EPS PEAKS Our Expertise. Your Knowledge.

ECONOMIC AND PRIVATE SECTOR
PROFESSIONAL EVIDENCE AND APPLIED KNOWLEDGE SERVICES

HELPDESK REQUEST

Skills, second chance learning and economic growth

A review of the available evidence on second chance education programmes and the role of skills for economic growth in emerging economies

Mr. Niccolo Durazzi and Dr. Robyn Klingler-Vidra

LSE Enterprise

June 2014

EPS-PEAKS is a consortium of organisations that provides Economics and Private Sector Professional Evidence and Applied Knowledge Services to the DfID. The core services include:

1) Helpdesk
2) Document library
3) Information on training and e-learning opportunities
4) Topic guides
5) Structured professional development sessions
6) E-Bulletin

To find out more or access EPS-PEAKS services or feedback on this or other output, visit the EPS-PEAKS community on http://partnerplatform.org/eps-peaks or contact Yurendra Basnett, Knowledge Manager, EPS-PEAKS core services at y.basnett@odi.org.uk.

Contents

1 Introduction

1.1 Context

DFID are working to improve the relevance and quality of delivery of skills programmes with strong private sector input. Three main reasons have been outlined for why DFID should engage on skills programmes: (1) to support growth in key sectors and related economic development, (2) to catalyse key investment opportunities and (3) to support country offices with technical advice on skills programmes. Importantly, DFID is focused on the link between skills and job creation.

The conceptualisation of skills employed in Part II of this study is consistent with DFID's categorisation of skills in emerging economies – foundation skills, associated with literacy and numeracy (particularly relevant to the focus on second chance learning); transferable skills, including problem-solving and the ability to transform and adapt knowledge and skills in varying work contexts; and technical and vocational skills, associated with specific jobs. DFID's life-cycle approach to skills has an increased focused on soft-skills / 21st century skills.

In order to commence work on these programmes, DFID are drafting a policy note on skills that assesses whether skills are a key constraint for jobs and growth and shows "the linkage between skills and the Economic Development Strategic Framework." DFID are also working on a short piece on skills in stabilisation/post-conflict and on "second chance" learning (equity) using the experience of country programmes to tell the story (including Bangladesh, Ghana and possibly Pakistan).

As part of these efforts, DFID have commissioned two Help Desk Requests, which have been combined in this single report. In this report we strive to answer the following research questions:

- Part I: what kind of second chance learning programmes are there to help individuals catch up? What is the evidence of the second chance learning programmes' impact?

- Part II: to what extent are skills a (key) driver of economic growth and job creation in emerging economies in South Asia and Sub-Saharan Africa? Moreover, to what extent are skills a key barrier to growth (vis-à-vis other factors) in service industries, extractive industries, agriculture, and industrialisation in emerging economies? What are the skills that enhance labour market performance (productivity, job creation, etc)? Which skills programmes have been found to produce good value for money?

The topics discussed in this report are relevant for a variety of reasons, including:

Part I:
- Second chance schooling is equity-enhancing and can contribute to strengthening social inclusion;

- Second chance schooling is efficiency-enhancing and can contribute to increasing individual productivity and – more broadly – to a variety of financial and non-financial benefits for the individual and society at large.

Part II:

- Youth bulge presents demographic dividend or disaster, depending upon the job opportunities made available to emerging economy youth;
- Skills are a driver of economic growth, as improved skills can propel higher productivity;
- Yet, research suggests that low productivity (due to low skill levels) inhibits emerging economies from competing internationally – which propels a vicious cycle of lack of adequate skills and opportunities.

The authors of this Helpdesk Request, Niccolo Durazzi and Robyn Klingler-Vidra, have conducted a literature review of the evidence available for the effectiveness of second chance learning and skills programmes across DFID's partner countries. This review includes discussions of the impact that (inadequate) skills have on (constraining) economic growth and job creation in emerging economies and the value-for-money of second chance learning and skills development programmes. Efforts are made to provide examples of programmes that have achieved favourable cost-benefit evaluations. A summary of the findings in provided in the box below.

Box 1: Main findings from the literature reviews

Part I describes a number of second chance learning programmes drawing from the existing literature. It concludes that are strong theoretical arguments for government intervention in second chance learning programmes. It also finds that second chance learning programmes usually have a positive impact on learners and they do seem to be cost effective. However, the majority of the evaluations of second chance programmes do not allow establishing a counterfactual and, therefore, isolating the impact of the programmes from other factors. It is recommended that future second chance programmes have strong evaluative components to ensure that we increase the available knowledge on their effectiveness, impact and value for money.

Part II examines evidence of skills are a primary driver of economic growth and also the evidence of the cost-effectiveness of skills programmes in emerging economies. It concludes that skills improvements are an important component of equitable, and sustainable, economic growth and job creation. In emerging economies, other factors are also constraints on economic growth and job creation, namely access to finance, infrastructure, electricity and a skills/jobs mismatch. For the value-for-money aspect of the review, it finds that demand-driven (and therefore labour-market relevant) and private sector partnered skills programmes perform best. Caveat that there is limited critical evidence (e.g. including a counterfactual) of skills programme effectiveness. As a result, similar to the finding in Part I, it is recommended that an evaluative component accompany future emerging economy skills programmes, focusing on value-for-money.

1.2 Methodology

The methodology, given DFID's emphasis on rigorous evidence, regardless of its grey or academic literature origins, consists of a review of academic, individual country donor, and development community studies. Geographic scope and literature typologies largely unconstrained, but wherever possible focus on:

- Rigorous studies across grey literature (e.g. international donors; development agencies) and academic literature

- South Asia and Sub-Saharan Africa over other developing countries (DFID's strategic interest)

To source relevant material, the report's authors primarily utilised Google Scholar. As the volume of rigorous studies on value for money of these skills programmes is limited, the authors have not selected a sub-set of available studies; instead, to the best of the authors' knowledge, all relevant studies found in the research process have been included in the findings presented in this report. To be sure, the lack of selection of specific studies is a reflection of the limited volume of value-for-money or cost-effectiveness evidence, and not a function of author, sector or geographical filters.

Where possible the key evidence and indicators highlighted in the literature are delineated. A full reference section is available for both parts of this Heskdesk query response (sections 2.6 and 3.7 for Part I and Part II, respectively).

2 Part I: Second Chance Learning

2.1 Background

Gary Becker's seminal work on human capital assigned a central role to education in the achievement of economic prosperity and productivity (Becker, 1995) and found widespread agreement among scholars, governments and international donors alike. Glewwe notices how the theoretical consensus around the human capital theory translated into major international organisations recognising education as an important driver of 'economic and social development' and prioritising it in international policy initiatives, e.g. the Millennium Development Goals (Glewwe, 2014: 1-2). Governments in developing countries, on their part, devoted increasingly more resources to this policy area. Resources invested in education across the developing world has steadily increased and reached the aggregate amount of $700 billion dollars per year (Glewwe, 2014: 2). However, despite high policy salience and large financial investments, poor educational achievements in some areas of the developing world (most notably Sub-Saharan Africa and Southern Asia) still pose a major challenge to policy-makers. In particular, a striking mismatch between quantity and quality of education provision exists. The tables below uncover this mismatch by comparing basic indicators of 'quantity-type' of achievements versus 'quality-type' of achievements in the field of education policy. The former is captured through the rate of out-of-school children at primary- and secondary- school age, while the latter is captured by the literacy rate of the 15-24 year old population.

Table 1: Rate of out-of-school children of primary school age, both sexes (%)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
World	15.80	14.95	14.45	13.99	12.61	11.90	11.34	10.69	9.37	9.18	9.05	8.78	8.84
Caucasus and Central Asia	..	4.99	5.01	5.29	5.95	5.58	5.50	5.51	6.33	6.67	6.96	6.75	6.09
Latin America & the Caribbean	6.88	6.20	5.97	5.20	5.38	5.37	5.57	5.59	5.57	5.97	5.60	5.56	5.84
Northern Africa	12.10	10.48	8.47	6.91	6.36	5.80	6.06	5.27	5.06	4.45	3.85	1.82	2.60
Sub-Saharan Africa	**41.69**	**39.74**	**37.97**	**36.40**	**33.95**	**32.31**	**30.07**	**27.99**	**24.97**	**24.17**	**23.62**	**23.13**	**22.29**
Western Asia	15.15	14.02	12.63	11.65	10.85	10.36	9.84	9.75	9.38	8.71	8.29	7.18	6.65
Eastern Asia	4.78	4.30	3.89	3.41	2.89	3.20	3.64	4.50	3.44	3.32	3.24	3.31	3.24
South-Eastern Asia	7.39	7.35	6.83	7.11	7.22	7.38	7.88	7.34	5.86	5.66	5.07	5.10	5.43
Southern Asia	**21.55**	**19.82**	**19.37**	**18.34**	**14.13**	**11.58**	**9.80**	**8.33**	**6.44**	**6.14**	**6.08**	**5.37**	**5.79**

Source: UNESCO Institute for Statistics

Table 2: Rate of out-of-school adolescents of lower secondary school age, both sexes (%)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
World	25.65	24.67	23.83	22.84	21.06	20.35	19.63	18.78	17.59	18.02	18.42	17.30	16.92

