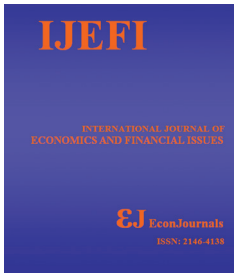

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Petro Rents and Higher Education: A Cross-country Examination

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ABSTRACT

This study provides an empirical investigation to test one of the transmission channels of resource curse, i.e., higher education. Our panel data analysis of 70 countries from 2006 to 2014 shows petro rents have a positive impact on the indicator of higher education and training in developed countries but petro rents have no statistically significant effect on the indicator of higher education and training in developing countries. We also find petro rents have a positive impact on the quality of education in both groups of countries but we find a negative and statistically significant association between petro rents and the quantity of higher education in developing countries which can explain resource curse. These findings are robust when we control for other major drivers of dependent variables, unobservable country- and time-fixed effects.

Keywords: Resource Curse, Oil Rents, Higher Education, Human Capital
JEL Classifications: I25, O15, O13

1. INTRODUCTION

Endogenous economic growth theory suggests a strong link between human capital investment, particularly education, and economic growth (Romer, 1989). Furthermore, in endogenous growth theory, the level of human capital can have a huge impact not only on short-run growth but also on growth in the long run. If the speed of technological progress depends on the level of the human capital stock, and this is a perfectly plausible assumption, then the long-run growth rate of the economy also depends on the level of the human capital stock (Romer, 1990). If the stock of knowledge helps in gaining additional knowledge, and knowledge is produced by human capital, there may be increasing returns to human capital. In this case, the benefits from investing in education can be enormous (Kronenberg, 2004).

Barro (2001) argues that education permanently increases the efficiency of the labor force by fostering democracy and that human capital facilitates the absorption of superior technologies from leading countries; this channel is supposed to be especially important at the secondary and higher levels. Similarly, Aghion et al. (1999) contend that education creates better conditions for good governance by improving health and enhancing equality (Stijns, 2006).

Development economists, and most notably Sen (1999), stress the importance of education, and in particular of educating women in developing countries. The marginal social returns of education for growth are considered sizeable at the human capital levels characterizing developing economies (Stijns, 2006).

Petro-dependent countries suffer from what economists call the "resource curse." In its simplest form, this refers to the inverse association between growth and natural resource abundance, especially oil and gas. This association repeatedly has been observed across time and in countries that vary by population size, income level, and type of government; it is so persistent that has been called a "constant motif" of economic history. Specifically, countries that are resource poor (without petroleum) grew four times more rapidly than resource-rich (with petroleum) countries between 1970 and 1993, despite the fact that they had half the savings (Karl, 2004). Some economists argue that about half of the natural resource curse works through the education channel. We are interested in understanding with more detail the relationship between petro (including oil and gas) rents and higher education especially in developing countries.

In this paper, the literature review is firstly studied and then data and method are presented and at the following, the results of the model are explained and in the end, the conclusion is discussed.

2. LITERATURE REVIEW

Numerous researches, for instance Gylfason and Zoega (2002), Sachs and Warner (1997) and Sala-i-Martin (1997), have found a significant negative correlation between natural resource abundance and economic growth. Confronted with this empirical finding, economists have developed theories that can explain the curse of natural resources. Most economists agree that there must be some sort of crowding out: If natural resources crowd out some activity X, and X is important for growth, then natural resources slow down growth. Plausible candidates for X include education, manufacturing, and sound government policy (Kronenberg, 2004). Mehlum et al. (2006) and Farzanegan (2014) mentioned that loot able natural resources such as oil are the main discouraging force.

Review of the literature on the relationship between petro rents and higher education indicate that petro rents can weaken demand for higher education. Auty (1993) argues that mining activity effectively "crowds out" other activities by monopolizing resources, including the human resources needed to develop and sustain other activities in the region. Sachs and Warner (1995) claim that natural resource abundance creates a false sense of confidence and those easy riches lead to sloth. An expanding primary sector does not need a high-skilled labor force, so that spending on education need not increase.

