

# Terms of Reference: Human capital development in Asia

#### **Project Description**

Rapid technological advancements and shifting patterns of specialization and trade have made it necessary for Asian economies to accelerate the accumulation of human capital. While much has been written about the state of human capital as the aggregate level, there is a limited understanding of the factors affecting human capital formation at the level of individuals and households, in particular for developing and emerging countries. Empirical research grounded on economic theories of human capital investment can provide the necessary insights for policymakers.

Various strands of economic literature can contribute to a better understanding of the process of human capital development. A multi-dimensional conceptualization of human capital, involving cognitive and non-cognitive characteristics as well as health, is widely accepted. Each of the components of human capital have their own formative processes. In one important strand, researchers conduct structural estimation of the human capital production function to uncover contribution of various factors to overall human capital. The estimates emerging from these models can identify where policy-interventions can be most effective.

It is well established that household (parental) resources play a significant role in human capital formation, especially during early childhood. Among poor households, budget and credit constraints can preclude adequate investment in human capital. It is also evident that non-economic factors such as cultural norms can hinder investment for women. Recent research has also pointed to the role of factors outside the household's control. These include environmental factors such as exposure to air pollution. The local labour market may also be important. Further research is needed to understand the interventions necessary to mitigate such factors.

The joint determination of occupational and human capital choice is also important to consider. Individuals make choices about occupations and career by weighing the rewards and costs of gaining occupation-specific skills. Such investment must compete with other beneficial uses of individual's time and financial resources. Therefore, in equilibrium, the level of human capital investment in a country is determined not only by the supply of training institutions, but also other economic factors. For example, high cost of skill acquisition may dissuade individuals from training for and entering an occupation even when monetary rewards are high. To organically develop a country's human capital, we need to also pay attention to the incentives faced by individuals who make an economic decision about investing in skills and training.

Economic Research Institute for ASEAN and East Asia (ERIA) [Headquarter] The ASEAN Secretariat 70A, Jalan Sisingamangaraja Jakarta Selatan 12110, Indonesia TEL: (+62-21) 726-2991, Ext. 334 FAX: (+62-21) 7278-9006 http://www.eria.org

[Annex Office] Sentral Senayan II, 5th & 6th Floor Jalan Asia Afrika No. 8, Gelora Bung Karno, Senayan, Jakarta Pusat 10270, Indonesia TEL: (+62-21) 5797-4460 FAX: (+62-21) 5797-4464 Most observers of Southeast Asian economy concur that the region faces a risk of skills shortage. Among the wealthiest ASEAN economies, Thailand and Malaysia face ageing population, Indonesia and the Philippines have poor education infrastructure, and Singapore has a small workforce. World Bank's Human Capital Index (HCI) gauges the amount of human capital children born today can expect to achieve when they are 18 years old, relative to the ideal scenario of full education and health. For Southeast Asia, the index ranges from 0.45 for Lao PDR to 0.88 for Singapore. This is interpreted to mean that given the current provision of health and education, the productivity of a child born today in Lao PDR is expected to be 45% of the ideal condition. ASEAN Member States are keenly interested in expanding their human capital base in order to sustain their economic growth and modernize their economies. Expansion of education and training opportunities have been highlighted as policy imperatives.

This objective of this project is to expand perspective on human capital development by analysing factors that impact each component of human capital. The project will bring together researchers to conduct empirical research related to the project theme. Each researcher in the project team will develop an original research proposal and conduct rigorous empirical research.

Possible research questions could include: How can we encourage more and more individuals to acquire the necessary skills? Which factors drive skill acquisition in each country? Why do skills gap exist? Is there a geographic disconnect between potential human capital and training opportunities and if so, how can we correct that? What factors explains schooling and health outcomes in Asian countries (e.g. Credit constraint, low returns to human capital, cultural factors (especially for women and certain ethnic communities E.g. Son preference, gender norms), persistent but random environmental shocks, family background). These are some questions that are important for the policymaker to prioritize the allocation of resources. For each factor that is viewed as important, how can policy be designed to encourage further investment in human capital?

The project is expected to produce the following output:

- Several publication-quality research papers related to the theme, which will be published as ERIA Discussion paper (8000-10000 words each) and may be published in academic journal
- A non-technical integrative ERIA report with policy recommendations (5000 words)
- Related policy briefs (2000-3000 words) and op-eds (800-1000 words)

### Task and Output of Consultant

The main author of each paper will be contracted by ERIA as a short-term consultant. The consultant is expected to contribute <u>one academic paper</u>, which will be published as ERIA discussion paper. Upon agreement of the project team, we may also publish a special issue journal article.

#### Task

The consultant's main tasks and deliverables will include:

- 1. Develop and conduct empirical research to produce publication-quality working papers related to project theme
- 2. Participate in workshops and provide comments and feedback on research of other project researchers
- 3. Peer-review research of one other researcher
- 4. Provide comments on non-technical ERIA report
- 5. Activities related to publication

The consultant is expected to submit the deliverables in Word format, with a separate document for tables and figures, and, if applicable, provide data and data exercises (including do files) in STATA.

- 1. Deliverable 1: Preliminary paper draft (research question, literature review, data description, empirical methods and preliminary results)
- 2. Deliverable 2: Final paper draft

#### **Time Frame**

The project activities will be undertaken between Aug 2019 and Aug 2020.

Aug 23, 2019 – Research proposals due

Dec 30, 2019 - Preliminary paper draft due

Jan xx, 2020 – First workshop to discuss preliminary paper draft (Date TBD)

Apr 15, 2020 – Complete paper draft due for peer review and feedback

Apr xx,  $2020 - 2^{nd}$  workshop to present full papers (Date TBD)

July 31, 2020 – Final paper draft due incorporating comments and feedback

#### Budget

ERIA will provide financial support of US\$8,000 (eight thousand US dollars) for one chapter. In addition, ERIA will cover the travel and lodging costs of the researchers to attend the project's workshops.

### **Terms and Conditions**

The consultant shall make himself or herself available from September 1, 2019 to August 31, 2020 on an intermittent basis.

The payment shall be made with the following instalments:

- 1. 40% of the total financial support paid after the submission of deliverable (1)
- 60% of the total financial support paid after the submission of the final report or deliverable
  (2) approved by the reviewer and the ERIA coordinator and management team.

## **Project Leader**

Rashesh Shrestha Economist Economic Research Institute for ASEAN and East Asia (ERIA) Sentral Senayan 2, 6th floor, Jakarta, Indonesia P. +62-21-5797-4460 x600 F. +62-21-5797-4464 E. rashesh.shrestha@eria.org