EDUCATION, GENDER EQUALITY, SOCIAL WELL-BEING AND ECONOMIC DEVELOPMENT IN AMERICAN COUNTRIES, 2000-2010

GUISAN, Maria-Carmen
AGUAYO, Eva

Abstract
We analyse the important role of education in economic development and social wellbeing of American countries, including indicators of gender opportunities for development as part of social well-being. In this regard we select some indicators which usually have a great importance for reaching improvements in social well-being such as Government effectiveness and voice of citizens, among Governance Indicators, and the indicator of interpersonal trust from World Values Survey. Regarding life satisfaction we analyse the correlations of three indexes with economic development and other variables. The USA and Canada have a clear outstanding position in average educational indicators and other variables, while only a few Latin American and Caribbean countries show values of education spending above World average. In spite of the UN declaration of the Millennium Development Goals (MDGs) many American countries show very low levels of education spending for the period 2000-2007. Fostering international cooperation to finance education is of uppermost importance to achieve the MDGs in those cases, and to guarantee socio-economic development. Regarding economic and social equality of opportunities for Women we find also a positive impact of education. Finally we present some econometric models which relate life satisfaction with economic development, gender equality and other variables.
Keywords: Life Satisfaction, quality of government, human capital, gender empowerment, American countries, economic development, trust, Latin America
JEL codes: C5, O52

1. Introduction

The important positive impact of education on economic and social development has been analysed in interesting studies since the pioneering quantitative studies of Denison(1964) and other authors during the period 1960-1990, cited in Neira and Guisan (2004), Guisan and Neira(2006) and other articles, to the most recent studies that relate social capital, education and quality of life, which have been possible thanks to the availability of data developed and/or published by OECD, Kaufmann et al, World Valued Surveys, World Bank and other international sources. The most outstanding findings of those studies are the many direct and indirect effects of education on the virtuous circle of socio-economic development.

More recently some quantitative studies have being applied to the analysis of gender opportunities for women to have a say in policy and making decision, in many fields related with socio-economic development where in general they have been traditionally excluded. Advances in this regard show a general positive impact on social well-being of women and men. In our view international comparisons of women wellbeing must be understood not only through indicators of relative development in comparison with men but also in absolute terms, as to say, judging if a society is a good place to live and reach a high level of quality of life both for women and men.

Section 2 analyses the educational level of population and quality of government. Section 3 analyse indicators of satisfaction with life, gender equality indicators and trust. Section 4 presents the estimation of some econometric models which relate satisfaction

with life with economic development, gender equality and other variables, emphasizing the important directs and indirect of education in this regard.. Finally section 5 present the main conclusions recommending more international cooperation to increase educational spending in many Latin American and Caribbean countries.

2. Education, development and quality of Government.

Table 1 presents the evolution of two indicators of quality of Government: *Voice of Citizens* and *Government Effectiveness*, in 22 American countries for the period 2000-2007. We have calculated data in a scale from 0 to 10, from figures in a scale -2.5 to 2.5 published by Kaufman et al(2008).

Table 1. Indicators of quality of Government: Voice of Citizens and Government Effectiveness, years 2000 and 2007

País	Voice 2000	Voice 2007	Δ Voice	Gov. Ef. 2000	Gov. Ef. 2007	Δ Gov. Ef.
Argentina	5.54	5.66	0.12	5.20	4.72	-0.28
Bolivia	5.16	5.04	-0.12	4.54	3.34	-1.00
Brazil	5.34	5.82	0.48	5.06	4.76	-0.10
Canada	8.14	7.72	-0.42	8.84	8.84	0.40
Chile	6.62	6.96	0.34	7.30	7.44	0.34
Colombia	3.82	4.44	0.62	4.36	5.06	0.90
Costa Rica	7.14	6.76	-0.38	5.98	5.78	0.00
Dominican R.	5.34	5.36	0.02	4.66	4.08	-0.38
Ecuador	4.24	4.54	0.30	3.34	2.92	-0.22
El Salvador	4.80	5.14	0.34	3.98	4.54	0.76
Guatemala	4.28	4.40	0.12	4.04	3.82	-0.02
Haiti	3.34	3.46	0.12	2.30	2.34	2.63
Honduras	4.64	4.54	-0.10	4.00	3.86	0.06
Jamaica	6.40	6.22	-0.18	5.10	5.24	0.34
Mexico	5.38	4.96	-0.42	5.60	5.26	-0.14
Nicaragua	4.56	4.80	0.24	3.76	3.18	-0.38
Panamá	6.18	6.04	-0.14	5.42	5.50	0.28
Paraguay	3.78	4.26	0.48	2.80	3.30	0.70
Peru	4.68	5.00	0.32	4.68	4.12	-0.36
USA	7.74	7.18	-0.56	8.82	8.24	-0.38
Uruguay	6.84	6.90	0.06	6.16	6.14	0.18
Venezuela	4.74	3.84	-0.90	3.64	3.26	-0.18

