

ion Asked 8th Aug, 2013

Eszter Rekasi
Central European University

I am interested in the impact of higher education on economic growth? Especially interested in empirical results, possibly quantitative research. Numerous articles discuss the connection between the finance and governance of higher education and a country's economic growth (ECD Higher Education at a Glance, researches at Bruegel by Aghion et al., Jacobs & Ploeg), but just these can justify the direction and the scale of causation.

I am also interested in the effect of extra higher education public spending on economic growth? Controlling for other government indicators, how does the proportion of higher edu. degree population affect growth? How can we measure the indirect effect of higher education on economic development (i.e. "production" of intellectuals, development of political culture, innovation as positive externalities)?

Education Economic Growth Economic Development Economic Policy Analysis Economics of Education

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answer

THOMAS H.W. Zieseimer
Maastricht University

10th Oct, 2016

with Vinicius on the fundamental relevance of primary and secondary schooling for society, but also as addition to get tertiary edu. When we go to recent growth regressions emphasis has shifted to tertiary on as emphasized by Bushra. My empirical knowledge is in two papers:

www.merit.unu.edu/publications/wppdf/2016/wp2016-044.pdf

www.merit.unu.edu/publications/wppdf/2011/wp2011-053.pdf

ing on the macro level comes out of growth, additional income, or from savings, indicating capital market conditions. Education inequality also plays a role beyond tertiary education. Beyond my papers, it seems that R&D without higher education can neither be done nor get diffused.

(33)

Geraint Johnes
Lancaster University

8th Aug, 2013

ed only last week...

www.gov.uk/government/uploads/system/uploads/attachment_data/file/229492/bis-13-858-relationship-between-graduates-and-economic-growth-across-countries.pdf

mmendations

Louis Augustin-jean
The Hong Kong Polytechnic University

8th Aug, 2013

not a topic I specifically studied, so I will only include a short comment. I would say it depends on the "development" of the country. Investment in tertiary education are probably more "profitable" in OECD as than in developing ones. If the structure of the economy is relatively weak, it may not be able to graduates, which may lead to immigration of qualified people. Again, I did not research on that, but the e of the Philippines come to my mind. This is why international agencies and NGOs try to stimulate the ment of primary education, which brings positive returns more quickly. That does not directly answer question, but hopefully it helps.

mmendation

Craig Holmes
University of Oxford

8th Aug, 2013

I wrote a paper on this topic, which is here: <http://ner.sagepub.com/content/224/1/R29.abstract>. If you have access to this, I would be happy to email you an earlier version which should be Open Access

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What are the differences between conceptual framework and theoretical framework?

Question 232 answers

Asked 1st Jan, 2015

Pasand Ali Khoso

I am a PhD student of medical sociology have to use both the frameworks in my research project. Your valuable and eas understand answers will help me a lot in research design.

regards.

[View](#)

What is meant by Common Method Bias? How do we test and control it?

Question 41 answers

Asked 6th Jun, 2016

Muhammad Shehryar

I have recently received the following comments on my manuscript by a reviewer: "I could not comprehend it properly. I am not clear on the concept of Common Method Bias."

"Recent editorial work has stressed the potential problem of common method bias (CMB) which describes the measurement error compounded by the sociability of respondents who want to provide positive answers (Cohen & Ledford, 2014; v. Witteloostuijn and Eden, 2010). The present study collected data on both the independent and dependent variables from the same respondents at one point in time, thus raising the potential common method variance as a threat to internal consistency might be present in the data. The authors however, failed to tell the reader how they countered common method bias."

[View](#)

If one variable is stationary at level but another is stationary at first difference

argued here that cross-country differences in growth rates since the 1960s show no correlation with the initial level of higher education attainment (as would be predicted by some endogenous growth) or the increase in attainment (which would be a prediction of the neoclassical growth model). Other factors, such as primary and secondary education and capital investment are strongly correlated with growth. Technical skills (measured at the end of compulsory schooling) are an even better predictor than the level of primary and secondary education. The size of the research sector may also have a role, although this is tricky. I haven't looked at expenditure, although this would be a useful addition.