Caucasus and Central Asia	..	..	5.90	5.34	4.86	4.63	4.35	3.94	4.46	4.82	4.93	5.03	5.99
Latin America & the Caribbean	10.23	10.10	10.17	9.75	9.50	9.18	8.64	7.17	6.34	5.87	6.02	6.58	7.45
Northern Africa	..	..	..	..	..	..	..	..	..	..	..	..	..
Sub-Saharan Africa	**45.92**	**44.63**	**43.67**	**42.29**	**41.52**	**40.46**	**39.84**	**38.64**	**39.03**	**37.55**	**35.95**	**34.36**	**33.71**
Western Asia	27.68	23.81	21.33	20.29	18.44	16.99	15.96	16.01	15.04	14.61	13.90	13.55	13.25
Eastern Asia	20.54	18.88	17.26	16.24	14.25	12.54	10.80	9.58	6.93	6.95	6.87	6.83	6.85
South-Eastern Asia	26.22	25.16	23.45	21.79	18.98	17.92	18.00	18.64	14.62	15.16	13.82	12.84	11.94
Southern Asia	**38.91**	**38.37**	**38.53**	**37.50**	**33.92**	**32.23**	**30.76**	**28.83**	**26.75**	**28.70**	**31.39**	**27.69**	**26.27**

Source: UNESCO Institute for Statistics

Table 3: Youth literacy rate, population 15-24 years, both sexes (%)

	1999	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**
World	87.32	87.32	87.32	87.32	87.32	87.32	89.44	89.44	89.44	89.44	89.44	89.44	89.44
Caucasus and Central Asia	99.85	99.85	99.85	99.85	99.85	99.85	99.88	99.88	99.88	99.88	99.88	99.88	99.88
Latin America & the Caribbean	96.32	96.32	96.32	96.32	96.32	96.32	97.82	97.82	97.82	97.82	97.82	97.82	97.82
Northern Africa	79.74	79.74	79.74	79.74	79.74	79.74	89.25	89.25	89.25	89.25	89.25	89.25	89.25
Sub-Saharan Africa	**68.69**	**68.69**	**68.69**	**68.69**	**68.69**	**68.69**	**69.61**	**69.61**	**69.61**	**69.61**	**69.61**	**69.61**	**69.61**
Western Asia	91.63	91.63	91.63	91.63	91.63	91.63	94.12	94.12	94.12	94.12	94.12	94.12	94.12
Eastern Asia	98.91	98.91	98.91	98.91	98.91	98.91	99.65	99.65	99.65	99.65	99.65	99.65	99.65
South-Eastern Asia	96.30	96.30	96.30	96.30	96.30	96.30	97.32	97.32	97.32	97.32	97.32	97.32	97.32
Southern Asia	**73.81**	**73.81**	**73.81**	**73.81**	**73.81**	**73.81**	**80.15**	**80.15**	**80.15**	**80.15**	**80.15**	**80.15**	**80.15**

Source: UNESCO Institute for Statistics

The tables show that governments were quite successful in tackling issues of school enrolment. While the percentage of out-of-school pupils is still significant, especially at the secondary level, the incidence of out-of-school on the relevant age-cohort decreased significantly. In Sub-Saharan Africa it almost halved between 1999 and 2011 at the primary level and in Southern Asia it showed a four-fold decrease. Against this (quantity) success story, it is however observed a much more problematic issue on the side of the learning outcomes. Table 3 shows that the literacy rate amongst the 15-24 year olds has remained almost unchanged in Sub-Saharan Africa and that it only had a timid increase in Southern Asia. These data highlight two basic problems of the education systems in developing countries – and Sub-Saharan Africa and Southern Asia in particular. Firstly, a sizeable amount of young people fall through the net of the system in the transition from primary to secondary school. Secondly, attending school may not necessarily translate into successful learning experiences.

In this context, second chance learning programmes become important – next to continued efforts to improve the formal education system – because they give an opportunity to individuals that, for a variety of reasons, are not in the formal education system, they did not complete it or, where completed, their learning was not satisfactory. For these reasons governments and donors have been giving in recent years increasing attention to **second chance education programmes** (Jimenez et al., 2007; Fredriksen, 2011). This paper investigates how these programmes have been implemented across developing countries and what is the evidence of their effectiveness. As the rest of the paper will discuss, the programmes vary along a number of

dimensions (e.g. size, scope, management, target beneficiaries), but at a headline level they are identified as **policies and programmes 'to get illiterate young adults into school or into informal training courses and to get illiterate young adults into literacy programmes'** (Jimenez et al. 2007). Second chance education programmes are also referred to as 'complementary programmes' (e.g. in DeStefano et al., 2007) pointing to the fact that such programmes are a complement to the formal education system and serve those that – for different reasons – may have slipped through the net of the formal system. Similarly, Nicholson (2006) refers to 'accelerated learning' for programmes aimed at providing condensed, fast-tracked education experiences to individuals in post-war settings that have not been able to attend education. Thus, second chance education programme cannot be captured by a single and narrow definition but they rather encompass a broad range of interventions. A useful three-fold categorisation is provided by WB/ Filmer and Fox (2014) and reported in the following box. It should be noted that specific programmes may not fit neatly in one of the three categories, but rather have characteristics of two of them.

Box 2: Typologies of second chance programmes

Accelerated learning programmes give children and youth an opportunity to catch up on missed education in a short period through intensive, flexible methods or schedules to complete the curriculum faster than in traditional education and help youth to re-enter the formal primary or secondary school system. Such programmes are common in countries where children's schooling was interrupted by armed conflict or other kinds of social upheaval.

Nonformal education programmes provide youth with instruction equivalent to formal education, focusing on essential learning needs and basic skills e.g. literacy, numeracy). Most nonformal education courses range from a few months to years and can be offered on a part-time or fulltime basis. They are normally delivered face-to-face in formal school facilities and learning centres but can also be provided through e-learning and radio.

Equivalency degree programmes are nonformal education programmes leading to qualifications equivalent to those gained through formal education programmes. Equivalency degree programmes target primary or secondary school dropouts and provide corresponding degrees, signalling that the recipient has demonstrated the ability to read, write, think, and compute at the level for which the degree was offered. Equivalency programmes vary in terms of admission, age, place, and pace, and they are delivered either via face-to-face learning or distance education.

Source: WB / Filmer and Fox (2014:81)

2.2 Rationale for the establishment of second chance programmes

At a headline level, the rationale behind the establishment of second chance education programmes broadly mirrors the central arguments in support of public investment in school education, i.e. arguments of equity and efficiency (Jimenez et al., 2007; see Barr, 2012 for a compelling explanation of the lessons from economic theory about the equity and efficiency aims of education policy).

Second chance education programmes are equity-enhancing because they target the most disadvantaged groups of the population. Several studies (e.g. World Bank, 2006; UNESCO, 2012; 2014; FAO, 2003; Jimenez et al., 2007) show that the segments of the population that are most likely not to enrol into school or to dropout from the formal education systems are the most disadvantaged, including: young people in the rural areas, the urban poor, those living in war-torn areas, ethnic minorities. The availability

of second chance programmes may be an important instrument to favour the inclusion of the most disadvantaged parts of the population in the society.

In turn, if education reaches out to the most disadvantaged, gains on efficiency grounds are also expected to occur: finding productive employment is the main example in this respect (Jimenez et al., 2012: 92). Benefits from widened access to education are not only expected to accrue to the individual who receives the education but also to the wider society, including a reduced propensity 'to risky kinds of behaviour, including drug abuse, unprotected sex, and violence' (Jimenez et al., 2012: 94).

Thus, as the World Bank effectively and succinctly puts it, second chance education programmes are instrumental to mitigating the undesirable outcomes deriving from past policies and behaviours (World Bank, 2006:60). Adverse outcomes are the result of choices that may occur at various levels. At the national level, insufficient spending on education in the past prevented significant parts of the population to receive a (good) education; at the community level, deep-rooted traditions such as early marriages prevented many young people to completed education; at the individual level, lack of information on the future benefits of education may have led young people to dropping out of school or not enrolling. At whatever level an adverse choice may have been made, second chance education programmes provide the opportunity to address its adverse consequences (World Bank, 2006:60).

The rationale for the establishment of second chance programmes is further reinforced by the 'size' of the challenge. Notwithstanding the technical issues in carrying out this kind of exercise, an estimation by UNICEF (2012: 182) reports that '200 million youth need a second chance in 123 low and middle income countries'. The UNICEF document also highlights that 'the most cost- effective way to provide basic skills is to ensure that all children have access to good quality primary schooling in the first place. **As long as this is still not a reality, there is an urgent need to ensure that all young people today have a second chance to achieve this goal**' (UNICEF, 2012: 182, emphasis added).

2.3 Overview of second chance programmes

Second chance programmes vary greatly in terms of their characteristics. The literature consulted provides several examples of these programmes, summarised in the following table.

Table 4: Summary of second chance programmes found in the literature

Programme	Country	Source	Short description
Community Schools	Afghanistan	DeStefano et al., 2007	The complementary model developed through the programme offers an example accurately, the home-based classrooms—are either single-sex or mixed and are located of a working, collaborative partnership between communities, local and national governments, and an international NGO. The peak enrolment in this programme was over 45,000 students.
Home-based Schools	Afghanistan	DeStefano et al., 2007	The schools establish learning opportunities in communities using community education committees to nominate trusted local teachers. Locally appointed teachers can provide appropriate instruction and an acceptable learning environment.

