



Education of girls vital to moving up the trade value chain

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Summary

Although the awarding of the Nobel Peace Prize for 2014 to Malala Yousafzai demonstrates recognition of girl's education as a political issue, the education of girls also has economic repercussions that specifically affect trade. These repercussions include:

- Girls' education leads to growth in developing countries;
- Girls' education results in more skilled labour and higher productivity;
- To move up the global value chain, countries need a deep pool of skilled, productive labour;
- For countries in the Asia-Pacific region that are seeking to allocate their public funding efficiently, girls' education has a particularly high payoff because of high marginal returns and because of spillover effects to family members;
- Trade benefits girls – when opportunities to work in trade-related industries exist, girls stay in school. Thus, a virtuous cycle exists between the education of girls and economic development.

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Introduction

In 2014, the Nobel Committee finally awarded the Nobel Prize to Malala Yousafzai, together with Kailash Satyarthi for his work on ending child labour. Malala was nominated in 2013 but was passed over in that year; many commentators suggested that the Peace Prize should not be based merely on surviving an assassination attempt, acting as a role model for girls or for being a media celebrity.

Yet Malala has proved that she represents the larger and broader issue of education for young girls and women around the world, and the benefits that implies for global development. These benefits include increasing the contribution of trade to a country's economic growth. There is unusually strong agreement among economists that educating girls creates direct economic benefits as they become more productive both in the workplace and at home, and increase their labour force participation. Indirect benefits also lead to economic growth – decreased fertility, decreased maternal mortality, decreased infant and child mortality, and improved education levels of boys and girls of the next generation. These improvements are precisely those that also serve to improve countries' trade opportunities.

1. Improving girls' education leads to growth in developing countries

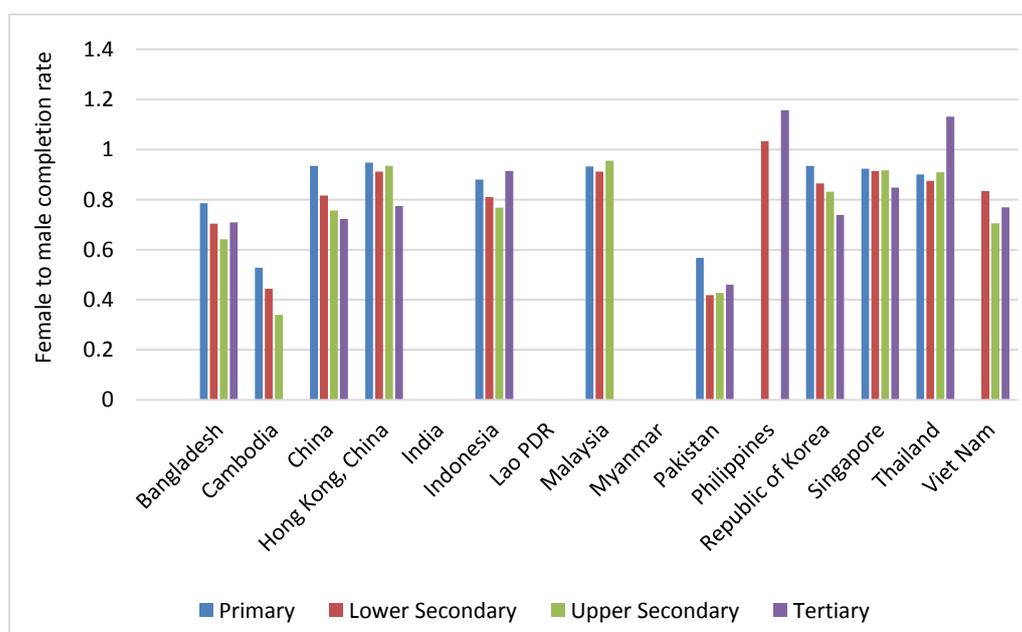
Estimates of the impact on gross domestic product (GDP) from increasing educational parity between boys and girls vary, but overall the literature suggests that eliminating the gender gap in education will increase GDP growth by at least 0.3 per cent per year: a significant increase for a developing country (Global Campaign for Education, 2005). Another way to look at it, is if girls in developing countries completed one more level of education than they complete today, their lifetime earnings would be equivalent to a 50 per cent to 60 per cent one-time boost in developing countries' annual GDP (Chaaban and Cunningham, 2011).