Source: Own elaboration from Kaufman et al(2008), transformed to a scale from 0 to 10

Voice of citizens: No country in America beat the score of 8 points in this indicator in 2007, and Canada was the only one who passed in 2000. Countries that meet or exceed the rating of 6 points in 2007 are: Canada, Chile, Costa Rica, Jamaica, Panama, USA and Uruguay. Rated between 5 and 6 points are: Argentina, Bolivia, Brazil, Dominican Republic, El Salvador and Peru. Between 4 and 5 points are Colombia,

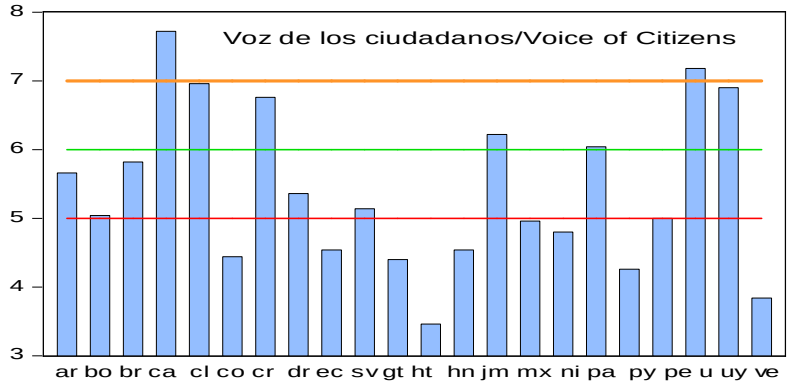
Ecuador, Guatemala, Honduras, Mexico, Nicaragua and Paraguay. Below 4 points: Haiti and Venezuela. The largest increases in the indicator of "Voice of Citizens", in 2000-2007 took place in Brazil, Colombia and Paraguay, and the largest decreases in Venezuela, USA and Canada.

Government Effectiveness: Top positions correspond to Canada, Chile, USA and Uruguay. Between 5 and 6 points: Colombia, Costa Rica, Jamaica, Mexico and Panama. Between 4 and 5 points: Argentina, Brazil, Dominican R., El Salvador and Peru. Below 4 points were in 2007: Bolivia, Ecuador, Haiti, Nicaragua, Paraguay and Venezuela. The largest declines in 2000-2007 occurred in Bolivia, Dominican Republic, Nicaragua, USA and Peru and the largest increases in Colombia, El Salvador and Paraguay.

Only Canada, USA, Chile and Urugual reached values higher than 6 in Government Effectiveness of year 2007, These 4 countries plus Costa Rica, Jamaica and Panama reach a value higher than 6 in Voice of Citizens.

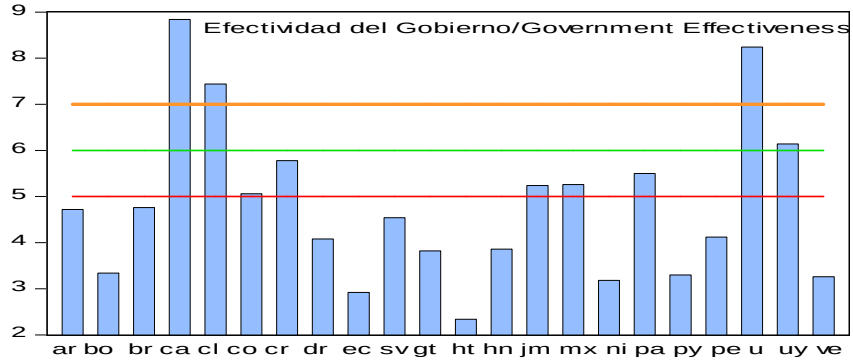
Graphs 1 and 2 show the values of the indicators of table 1 in year 2007 for 22 American countries. Name of country is indicated by the corresponding internet code and in the case of the USA by the letter “u”.

Graph 1. Voice of Citizens in American Countries, year 2007



Note: Data of table 1

Graph 2. Government Effectiveness in American Countries, year 2007



Note: Data of table 1

Table 2. Educational level of population and real GDP per capita ($2005 PPP)

