

Kuznet curve of australia with evidence economics essay

[Economics](#)



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The labour search models states that, a person who is unemployed continues to search for a job that maximizes his satisfaction. The unemployment benefits could increase the reservation wage of those in search of jobs, reduce the degree of departures out of unemployment, reduce search efforts and consequently lengthening the unemployment period. Labour search model has a straightforward effect on the choices an unemployed person creates over his job search and reservation wage. To be able to offer someone the option to search for a job without forcing him to accept the first offer, this might not equal his qualification. The unemployed person usually receives the unemployment benefit. Unemployment benefits makes searching for jobs fairly economical for the unemployed and thus lengthening unemployment spells, but hopefully leads to a better job and worker match. Empirical studies show that the reservation wage of the unemployed will reduce as spells of unemployment lengthens. An example is that with a lengthy unemployment spell the qualification of a person may decline, and finally it might be more difficult to find a new job and thereby lowering the minimum wage he receives. http://edwardmcphail.com/intromacro/class3%264_files/image036.gif From the graph, it could be explained that individuals will be prepared to continue looking for a job in the labour market in places where there will be a higher wage because the subsequent offer will be higher than the previous one. The individual wouldn't be searching for a job where he is likely to be paid a lower wage. As the individual continues to search for a job the offer rate rises. http://edwardmcphail.com/intromacro/class3%264_files/image042.gif Where D = duration/length of which a person is unemployed W_0 = Wage offer r =

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reservation wage $w = w_e$ and $w_e =$ equilibrium wage. Also, in the long-run a simple successive search model incorporating tenancy of a job after unemployment demonstrates that lengthier unemployment spells leads to a greater separation rate and shorter tenure at work after unemployment. Also, if workers become unemployed at any juncture, all of the unemployed first receive the benefits of unemployment benefits henceforth. The unemployment benefits expire and those who receive it become no more qualified for it at a Poisson rate. At this point the reservation wage will now depend on the length of unemployment. Therefore a person who gets the unemployment benefits takes an offer for a job if he is offered a wage that surpasses the reservation wage, whereas a person who is no longer qualified for the Unemployment benefits takes the offer if he is offered a wage surpasses the reservation wage therefore decreasing the reservation wage of the unemployed person. From the diagram, as the length of an unemployed worker increases from D_e to D , the worker continues to search for work and the longer this happens, his qualification and savings is depleted and thereby decreasing reservation wage (r_w). Also the point that the two curves cross gives the equilibrium wage (w_e) and equilibrium duration of unemployment (D_e). He will not accept a wage offer (w_o) below the reservation wage since he prefers to continue to be unemployed

2a.

Region Mean Income Mean Gini Coefficient East Asia and The Pacific 9, 278.

0636., 134 Europe and Central Asia 15, 291. 2029. 552 Latin America and

Caribbean 8, 453. 6349. 686 Middle East and North Africa 4, 195. 4040.

641 North America 21, 362. 9233. 878 South Asia 953. 8834. 056 Sub-Saharan

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Africa2, 514. 6545. 055 From the table it can be deduced that North America has the highest mean income of 21, 362. 92 with South Asia with the lowest mean income 953. 88. Also the considering the mean Gini coefficients it can said that Europe and Central Asia has the lowest level of inequality of 29. 552 with Latin America and Caribbean having the highest level of inequality of 49. 686. It can be observed also from the table that Latin America and Caribbean, Middle East and North Africa and Sub-Saharan Africa have fairly the same level of inequality. Normally it is assumed that richest county should have the lesser level of inequality, but this is no case as the table illustrates this. North America that has the highest mean income does not have the lowest level of inequality.

i. $g = \beta_0 + \beta_1y + \beta_2y^2$

There will be an inverted -U Kuznet curve when the the sign on (β_2y^2) in the quadratic function is negative. There will also be an inverted-U Kuznets curve when the coefficients of the Kuznet curve of people in the countries first increase and later fall during the periods of economic development. This stems from the fact that if incomes stay stationary in the developing countries, the developed countries will grow wealthier. This can also in effect shift people away from developed countries since their wages isn't going to increase as compared to those in developed countries. This means that the rich countries will continue to be rich while the poor countries will continue to suffer. Situations like these pushes up inequality. In due course, because labour will become scarce in developing countries, their salaries will begin to rise again thereby lessening inequality.

2.

b. ii

$$g = \beta_0 + \beta_1 y + \beta_2 y^2$$

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$$g = 40.4 - 0.00046y + 7.35e-09y^2$$

The regression shows that if income(y) goes up by 1 Gini coefficient decreases by 0.00406 with a standard error of 0.001468 and also significant. When the income of the countries is squared y^2 , an increase in y^2 by 1 will increase the Gini coefficient by $7.35e-09$ and standard error is $5.42e-09$ is not significant. The coefficient of the constant is 40.32171; the coefficient of the constant for the standard error is 0.7429787.