If this is to say that higher education can't affect growth, but its effect is likely to be too nuanced, and dependent on numerous other (hard-to-measure) factors in each country. The Aghion paper exploits state differences in the US, and can use higher quality data than is possible across countries. It shows a mechanism by which higher education can affect economic growth - innovation, captured by patents. Having an economy with the infrastructure for such a mechanism to be successful would be an example of one of those hard-to-measure conditions necessary for higher education to lead to growth.

Conclusion in this paper: cross-country studies are fraught with all sorts of data problems, and can be highly sensitive to variable choice, country choice and time period choice.

Recommendations

[Amitabh Shukla](#)

Global Institute of Management & Technology

8th Aug, 2013

Finally, there is a high degree correlation between higher education and higher economic growth. Empirical evidence establishes this relationship.

Expenditure on higher education creates an environment which makes a positive environment towards size & growth of population, birth rate, health, work culture and consequently more meaningful use of resources and productivity on production, income generation, per capita income and leads to economic growth.

How we can test these by using correlation, regression techniques etc.!!

[Goodhope Maponya](#)

Council for Scientific and Industrial Research, South Africa

8th Aug, 2013

Clearly, there exists a relationship between economic growth and higher education. However, you will have a hard time in quantifying it. Most countries quantify economic growth in terms of GDP growth, with sectors such as manufacturing, and retail being the biggest contributors. The way I see it is that higher education creates people with better skills to run jobs in each of the sectors and to increase productivity. But if I understand your question clearly, what you need to determine and possibly quantify is the extent to which higher education, if treated as a sector, contributes to economic growth. On the other hand, if higher education is to be treated as a business, then you could easily just visit any institution of higher learning and just peruse their financial reports. But I doubt if that's what you want to achieve. I therefore suppose what you are interested in is to see how much growth the economy will experience over time if say it produces more Masters employees (regardless of the job/business sectors). Perhaps you could begin by looking at ONLY professional jobs, say 'Researchers', and then make an assumption that says "highly qualified people are more likely to be employed in high-paying jobs". If this statement holds true, then the second assumption (or rather the third) would then be that "high income earners contribute more TAX as opposed to their low income earners' parts". Then you would have to look at your country's employment profile - what are the proportions of employment within different job categories, what salary scales most people are placed in, what non-growth expenditures (such as subsidies, unemployment insurance fund, medical health fund for the poor, etc.) are paid out of your country's tax system. You should then be able to make a relationship between higher education and economic growth. For example, you could have findings like "if a state employed xx amounts of PhD Researchers, its growth could/would increase by yy factor". But then growth is closely related to productivity/innovation. Using the same example of Researchers, you could then look at how much innovation or solutions developed by researchers at different career ladders. Most institutions grade their Researchers from junior to senior researchers. Across the spectrum, you would want to see where innovation lies and what impact it has on the economy. Obviously your study is very complex - you need to just focus on a few measurable items.

Recommendations

[Vinicius Pedrazzi](#)

University of São Paulo

8th Aug, 2013

Hi, good morning and thank you so much for posting this question. I think we should have a dichotomy between the rich countries and the developing ones. For the rich nations with high human development index, higher education level or at least maintains the intellectual growth, technological and even social one. Conversely, in developing countries (I say, excuse me, for my beloved country, Brazil), where there are huge inequalities that separate the very rich minority of the majority poor and uneducated, enslaved by stock welfare, I am not convinced that the primary and secondary education are fundamentally more important for the formation of a solid nation, strong, self-sufficient and independent of "vote buying" on the part of politicians, but I want a nation closely informed and able to criticize and also self-criticize to do more and better things. It is my humble opinion and contribution. Unfortunately I wish it could be different, very different, and I just want to make it happen. Sincerely, Vinicius Pedrazzi.

Recommendations

[Syed Imran Ali Meerza](#)

University of Nebraska at Lincoln

8th Aug, 2013

which model should be used?

Question

33 answers

Asked 1st Jan, 2015

[Ujjwal Kumar Das](#)

When my dependent variable is stationary at level but independent variable is non-stationary at level (but stationary at first difference) which model should be used?

[View](#)

Is a Likert-type scale ordinal or interval data?

Question

151 answers

Asked 6th Jun, 2014

[Reginald L. Bell](#)

I've heard arguments that a Likert-type scale is ordinal data. I've heard arguments that the same type of data is interval data. Some believe it is quasi-ordinal-interval data. Which exact model should be used?