País	Public spending on Education 2000 pc	Public spending on Education 2007 pc	Years of Schooling 1995	Years of Schooling 2004	GDP pc 2000	GDP pc 2007
Argentina	475	616	8.22	6.71	10292	12502
Bolivia	171	251	5.24	4.59	3563	3972
Brazil	330	471	4.35	6.60	7921	9034
Canada	1695	1788	10.94	10.16	32477	36260
Chile	379	446	7.66	6.88	10475	13108
Colombia	261	328	4.84	6.14	6433	8109
Costa Rica	386	485	5.76	6.28	8117	10239
Dominican R.	107	139	5.00	5.86	4957	6333
Ecuador	76	NA	6.20	5.74	5491	7035
El Salvador	126	165	4.22	5.56	4974	5481
Guatemala	62	131	2.92	4.23	3963	4308
Haiti	17	NA	2.52	4.29	1190	1090
Honduras	103	NA	3.86	4.53	2898	3585
Jamaica	347	313	5.03	6.29	5758	5741
Mexico	585	643	6.39	6.80	12071	13307
Nicaragua	69	NA	4.13	4.41	2115	2427
Panamá	422	411	7.59	6.42	8149	10757
Paraguay	169	167	5.46	4.80	3792	4186
Peru	164	185	6.99	5.83	5586	7400
USA	1873	2385	11.83	10.70	39108	43055
Uruguay	235	299	6.98	6.73	8862	10592
Venezuela	416	420	5.33	6.34	9564	11480

Source: World Bank(2008), Barro and Lee(2000) and own calculations for estimated Years of Schooling in year 2004 and for Spending on Education per capita, as explained in the Annex. Notes: Data of Public Spending on Education and Gross Domestic Product per capita, of years 2000 and 2007 are in $ per inhabitant at 2005 prices and Purchasing Power Parities (PPPs). Years of Schooling corresponds to average schooling of population of age 15+.

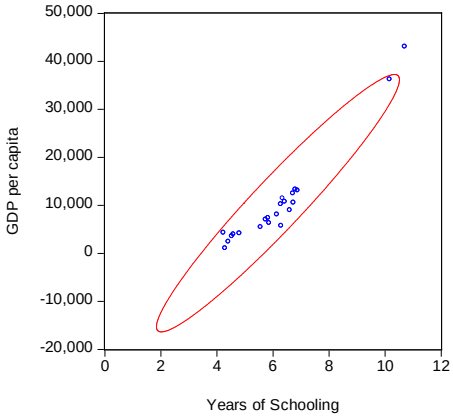
Although data of private spending on education would increase the total spending of the countries, generally it would not be sufficient to show a good level of total spending in many countries with data below 300 dollars, at 2005 prices and PPPs, in table 1. It is really sad to be aware that in spite of the Millennium Development Goals, expenditure in education remains very low in many American countries.

The United States of America and Canada show very high levels of education spending, and even an increase in the period 2000-2007. Among the other countries of table 1, the highest levels of public spending on education in year 2007 correspond to Mexico (643), Argentina (616), Costa Rica (485). Brazil (471), Chile (443), Venezuela (420) and Panama (411). Many poor countries have shown little increase for 2000-2007,

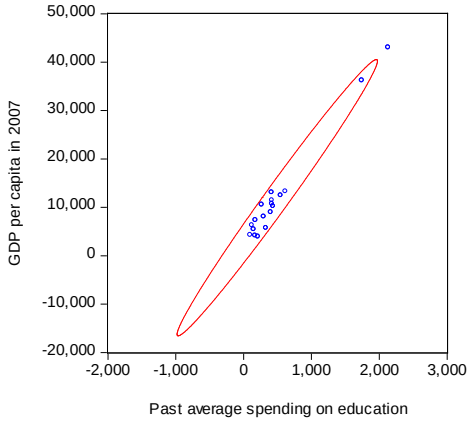
Graphs 3 and 4 show the positive relationship between indicators of education and economic development. In graph 1 we relate Years of schooling in 2004 (as an indicator of human capital for the period 2000-2007) with real Gross Domestic Product in year

2007. In graph 2 we related the average of public spending on education of years 2000 and 2007 (as representative of average spending for the period 2000-2007) with economic development. The positive role of education on economic development is usually very high as shown by Denison(1967) and other pioneering studies, due to many direct and indirect effects, as seen in Guisan and Neira (2006), Guisan(2009) and other studies there cited.

Graph 3. GDP pc and Years of Education



Graph 4. GDP pc and Past Spending on Education



We express our concern and desire of improvement of education spending in those Latin American and Caribbean countries which have shown very low resources for the decade 2000-2010.Are the Millennium Development Goals being achieved? It seems that little has been made to advance in the eradication of poverty and improving the life of the poorest countries when expenditure in Education is kept below 300 Dollars in many countries.

3. Gender equality, satisfaction with life, trust and development in America

Gender differences and satisfaction with life: Accordingly to Inglehart(2002) there seems that in general terms there are some gender differences in subjective well-being related with age: while among younger population there is a higher level of happiness it happens the opposite among older population with a lower percentage of old women declaring themselves as very happy in comparison with men. They found that, due to the compensation between younger and older population, the overall percentage did not show important gender differences.