Kuznet Curve with no evidence of an Inverted U

From the regression and the scatter diagram, it can be said inequality is decreasing at an increasing rate with respect to income.

2.

b. iii

For an inverted Kuznets curve to be U-shaped, inequality must first increase and later fall during the periods of economic development. From the diagram, there is no evidence of an inverted U-Kuznets curve. As illustrated in the diagram, the Kuznet curve is decreasing with respect to the gini coefficients and increasing with respect to income levels. Also to check for statistical significance, T-stat is 3.14, which is greater than 1.96 and means

it is significant at 95% confidence interval. Also the P-value is 0.002 and is lesser than 0.05, which means it is significant. When income is squared (y^2), T-value is 1.36 which is less than 1.96 which means it is insignificant at 95% confidence interval. Again, the p-value is 0.176 which is greater than 0.05 and means it is insignificant. The coefficients show no evidence of statistical significance. Also the R-squared is 6.28% which shows there might be additional variables needed to explain regression better.

2. c. i

$$g = \gamma_0 + \gamma_1 \ln y + \gamma_2 (\ln y)^2 \quad (2)C:$$

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$$g = -50.7 + 23.05845 \ln_y - 1.465444 \ln_y^2$$

From the regression, we can deduce that all things being equal a 1% increase in log of income amounts to a 23% increase in the Gini coefficient with a standard error of 4.877206. Also the t-value is 4.73 which is greater than 1.96 and is statistically significant at 95% significance level. The p-value is 0.000 and is lower 0.05 and can be said to be significant. The coefficient of the constant is 50.70113; the coefficient of the constant for the standard error is 20.20631. The R-square is 7.8% which shows there might be additional variables needed to explain Gini-coefficient better.

Kuznet Curve with evidence of an Inverted U

From the signs on the coefficients of the regression and the scatter diagram it can be deduced that Inequality is increasing at a decreasing rate with respect to income.

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2. d.

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$$g = 71.8 - 7.205\ln_y + 0.325\ln_y^2$$

From the regression we can deduce that, holding all other factors equal, a 1% increase in the log of income accounts for 7.2% decrease in the Gini coefficient with a standard error of 4.076786. Also the t-value is 4.73 which is less than 1.96 and is statistically insignificant at 95% significance level. The p-value is 0.078, which is greater 0.05 and can be said to be insignificant. Also, when the log of income is squared holding all factors constant, a 1% increase in the log income squared (\ln_y^2) will increase the Gini-coefficient by 0.323 with a standard error of 0.2417961. The coefficient of the constant is 71.77948; the coefficient of the constant's standard error is 16.83938. The R-square is 4% which shows there might be additional variables needed to explain Gini-coefficient better.

Kuznet Curve : Latin American and Carribean Countries identified

Again, from the signs on the coefficients of the regression and the slope of the scatter diagram it can be deduced that inequality is decreasing at an increasing rate with respect to income. The scatter diagram for Latin American and Carribean seems to have higher Gini coefficients because of the inclusion of the dummy variable.

2e.

USA

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$$g = 1460.4 - 290.420\ln_y + 14.78384\ln_y^2$$

For the regression for USA, we can deduce that holding all other factors constant, a 1% increase in the log of income accounts for a 290.4% decrease in the gini coefficient with a standard error of 2806814. Also the t-value is 10.35 which is more than 1.96 and is statistically significant at 95% significance level. The p-value is 0.000, which is less 0.05 and can be said to be significant. Also, when the log of income is squared holding all factors constant, a 1% increase in the log income squared (\ln_y^2) will increase the the gini-coefficient by 1460.391 with a standard error of 1.478384. The coefficient of the constant is 1460.391; the coefficient for the standard error is 139.2981. The R-square is 85% which shows the variables in the regression explain gini-coefficient well.

Kuznet Curve of USA with evidence of U-shape

In the case of USA, the signs on the coefficients of the regression and the slope of the scatter diagram it can be deduced that inequality is decreasing at an increasing rate with respect to income.

UK

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$$g = 3167.733 - 656.627\ln_y + 34.28816\ln_y^2$$

Considering the regression for USA, we can deduce that holding all other factors constant, a 1% increase in the log of income will lead to a 656.6% decrease in the gini coefficient with a standard error of 70.04603. Again the t-value is 9.37 which is greater than 1.96 and is statistically significant at 95% significance level. The p-value is 0.000, which is less 0.05 and can be said to be significant. Also, when the log of income is squared holding all factors constant, a 1% increase in the log income squared (\ln_y^2) will increase the gini-coefficient by 34.3% with a standard error of 3.610329. The coefficient of the constant is 3167.733; the coefficient for the standard error is also 339.6264. The R-square is 88% and explains the regression a little better than the case of USA.