			Women are encouraged to become teachers, especially as they are often able to attract girls from more conservative families. In some communities, families allow their daughters to be taught by men from the community if they are known and trusted. The peak enrolment in this programme was 14,000 students.
BRAC primary schools	Bangladesh	DeStefano et al., 2007; CREATE, 2010; FAO, 2003	These programmes are similar in their fundamental features insofar as they create, operate and support small classes located directly in the remote villages where rural people, particularly girls, previously had almost no access to schooling. In the villages where they work, these programmes help establish community-based school governance and management structures. They vary greatly in size, ranging from a peak enrolment of 1 million in Bangladesh to 4,700 in Egypt.
Community Schools	Egypt	DeStefano et al., 2007	
School for Life	Ghana	DeStefano et al., 2007	
Community Schools	Mali	DeStefano et al., 2007	
PRONADE	Guatemala	DeStefano et al., 2007	
Educatodos	Honduras	DeStefano et al., 2007	
Community Schools	Zambia	DeStefano et al., 2007	A programme that was formed in part as a response to the HIV/AIDS epidemic and the fiscal crisis constraining government services during the 1990s. Communities started their own schools in the absence of a nearby public school and in order to help families and orphans unable to meet the costs associated with government schooling. The peak enrolment in this programme was 500,000 students.
Jóvenes en Acción	Colombia	Attanasio et al., 2011	The programme was introduced between 2001 and 2005 and provided three months of in-classroom training and three months of on-the-job training to young people between the ages of 18 and 25 in the two lowest socioeconomic strata of the population. Training institutions in the seven largest cities of the country chose the courses to be taught as part of the programme and received applications.
CREPS	Sierra Leone	Nicholson, 2006	These programmes are similar in their fundamental features. They offer a condensed version of the national
ALP	South	Nicholson,	

	Sudan	2006	primary school curriculum to out-of-school, dropouts and, in some instances, demobilised soldiers' children, in post-war settings.
COPE	Uganda	Nicholson, 2006	
APEP	Afghanistan	Nicholson, 2006	
Balsakhi Programme	India	Banerjee et al., 2007	It is a remedial education programme, where a young woman ('Balsakhi') from the community works on basic skills with children who have reached grade 3 or 4 without having mastered them. These children are taken out of the regular classroom to work with this young woman for two hours per day (the school day is about four hours).
Computer Assisted Learning	India	Banerjee et al., 2007	The intervention is addressed to all children but is adapted to each child's current level of achievement. It is a computer-assisted learning programme where children in grade 4 are offered two hours of shared computer time per week during which they play games that involve solving math problems whose level of difficulty responds to their ability to solve them.
Second chance education	China	UNICEF, 2001	The Second Chance Education Project was designed to meet the requirements of the most disadvantaged youth, especially from poor families, who have been forced to drop out of schools largely by circumstances beyond their own control. The objective of the project, therefore, was to provide alternative education opportunities to out-of-school adolescents, especially girls. The project offered opportunities for obtaining basic literacy, numeracy, income-generation skills and health information.
Education for house-wives	Nepal	World Education, 2013	The programme targets 15-45 year old women who have never been in formal education. The programme develops across three years with the objective of providing participants upon successful completion of the third year with a similar level of knowledge of a five-year primary public school.
Second chance schools	Morocco	FAO, 2003	This non-formal education programme offers out-of-school children a second chance for schooling or training for work – and offers a second chance also to those responsible to provide Education for All. It targets the 2.2 million children between 8 and 16 years old who have never entered school or have left before the end of the 'compulsory cycle. Over three-

			quarters of these children live in rural areas and some 45 per cent are girls. Consequently, the programme gives special attention to reaching rural children and girls in particular. It also gives attention to meeting the basic learning needs of working children and children in difficulty.

Source: author, based on the various sources mentioned in the table. Please refer to the respective sources for further information on the programmes

2.4 Evidence of impact of second chance programmes

There is a large number of second chance programmes implemented worldwide. A survey of such opportunities in Africa identified over 150 programmes, but 'information on their availability is patchy' (Jimenez et al., 2012: 13). Further, information on the effectiveness of impact and cost-effectiveness of these programmes is also limited (WB/ Filmer and Fox, 2014: 82). Of all the sources consulted, only two (Banerjee et al., 2007; Attanasio et al., 2011) applied an evaluation technique that allowed to establish a counter-factual (e.g. randomised evaluations); the other documents provide rich information on key features of the programmes assessed, but they do not allow for a clear understanding of what would have happened if the programmes had not been implemented or what are the specific benefits of a programmes vis-à-vis, say, the formal education system.

Notwithstanding these limitations, it is possible to categorise the findings from the various sources under five different headings, namely: **funding; delivery; content; target groups; benefits to participants; and value for money.**

Funding

In most of the cases analysed, governments and international donors are the most relevant contributors to the funding of the programmes. In the nine case studies carried out by DeStefano et al. (2007), the governments' role ranges among the following:

- Paying salaries to teachers (e.g. in the Egypt and Mali cases);
- Contributing to a proportion of the overall programme cost (e.g. in the Guatemala and Honduras cases);
- Providing grants to support the community schools (e.g. in the Zambia case).

The Computer Assisted Learning programme in India is another example of government-funded programme (Banerjee, 2007).

In the cases of post-conflict second chance programmes, such as the accelerated learning programmes analysed in Nicholson, the role of the governments is more limited and the funding of the programmes more dependent upon international donors (Nicholson, 2006: 17). It is also found that in these instances governments' role may also be 'obstructive' and affected by the individual personalities holding a ministerial position at a specific point in time (Nicholson, 2006: 17). The Chinese case described in UNICEF (2001) is a further example of international donor-funded programme.

The arguments in support of public investment in second chance programmes are well-established and grounded in the economic theory[1] (e.g. World Bank, 2004; Jimenez et al., 2007). A useful sum-up of the arguments is provided in Jimenez et al. (2007, 93-94)

[1] As already mentioned with respect to equity and efficiency arguments for education, the reasons that underpin government intervention in second chance education are also broadly similar to those that underpin government intervention in education in general. Barr (2012) is recommended for an overview of such arguments.

who puts forward five main reasons why it is the government – and not the markets – that should provide these programmes:

- Students cannot borrow to fund their education because of lack of access to credit;
- Individuals often lack the information to make a choice about education, resulting in under-investment, which governments can address through information campaign (and other similar initiatives);
- There are benefits to the society from second chance programmes;
- There are increasing costs in terms of human capital if gaps in education are not filled early on;
- The unavailability of second chance programmes may results in a waste of earlier investments (e.g. in early childhood investment).

Delivery

In terms of delivery of the programmes, the literature surveyed points towards a strong role retained by the NGOs who work in partnership with government and donors. The private sector does not emerge as a relevant actor in the provision of this type of programmes. In the Indian cases, the implementation of both programmes is responsibility of an Indian organisation, Pratham (Banjaree et al., 2007). NGOs are also often found to play a key role in delivering the programme as well as building capacities of the local communities to foster a local sense of 'ownership' of the programmes. DeStefano et al. (2007: 28) define the role of NGOs as to 'help communities address their own education needs'. The level of involvement of the local community in the design and development of programmes is considered a crucial factor for the success of programmes in post-conflict settings (Nicholson, 2006: 19).

The involvement of governments in the delivery of the programme is often in the areas of contribution to programme design, provision of a framework to recognise the educational attainments into the formal education system of the country (DeStefano et al., 2007: 33; Dopart and Wodon, 2012: 7), coordination among different parties involved in the programmes (UNICEF, 2001: 19; World Bank, 2006), and appointment of teachers (Nicholson, 2006: 13). Teachers are often members of the community (DeStefano et al. 2007: 33; Nicholson, 2006: 13; Banerjee et al., 2007).

Content

The type of curricula offered in second chance programmes is also different according to the programme. The accelerated learning programmes in post-conflict areas described in Nicholson (2006: 13) replicate the national curriculum of the respective country and provide it in an accelerated format. The programmes run in Nepal and China (UNICEF, 2001; World Education, 2013) offer a blend of basic skills (e.g. literacy, numeracy) with some general skills that are either relevant in a specific community (World Education, 2013) or that are considered important cross-cutting skills to have, such as income-generation and health information (UNICEF, 2001).

Target groups

Target groups are highly dependent on the type of programmes. Out-of-schools and dropouts in school age are the most significant target groups for second chance programmes. However, many programmes also focus on adult learners (e.g. World Education, 2013), or on particular groups, such as demobilised soldiers' children, in specific environments, such as post-war settings (e.g. Nicholson, 2006) or girls and women (e.g. World Education, 2013; Brookings Institute, 2013). There is strong rationale in particular for extending second chance education to adult learners. Evidence from Western countries suggest strongly that more educated fathers and mothers better prepare children for school (e.g. Baum, 2010) – offering second chances to parents as

well may therefore trigger a virtuous circle with beneficial consequences for their children, and make the investments in second chance education ultimately more cost-effective.