Happiness indexes, or subjective measures of *life satisfaction*, usually represent more the satisfaction with personal life (family, friends, health, social environment, and other circumstances) than satisfaction with life opportunities for job, politics and self development. Nevertheless it does not mean that women do not find often, in many countries, more difficulties for equality of opportunities. In fact we may notice gender differences, with lower levels for women, regarding particular difficulties. For example women, in politics, management, trade unions, public administration, universities, and other institution, very often feel strong dissatisfaction when they find more obstacles and less support than men to reach outstanding positions in direction and decision making.

Table 3 shows data of Satisfaction with Life (SWLECO05), together with indicators of Trust, measured by World Values Surveys, the United Nations indicators of Gender Development Index (GDI) and Gender Empowerment Measure (GEM), for the period 2000-2009, representing the situation in American countries around year 2005.

País	Satisfaction With Life SWL ECO05	Trust Interpersonal 2000-2008	Gender GDI 2007	Gender GEM 2009	PIB pc 2005 PPPs
Argentina	6.47	40.6	0.862	0.699	10815
Bolivia	5.49	48.8	0.728	0.511	3758
Brazil	6.47	17.5	0.810	0.504	8471
Canada	7.60	85.9	0.959	0.830	35065
Chile	6.79	34.4	0.871	0.526	12173
Colombia	6.18	30.9	0.806	0.508	7231
Costa Rica	6.62	48.9	0.848	0.685	9004
Dominican R.	5.63	74.7	0.775	0.550	5415
Ecuador	6.27	72.7	0.554 [1]	0.622	6737
El Salvador	6.16	60.4	0.740	0.539	5167
Guatemala	5.32	51.9	0.696	na	4064
Haiti	4.09		0.239 [1]	na	1068
Honduras	5.25	47.0	0.721	0.589	3298
Jamaica	6.02		0.762	na	6122
Mexico	6.77	41.7	0.847	0.629	12563
Nicaragua	5.66	46.1	0.686	0.542	2311
Panamá	6.36	45.9	0.838	0.604	9186
Paraguay	5.76	22.7	0.759	0.510	3900
Peru	6.22	30.5	0.804	0.640	6454
USA	7.62	78.8	0.942	0.767	41826
Uruguay	6.37	54.2	0.862	0.551	9266
Venezuela	6.09	48.5	0.827	0.581	9924

Source: The Economists for SWLECO05, WVS por Trust, UNDP for GDI and GEM and WB for Gross Domestic Product per capita in year 2005.

Table 4 shows correlations of Satisfaction with Life with economic development and other indicators of social well-being, around year 2005.

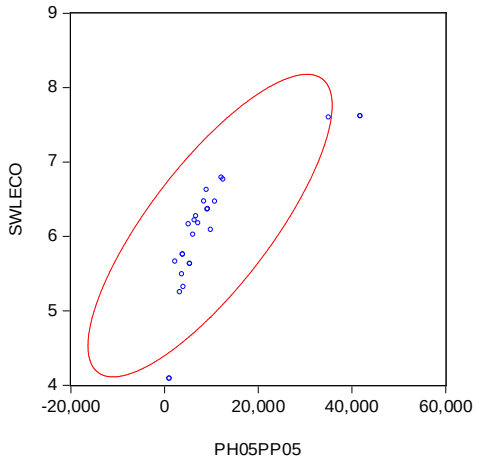
Table 4. Correlation coefficients between Satisfaction with Life and other variables

	Satisf. with Life (1)	Trust Inteper. (2)	GDP Per capita (3)	Years of Schooling (4)	Gov. Quality: Voice (5)	Gov. Quality: Effect. (6)	GEM (7)
(1)	1.0000	0.3242	0.8641	0.9401	0.7738	0.8887	0.9316
(2)	0.3242	1.0000	0.5984	0.5181	0.4527	0.4683	0.3279
(3)	0.8641	0.5984	1.0000	0.9582	0.6846	0.8430	0.8229
(4)	0.9401	0.5181	0.9582	1.0000	0.7508	0.8847	0.9280
(5)	0.7738	0.4527	0.6846	0.7508	1.0000	0.8944	0.7608
(6)	0.8887	0.4683	0.8430	0.8847	0.8944	1.0000	0.8620
(7)	0.9316	0.3279	0.8229	0.9280	0.7608	0.8620	1.0000

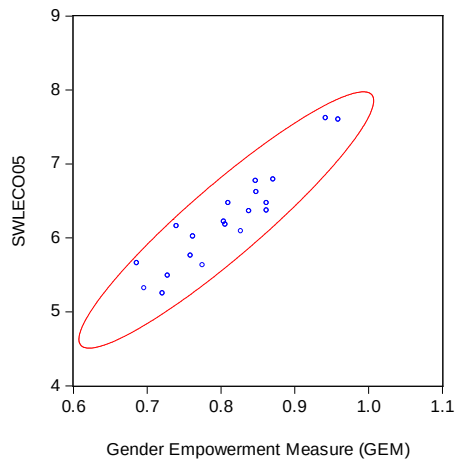
In the Annex we present a comparison of correlations with socio-economic development and three indexes of Satisfaction with Life. We have chosen SWLECO for this analysis because it is the most correlated with the educational level of population. *Satisfaction with life* is positively related with *economic development* as seen in figure 3.3 of Stevenson and Wolfers(2009) and graph 5 below, as well as in the estimation of Model 1 in the next section.