Kuznet Curve of Latin America and Caribbean Countries

The signs on the coefficients of the regression and the slope of the scatter diagram it can be deduced that inequality is decreasing at an increasing rate with respect to income. Also UK faces a similar situation as the US as both countries are experiencing a downward sloping Kuznet curve.

Australia

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$$g = -20901.52 + 4150.912\ln_y - 205.687$$

Considering the regression for Australia, we can deduce that holding all other factors constant, a 1% increase in the log of income will lead to a 4150.912% increase in the gini coefficient with a standard error of 2118.738. The <https://assignbuster.com/kuznet-curve-of-australia-with-evidence-economics-essay/>

t-value is 1.96 which is equal to t-crit of 1.96 and is statistically significant at 95% significance level. The p-value is 0.098, which is more than 0.05 and can be said to be insignificant. Also, when the log of income is squared holding all factors constant, a 1% increase in the log income squared ($\ln y^2$) will decrease the gini-coefficient by 205.7% with a standard error of 105.4349. The t-value is 1.95 which is less than 1.96 and is statistically insignificant at 95% significance level. The p-value is 0.099, which is more than 0.05 and can be said to be insignificant. The coefficient of the constant is 20901.52; the coefficient for the standard error is also 10643.19. The R-square is 61% and shows both USA and UK's R-squared explained the regression better than in the case of Australia.

Kuznet Curve of Australia with evidence of Inverted U-shape

From the signs on the coefficients of the regression and the scatter diagram for Australia, it can be deduced that inequality is increasing at a decreasing rate with respect to income.

India

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$$g = 888.268 - 245.8418y + 17.609$$

Considering the regression for India, we can deduce that holding all other factors constant, a 1% increase in the log of income will lead to a 245.8% decrease in the gini coefficient with a standard error of 47.69539. The t-value is 5.15 which is greater than 1.96 and is statistically significant at

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95% significance level. The p-value is 0.000, which is less than 0.05 and can be said to be significant. Also, when the log of income is squared holding all factors constant, a 1% increase in the log income squared (\ln_y^2) will decrease the gini-coefficient by 17.6% with a standard error of 47.695399. The t-value is 5.06 which is more than 1.96 and is statistically significant at 95% significance level. The p-value is also 0.000, which is less than 0.05 and can be said to be significant. The coefficient of the constant is 888.4677; the coefficient for the standard error is also 163.1293. The R-square is 68% which is lesser than that of UK and USA but explains the regression better than that of India.

Kuznet Curve of India with evidence of Inverted U-shape

The signs on the coefficients of the regression and the slope of the scatter diagram for India, it can be deduced that inequality is decreasing at an increasing rate with respect to income.

Pakistan

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$$g = -759.885 + 222.499 \ln_y - 15.624 \ln_y^2$$

The regression for Pakistan, we can deduce that holding all other factors constant, a 1% increase in the log of income will lead to 222.9% increase in the gini coefficient with a standard error of 110.3603. The t-value in this case is 2.02 which is greater than 1.96 and is statistically insignificant at 95% significance level. The p-value is 0.090, which is greater than 0.05 and can be said to be significant. Also, when the log of income is squared holding

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all factors constant, a 1% increase in the log income squared (\ln_y^2) will decrease the gini-coefficient by 15.6% with a standard error of 7.815821. The t-value is 2.00 which is more than 1.96 and is statistically significant at 95% significance level. The p-value is also 0.093, which is greater than 0.05 and can be said to be insignificant. The coefficient of the constant is 759.8853; the coefficient for the standard error is also 389.2274. The R-square is 88% which is similar compared to that of UK. This R-square indicates that the variables explain 88% of the gini-coefficient.

Kuznet Curve of Australia with evidence of Inverted U-shape

The signs on the coefficients of the regression and the slope of the scatter diagram it can be deduced that inequality is increasing at a decreasing rate with respect to income. The scatter diagram also shows that inequality is lower in Pakistan since the curve depicts a U-shaped structure. f.

Year Quintile 1 Quintile 2 Quintile 3 Quintile 4 Y1969 30.560.09160.22010.38510.5993851.1121970 29.910.09160.22280.39070.6061963.07491971 31.450.08940.21680.38050.5925946.00881979 32.08580.21090.37380.58731072.1461985 32.440.08540.20880.37100.58631367.9731986 32.150.08210.20670.37240.59301389.3921987 32.130.08470.20970.37380.59041431.5391988 31.430.08610.21370.37970.59611504.1381991 31.150.08400.21270.38140.60301569.253

In examining the cumulative shares, comparing the 1970 and 1985, the Lorenz curve do not cross. Also from the graph, it can be said that 1970 had a slighter lesser inequality compared to 1985 though the gap is marginal. It also shows that income distribution decreased in fairly 1985 compared to

1975. Comparing 1969 and 1991 the Lorenz curves intersect as shown in the graph and because of that nothing can be said about which income distribution has less inequality. The intersection of the Lorenz curve will make it difficult to analyse how much less or more is the income distribution.