Gylfason (2001) argues that it is not the existence of natural resources per se that imposes a drag on growth, but rather the way governments deal with the issue. Using public expenditure on education as indicator, Gylfason finds a statistically significant relationship between natural resource abundance and low levels of educational effort. Counter-examples include Botswana and Norway. Other indicators also show a negative correlation between natural resource abundance and educational achievement. As a next step, Gylfason argues that education is important for economic growth. He finds clearly positive, but decreasing, returns to education. A positive relationship between secondary school enrolment and economic growth is found significant. Gylfason concludes that about half of the natural resource curse works through the education channel (Kronenberg, 2004). Papyrakis and Gerlagh (2003) argue that the schooling transmission channel is almost twice as important as the corruption channel. Natural resource booms lead to a decline in the manufacturing sector for which human capital is an important production factor.

Stijns (2006) using a cross-country VAR model concludes that resource booms tend to engender to increased levels of educational expenditure and resource wealth and the corresponding rents seem to make a positive and significant difference in terms of allowing countries to invest in human capital. His observations come in contrast to Gylfason's (2001) findings.

Farzanegan (2011) examined the effects of oil export revenues per capita shocks on the spending behavior of the Iranian government. He concludes that a reduction in oil rents creates incentives for the government to pay more attention in non-oil economy, investing in research and development fields, and human capital.

Bell (2014) examines the impact of the minerals boom to date on the demand for higher education in Central Queensland, Australia. He argues that the minerals boom has had a negative significant impact on the demand for higher education in many regional areas in Australia. Increased employment opportunities and rapidly rising costs of living have motivated many current and potential students to move into the workforce rather than continuing their education.

Summarizing the literature review, we can define the following hypothesis for our empirical examination. We are also interested in understanding the difference between the effect of petro rents in developing and developed countries.

Hypothesis 1: Higher levels of petro rents decrease the index of higher education and training in developing countries.
Hypothesis 2: Higher levels of petro rents increase the index of higher education and training in developed countries.
Hypothesis 3: Higher levels of petro rents decrease on-the-job training in developing countries.
Hypothesis 4: Higher levels of petro rents enhance on-the-job training in developed countries.
Hypothesis 5: Higher levels of petro rents decrease the quality of higher education in developing countries.
Hypothesis 6: Higher levels of petro rents enhance the quality of higher education in developed countries.
Hypothesis 7: Higher levels of petro rents decrease the quantity of higher education in developing countries.
Hypothesis 8: Higher levels of petro rents increase the quantity of higher education in developed countries.

3. METHODS

The data-set we use in our empirical work is a 9-years panel covering the period from 2006 to 2014 for 70 countries (Appendix Table A). The dependent variables in Tables 1-4 are the indicator of higher education and training, the indicator of on-the-job training, the indicator of the quality of higher education (supply side), and the indicator of the quantity of higher education (demand side). These data are from The World Economic Forum's annual executive opinion survey, which feeds into its Global Competitiveness Reports (GCR).

We are mainly interested in the effect of the petro rents. Petro rents have a major share of natural resources rents including crude oil and natural gas. The estimates of natural resources rents are calculated as the difference between the price of a commodity and the average cost of producing it. This is done by estimating the world price of units of specific commodities and subtracting estimates of average unit costs of extraction or harvesting costs (including a normal return on capital). These unit rents are then multiplied by the physical quantities which countries extract or harvest to determine the rents for each commodity. The source of this data is World Development Indicators of the World Bank. In order to facilitate comparison between the coefficients of the model and to match the scales of variables, the scale of petro rents variable is changed with the following conversion formula[1]:

1 This formula is used by GCR for some of indicators.

Table 1: Determinants of higher education and training estimation: Country-and year-fixed effects

Independent variable	Dependent variable: Higher education and training					
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	4.16***	4.15***	2.41***	1.74***	5.29***	5.12***
	(35.26)	(35.69)	(15.48)	(8.48)	(5.29)	(4.94)
Petro	0.07*	−0.02	0.03	−0.01	0.07**	0.01
	(2.04)	(−0.44)	(1.27)	(−0.34)	(2.30)	(0.21)
Petro*developed		0.26***	0.18**	0.21**		0.19*
		(3.33)	(2.51)	(2.54)		(1.69)
Institutions			0.39***	0.33***	0.35***	0.35***
			(13.33)	(11.93)	(13.60)	(14.24)
Tech				0.24***	0.17***	0.16***
				(5.22)	(3.41)	(3.48)
Wage					−0.52***	−0.49***
					(−3.19)	(−2.95)
Observations	551	551	551	551	422	422
Countries	70	70	70	70	62	62
Adjusted R^2	0.97	0.97	0.98	0.98	0.98	0.98