We also find, with data of American countries around year 2005, a positive relationship of *Satisfaction with Life* with the explanatory variables *Gender Empowerment Measure* (GEM) and with *Educational level of population* as seen in graphs 6 and 7 and in the econometric Model 2 of the next section. On the other hand graph 8 shows the positive correlation of GEM with the *Educational level of population.*

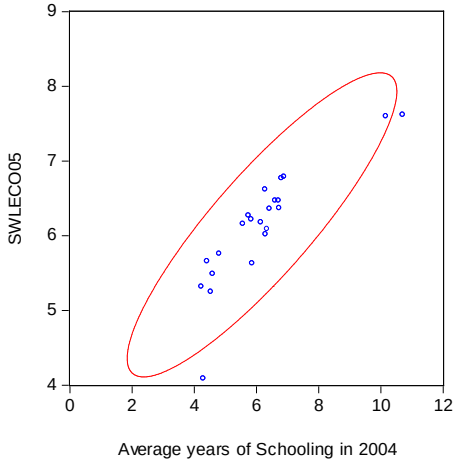
Graph 5. Satisfaction with Life and GDP pc in 2005: 22 American countries



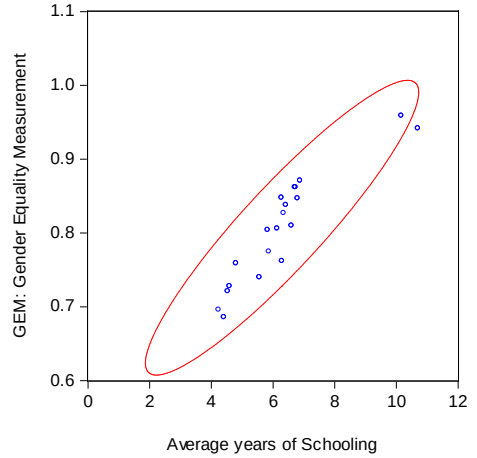
Graph 6. Satisfaction with Life and GEM in year 2005: 20 American countries



Graph 7. Satisfaction Life and Education in year 2005: 22 American countries



Graph 8. Gender Equality and Education around year 2005: 20 American countries



4. Econometric models relating Satisfaction with Life with other variables.

Model 1 relates Satisfaction with Life with economic development and gender empowerment measure (GEM) in 20 American countries with available data.

Model 2 includes GEM and Education as explanatory variables.

Model 3 includes also an indicator of Government Quality, *Government Effectiveness*, as well as dummy variables for the fixed effects in some countries, and presents a very good goodness of fit, as well as significant and positive effects

We notice positive and significant impacts of the explanatory variables on *Satisfaction with Life.* The role of education is highly positive through direct and indirect effects, because as seen in Guisan(2009), and other studies, GEM, GDP per capita and Government Effectiveness are also positively dependent of Education. Graph A1 in the Annex shows the estimations and residuals of SWLECO5 in the three models.

Model 1. Dependent Variable: SWLECO05. Method: Least Squares				
Included observations: 20 American countries, around year 2005				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.284379	0.896223	1.433102	0.1700
GDP per capita (thousand $)	0.019580	0.008870	2.207314	0.0413
GEM	5.892879	1.200141	4.910155	0.0001
R-squared	0.895930	Mean dependent var		6.242500
Adjusted R-squared	0.883686	S.D. dependent var		0.650019
S.E. of regression	0.221688	Akaike info criterion		-0.037613
Sum squared resid	0.835472	Schwarz criterion		0.111746
Log likelihood	3.376134	Hannan-Quinn criter.		-0.008457
F-statistic	73.17571	Durbin-Watson stat		1.685564
Prob(F-statistic)	0.000000			

Model 2. Dependent Variable: SWLECO05. Method: Least Squares				
Included observations: 20 American countries, around year 2005.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.814486	0.896314	2.024388	0.0589
GEM	3.880637	1.604332	2.418849	0.0271
Years of Schooling	0.205905	0.072315	2.847340	0.0111
R-squared	0.909339	Mean dependent var		6.242500
Adjusted R-squared	0.898673	S.D. dependent var		0.650019
S.E. of regression	0.206913	Akaike info criterion		-0.175556
Sum squared resid	0.727821	Schwarz criterion		-0.026196
Log likelihood	4.755558	Hannan-Quinn criter.		-0.146399
F-statistic	85.25632	Durbin-Watson stat		1.650161
Prob(F-statistic)	0.000000			

