregress 2sls Lifeexpectancyatbirth NationalIncome GDPperCapita (kwhpercapita = Residual)

Instrumental variables (2SLS) regression          Number of obs   =        146
                                                  Wald chi2(3)    =     464.23
                                                  Prob > chi2     =     0.0000
                                                  R-squared       =     0.7634
                                                  Root MSE        =     .02419

------------------------------------------------------------------------------
Lifeexpectan~h |     Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------+--------------------------------------------------------------
  kwhpercapita |  .0343612   .0310016     1.11   0.268    -.0264007    .0951232
NationalIncome |  .1304962   .0260942     5.00   0.000     .0793526    .1816399
  GDPperCapita | -.0915458   .0386058    -2.37   0.018    -.1672117   -.0158799
         _cons |  1.583083   .0178272    88.80   0.000     1.548143    1.618024
------------------------------------------------------------------------------
Instrumented:  kwhpercapita
Instruments:   NationalIncome GDPperCapita Residual

2 . estat endog

  Tests of endogeneity
  Ho: variables are exogenous

  Durbin (score) chi2(1)          =  .127513  (p = 0.7210)
  Wu-Hausman F(1,141)             =  .123254  (p = 0.7261)

3 . estat firststage

  First-stage regression summary statistics
  --------------------------------------------------------------------------
               |            Adjusted      Partial
      Variable |    R-sq.       R-sq.        R-sq.     F(1,142)   Prob > F
  -------------+------------------------------------------------------------
  kwhpercapita |   0.8417      0.8384       0.0579      8.73301    0.0037
  --------------------------------------------------------------------------


  Minimum eigenvalue statistic = 8.73301

  Critical Values                      # of endogenous regressors:    1
  Ho: Instruments are weak             # of excluded instruments:     1
  ---------------------------------------------------------------------
                                     |    5%     10%     20%     30%
  2SLS relative bias                 |         (not available)
  -----------------------------------+---------------------------------
                                     |   10%     15%     20%     25%
  2SLS Size of nominal 5% Wald test  |  16.38    8.96    6.66    5.53
  LIML Size of nominal 5% Wald test  |  16.38    8.96    6.66    5.53
  ---------------------------------------------------------------------


4 . ivregress 2sls Expectedyearsofschooling NationalIncome GDPperCapita (kwhpercapita = Residual)

Instrumental variables (2SLS) regression          Number of obs   =        145
                                                  Wald chi2(3)    =     312.94
                                                  Prob > chi2     =     0.0000
                                                  R-squared       =     0.6868
                                                  Root MSE        =     .05477

------------------------------------------------------------------------------
Expectedyear~g |     Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
---------------+--------------------------------------------------------------
  kwhpercapita |  .0531675   .0722325     0.74   0.462    -.0884055    .1947406
NationalIncome |  .1545424   .0610559     2.53   0.011      .034875    .2742099
  GDPperCapita | -.0704628   .0960966    -0.73   0.463    -.2588086    .1178831
         _cons |  .6137938   .0439845    13.95   0.000     .5275858    .7000017
------------------------------------------------------------------------------
Instrumented:  kwhpercapita
Instruments:   NationalIncome GDPperCapita Residual
```

```
5 . estat endog

  Tests of endogeneity
  Ho: variables are exogenous

  Durbin (score) chi2(1)          =  .024806  (p = 0.8749)
  Wu-Hausman F(1,140)             =  .023955  (p = 0.8772)

6 . estat firststage

  First-stage regression summary statistics
```

Variable	R-sq.	Adjusted R-sq.	Partial R-sq.	F(1,141)	Prob > F
kwhpercapita	**0.8399**	**0.8365**	**0.0566**	**8.45928**	**0.0042**

```
  Minimum eigenvalue statistic = 8.45928

  Critical Values                     # of endogenous regressors:    1
  Ho: Instruments are weak            # of excluded instruments:     1
```

2SLS relative bias	5%	10%	20%	30%
	(not available)			

	10%	15%	20%	25%
2SLS Size of nominal 5% Wald test	**16.38**	**8.96**	**6.66**	**5.53**
LIML Size of nominal 5% Wald test	**16.38**	**8.96**	**6.66**	**5.53**

```
7 . ivregress 2sls Meanyearsofschooling NationalIncome GDPperCapita (kwhpercapita = Residual)

  Instrumental variables (2SLS) regression          Number of obs   =        145
                                                    Wald chi2(3)    =     350.14
                                                    Prob > chi2     =     0.0000
                                                    R-squared       =     0.7240
                                                    Root MSE        =     .10455
```

Meanyearsofs~g	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
kwhpercapita	**.1488715**	**.1378936**	**1.08**	**0.280**	**-.1213951**	**.4191381**
NationalIncome	**.238623**	**.1165573**	**2.05**	**0.041**	**.0101748**	**.4670712**
GDPperCapita	**-.1098591**	**.1834509**	**-0.60**	**0.549**	**-.4694162**	**.2496981**
_cons	**-.142776**	**.0839675**	**-1.70**	**0.089**	**-.3073493**	**.0217972**

```
  Instrumented:  kwhpercapita
  Instruments:   NationalIncome GDPperCapita Residual

8 . estat endog

  Tests of endogeneity
  Ho: variables are exogenous

  Durbin (score) chi2(1)          =  .086392  (p = 0.7688)
  Wu-Hausman F(1,140)             =  .083463  (p = 0.7731)

9 . estat firststage

  First-stage regression summary statistics
```

Variable	R-sq.	Adjusted R-sq.	Partial R-sq.	F(1,141)	Prob > F
kwhpercapita	**0.8399**	**0.8365**	**0.0566**	**8.45928**	**0.0042**

```
  Minimum eigenvalue statistic = 8.45928
```

Critical Values # of endogenous regressors: **1**
Ho: Instruments are weak # of excluded instruments: **1**

	5%	10%	20%	30%
2SLS relative bias		(not available)		

	10%	15%	20%	25%
2SLS Size of nominal 5% Wald test	**16.38**	**8.96**	**6.66**	**5.53**
LIML Size of nominal 5% Wald test	**16.38**	**8.96**	**6.66**	**5.53**

10 .