Benefits to participants

Two studies provide a sophisticated statistical analysis of the benefits to participants in second chance education programmes: Attanasio et al., (2011) and Banerjee et al. (2007) use randomised evaluations. Attanasio et al. focus on a vocational training programme and target their results towards employability gains of the individuals that attended the programme. They find significant gain accrued particularly to women who took part in the programme, who had a significant increase in the probability of finding a formal sector job and a written contract of respectively 0.053 and 0.066. Salaried earnings for women also increased, by nearly 20% (Attanasio et al., 2011: 211). Banarjee et al. also find significant benefits to the participants: the Balsakhi programme increased average test scores of 'all children in treatment schools by 0.28 standard deviation', while the Computer Assisted Learning 'focusing on math increased math scores by 0.47 standard deviation' (Banarjee et al. 2007: 1235). An additional descriptive analysis of the benefits to participants in second chance programmes is provided in DeStefano et al. (2007: 24) and provided in the table below by means of comparison in completion rates between public and complementary schools.

Table 5: Summary of completion rates across nine second chance education programmes

Programme	Country	Completion rate (%)	
		Public	Complementary
Community Schools	Afghanistan	32	50
Home-based Schools	Afghanistan	32	68
BRAC primary schools	Bangladesh	67	94
Community Schools	Egypt	90	92
School for Life	Ghana	59	91
Community Schools	Mali	56	67
PRONADE	Guatemala	62	98
Educatodos	Honduras	68	61
Community Schools	Zambia	72	72

Source: DeStefano et al. (2007: 24)

The table shows that in all cases complementary schools do better than their public counterparts in getting students to complete the programme. However, these results should be treated with a pinch of salt, especially since these are descriptive statistics that cannot control for crucial issues, e.g. self-selection.

Value for Money

Similarly to the 'benefits' issues, value for money is not easy to assess, and most studies do not provide this type of information. DeStefano et al. (2007: 26) is again the only source that makes an attempt to quantify the value for money side of the things. Table below provides such information.

Table 6: Value for Money data across nine second chance education programmes

Programme	Country	Students meeting learning outcomes (%)		Annual cost per pupil ($)	
		Public	Complementary	Public	Complementary
Community Schools	Afghanistan	--	94	31	38
Home-based Schools	Afghanistan	--	99	31	18
BRAC primary schools	Bangladesh	27	70	29	20
Community Schools	Egypt	90	73	94	114
School for Life	Ghana	81	65	27	39
Community Schools	Mali	43	51	322	421
PRONADE	Guatemala	--	--	155	119
Educatodos	Honduras	62	63	102	40
Community Schools	Zambia	35	40	67	39

Source: DeStefano et al. (2007: 26)

According to the data above, there is huge value for money provided through complementary programmes: in nearly every example, complementary programmes tend to be less costly and to lead to better learning outcomes. However, a note of caution should also be placed here since there is no causal link that can be drawn between the outcomes and the programmes due to the purely descriptive nature of available statistics. Furthermore, large differences can be noted between learning outcomes across programmes (ranging from 40% in Zambia to 99% in one of the Afghani programmes), but there is no systematic evidence to be able to isolate success factors that led to such significant differences across programmes.

2.5 Conclusion

The literature consulted and evidence gathered through the literature allows drawing two main general points by means of conclusions.

Firstly, the economic theory provides strong arguments in support of public investments in second chance programmes. This is expected to bring benefits to individuals and society at large and to contribute to more equitable and efficient outcomes. Governments and international donors might play a particularly important role in funding second chance programmes and providing coordination among the many actors involved across various programmes.

Secondly, the empirical evidence related to second chance programmes is more limited than their theoretical foundations. Academic studies in the field are very few[2] and most of the work done – at both descriptive and analytical levels – comes from international organisations and donors. While these studies are extremely rich in terms of information, they do sometimes lack the analytical depth and methodological sophistication to

[2] Although the two mentioned in this document (Banerjee et al., 2007; Attanasio et al., 2011) that apply statistical techniques find a number of positive impacts that second chance programmes have on learners. However, the majority of the programmes has been evaluated through methods that do not allow for establishing a counter-factual.

understand accurately the impact, effectiveness and value for money aspects of second chance programmes. While the findings from the various sources consulted all point towards a positive impact of these programmes on learners, future programmes should have a strong evaluative component to increase the body of evidence on the mechanisms and processes by which second chance programmes impact upon individuals and society.

2.6 References

Attanasio, O., Kugler, A., & Meghir, C. (2011). Subsidizing vocational training for disadvantaged youth in Colombia: Evidence from a randomized trial. *American Economic Journal: Applied Economics*, *3*(3), 188-220.

Banerjee, A. V., Cole, S., Duflo, E., & Linden, L. (2007). Remedying education: Evidence from two randomized experiments in India. *The Quarterly Journal of Economics*, *122*(3), 1235-1264.

Barr, N. (2012). *Economics of the Welfare State*. Oxford University Press.

Baum, S., Ma, J. & Payea, K. (2010). Education Pays 2010. The Benefits of Higher Education for Individuals and Society. *College Board. Advocacy and Policy Center*

Becker, G. S. (1995). *Human capital and poverty alleviation*. World Bank, Human Resources Development and Operations Policy.

Brookings Institute, (2013). A New Agenda for Education in Fragile States. Center for Universal Education Working Paper 10.

CREATE, (2010). Debating Diversity in Provision of Universal Primary Education in Bangladesh. *Create Pathways to Access Research Monograph No. 34*.

DeStefano, J., Moore, A.S., Balwanz, D. & Hartwell, A. (2006). Meeting the EFA: Reaching the Underserved through Complementary Models of Effective Schooling. *EQUIP2 Working Paper*, Washington, DC: USAID/Academy for Educational Development.

Dopart, A. & Wodon, Q. (2012) Thematic Paper: Comprehensive Education. *World Bank*.

FAO, (2003). *Education for rural development: Towards new policy responses*. Rome: Food and Agriculture Organization of the United Nations.

Filmer, D., & Fox, L. (2014). *Youth Employment in Sub-Saharan Africa*. World Bank Publications.

Fredriksen, B. (2011). Education resource mobilization and Use in developing countries: Scope for Efficiency Gains through more Strategic Use of Education Aid. Results for Development Institute.

Glewwe, P. (2014). *Education policy in developing countries*. The University of Chicago Press: Chicago and London.

Jimenez, E. Y., Kiso, N., & Ridao-Cano, C. (2007). Never Too Late to Learn? Investing in Educational Second Chances for Youth. *Journal of International Cooperation in Education*, *10*(1), 89-100.

Jimenez, M., King, E. M., & Tan, J. P. (2012). Making the Grade, *Finance & Development*, 9(1): 12-14.

Nicholson, S. (2006). Accelerated learning in post-conflict settings: A discussion paper. Save The Children-US, position paper presented in a World Bank Accelerated Learning Conference.

UNESCO, (2012). Youth and skills: Putting education to work. *Education For All Global Monitoring Report*.

UNICEF, (2001). Second Chance Education for Out-Of-School Adolescents in China. *Project Impact Assessment Report*

UNICEF, (2012). 200 million young people need a second chance to acquire most basic skills. *Technical note prepared for the Education For All Global Monitoring Report*.

UNICEF, (2014). South Asia regional study. Covering Bangladesh, India, Pakistan and Sri Lanka. *Global Initiative on Out-of-School Children.*

World Bank, (2004). Rationale for public investments in primary education in developing countries. *World Bank, IEG*.

World Bank, (2006). *World Development Report 2007: Development and the Next Generation*, Washington, DC: The World Bank.

World Education, (2013). The Role of Grihini Shikshya in Addressing Child Labour. *Research report*.

3 Part II: Skills as driver of economic growth and job creation

3.1 Background

The motivation for donors' investment in skills training programmes and for the literature examining skills provisioning is underscored by the IFC Jobs Study's conceptual framing:

> some 200 million people are currently unemployed, many of them young people, and it is estimated that by 2020, some 600 million jobs need to be created, mainly in Africa and Asia, largely due to demographic trends. Second, the new jobs must be good jobs. Almost a third of workers are still poor, and about half—particularly women — are informal workers. In some of the poorest countries, informality and underemployment, rather than unemployment, are the main issues (IFC, 2013: 4).

In light of this context, skills development programmes have been funded in SSA, South America, North Africa and South Asia. The countries that have received the largest amounts of bilateral funding for skills development programmes (across all sectors and in absolute numbers, not as a percentage of GDP) are as detailed in the table below:

Table Three: Donor funding to countries 2002-9 (US$ million): most funding in terms of US$

Country	Number of bilateral donors	Total amount disbursed 2002-9, US$ million (2009 constant prices)	Average amount across donating countries US$ million
Mayotte	1	68.6	68.6
Oceania, regional	2	64.1	32.1
Bolivia	12	57.4	4.8
Tunisia	8	56.9	7.1
Senegal	9	51.8	5.8
Morocco	10	51.6	5.2
Nicaragua	10	45.8	4.6
South Africa	14	43.1	3.1
Peru	8	42.2	5.3
Viet Nam	13	38	2.9
Mozambique	14	35.2	2.5
Wallis and Futuna	1	33.4	33.4
Iraq	7	32.4	4.6
Ecuador	8	29	3.6

(source: OECD-DAC, 2011).