Robust t-statistics in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively

Table 2: Determinants of on-the-job training estimation: Country-and year-fixed effects

Independent variable	Dependent variable: On-the-job training					
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	3.85***	3.84***	1.03***	0.69**	5.16**	4.84**
	(20.68)	(20.06)	(4.39)	(2.27)	(2.32)	(2.02)
Petro	0.16***	−0.03	0.05	0.03	0.13***	0.00
	(2.69)	(−0.36)	(1.17)	(0.63)	(3.27)	(0.05)
Petro*developed		0.51***	0.39***	0.40***		0.37*
		(2.99)	(2.74)	(2.68)		(2.68)
Institutions			0.62***	0.59***	0.59***	0.59***
			(16.96)	(15.91)	(13.83)	(14.32)
Tech				0.13**	0.17**	0.16**
				(1.98)	(2.06)	(2.11)
Wage					−0.71**	−0.65***
					(−2.01)	(−1.74)
Observations	551	551	551	551	422	422
Countries	70	70	70	70	62	62
Adjusted R^2	0.93	0.93	0.95	0.95	0.95	0.96

Robust t-statistics in parentheses. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively

$$6*\left(\frac{\ln(\text{country score}+1)}{\ln(\text{sample maximum}+1)}\right)+1 \quad (1)$$

Resource rents are largely exogenous in the model. The major driver of rent, commodity prices are given to countries exogenously. For example, petro rents are determined in international markets and are affected largely by factors beyond the control of the domestic economy. Production of resources also depends on flow of capital and investment, political stability of target country, related geographical region and so on (Farzanegan, 2014). Thus it is reasonable to assume that a large part of within-country variation in our key independent variable (rents) is exogenous with higher education.

It is unrealistic to assume that petro rents alone determine the index of higher education and training. There are other time-variant variables which may affect the dependent variable in addition to petro rents. To account for other channels of causality, we add a set of control variables. Empirical research has shown that the quality of institutions should matter for the education-rents nexus. Thus, we expect to see a positive sign for the quality of institutions variable. The quality of institutions indicator, obtained from GCR, is the first pillar of global competitiveness index and includes public and private institutions. The level of wage in economy is GDP per person employed (constant 1990 PPP $) as a proxy which is obtained from World Development Indicators of the World Bank. All variables are converted to a 1-7 continuous scale in order to facilitate comparison between the coefficients of the model.

We need to control for other factors influencing the higher education and training, country-specific properties which are important but difficult to measure and usually are constant over time (e.g., culture, tradition and so on). To measure the effect of petro rents on higher education and training, we estimate the following country- and year-fixed effects panel regressions for 70 countries from 2006 to 2014:

$$edu_{it} = cons+\beta_{11}petro_{it}+\beta_{12}petro_{it}developed_{it}+\beta_{13}Z_{it}+u_{1i}+\theta_{1t}+\varepsilon_{1it} \quad (2)$$

Table 3: Determinants of the quality of education estimation: Country-and year-fixed effects

Independent variable	Dependent variable: The quality of education					
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	3.77***	3.76***	0.70***	0.31	0.35	0.11
	(22.91)	(22.14)	(3.59)	(1.47)	(0.29)	(0.08)
Petro	0.15***	0.03	0.12**	0.09**	0.15**	0.05
	(2.85)	(0.47)	(2.58)	(2.04)	(2.53)	(2.04)
Petro*developed		0.33***	0.20**	0.21**		0.28**
		(2.82)	(2.07)	(2.22)		(2.01)
Institutions			0.68***	0.65***	0.62***	0.62***
			(22.52)	(21.78)	(17.13)	(18.66)
Tech				0.15***	0.15***	0.14***
				(3.87)	(2.76)	(3.09)
Wage					0.02	0.06
					(0.11)	(−1.74)
Observations	551	551	551	551	422	422
Countries	70	70	70	70	62	62
Adjusted R^2	0.94	0.95	0.97	0.97	0.97	0.97

Robust t-statistics in parentheses. **, and *** indicate significance at 10%, 5%, and 1%, respectively

Table 4: Determinants of the quantity of education estimation: Country-and year-fixed effects