Model 3. Dep. Variable: SWLECO05. Method: Least Squares with Dummies				
Included observations: 20 American countries, around year 2005				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.494799	0.697890	3.574772	0.0051
Governement Effect.	0.100386	0.042298	2.373311	0.0391
GEM	3.067486	1.184273	2.590184	0.0269
Years of Schooling	0.128427	0.054583	2.352878	0.0404
R-squared	0.980472	Mean dependent var		6.242500
Adjusted R-squared	0.962897	S.D. dependent var		0.650019
S.E. of regression	0.125208	Akaike info criterion		-1.010830
Sum squared resid	0.156770	Schwarz criterion		-0.512964
Log likelihood	20.10830	Hannan-Quinn criter.		-0.913641
F-statistic	55.78732	Durbin-Watson stat		2.921235
Prob(F-statistic)	0.000000			

Note: Coefficients for Dummy variables: D8: Dominican R. -0.4042, D10: El Salvador 0.2254, D11: Guatemala -0.2364, D13: Honduras -0.4257, D15: Mexico 0.2757, D21: Peru -0.2496

5. Conclusions

Although the top American countries, the USA and Canada have reached high standards of socio-economic development, only a few countries, among those of Latin America and Caribbean, have reached middle level of socio-economic development and several are below World average. The main difference among the 22 American countries here analysed is the educational level of population and the level of spending on education. Here we have presented a comparison of several indicator of quality of government, life satisfaction, gender equality, trust and education in American countries and have insisted upon the great importance of education to foster socio-economic well-being. We have presented three econometric models which show positive effects of education on life satisfaction, both directly and indirectly through the positive impact of education on gender equality, quality of government and economic development.

Bibliography

Barro, Robert J. & Lee, Jong-Wha, 1994. "Sources of economic growth", *Carnegie-Rochester Conference Series on Public Policy*, Elsevier, vol. 40(1), pages 1-46, June.

Bjornskow, C. (2006). "How Does Social Trust Affect Economic Growth?" *Department of Economics Aarhus School of Business Working Paper* 06-2.

Crabtree, S. (2005). "The Economics of Happiness". *Gallup Management Journal*[3]

Deaton, A.. (2008). "Income, Health, and Well-Being around the World: Evidence form the Gallup World Poll". *Journal of EconomicPerspectives*, Volume 22, Number 2, and *Gallup Management Journal*.[4]

Denison, E. (1967*). Why growth rates differ (postwar experience in nine western countries)*. With collaboration from J-P Poullier. The Brookings Institution, Washington.

Goldin, C. and Katz, L.F. (2001). "The Legacy of U.S. Educational Leadership: Notes on Distribution and Economic Growth in the 20th Century," *American Economic Review*, American Economic Association, vol. 91(2), pages 18-23, May.

Guisan, M.C. (1980). "Forecasting Employment through an Internacional Cobb-Douglas Function. An Analysis of 23 OECD Countries". Econometric Society World Congress, Aix-en-Provence.

Guisan, M. C. (1997) "Economic growth and education: a new international policy". Society for International Development, SID 22nd World Conference, series *Economic Development* n.18.[1]

Guisan, M.C.(2009 b). "Government Effectiveness, Education, Economic Development And Well-Being: Analysis Of European Countries In Comparison With The United States And Canada, 2000-2007", *Applied Econometrics and International Development*, Vol. 9-1. [1]

Guisan, M.C. (2009 c). "Quality of Government, Education and World Development: An Analysis of 132 countries, 2000-2007", *International Journal of Applied Econometrics and Quantitative Studies*, Vol.6, special issue.[1]

Guisan, M.C. (2010). "A Comparative Analysis of Women´s participation in Labor, Income, Politics and Social Decision Making, in Spain, Europe and North America", Revista Galega de Economia (English Edition), Vol. 19-3, free on line.[5]

Guisan, M.C., and Aguayo. E.(2005). "Industry and Economic Development In Latin America, 1980-2002", *Applied Econometrics and International Development*, Vol. 5(3).[1]

Guisan, M.C., Aguayo, E. and Exposito, P. (2001a). "Economic Growth and Cycles: Cross-country Models of education, Industry and Fertility and International Comparisons".*Applied Econometrics and International Development*. Vol.1-1, pp.9-38. [1]

Guisan, M.C., Aguayo, E. and Exposito, P.(2001b). Education and World Development in 1900-1999. A General View and Challenges for the Near Future. *Applied Econometrics and International Development* Vol. 1-1, pp.101-110.[1]

Guisan, M.C. and Cancelo, M. T. (2001). Economic Development in OECD countries during the 20th century. Working Paper of the Series *Economic Development*, n.49, downloadable[1].