Potential "demographic dividends" – stemming from the high proportion of youth in society in emerging economies in Sub-Saharan Africa (SSA) and South Asia – could propel gains in poverty reduction, employment generation and economic growth (EIU, 2013: 2). The demographic opportunity stems from the fact that emerging economies' youth are in many cases the best educated generation thus far. Their skills represent potential for higher rates of productivity and higher value job creation (Amjad, 2013).

However, demographic dividends have not yet contributed to economic growth as numerous challenges are undermining the ability of youth (and adults) to reap the opportunities stemming from their relatively more advanced skills. **Challenges in harnessing the potential of the skilled youth stem from jobs/skills mismatches,**

the low quality of education, the trend towards fewer but more skilled jobs, the inequity of the provision of education and skills training, economic structures focused on mining and agriculture, etc (WDR, 2013; IFC, 2013; World Bank, 2008; Okada, 2012). As a result, economic growth has stemmed from increases in natural resource extraction, capital and labour inputs. For example, in Pakistan, 80% of GDP growth between 1960 and 2005 came from increased capital and labour, while only 20% of growth stemmed from total factor productivity advances (Amjad, 2013: 43).

Rodrik and McMillan (2012) find that labour productivity flows in Sub-Saharan Africa and Latin America, since 1990, have actually been growth reducing, while these structural shifts had proven to be growth enhancing in East Asia. This trend in the wrong direction occurred as labour has moved towards lower productivity activities, particularly informality and has been especially acute in economies with large shares of natural resources. However, economies with flexible labour markets were found to experience the most growth-enhancing structure change as labour can easily flow across sectors (Rodrik and McMillan, 2011: 4).

If the youth bulges in South Asia and SSA are not met with good quality jobs, the concern then shifts from optimizing potential economic growth to a demographic curse in which unemployed and underemployed youth represent bedrock for social problems (World Bank, 2012). Jobs, in this way, represent more than a means for economic growth; jobs are linked to social identity, connection people and overall social cohesion (WDR, 2013: 140-141).

In addition to the youth's potential demographic dividend, the development community's focus on jobs stems from the positive impact that jobs are purported to have on living standards, productivity and social cohesion (WDR, 2013). Multilateral and bilateral donors' **skills programmes strive to ensure that emerging economies have the right skills for more, and better, jobs** as a means to facilitate sustainable economic growth and to provide opportunities for economies with demographics with youthful populations. Partner country governments, private industry, NGOs and donors work to identify (1) the skills that are needed to enable jobs creation and economics growth in the short and long term and (2) how can skills programmes best delivery improvements in the quality and provision of skills in emerging economies.

Despite funding and research endowed to skills programmes, efforts are often fragmented as skills are not necessarily the focus in and of itself, they are affected by fragmentation of agenda and by turf wars (The EIU, 2013). Skills programmes often have the following broad objectives: "help reduce poverty, provide a second chance for dropouts, and serve as a reservoir to keep youth with little academic interest out of the streets and away from social problems (Okada, 2012: 171-172). Donors and governments are working to rectify the fragmentation issue by investing in skills programmes in a more coherent fashion (through skills-centric policies and institutions).

3.2 Skills as a (key) driver of economic growth

By way of background, Mincer (1981; 1995) sets the tone for the dynamic relationship that exists between the supply of human capital, and the demand for it. Mincer (1995) identifies the (micro) supply sources of the growth of human capital as the growth of family income, urbanization, the demographic transition stemming from decreased mortality rates, and the rising cost of time, while he notes that the demand for human capital in the labour market is propelled by capital accumulation and technological changes (Mincer, 1995). What's more, Mincer makes the important assertion that sustainable economic growth is a product of the reciprocal relationship between

economic growth and advances in human capital). Barro (2001) adds to the understanding of the relationship between human capital and growth by demonstrating the impact of the quality, not quantity, of education on economic growth.

Moving into recent empirical studies of the relationship between skills and economic growth, we find that inadequate skills act as a constraint on economic growth in emerging economies. The ILO (2013) study on *Emerging economies: has growth translated into more and better jobs*, laments that a key challenge (in South Africa in particular) is "inadequate access to high-quality education and training, along with the mismatch between the skills of job-seekers and vacancies." In this way, the lack of skills for high-quality jobs acts as a constraint to development of value-added activities. Low skill levels in South Africa were found to have hampered growth opportunities (ILO, 2013). In addition to low skills acting as a drag on the growth of high-value sectors, lower skills levels were also linked to higher rates of joblessness. As a manifestation of this relationship, South Africans with at most a primary school education were found to be three times more likely to give up their job search than university graduates.

Hanushek and Wößmann (2007) demonstrated in their analysis of cross country data that **economic growth depends more on the quality of learning than on the extent of educational coverage.** Though the time in schooling has increased across emerging economics (and in SSA in particular), research suggests that the quality of education (and therefore the skills obtained from attending school) lags behind international standards. The low quality of education hinders SSA youth productivity and further learning abilities. As a result, **low productivity was named as "the main constraint on the growth of an export-oriented sector in Africa"** (WB/Filmer and Fox, 2014: 19). It is important to note that while low quality of education is one of the contributors to low productivity it is certainly not the only driver.

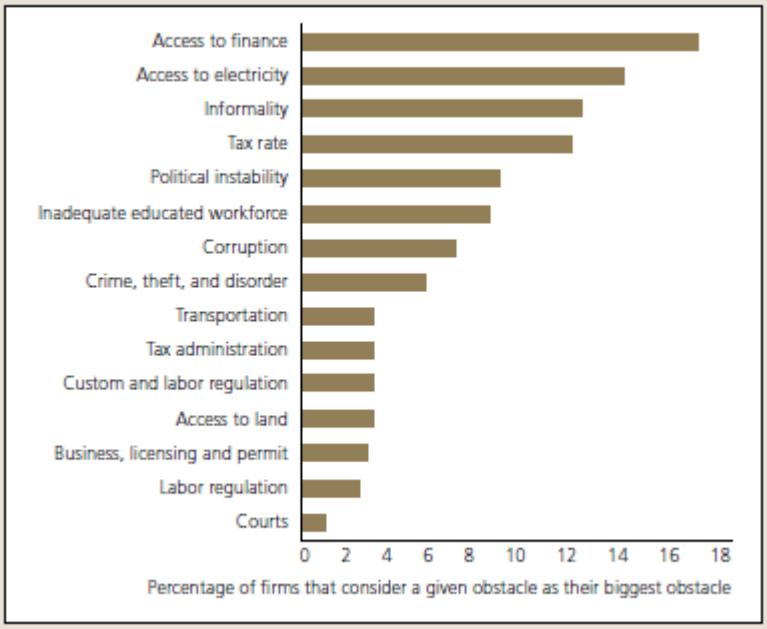
Therefore, as Mincer lamented, there is a reciprocal, or **"chicken and egg", relationship between the lack of high quality jobs and the low level of skills.** Another important finding is that there exists complementarities between skills and physical capital (e.g. technology), whereby education advances skills, which helps to attract investment and make that investment more productive (Griliches 1969; Diep and Coxhead, 2013. Said another way, until there are higher levels of education (contributing to an advance in productivity) amongst workers, SSA and some South Asian economies are not able to compete in international export markets. The cycle is that low skill levels restrict "the potential for diversification into higher return agricultural or industrial products by reducing the ability to integrate into global supply chains and networks and to meet the requirements set by buyers for higher order participation in these markets where profit margins are more lucrative (World Bank, 2008: 3). In Pakistan, for example, as of "2010–11 one-third of the youth labour force was still illiterate and possessed very low levels of technical education" (Amjad, 2013: 48). The low skill levels flow into a vicious cycle by which there remains a volume of manufacturing and services job opportunities. Because of the lack of skill development via such formal sector jobs, youth instead continue to work in the informal (household) sector, where they again fail to develop their skills that would help their economies to compete in higher value added sectors.

However, **skills are not the only drag on economic growth and job creation**. Filmer and Fox (2014) find other factors act as considerable constraints on economic growth in SSA: **financial institutions and access to credit, infrastructure and business climate, and land policies**. The IFC Jobs Study (2013: 38) similarly finds that **SMEs are constrained by access to finance, electricity, informality (informal competition) and tax rates, in addition to a lack of skills**.

Enterprise manager data casts doubt over the centrality of the impact of skills and human capital in economic growth (WDR, 2013: 140). SME perception surveys find that

lack of adequate education or skills is not the primary constraint for SME managers in SSA and South Asia. Initial caveat about the strength of this evidence being that these surveys cannot distinguish between what is a real binding constraint and what is just one of many problems to SME managers. With that said, the top obstacles identified in the World Bank Group Enterprise Surveys for all countries surveyed were as follows:

Figure 4.3: Most firms consider access to finance and electricity, followed by informality and the tax rate, their biggest obstacle



Source: World Bank Group Enterprise Surveys.

As evidenced in the figure above, issues such as access to finance, electricity and informality top the list of SMEs' enterprise managers' perceived concerns. In this way, though skills (education or vocational training) are cited as propellers of productivity and therefore growth, they are not necessarily found to be the primary constraint for SMEs. There is variation in the rank of inadequate skills as a top constraint across countries, where enterprise managers in countries such as India rank inadequate skills as one of the top five constraints while enterprise managers in Afghanistan and Pakistan rate skills amongst the least problematic issues (World Bank, 2012: 27).