The Asia-Pacific region, in fact, shows different trends in girls' educational parity (see figure). East Asia-Pacific economies such as China, Hong Kong, China, Singapore and Thailand have led the region in closing gender gaps in education. In fact, empirical research has shown that more than half of the difference in growth rates between South Asian and East Asian economies between 1960 and 1992 (about a 2.5 per cent difference per year) could be directly accounted for by gender inequality in education (Klasen, 2002). In particular, Schultz (2002) pointed to the growth differences between East and South-East Asia, where policy initiatives have increased the schooling of women faster than men, and South and West Asia.

Another way to look at the value of girls' education is to compare estimates of the private and social returns to completing a given level of schooling, with the social returns that include all of the spillover benefits to society when one person's increased human capital positively has an impact on the productivity of others in his or her environment. Psacharopoulos and Patrinos (2004) compiled the results of methodologically sound studies

for 42 countries. These results showed that, overall, the private and social returns from completion of primary education are 20 per cent and 16.2 per cent, respectively, while for secondary education they are 15.8 per cent and 11.1 per cent, respectively. For the low income countries in Asia the returns from primary education are closer to 25.8 per cent and 21.3 per cent, while secondary education shows private and social returns of 19.9 per cent and 15.7 per cent, respectively.

Figure: Gender parity index – education



Source: Compiled by authors from UNESCO Institute for Statistics data, representing the population aged 25 years-plus that has completed the given level of education. Data reported between 2008 and 2012, except for Bangladesh, which was reported in 2001.

2. Girls' education results in more skilled labour and higher productivity

Keeping girls in school results in a higher level of labour force participation as well as the development of a more highly-skilled workforce, both in the current and future generations (Lincove, 2008). This productivity improvement is crucial, as export industries in developing countries lose their “advantage” in the form of low labour costs. The productivity improvements that come with girls' education mean that in the workforce they can work more efficiently and use more complex technology, machines and processes. The spillover effects of girls' education on their families as well as their children's education and human capital, speed up the development of a more skilled labour force (Klasen 2002; and Knowles and others, 2002). As wage levels increase, these skills become vitally important to export-based industries.

3. Higher productivity levels lead to more trade and to moving up the value chain in trade

Asia-Pacific economies vary greatly in the parts they play in the global value chain. Those that reach higher on that value chain, such as China, the Republic of Korea and Taiwan Province of China, have near parity in primary and secondary education for girls. While correlation does not represent causality, it is true that an extensive pool of skilled labour is vital to achieving higher-level production and services export activities. Educational investments in boys and girls represent one way to move up the global value chain, and have even been cited as a way to overcome other policy challenges to a country's ability to add value in a globalized production process. (World Economic Forum, 2012)

Labour productivity has been shown to act as a determinant of firms' participation in export activities, both in cross-country studies (Melitz 2003, Wagner 2007) and at the micro-level in single country studies (Deshmukh and Pyne, 2013, India; and Tũaño and others, 2014, in the Philippines). For small and medium-sized enterprises (SMEs) in particular, labour productivity is a determinant of export market participation. (For a summary of SME studies showing productivity correlations, see Duval and Utoktham, 2014.)

Impediments to the expansion of trade-related industry include a lack of skilled labour. For example, a recent survey of the growing manufacturing sector in Myanmar showed that almost 60 per cent of respondents cited the lack of skilled labour as a serious problem. (Abe, 2014)

4. Girls' education has a particularly high payoff for Asia-Pacific countries looking to allocate their public funds efficiently

Given the primary completion gap between girls and boys, investment in girls appears to be an effective policy for improving labour productivity. In particular, in countries where education for girls has lagged, the marginal returns for investment in female education will exceed those for male education (Schultz, 2002). Increased labour force participation by a higher-skilled female population is precisely what many industries in Asia-Pacific economies need in order to move up the global value chain.