Guisan, M.C. and Frias, I. (1997) "Economic growth and social welfare in the European regions". Working Paper of the series *Economic Development* n.9, free downloadable.[1]

Guisan, M.C. and Neira, I. (2006). "Direct and Indirect Effects of Human Capital on World Development, 1960-2004", *Applied Econometrics and International Development*, 6 (1).[1]

Inglehart, R.(2002). "Gender, Aging, and Subjective Well-Being". *International Journal of Comparative Sociology*, October 2002; vol. 43, 3-5: pp. 391-408.

Kaufmann D., A. Kraay, and M. Mastruzzi (2008): Governance Matters VII: Governance Indicators for 1996-2007. World Bank Policy Research Working Paper nº 4654.[2]

Lee, Jong-Wha & Barro, Robert J, 2001. "Schooling Quality in a Cross-Section of Countries" *Economica*, London School of Economics and Political Science, vol. 68(272), pages 465-488.

Marks, N., Simms, A., Thompson, S. and Abdallah, S. (2006). HPI Index. NEF Foundation.

Robbins, D. J. (1999). "Gender, Human Capital and Growth: Evidence from Six Latin American Countries", OECD Development Centre Working Papers151, OECD, Paris.

Sharpe, A.(1999). "A Survey of Indicators of Economic and Social Well-being", *Centre for the Study of Living Standard*. Paper for the *Canadian Policy Research Networks*, July 22.

Stevenson, B. and Wolfers, J. (2009). "The Paradox of Declining Female Happiness", *American Economic Journal: Economic Policy* Vol. 1-2, pp.190-225.

The Economist. Quality of Life.

Veenhoven, R. (2005). World Data base, http://worlddatabaseofhappiness.eur.nl/

WVS(2006). World Values Survey Association: http://www.worldvaluessurvey.org

[1] http://www.usc.es/econmet/eaa.htm

[2] http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1148386

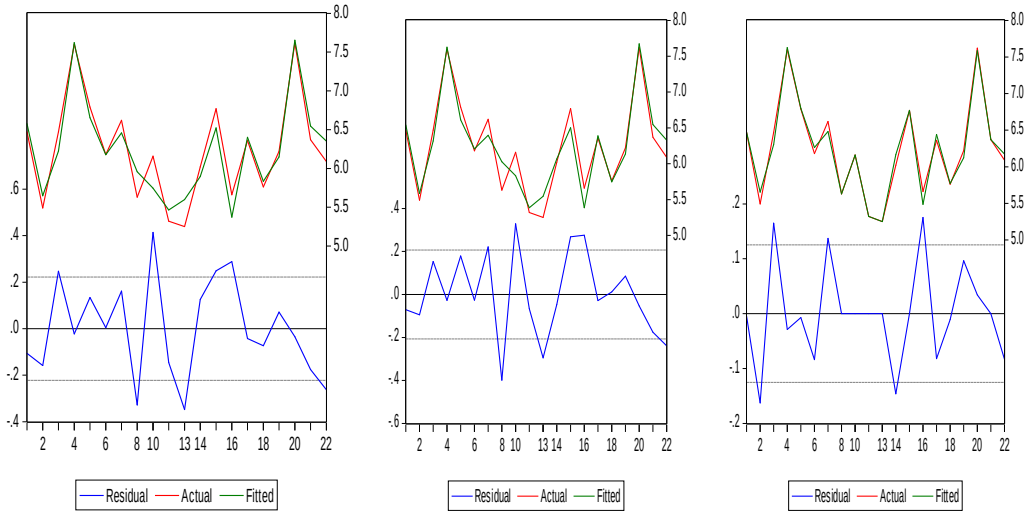
[3] http://gmj.gallup.com/content/103549/economics-happiness.aspx

[4] http://www.gallup.com/poll/.../Angus%20Deaton%20Gallup%20Poll%20Article. Pdf

[5] http://www.usc.es/econo/RGE/dispon.htm (see link to English edition updated in the Annex)

Annex on line at the Journal Website: http://www.usc.es/econmet/aeid.htm

Graph A1. Actual and Fitted values of Satisfaction with Life and residuals



Model 1 Model 2 Model 3

Table A1. Correlation: 79 países del mundo con datos de nbm132

	SWLECO	SWL2F	SWLVEEN
SWLECO	1.00	0.76	0.72
SWL2F	0.76	1.00	0.91
SWLVEEN	0.72	0.91	1.00
TRUSTWVS	0.51	0.39	0.45
TYR04F	0.85	0.57	0.51
EDUH00	0.80	0.70	0.63
PH07PP05	0.84	0.67	0.60
GOV1X07	0.74	0.58	0.49
GOV2X07	0.87	0.68	0.60
GEM08	0.73	0.47	0.57

