

Stumbling and Mumbling

An extremist, not a fanatic

September 12, 2005

Vaccination and growth

Owen Barder excepted, few people have given Gordon Brown the acclaim he deserves for launching the International Finance Facility for Immunization.

This is a useful response to meanness and stupidity: the meanness of governments in not fulfilling their moral obligations to poorer countries; and the stupidity of bond markets in being prepared to lend at record-low real interest rates.

One interesting question, though, is: what's the link between life-saving vaccination programmes and subsequent economic growth?

Bog-standard neoclassical economics says vaccination could be economically damaging. Keeping kids alive will merely decrease the capital-labour ratio. This will encourage firms to use cheap labour and discourage investment. It's pretty widely agreed that, across countries, there's a negative relationship between growth in population and growth in GDP per capita.

Luckily, there's a more optimistic possibility. Anything that increases people's probability of living a long life increases their incentive to get an education; the pay-offs to schooling are poor if you die at 15, but good if you live to 60+. And increases in education can lead to sustained growth.

If you think this is unlikely, just consider this paper (pdf) by Michele Boldrin and colleagues. They show that increased survival probabilities in the 18th century led to - and possibly caused - the rise in GDP growth associated with the British industrial revolution.

You might think this story doesn't apply to vaccination of children. What matters for incentives to get an education are survival probabilities for people of working age, not for pre-school children.

But there is a link. If children survive childhood illnesses, families can reach their optimum size with fewer births. And the fewer childbirths there are, the greater are the survival prospects for women.

This in turn should increase the education of girls. There's no point educating these if they'll die in childbirth. But if they do survive, there's more value in educating them.

It's possible, therefore, that IFFIm will raise long-term economic growth. To do so, however, requires that the increased demand for education be met. And it requires that girls be encouraged to get an education - and jobs - as well as boys. As Bill Easterley says here (pdf):

Development happens when many agents have the institutional environment that allows and motivates them to take small steps from the bottom.

Could this institutional environment include non-sexist attitudes?

Another thing: Speaking of Mr Barder, can I recommend you read this?

September 12, 2005 in Aid | Permalink

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I think that malaria and AIDS are major growth retarders in parts of Africa.

On the other hand, until a country leaves the "unfree" level of the Economic Freedom index, there is little chance for the population to leave poverty regardless of public health programs.

AIDS is really, really bad for economic growth in poor countries, but cannot compete with Robert Mugabe's rule, for instance, in terms of growth-killing.

Posted by: Mr. Econotarian | September 12, 2005 at 06:03 PM



Chris

Thanks for picking this up.

William D. Nordhaus has also published a series of studies which show that improved health has made an enormous contribution to increasing economic prosperity (see, for example, his paper "The Health of Nations: The Contribution of Improved Health to Living Standards." in Kevin H. Murphy and Robert H. Topel, eds., *Measuring the Gains from Medical Research: An Economic Approach*.)

Furthermore, the Commission for Macroeconomics and Health report in 2001 was an influential statement of the evidence on the relationship between prosperity and health.

I think you are exactly right about the likely impact on fertility rates.

Vaccination has been an astonishingly important success in global health - one that we are in danger of taking for granted here in the rich countries. It is a huge opportunity, and I am full of admiration for Gordon Brown for his combination of vision and intelligence in driving this forward.

Owen

Posted by: [Owen Barder](#) | [September 13, 2005 at 04:24 AM](#)



The proposed effects are all a bit removed from the cause aren't they?

Vaccination causes lower child deaths; which causes women to have fewer children to reach their optimum family size; which causes lower female death rates; which increases the profitability of educating women; which causes increased economic growth. I don't think the likely sizes of any of these changes will be sufficient to feed through to have much of an effect.

My bet is that: (a) more outside money for medical programs (stimulating employment), and, (b) less disability and illness caused by disease (improving productivity) will be more likely to cause increased economic growth.

Posted by: [nikolai](#) | [September 13, 2005 at 09:18 PM](#)



It is compelling to read this theory and space of its appendix in gambling.

That I be informed less it - it concerns statistics, is applied to the conclusiveness of the nonlinear equations.

Profoundly much the exegesis to the facer purpose (representing till conditions anybody so plainly explain nothing a smog) interests:

There is a teleshow - the virtuoso and the leader.

There are three doors. Behind one of them the windfall, behind two others is not present.

The chief offers a creme de la creme to the thespian that conformably chooses any of 3 doors (their probabilities are correspond to).

After the choice is made, the leader who knows where lies a prize, opens one of those doors that are not chosen via the trouper and shows that there the prize is not present. Also suggests the competitor to choose aeons ago again already between 2 doors.

Topic - how to arrive to the player? (In a source it is specified that it is necessary to supplant a selection, the odds of a pickings behind a door on which was specified nearby the actor who is doing not direct = 66.7 %.

Profoundly much I put off appropriate for councils or at least references where to look.

Representing more intersting look <http://www.obu.edu/centers/images/index.html>

Posted by: [MasterillioViktoria](#) | [October 23, 2010 at 04:48 PM](#)

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