When export-focused industries develop and more educated workers are in demand, females can become an untapped labour force. Males may already have opportunities in the non-skilled or agricultural labour force, resulting in a higher opportunity cost of staying in school. For the same reasons, they may also experience a higher likelihood of dropping out or not continuing education that would help them to pursue skilled employment because they are asked to enter their traditional trades.

Girls are less likely to have a traditional economic role outside the house, so are more likely to make up part of a workforce in a trade-related industry. The spillover effects of their education to family members, particularly children, also increase the marginal returns of

girls' education funding.

5. Current status of girls' educational parity in the Asia-Pacific region

When Malala began to speak out for girls' education, she probably did not know that UNESCO and the World Bank were targeting education for girls as a strategic approach to reducing poverty and extremism. One of the United Nation's eight Millennium Development Goals is the eradication of gender disparities in primary and secondary education by 2005 and in all education by 2015.

As of 2012, only two-thirds of countries showed gender parity in primary education, dropping to one-third in secondary education. Of great concern is the fact that those countries falling short of this goal are also those countries where the growth in school-age population is the highest. Afghanistan, for example, will see a more than 30 per cent increase in its "potential" students between 2010 and 2020 due to its high fertility rate. However, its education system also shows low gender equality, with only 67 girls enrolled in primary school and 49 girls enrolled in secondary education for every 100 boys (UNESCO, 2012).

In the Asian and Pacific region, China, Hong Kong, China, Malaysia, the Republic of Korea and Singapore are close to achieving gender parity in primary education (see figure), while Cambodia and Pakistan are the furthest from that goal (data were not available for India, the Lao People's Democratic Republic and Myanmar). The results are similar for secondary education, except that China falls behind the other primary education leaders. In tertiary education, the Philippines and Thailand have a higher female than male completion rate; the reason could be a higher opportunity cost of education for males, given their higher wages with a secondary school diploma compared to female market wages.

Progress in achieving gender parity in education has run into obstacles in some parts of the developing world, such as Pakistan where extremist groups threaten violence against girls who attend school as well as their teachers. Even the more moderate groups consider Malala's views to be a threat to their traditional way of life.

Because the suppression of women's education is also a suppression of many developing countries' economic transformation, a concerted policy effort is required.

6. Trade benefits girls, as opportunities to work in trade-related industries exist encourage them stay in school

While the education of girls increases the pool of skilled labour required to move trade opportunities from low-value to high-value activities, the presence of trade-related industries creates incentives for education that keep girls in school, potentially achieving a virtuous cycle. For example, India's entry into the world economy increased the returns to

English education. Low-caste boys with traditional caste-based employment did not benefit as much as low-caste girls, who were not needed in the traditional labour market. These low-caste girls were motivated to enter English-language schools that channelled them into white-collar jobs, leading to their rising education levels and higher labour force participation (Munshi and Rosenzweig, 2006).

Using a natural experiment setup, Jensen (2012) showed that in India an increase in job opportunities in the business process outsourcing field led to higher schooling and labour force participation for older girls, increased body mass index and schooling for younger girls, and lower marriage and birth rates when compared with girls in villages that were not targeted in business process outsourcing recruitment efforts.

7. Conclusion

The benefits that are derived from investing in girls' education spread across many economic constituencies in a country, including the export-oriented product and service sectors. The recent recognition of the efforts of Malala Yousafzai to advocate for girls shines a light on the lagging gender parity in education in Pakistan and other Asia-Pacific countries. A concerted effort on the part of policy-makers is an absolute necessity if these countries are to move higher up the global value chain in trade as well as improve the lives of their female citizens and future generations.

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