The ranking of constraints for SMEs varies across regions and across industries (see tables below. Inadequate educated workforce is not ranked as one of the top three constraints in any of the regions or the three industry sectors identified:

Table 4.1: Top 3 obstacles by region

	SSA	EAP	ECA	LAC	SAR
1st obstacle	power (22.3 percent)	finance (16.6 percent)	tax rate (16.7 percent)	informality (15.9 percent)	political instability (24.4 percent)
2nd obstacle	finance (19.2 percent)	informality (12.0 percent)	finance (15.3 percent)	finance (15.3 percent)	power (23.4 percent)
3rd obstacle	informality (9.7 percent)	power (11.5 percent)	informality (12.9)	informality (12.9 percent)	finance (19.9)

Source: World Bank Group Enterprise Surveys.

Table 4.2: Top 3 obstacles by Industry

	manufacturing	retail	services
1st obstacle	finance (18.6 percent)	finance (18.5 percent)	finance (15.1)
2nd obstacle	power (15.9 percent)	informality (12.6 percent)	tax rate (12.5 percent)
3rd obstacle	informality (12.7 percent)	power (9.9 percent)	informality (11.6 percent)

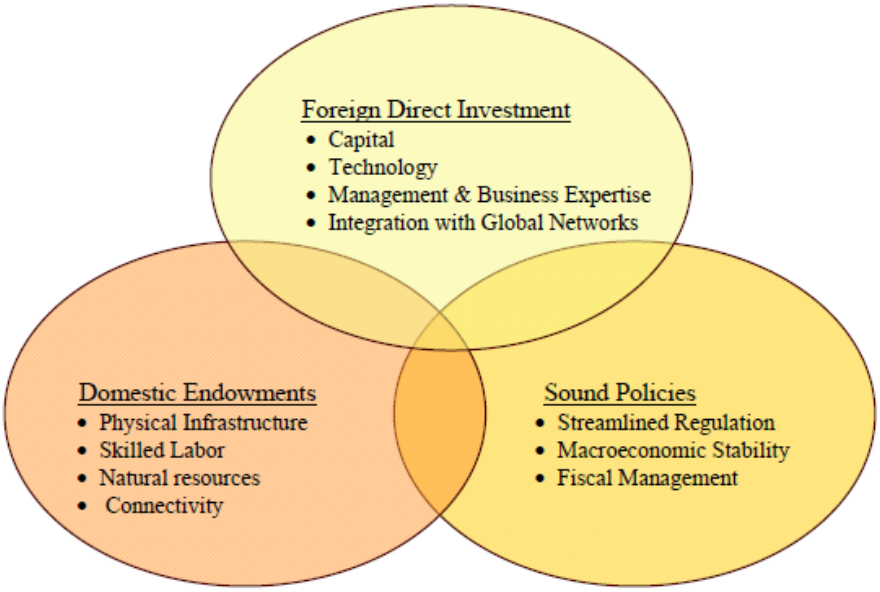
Source: World Bank Group Enterprise Surveys.

There are two primary limitations to the Work Bank Group Enterprise Surveys' findings. First, SMEs have a tendency to under-invest in their staff – relative to larger firms – and are more likely to continue the poverty cycle as a result of the low skills development. In this way, SMEs are not necessarily the engines of long-term economic advances. Furthermore, when examining the perception results of large firms, we see that lack of skills is named as one of the top constraints. So, large firms – local or FDI – which may act as the engines of economic growth in SSA and South Asia as they did in East Asia's industrialization, are constrained by inadequate skill levels. With this said, (very small) SMEs are the provider of most jobs in emerging economies, so the enterprises managers are indicative of the majority of employers' perception of the labour force (WDR, 2013: 104-106).

Second, there is a bias towards short term issues when we value the current perspectives of business managers. Business managers are thinking tactically, about the issues that affect their business today. They are likely not thinking about investments that can improve their business in 10-20 years. As a result, they rank tangible issues such as access to finance, electricity and competition highly, and discount factors that are more indirect and longer-term. The point here is: business managers' perceptions of constraints, while interesting to consider, should be contextualized for their biases and potential economic impact before they shape skills policy agendas. In this vein, we find that SME constraint perceptions can be particularly valuable insights into short-term environment issues.

Furthermore, studies that separate skills from other factors under-represent the indirect impact skills have on broader productive contexts. Skills are one of the few domestic factors that can be aided to propel FDI-led industrialization. The domestic elements that can contribute to FDI-led industrialization are:

Figure 1: Skills Development to Support FDI-led Industrialization



***Source**: World Bank, 2008: 5*

The domestic endowments are physical infrastructure, labour, natural resources and connectivity. While listed as four distinct endowments, skilled labour underscores the productivity and advancement of the other endowments. Greater management of natural resource extraction can drive economic growth, better skilled managers and labour can lead to physical infrastructure improvements and can propel advances in ICT and telecommunications connectivity.[3] What's more, there is a virtuous circle between FDI and skilled labour as skilled labour is one of the contributors to FDI-led industrialization, while FDI inflows generally help create more and better quality jobs (IFC, 2013: 57).

3.3 Skills/jobs (mis)match

Enhancing skills via improvements in education does not necessarily translate into greater employability or productivity. The failure of skills to drive greater productivity and employability in emerging markets in the short-run stems in part from the economic makeup of emerging economies. This is due to the distribution of jobs in emerging markets. As context, emerging market jobs, especially in a SSA context, fall into three main categories:

(1) agriculture,
(2) household enterprises, and the
(3) modern wage economy (WB/Filmer and Fox, 2014).

Family farms (agriculture) and household enterprises (informal work) accounts for a large share of jobs in emerging economies (WDR, 2013: 98). In some countries, the formal sector has been found to only account for 8 to 15% of employment. Majgaard and Mingat (2012) find that as a result of the low formal sector employment creation in SSA, the "informal non-farming sector has become the employer of last resort, absorbing most of the labour force growth and decrease in agricultural employment" (Fredriksen

[3] Greater skilled labour pools would also impact the ability of countries to initiate and manage Sound Policies.

and Fossberg, 2014: 7). A 2008 World Bank report painted a similarly lopsided picture for employment opportunities in 23 SSA countries as on average "subsistence farming or the informal sector provide a livelihood to more than 70 percent of working age adults, while the modern sector offers it to only 8 percent" (World Bank, 2008: 6).

Large enterprises invest more in training than small firms do, so the majority of the SSA workforce - that is employed by household enterprises – are not receiving training that they would if employed by large firms. Furthermore, the traditional apprenticeships that they participate in via small firms in the informal sector perpetuate the use of traditional technologies and lack standards and quality assurance (World Bank, 2004: 7). **Given the large share of jobs provided by SMEs and not large firms in emerging economies, the provision of skills training (a la SMEs) is suboptimal.**

SSA

Looking ahead, short-term economic growth in SSA is expected to continue to stem from minerals and agriculture (WB/Filmer and Fox, 2014: 5). With this said, the services sector has contributed – and is expected to continue to contribute - to growth and job creation in SSA. See, for example, the contribution of the mobile economy to SSA – in 2012, the mobile economy contributed 3.3 jobs and six percent of GDP (see GSMA, 2013). Given that economic compositions in SSA will not shift towards industrialization and formal jobs overnight, the WDR 2014 report laments that "increasing young people's opportunities for productive work in rural areas is arguably the most important catalyst for Africa to reap its demographic dividend." To date, farmers' low productivity has been driven by their low education levels and poor health. **Improving SSA youth's agriculture work skills (through higher-quality education and vocational programmes) would help them to better manage and invest in farms.** Furthermore, investment in skills for the formal sector (including skills for the services sector and sectors such as the mobile economy) can help supply labour needed to grow these productive activities.

As a result of the agriculture-and-mineral-extraction heavy economic composition of SSA emerging economies, graduates end up working – and being underemployed – in the informal sector as the **formal labour market is not able to absorb** them (WB/Filmer and Fox, 2014). Mineral extraction does not create a large number of jobs, and household and agricultural jobs do not leverage SSA youth's education. These conditions compound the issue of the better educated youth not being met with growing high-value job opportunities. As a result, the vast majority of SSA youth will continue to work in the informal sector, in farms and household enterprises, in the short to medium term.

In light of the continued prominence of the informal sector and agricultural work in these emerging economies, skills training in SSA needs to deliver skills relevant to improving informal sector and farming productivity. Investment in farming productivity, a so-called "Green Revolution" in SSA can increase the yield from farms and create more farming jobs, but can also stimulate the development of non-farm sectors as it did in East Asia (WDR, 2013: 106-107). In addition, in light of the growth of sectors such as the mobile economy in SSA and the dynamic relationship between skills and technology, investment in skills relevant to the formal sector, including the services sector, are valuable components towards sustainable economic growth.

South Asia

In South Asia, the service-oriented nature of the economies, and the potential to compete globally in sectors such as business-process outsourcing, means that investment in soft-skills and "horizontal skilling" (English language and communications skills) can increase the relevance of skills obtained and drive economic competitiveness in the business-process outsourcing and hospitality sectors (The EIU, 2013: 3).