Independent variable	Dependent variable: The quantity of education										
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Constant	4.84***	4.85***	5.51***	5.50***	4.25***	3.51***	2.69***	8.24***	8.19***	4.04***	4.04***
	(19.48)	(19.32)	(15.64)	(15.72)	(9.18)	(7.59)	(6.02)	(4.22)	(4.11)	(11.09)	(10.93)
Petro	−0.08	−0.05	−0.09	−0.07	−0.16*	−0.21**	−0.28***	−0.18**	−0.20***	−0.20***	−0.22***
	(−1.01)	(−0.60)	(−1.20)	(−0.83)	(−1.73)	(−1.73)	(−3.11)	(−2.54)	(−3.15)	(−2.73)	(−3.44)
Petro*developed		−0.07		−0.04	0.01	0.09	0.18		0.05		0.05
		(−0.45)		(−0.29)	(0.05)	(0.65)	(1.33)		(0.39)		(0.39)
Institutions			−0.15***	−0.14***	−0.25***						
			(−2.70)	(−2.77)	(−4.25)						
Intellectual property						−0.23***	−0.27***	−0.29***	−0.29***	−0.29***	−0.29***
						(−3.71)	(−4.14)	(−3.69)	(−3.84)	(−3.69)	(−3.84)
Tech					0.46***	0.63***	0.60***	0.37***	0.37***	0.37***	0.37***
					(3.95)	(5.58)	(5.40)	(3.61)	(3.60)	(3.61)	(3.60)
Primary education							0.25***	0.19***	0.19***	0.19***	0.19***
							(5.15)	(3.88)	(3.98)	(3.88)	(3.98)
Wage								−0.67**	−0.66**		
								(−2.30)	(−2.24)		
Wage (residual)										−0.67**	−0.66**
										(−2.30)	(−2.24)
Observations	551	551	551	551	551	484	484	360	360	360	360
Countries	70	70	70	70	70	70	70	62	62	62	62
Adjusted R^2	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.97	0.97	0.97	0.97

Robust t-statistics in parentheses. **, and *** indicate significance at 10%, 5%, and 1%, respectively

$$edu\_on\_job_{it} = cons+\beta_{21}petro_{it}+\beta_{22}petro_{it}developed_{it}+\beta_{23}Z_{it}+u_{2i}+\theta_{2t}+\varepsilon_{2it} \quad (3)$$

$$edu\_quant_{it} = cons+\beta_{31}petro_{it}+\beta_{32}petro_{it}developed_{it}+\beta_{33}Z_{it}+u_{3i}+\theta_{3t}+\varepsilon_{3it} \quad (4)$$

$$edu\_qual_{it} = cons+\beta_{41}petro_{it}+\beta_{42}petro_{it}developed_{it}+\beta_{43}Z_{it}+u_{4i}+\theta_{4t}+\varepsilon_{4it} \quad (5)$$

The subscripts denote the country i and the time period t. The dependent variable in equation 1 is higher education and training (edu), in equation 2 is on-the-job training, in equation 3 is quality of education (edu_qual), and in the last equation (equation 4) is quantity of education (edu_quant).

The main variable of interest is petro rents (petro) in developing and developed countries. The dummy variable (developed) is zero for developing countries and one for developed countries. Z includes other drivers of educational system such as the quality of institutions and technological readiness. In contrast to cross-country regressions, we allow for country (u_i) and time (θ_t) fixed effects. Country-fixed effects eliminate the latent heterogeneity between countries. Such heterogeneity between countries may originate from different factors which are country-specific elements.

Appendix Table B shows the name of countries included in the models for educational system-petro rents estimations.

4. FINDINGS

The empirical focus of the paper is how petro rents shapes educational system within and across countries and that there is a significant difference in the role of petro rents between developed and developing countries. Our estimations in Table 1 start with looking at higher education (an index of quality and quantity of higher education) and petro rents per capita, adding other control variables in order to see how the petro-higher education nexus changes in different specifications. Table 2 looking at on-the-job training and petro rents per capita, Table 3 looking at quality of higher education and petro rents per capita and Table 4 looking at quantity of higher education and petro rents per capita, adding other control variables in order to see how the petro-higher education nexus changes in different specifications.

In all tables, the results are estimated by ordinary least squares, with country- and year-fixed effects to reduce the risk of omitted unobservable factors. These are examined against Limmer (Chow) test and Hausman test.

In addition, we report the robust t-statistics on the basis of White-period standard errors. The White-period method assumes that the errors for a cross section (country) are heteroskedastic and serially correlated (cross section clustered).