[View](#)

Preprints of manuscripts

Discussion

2 replies

Asked 4th Apr, 2019

[Anwar Khitab](#)

Is it better idea to put papers on Preprint before publication?

[View](#)

Scopus indexed list of 2019

Discussion

86 replies

Asked 1st Jan, 2019

[Ali Al-Samydai](#)

Could you please help me to know, where Scopus indexed list (2019) update appears on the website?

[View](#)

Can anyone explain the difference between Sustainable Development Goals and Millennium Development goals?

Question

8 answers

Asked 2nd Feb, 2018

[Ajit Kumar Roy](#)

It will be interesting to have feedback.

[View](#)

How we can make academic research useful to the society?

Question

45 answers

Asked 9th Sep, 2017

[Iqbal Thonse Hawaldar](#)

Many people feel that majority of the academic researches are not useful to the society. Most of the time publications are not to get academic promotion. How we can make academic research useful to the society?

[View](#)

Best practices for survey question at gender?

Question

8 answers

Asked 6th Jun, 2017

[Bonnie O Richard](#)

we can use long-run time series of expenses of higher education and economic growth of a country. we can use time series analyses such as cointegration, error correction model and Granger causality test to determine short-run and long-run relationship between these two variables. By Granger causality test we can identify whether expenditure of higher education Granger causes economic growth.

Pius STEPHEN Chaya

8th Aug, 2013

Institute of Rural Development Planning

depends on the type of type of education as well as the level of education of the worker, on the other hand, it is on the type of skills that are generated from schooling. Even though the human capital theory states that a worker with more level of education, has therefore a good chance to be more productive, yet the link between skills and job as well as education and job can distort the contribution of educated worker to economic growth. Thus, contribution of education to economic development is yet linked to healthy labour force. Workers with good skills are likely to contribute significantly to economic growth through production and service delivery. I reserve to say that not all educated people have significant effect on economic growth. The link between education and job as well as skills and job are some of labour market distortions. Thus, the link between education and economic growth remains a paradox.

Recommendations

Zachary Tambudzai

8th Aug, 2013

Midlands State University

The impact of higher education depends on other non-economic environmental factors. A stable socio-economic environment would help the human capital created via higher education to contribute positively to the production of more quality products. Empirical findings on the causality between the two variables would depend on socio-political as well as geostrategic control factors.

Recommendation

Akilu Nigussie

8th Aug, 2013

Ethiopian Institute of Agricultural Research

significant impact yet if it is followed by innovation its contribution will accelerate

Eszter Rekasi

8th Aug, 2013

Central European University

alázis and Geraint!

Thank you for suggesting your papers. I found both connecting exactly to the core of what I'm looking for.

I only found a general summary paper on the topic at your RG page. Is your case study on Szeged also available somewhere?

Recommendations

Eszter Rekasi

8th Aug, 2013

Central European University

Hi,

Thank you for your reply. I would like to read the whole paper if you were so kind to e-mail it to me (rekasi.gigi [at] gmail) as it is not available through my uni's databases.

Thank you in advance.

My paper by Krueger & Lindahl draws a similar conclusion. Anyone interested can find it here:

www.unibg.it/dati/corsi/91015/49249-JEL%202000_kruegerlindahl.pdf

Reger, A. B. – Lindahl, M. (2001): Education for Growth: Why and for Whom? Journal of Economic Literature, December, pp. 1101-1136

Recommendations

Craig Holmes

8th Aug, 2013

University of Oxford

- I have uploaded a version of the paper to my profile. I'm interested in the diverging conclusion in my finding and the UK BIS study linked above, but I haven't had chance to think about this yet. I'd be interested in your thoughts about this.

Recommendation

Eszter Rekasi

8th Aug, 2013

Central European University

As you say: I think you're totally right about the higher return rates of primary and secondary education than that of higher education, especially for less developed countries. E.g. data published in OECD's 'Education at a Glance' strongly support your point.

On the other hand, in case of Hungary for instance, here the return rates to investment in higher education are high - suggesting that there is still excess demand for graduates. (This is due to the inheritance of

https://www.researchgate.net/post/What_is_the_impact_of_higher_education_on_economic_growth

I'm looking for best options for asking the gender question in a survey. The survey is for a training evaluation, which is not specifically related to gender/sex/orientation/etc. issues. Basically it's just one of a series of brief demographic questions to ensure we've captured those variables in our evaluation. When I search for options, I am mainly coming across research that is concerned with analysing impacts related to sexual or gender minority populations. Our purpose is just to make sure we are being inclusive by not simply asking the question in the binary way, which is limiting. Any insight you can provide would be much appreciated!