Another attribute of South Asia's work force is their migrant work population that can benefit from skills development relevant to the healthcare, construction and domestic services sectors. Finally, the migrant populations of South Asia contribute to the short and long term economic performance of their home countries. In the short-term, migrants that find work abroad (e.g. in the Middle East) contribute to GNP as they send money home via wire transfers. In the long-run, these migrant workers are acquiring skills abroad that can be conceptualized as a skilled labour pool once there are opportunities for them at home (or when they decide to return and start their own businesses in South Asia).

Across the regions and their unique economic makeups, reports such as an Asian Development Bank's 2010 study, have found that "training and skills development experiences are ill equipped to produce graduates with competencies that are aligned to the needs of the labour market … and countries need to improve the 'labour-market relevance of skills being taught" (Asian Development Bank, 2010). To be sure, the responsiveness of institutions providing education and skills development is critical. In addition to skills not being relevant to jobs available, low school-to-work transition rates are low across urban and rural subsets of youth as these first generation school leavers, endowed with better skills than their parents' generation, struggle to find jobs due to a lack of network (Filmer and Fox, 2014: 7).

3.4 Overview of skills development programmes

The **overarching aims of skills programmes are to enhance emerging economies' populations' "productivity and employability in a context of changing labour market conditions"** (World Bank, 2008:4). Skills programmes have historically been implemented as part of a variety of rubrics – including education (Education for All), poverty reduction (specifically the Millennium Development Goals), economic growth, good governance, health, gender equality, etc – rather than as a comprehensive strategy focused on skills specifically (The EIU, 2013). Depending upon the funding and implementing bodies' aims, skills are developed (by the work of local governments, NGOs and the donor community) through a variety of means. According to a 2014 DFID working document on skills programme strategies shared with this report's authors, **donors focus on five main types of skills development work**:

1) vocational skills development / TVET, on-the-job training programmes, literacy and numeracy programmes, as well as soft-skills[4] programmes;
2) Entrepreneurship promotion (financial, technical assistance, and entrepreneurship training) business development;
3) Subsidized employment (including wage subsidy programmes, public works, and public/community service programmes);
4) Employment services (including search assistance and aces to labour market information, job counselling and placement services, financial assistance for job search);
5) Reforms to labour market regulation (including anti-discrimination legislation).

Drilling down into one of these five categories, it is worth noting that vocational skills programmes (technical vocational education and training (TVET) and vocational education training (VET)) programmes have experienced marked growth in the past fifteen years, as providers work to improve the TVET and VET programmes' relevance, quality and affordability. As a manifestation of the growth of vocational education over

[4] Soft-skills refer to critical thinking, self-respect, getting things done, teamwork, motivation and communication (IFC, 2013: 98).

time – overall funding for vocational training (OECD-DAC, 2011), "increased almost three-fold between 2002 and 2009; from US$232 million in 2002 to US$668 million in 2009" (Hunt, 2012: 10). The following table summarizes the largest recipients of donor programmes for vocational training:

Table Five: Most funded countries in terms of numbers of donors funding vocational training

Country	Number of bilateral donors	Total amount disbursed 2002-9, US$ million (2009 constant prices)	Average amount across donating countries US$ million
India	14	23.6	1.7
Mozambique	14	35.2	2.5
South Africa	14	43.1	3.1
Viet Nam	13	38	2.9
Bolivia	12	57.4	4.8
Brazil	12	17.1	1.4
Kenya	12	7.3	0.6
Uganda	12	4	0.3
O. Palestinian T.	11	14.9	1.4
Serbia	11	11	1.0
United Republic of Tanzania	11	13	1.2
Bangladesh	10	24.7	2.5
Burkina Faso	10	20.8	2.1
DRC	10	25.1	2.5

(source: OECD-DAC, 2011).

In addition to the volume of vocational training programmes, governments such as India are working to increase potential trainees' access to vocational education by developing e-learning and digital learning platforms (The EIU, 2013: 19). Funding for such vocational education has increased as evidence "suggests that routes to employment and income generation are often enhanced through participation on donor funded vocational skills programmes" (Hunt, 2012: 8).

The UNESCO Education for All (EFA) initiative has six goals. These UN goals align with the means by which the donor community strives to advance skills in emerging economies (e.g. the five types of skills development work identified above). The UN's six EFA goals are as follows:

1) Early childhood care and education
2) Universal primary education
3) Youth and Adult Learning Needs
4) Improving levels of adult literacy
5) Assessing gender parity and equality in education
6) The quality of education

These six goals are not mutually exclusive; skills programmes can be designed and implemented to address multiple goals at once.

Across the different levels of education there are two recurring themes: **increasing enrolment rates and the quality of education**. In this vein, the ILO (2013) report suggests that public policies to address emerging economies' labour market challenges should focus on improving "access to and the quality of education and training."

Furthermore, **the provision of education is not equitable** across societies in emerging markets. These goals – especially number five – speak to the disparity that exists according to family income levels, gender and urban/rural environments.

Education enrolment rates differ according to these individual factors and also as a confluence of the factors such that girls from low income families in rural areas less likely to enrol in (primary and secondary) education, and accordingly, less likely to make the transition to formal employment (Fredriksen and Fossberg, 2014: 5-6). Across emerging markets donors are working, with the UN 2015 goal that every child has access to an education, to increase the reach and quality of education and skills training.

Taking a long-term view, Fredriksen and Fossberg make the case for donors investing in secondary education given that SSA will face substantial pressure to expand its secondary education system in the next two decades. The authors identify the drivers of this pressure as "the current low development of secondary education compared to other world regions, continued rapid population growth, the increase in the enrolment and completion rates at the primary education level, and the upsurge in the demand for skills."

3.5 Evidence of impact of skills programmes

Skills training programmes are, on average, modestly effective with positive long-term effects (Puerto et al, 2014: 14).[5] The skills development programmes that have been **most successful are those that are collaborations across government, private sector and aid donors** (UNESCO, 2012). Furthermore, "experience in many countries suggests that training institutions which develop close ties with prospective employers and which regularly seek employers' input to develop the curriculum enjoy the best results" (World Bank, 2008: 19). There is limited rigorous evidence of the superior quality of privately provided TVET programmes, however, as private training providers are incentivized to have high job placement rates (as graduates value employability following their completion of the TVET programme) and to invest in high-quality teachers and equipment (UNESCO, 2002: 84-85).

There is limited rigorous evidence of the value for money of skills programmes. Evaluations of cost-effectiveness comparisons across skills programmes were presented in a summary manner by Puerto et al (2014). They compare the cost-benefit analysis findings of youth training programmes[6] in Latin America:

[5] Note that the implicit assumption here is that skills programmes are provided by donors. It is of course worth noting that highly effective skills programmes were employed in East Asia by national governments (e.g. Singapore, Taiwan and Korea).

[6] The Puerto et al (2014) data canvasses the success and failures of various programmes aimed at aiding youth employment, with skills training as one subset. Categories of youth employment initiatives covered include: comprehensive training; job assistance, wage subsidies, public works; skills training; entrepreneurship schemes; others (Puerto et al, 2014: 5).

Country	Impact on Employment	Impact on Earnings	Cost-Benefit Analysis
Chile **Chile Joven**	21% (<21 years, women)	26%	NA
Argentina **Proyecto Joven**	10% (women)	10% (monthly wages)	NPV>0 if 12 years of positive benefits (DR = 5%)
Peru **ProJoven**	6% (placement)	18% (hourly)	•NPV>0 if 7 years of positive benefits (DR = 5%) •IRR > 4%
Dominican Rep. **Juventud y Empleo**	Not significant	10%	NPV>0 if 2 years of positive benefits (DR = infl.)
Colombia **Jóvenes en Acción**	5% (women)	18% - 35% (men - women)	IRR = 4.5% - 13.5% (men - women)

Source: Puerto et al (2014: 17)

The features of the Latin American programmes, as identified by Puerto et al (2014), which drove their impact analyses were the following:

- **Financing of training separated from the provision**: training courses are selected through a public bidding system
- Type of training is **demand driven** -> connection with private sector[7]
- The intervention follows **a "multi-service" approach**: classroom training + internship / work experience + job search assistance + life skills

In addition to these findings, the Puerto et al presentation highlights the low number of impact evaluations that include cost-benefit analyses. Said another way, their data identify the prevalence of impact evaluations that do not include cost-benefit analyses.

At the other end of evidence available, there are individual project descriptions and impact evaluations. Such project information and data – sourced from donor project materials and websites – typically includes the project cost, employment rates, direct numbers trained, etc. lack comparative context. The following are examples of skill development programmes – across primary education through vocational skills development – that have had a high value for money in terms of (a) direct participant volume (b) employability of participants and (c) indirect ecosystem improvement:

1) The World Bank's **Afghanistan Skills Development Programme (ASDP)** has a clear project development objective: to increase the number of immediately-employable graduates through a TVET system that is equitable, market responsive and cost-effective. The project, initiated in 2008 and running through 30 June 2014, has an overall cost of US$ 38 million and is implemented by the Government of Afghanistan's Ministry of Education and Ministry of Labour, Social Affairs, Martyrs and Disabled. As of August 2013, the project had reach over 13,000 chronically poor women and disabled people and over 70 percent of graduates gained employment within six months of completing training (World Bank, 2013b: 3-4). The Government is providing more autonomy to project aided institutions over time.