Table 1 shows the effect of petro rents on higher education and training. It is positive and statistically significant for Model 1, following a specific to general approach. Model 1 in Table 1 shows that a 1 unit increase in petro rents increases the indicator of higher education and training by 0.07 units which is statistically significant at 90% confidence interval, controlling for country and time-fixed effects. Model 2 divide the role of petro rents in developing and developed countries. It shows that petro rents have no statistically significant effect on higher education in developing countries but have a positive statistically significant effect on higher education in developed countries. In subsequent models, we add other control variables which may have an effect on higher education across countries.

Model 6 is in complete form. It shows that a 1 unit increase in petro rents increases higher education and training by 0.19 unit in developed countries controlling for country and time-fixed effect but petro rents have no statistically significant effect on higher education in developing countries. Model 6 also shows that a 1 unit increase in institutions quality increases higher education by 0.35 units. The quality of institutions has a robust positive and statistically significant effect on higher education at 99% confidence interval, controlling for country and time-fixed effects. The variable technological readiness (tech) has also a statistically significant effect (0.16) on higher education but the variable wage has a negative statistically significant effect (−0.49) on higher education.

Table 2 shows the effect of petro rents on the on-the-job training. It is positive and statistically significant for model 1, following a specific to general approach. Model 1 in Table 2 shows that a 1 unit increase in petro rents increases on-the-job training by 0.16 units which is statistically significant at 99% confidence interval, controlling for country and time-fixed effects. Model 2 divide the role of petro rents in developing and developed countries. It shows that petro rents have no statistically significant effect on on-the-job training in developing countries but have a positive statistically significant effect on the on-the-job training in developed countries. In subsequent models, we add other control variables which may have an effect on the on-the-job training across countries.

Model 6 is in complete form. It shows that a 1 unit increase in petro rents increases on-the-job training by 0.37 units in developed countries controlling for country and time-fixed effect but petro rents have no statistically significant effect on higher education in developing countries. Model 6 also shows that a 1 unit increase in institutions quality increases higher education by 0.59 units. The quality of institutions has a robust positive and statistically significant effect on higher education at 99% confidence interval, controlling for country and time-fixed effects. The variable technological readiness (tech) has also a statistically significant effect (0.16) on the on-the-job training but the variable wage has a negative statistically significant effect (−0.65) on higher education.

Table 3 shows the effect of petro rents on the quality of education. It is positive and statistically significant for Model 1, following a specific to general approach. Model 1 in Table 3 shows that a 1 unit increase in petro rents increases the quality of education by 0.15 units which is statistically significant at 99% confidence interval, controlling for country and time-fixed effects. Model 2 divide the role of petro rents in developing and developed countries. It shows that a 1 unit increase in petro rents increases the quality of education in developed countries by 0.33 units which is statistically significant at 99% confidence interval. In subsequent models, we add other control variables which may have an effect on the quality of education across countries.

Model 6 is in complete form. It shows that a 1 unit increase in petro rents increases the quantity of education by 0.28 units in developed countries controlling for country and time-fixed effect but petro rents have no statistically significant effect on higher education in developing countries. Model 6 also shows that a 1 unit increase in institutions quality increases the quality of education by 0.62 units. The quality of institutions has a robust positive and statistically significant effect on the quality of education at 99% confidence interval, controlling for country and time-fixed effects. The variable technological readiness (tech) has also a statistically significant effect (0.14) on the quality of education but the variable wage has no significant effect on the quantity of education. Therefore, model 4 in Table 3 probably is the best. It shows that a 1 unit increase in petro rents increase the quality of education by 0.09 units in developing countries controlling for country and time-fixed effect but the same increase in petro rents in developed countries increase the quality of education by 0.30 units, controlling for country and time-fixed effects:

$$\frac{d(edu\_quality_{it})}{d(petro_{it})}=0.09+0.21\times developed_{it} \quad (6)$$

Table 4 shows the effect of petro rents on the quantity of education. It is negative but it is not statistically significant for Model 1, following a specific to general approach. Model 2 divide the role of petro rents in developing and developed countries. In subsequent models, we add other control variables which may have an effect on the quantity of education across countries.