Table A2. 15 países de América con dato

	SWLECO	SWL2F	SWLVEEN
SWLECO	1.00	0.67	0.28
SWL2F	0.67	1.00	0.51
SWLVEEN	0.28	0.51	1.00
TRUSTWVS	0.29	0.29	0.23
TYR04F	0.95	0.70	0.31
EDUH00	0.86	0.60	0.35
PH07PP05	0.88	0.64	0.33

GOV1X07	0.76	0.48	0.01
GOV2X07	0.88	0.64	0.36
GEM08	0.78	0.52	0.70
WPOL	0.06	-0.02	0.22
WINCRATIO	0.43	0.27	0.22

Model 3. Dependent Variable: SWLECO05. Method: Least Squares
Included observations: 20 American countries, around year 2005

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.494799	0.697890	3.574772	0.0051
Governement Effect.	0.100386	0.042298	2.373311	0.0391
GEM	3.067486	1.184273	2.590184	0.0269
Years of Schooling	0.128427	0.054583	2.352878	0.0404
D8: Dominican R.	-0.404254	0.132886	-3.042104	0.0124
D10: El Salvador	0.225458	0.141983	1.587920	0.1434
D11: Guatemala	-0.236487	0.149559	-1.581231	0.1449
D13: Honduras	-0.425718	0.140855	-3.022380	0.0128
D15: Mexico	0.275710	0.131603	2.095016	0.0626
D21: Peru	-0.249652	0.137659	-1.813551	0.0998
R-squared	0.980472	Mean dependent var		6.242500
Adjusted R-squared	0.962897	S.D. dependent var		0.650019
S.E. of regression	0.125208	Akaike info criterion		-1.010830
Sum squared resid	0.156770	Schwarz criterion		-0.512964
Log likelihood	20.10830	Hannan-Quinn criter.		-0.913641
F-statistic	55.78732	Durbin-Watson stat		2.921235
Prob(F-statistic)	0.000000			

SOCIAL COHESION INDICATORS

1. Life satisfaction

http://www.oecd-ilibrary.org/docserver/download/fulltext/8109011ec030.pdf?expires=1291364696&id=0000&accname=guest&checksum=0B42B63D160D5385604618D14A6FE9B7

Data source: OECD (2009) *Society at a Glance 2009: OECD Social Indicators*, Chapter 8, Social Cohesion Indicators, Table CO1: Life satisfaction. The data is from the 2006 Gallup World Poll.

http://www.socialreport.msd.govt.nz/comparisons/definitions-data-sources.html

A great deal of research has been done to find out what determines life satisfaction or happiness – how it relates to demographic factors such as age and sex, or other aspects of people's lives such as health, education, work status and income. The research has established that subjective wellbeing measures themselves are sufficiently reliable and valid for wider use, despite some shortcomings.115 Self-reported life satisfaction measures can provide insights into what matters to people. However, because of the human tendency to adapt to circumstances, these measures are not a reliable reflection of people's actual conditions of life.116 To be meaningful for policy,

measures of subjective wellbeing must go together with measures of objective conditions.

Gender, Aging, and Subjective Well-Being

1. Ronald Inglehart
    1. *Institute for Social Research, University of Michigan, 3067 ISR, Ann Arbor, Michigan, 48106-1248, USA*

Abstract

Previous research has consistently found that men and women have similar levels of happiness, life satisfaction, and other global measures of subjective well-being. This article demonstrates that significant gender-related differences in subjective well-being exist— but tend to be concealed by an interaction effect between age, gender and well-being. Women under 45 tend to be happier than men; but older women are less *happy. Thus, in a pooled sample of 146,000 respondents from 65 societies, among the youngest group, 24 percent of the men and 28 percent of the women describe themselves as very happy; but among the oldest group, only 20 percent of the women describe themselves as very happy, while 25 percent of the men do so. The relationship between gender and well-being reverses itself, moving from a female advantage of 4 points to a deficit of 5 points. Given the huge sample size, these differences are highly significant.*

The aspiration-adjustment model implies that, despite their continuing disadvantages in income, status, and power, women of today should show higher levels of subjective well-being than men. A global women's movement has been pushing for gender equality throughout the world, with some success, so that currently, women's achievement tends to be above traditional aspiration levels. But this is offset by a systematic tendency to devalue older women. This tendency is particularly strong in advanced industrial societies where women have made the most progress—but where the mass media and advertising convey the message that only young women are beautiful and devalue the social worth of older women (Bluhm 2000). This produces an interaction between gender, age, and well-being that conceals statistically significant and theoretically interesting gender differences in subjective well-being.