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ism when higher educ. was only available for a few and thus the increased demand for skilled labour (transition could still not have been satisfied.) Also employment and unemployment rates are for graduate the most favourable.

: ...In Hungary there is no crowding-out effect either at the expense of less educated labourers (as evidenced by the empirical analysis of Hermann & Varga 2013: pa.oszk.hu/00000/00017/00193/pdf/EPA00017_Kozgazdasagi_szemle_2012_07-620Hermann%20Varga.pdf, in Hungarian, but data might be understandable for all). This result cannot be extended for other countries, of course.

thus: For direct economic purposes, I agree with you that primary and secondary education are more important. It might be just partly true, however, for the fight against 'vote buying' and lacking political culture. It is well known by much education related literature that higher education plays a key role in the creating of political resistance and the standing up against repressive and corrupt leadership. Although empirically I cannot just partly justify it...

During the '80ies intellectuals became stronger and more active against the Socialist/ Soviet leadership (as just a small intellectual part of the society who really 'made transition' in 1989/1990. However, what I would say that there is widespread dissatisfaction against the actual government and its business connections with intellectuals, but it has hardly any effect on the preferences of the majority of Hungarian society.

Transition countries of Central Europe are somewhere at the margin of developed and developing countries as in respect of labour market supply. That's why their experience might be relevant for some developing countries. As far as I know, even Brazil 'imports' some more educated human capital from abroad, but Vinícius might know more about this. (See Geraint's publication on Brazilian education and labour market issues.) Btw, I'd be interested in your personal views.

Recommendations

 **THOMAS H.W. Ziesemer** 9th Sep, 2013
Maastricht University

That tertiary school enrolments as 5-year changes with five-year lags have a positive effect on economic growth in my paper 'What changes Gini coefficients of education'

Recommendation

 **THOMAS H.W. Ziesemer** 9th Sep, 2013
Maastricht University

Comments. Countries successfully catching up have used world demand. First Japan, then Korea, Hong Kong, Taiwan, Singapore, now many others. Keeping growth high under approximately constant returns to scale on the macro level requires that all factors keep growing. If some factors do not grow, the others run into diminishing returns. Tertiary education is one of them. Researchers are a subgroup needed for technical change, but tertiary is needed also outside research. But you can't get it without primary and secondary. Tertiary is not sufficient but complemented by primary and secondary. Lack of roads or electricity and all other systems impede growth. India is unfamous for its lack of infrastructure, Russia and Argentina were criticized by the IMF for raising too little tax revenues. You can't provide all the necessary public investment without taxes. China has expressed the intention to double expenditure on education and produce more electricity. Each of these can slow down growth as all factors have to grow. Eastern Europe is more complicated because of the transition starting from 1990 conditions. But education and other public investment remain crucial as they are for the branches.

Recommendations

 **Geetha Rani** 10th Oct, 2013
NIEPA

Contribution of education to economic growth in the Indian context is not yet significant though there are few studies made. It is primarily because the low income growth of India till early 1980s, what is called as Hindu rate. Only since 1990s, the growth rates have geared up, yet the GER in tertiary education in India is less than 20 per cent.

Recommendation

 **Pablo Gil** 11th Nov, 2013
University of Alicante

Example to explain that fact is the evolution of industry in Korea. In the last ten years, new engineers and manufacture better cars, mobile devices, etc than in previous years. Nowadays, their cars give more safety years and the technological innovation is similar to American and European cars.

Recommendations

 **Elchin Suleymanov** 12th Dec, 2013
Baku Engineering University

should lead higher real living standards and rising employment. Short term growth is measured by the % change in real GDP. Industries experience cycles of economic growth and contraction based on many factors.