Model 11 is in complete form. It shows that a 1 unit increase in petro rents decrease the quantity of education by −0.22 units in developing countries controlling for country and time-fixed effect but petro rents have no statistically significant effect on the quantity of education in developed countries. Surprisingly, the institution quality has a negative and statistically significant effect on the quantity of education. The intellectual property protection as a component of the institution quality has also a negative and statistically significant effect on the quantity of education. Model 11 shows that a 1 unit increase in intellectual property protection decreases the quantity of education by −0.29 units. The intellectual property protection has a robust negative and statistically significant effect on the quantity of education at 99% confidence interval, controlling for country and time-fixed effects. The variable technological readiness (tech) has a statistically significant effect (0.37) on the quantity of education. The variable primary education has also a statistically significant effect (0.19) on the quantity of education but the variable wage has a negative statistically significant effect (−0.66) on the quantity of education.

5. DISCUSSION

The obtained results show that

- Petro rents have a positive impact on higher education and training (0.19) in developed countries but petro rents have no statistically significant effect on higher education in developing countries.
- Petro rents have a positive impact on on-the-job training (0.37) in developed countries but petro rents have no statistically significant effect on higher education in developing countries.
- Petro rents have a positive impact on the quality of education (0.09) in developing countries but petro rents in developed countries increase the quality of education by (0.30), controlling for country and time-fixed effects.
- Petro rents have a negative impact on the quantity of education (−0.22) in developing countries but petro rents have no statistically significant effect on the quantity of education in developed countries.

The negative and statistically significant association between petro rents and the quantity of higher education in developing countries can explain resource curse. The results also show that institutional quality enhances the level of higher education and training in general especially in the quality of education and in on-the-job training but institutional quality and intellectual property protection weaken demand for higher education. This is probably because people want to absorb to market quickly to take advantage of the protection. The level of wage in economy also decrease demand for higher education probably due to the opportunity cost of studying.

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APPENDIX

Appendix Table A: Variable descriptions

Variable	Scale	Source	Definition
Higher education and training	1-7	GCR	Higher education and training indicator (pillar 5)
Quantity of education	1-7	GCR	Quantity of education (Component A in pillar 5)
Quality of education	1-7	GCR	Quality of education (Component B in pillar 5)
On-the-job training	1-7	GCR	On-the-job training (Component C in pillar 5)
Primary education	1-7	GCR	Primary education (Component B in pillar 4)
Petro: Petro rents per capita	1-7	World Bank Database	Oil+gas
Oil: Oil rents per capita	1-7	World Bank Database	Oil rent is difference between the value of crude oil production at world prices and total costs of production (constant 2005 US$) divide on population
Gas: Gas rents per capita	1-7	World Bank Database	Gas rent is difference between the value of natural gas production at world prices and total costs of production (constant 2005 US$) divide on population
Developed	Dummy variable	UN classification	For developed countries equals 1 and for developing countries equals 0
Institutions	1-7	GCR	Institutions indicator (pillar 1)
Intellectual property	1-7	GCR	Intellectual property protection (Component A, ingredient 1.02 in pillar 1)
Tech	1-7	GCR	Technological readiness indicator (pillar 9)
Wage	1-7	World Bank Database	GDP per person employed (constant 1990 PPP $) as a proxy variable
Wage (residual)	1-7	Regression	Residuals of wage on C and petro regression (country-and year-fixed effects)

GCR: Global Competitiveness Reports

Appendix Table B: List of countries in higher education and training petro rents models

Developed countries						
Canada	Denmark	Norway	UK			
Australia	Cyprus	Greece	Japan	New Zealand	Switzerland	
Austria	Finland	Iceland	Luxembourg	Portugal	USA	
Belgium	France	Ireland	Malta	Spain		
Bulgaria	Germany	Italy	Netherlands	Sweden		
Developing countries						
Algeria	Belize	Colombia	Indonesia	Mexico	Tunisia	
Argentina	Bolivia	Ecuador	Iran	Nigeria	U.A.E.	
Bahrain	Cameroon	Gabon	Malaysia	Saudi Arabia	Venezuela	
Brazil	Costa Rica	Hong Kong	Malawi	Paraguay	South Africa	Uruguay
Burundi	Cote d'Ivoire	India	Morocco	Peru	Thailand	Zambia
Chile	Gambia	Korea, Rep.	Nicaragua	Philippines	Turkey	
China	Ghana	Lesotho	Pakistan	Sierra Leone	Uganda	