Recommendations

 **Md Nasir Uddin** 1st Jan, 2014

American International University-Bangladesh

education increases the quality of labor, higher education leads higher productivity, thus it reflects in growth.

mmendation

[Dr. Arjun Yallappa Pangannavar](#)
Kannada University, Hampi

5th May, 2014

education has positive effect on economic growth in various respect.

mmendation

[Aklilu Nigussie](#)
Ethiopian Institute of Agricultural Research

5th May, 2014

it saying positive or negative since is economic growth means industrialization or creating abandonment or what...but education will help to broaden the sphere of thinking yet it will also create idiots society but eliefs the education should has to back up by the nation culture, ethics and other norms so that it will jte more to economic growth yet education helps more if it follows with innovation and invention it will jte to more advancement though innovation or invention is not mandatory educational background.

[Dr. Arjun Yallappa Pangannavar](#)
Kannada University, Hampi

5th May, 2014

her education places people on gainful employment that attracts labour force from primary sector which mental to the growth of these sectors, for instance, in India agricultural sector facing labour shortage n.

mmendation

[J.A. Karunaratne](#)
Colombo International Nautical & Engineering College

9th Sep, 2014

ector education has spread widely at the same time as economic growth has taken place in the economies and tiger economies of Asia. South Korea is an example. But it is difficult to say if one the other. In some cases (in the case of the labour intensive economies), extreme exploitation of the s bring about economic growth whilst in other cases (specially when the economy is highly dependent nology intensive industries), the skilled labour help bring about economic growth.

[Indre Deksnys](#)
Vytautas Magnus University

8th Aug, 2015

rent in education this is really actual theme: it establishes human capital that makes a substantial ction to economic and income growth. Here are many empyrical results indicating that here is positive between higher education and income growth. Its contribution returns in the form of skilled labor which o increased development and improved quality of life. But I think here is not enough research about os if those people leave their native country.

mmendation

[Silburn Clarke](#)
The University of the West Indies at Mona

6th Jun, 2016

er,

yardstick to use as a point of reference is the WEF categorisation of economies.

c Resource-Based Economies:

es compete based on factor endowments: primarily unskilled labour and natural resources. Compete basis of price and sell basic products or commodities, with their low productivity reflected in low wages.

iciency-Driven Economies

es begin to develop more efficient production processes and increase product quality. Competitiveness asingly driven by higher education and training. Wages have risen and they cannot increase prices

vation-Driven Economies

nies must compete by producing new and different goods using the most sophisticated production ses driven by innovation. Wages will have risen by so much that they are only able to sustain those wages and the associated standard of living by higher value

h there are exceptions, these three stages typically are associated with rising levels of GDP growth. ions may cited as the oil-rich petro-states or non-oil mineral-rich states. Note that in category 2 higher on and training is posited as one of the pillars for differentiating an efficiency-based economy from a onomy. And in Stage 3, the Innovation-driven economy, new and different technologies and icated business processes and models is the differentiator with stage 2; again requiring still higher levels ation and training.


papers may help.

www.researchgate.net/publication/299747565_Towards_a_talent-driven_outward-oriented_globally-competitive_SME_framework_Discussion_Paper

www.researchgate.net/publication/301341427_Reforming_Jamaica%27s_National_Systems_of_Innovation

[al Report Towards a talent-driven outward-oriented globally-competitiv...](#)

[al Report Reforming Jamaica's National Systems of Innovation](#)

 **Bushra Zaareer**
Jordan University of Science and Technology

10th Oct, 2016

giving higher education more concentration and interest is vital, however, this can impose pressure on societies governments budgets especially when

ring countries with limited resources where Jordan is one example of such countries. In such countries, eased interest in higher education resulted in opening new universities and educational institutions, as a result increase the number of students who are willing to enroll in them and pursue their graduate studies.

paper.researchbib.com/view/paper/92304



Can you help by adding an answer?

Answer

Add your answer

Add your answer

Publications

1, Volume 2: Energy, the Environment, and Economic Growth

38

W. Jorgenson

1: Econometric General Equilibrium Modeling presents an econometric approach to general equilibrium modeling of the impact of economic policies. Earlier approaches were based on the "calibration" of general equilibrium models to a single data point. The obvious disadvantage of calibration is that it requires highly restrictive assumptions about the

Development of Economic Education in Korea's Higher Education

er

18

oo Hahn ·  Kyungho Jang ·  Jongsung Kim

Status of Home Economics in Higher Education

75

ra Jane Harper

icle deals with data on enrollment and degrees granted in home economics in colleges and universities over two decades of 1952-53 through 1972-73. It has attempted to point out from this data significant trends and changes in home economics higher education. (Author/BP)



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