2) In light of the prominence of informal sector work in SSA and South Asia, effective skills training programmes must deliver skills to these sectors. An example of a successful project comes from the **e-TVET Reform Project** (an

[7] Precise means by which the private sector was involved were not specified in the presentation.

initiative of the **Government of Bangladesh** funded by the ILO and the EU) in which 500 Bangladeshi businesses across hairdressing, motorcycle servicing, and garment making were given apprenticeships. The result of the programme was that 100% of participants stayed on where they were trained, found work in other companies or went on to start their own businesses (The EIU, 2013: 20).

3) The **Australia-Pacific Technical College** trains Pacific Island youth in a range of industry sectors (health, automotive, manufacturing, construction, engineering, tourism, hospitality, and community services) to Australian standards. Run by AusAID, between 2007 and 2015 the College has cost approximately AUD300 million. By 2011, the College helped improve the future employment and promotion prospects of 3,172 graduates.

4) Australia's **Sustainable Livelihood Training in 7 Provinces and Phnom Penh**, run by AusAID from 2002-2006, aimed to reduce poverty in targeted Cambodian communities by providing vocational, education and life skills. The provision of skills training came from womens groups, TVET training centres, and NGOs. Total project cost approximately AUD400,000 and number of participants was 5,445. 90% of the participants were able to earn a living from the skills obtained in the programme.

5) Graduates of Switzerland's **Basic School and Joint Gender Programme** in Bangladesh have achieved the following: over 4000 girls are now in income generating activities and more than 8,800 businesses have been established by graduates. The SDC total project cost between 2007 and 2015 is nearly CHF 13 million and the project is implemented by a Bangladeshi NGO.

6) The SDC funded a successful project in Mali (**Programme d'Appui a la Formation Professionelle – PAFP**) from 1998-2011. PAFP was a national system of vocational training adapted to the socio-economic artisans and craftspeople of Mali. The total project budget was CHF9.6 million. From 2006-2009 alone, the project trained over 7,800 apprentices across 9 education areas and over 500 master craftsmen were training in 2008-2009 alone. Compared to Mali's formal TVET system, the PAFP has "high outreach" and is "more effective" (Maurer, 2011). This effectiveness of the project stems from the delivery of training sessions within firms and workshops, so competences acquired during training are closely aligned with skill needs. As a result, 98% of trainees achieve employability.

7) The World Bank's **Skills Development Project** run in Egypt from 2004-2010 achieved satisfactory results and touched a large number of participants as it strove to stimulate private sector demand for skills training and private manufacturing firms' competitiveness. The Skills Development Project was run by the Government of Egypt and implemented by intermediaries linked with employers. 34,500 people were trained and 1,155 firms were served with training as the result of a US$12.5 million project cost. This project executes on "making skills development initiatives more demand-driven" (Hunt, 2012).

8) As part of its Private Sector Development efforts, Norad's **Matchmaking Programme** has since 1994 established joint ventures between Norwegian companies and recipient country (Sri Lanka, South Africa, Vietnam and India) companies in order to transfer technology and exchange management and business-skills to the South. In addition to the indirect value of the skills transferred, Norad's Matchmaking Programme mobilized 600 Norwegian SMEs to explore business cooperation and investment opportunities in Sri Lanka and South Africa. Direct employment produced by the programme came across 70

companies and 2,000 jobs (Norad, 2010: xix). Success rates have been higher in trade sectors than in investment, and services have had a better chance of leading to a sustained match than manufacturing (Norad, 2010: 33). The Matchmaking Programme's cost to Norad's aid budget per 'successful' cooperation are NOK 0.7-1.3 million, excluding ABS (Application-based Support) and other forms of support. The cost-effectiveness of the Matchmaking Programme could be enhanced by: (1) using local organizations for the matchmaking in partner countries and (2) strengthen the capacity of the local counterpart organizations to apply matchings and cooperations with companies from other partner countries besides Norway (Norad, 2010: 33). Note that the impact of Norad's Matchmaking Programme, when placed in broader economic context in partner countries, is negligible given the programme's focus on joint ventures with Norwegian companies (as a result of the limiting nature of the focus on Norwegian partners, the Programme is expanding to a matchmaking service for international companies with partner companies).

9) **Malaysia – Penang Skills Development Center (PSDC)** - short-term skills development programme via government, industry and academic partnership (World Bank, 2008: 13). The Malaysian government, through the Penang Skills Development Center (PSDC), provided the authorization of training, tax incentives and grants for equipment and facilities. The center's industry partners provided the trainees and incurred equipment and fee costs, academia supplied the trainers and academic advisers. The combination of government, industry and academia resulted in the provisioning of relevant skills of the local work force. The government's investment was equivalent to approximately US$ 12 million, which led to the training of over 100,000 individuals and a financially self-sustaining operation with a portfolio of more than 500 courses.

3.6 Conclusion

The first main research questions addressed in this HelpDesk request centered on the extent to which skills are a (key) driver of economic growth and job creation in emerging economies. The second question asked which skills programmes have been found to produce good value for money.

With respect to the first research question, the finding – across the analytical and empirical literature – is that skills are a critical contributor to sustainable, equitable economic growth and job creation. There is a dynamic relationship between skills and economic growth, in which investment and competitiveness are enhanced by skills and then investment drives the demand for greater skill levels. A focus of the literature on skills programmes and economic growth is on the need to deliver **high quality skills training that are relevant and accessible** to emerging economy populations today. The supply of, and demand for, skills both need advancing in emerging economies (with a focus on SSA and South Asia).

Regarding the second question about the evidence of effectiveness of skills programmes in emerging economies, based upon the research evidence, effectiveness stems from delivering demand-driven training in partnership with private industry as well as investing in skills training for informal sector activities (e.g. craftsmen apprenticeships). Said another way, responsive educational systems – to labour market institutions – are central drivers of the performance of skills programmes. Looking ahead to the design of skills programmes for emerging economies, skills programmes logically focus on two parallel tracks to overcome the vicious cycle of the skills-jobs mismatch.

1. **Short-term programmes**: The first track focuses on short-term measures to produce immediate results that are relevant to economic competitiveness today. Such programmes would focus on vocational and business management skill development to improve productivity in sectors such as agriculture, mining and the informal sector (e.g. household enterprises). In doing so, these skills programmes increase the quality and quantity of skills relevant for increasing productivity and innovation in agriculture, industry and services, and by adding value to extractive industries. To further enhance the relevance of skills programmes, and to reduce costs and therefore increase affordability of education and skills training, private sector partnerships are sought. Private sector partners can be sources of expertise, finance, and equipment – and they can also become employers of graduates. Donors work in close collaboration with prospective employers to design on-demand, ad hoc skills training that have "brand equity" that make them attractive means of vocational education.

2. **Institutional Improvements programmes**: The second track of skills programmes take a long-term view (10-20 years) and in so doing, focus on systemic measures to provide a steady supply of skills to meet the economy's evolving needs. Such programmes focus on the quality and equity in the provision of foundations in mathematics, science and language skills. Investment in soft-skills such as English language and communication in South Asia can be particularly beneficial to their business-process outsourcing and broader service sector competitiveness.

Finally, and importantly, skills programmes can benefit from more rigorous evidence of their value for money. Similar to the conclusion of the second chance learning section, here we conclude that existing studies are rich in information and analytical framing, but lack strong evaluative components for understanding the mechanisms by which skills programmes directly and indirectly impact emerging economies.

3.7 References

Amjad, Rashid. 2013. Chapter Four: Why has Pakistan not reaped its Demographic Dividend? Capturing the Demographic Dividend in Pakistan. http://www.popcouncil.org/uploads/pdfs/2013_PakistanDividend/Chapter4.pdf.

Ansu, Yaw and Jee-Peng Tan. 2008. Skills Development for Economic Growth in Sub-Saharan Africa. World Bank.

Asian Development Bank. 2010. Education by 2020. Manila: Asian Development Bank. http://www.adb.org/documents/education-2020-sector-operations-plan.

Barro, Robert J. 2001. Human Capital and Growth. The American Economic Review Vol. 91, No. 2, Papers and Proceedings of the Hundred Thirteenth Annual Meeting of the American Economic Association. 12-17. http://www.jstor.org/discover/10.2307/2677725?uid=3738032&uid=2&uid=4&sid=21104100542447.

Biavaschi, Costanza *et al.* 2012. "Youth unemployment and vocational training". WDR background paper, April. http://ftp.iza.org/dp6890.pdf.

Diep Phan and Ian Coxhead. 2013. Long-run costs of piecemeal reform: Wage inequality and returns to education in Vietnam. *Journal of Comparative Economics* 41:41106-1122.

Fredriksen, Birger and Camila Helgo Fossberg. 2014. The case for investing in secondary education in sub-Saharan Africa (SSA)

Hanushek, E. and L. Wößmann. 2007. Education Quality and Economic Growth. Washington D.C.: The World Bank.

Hunt, Frances. 2011. Paper commissioned for the EFA Global Monitoring Report 2012, Youth and skills: Putting education to work, "Mapping donors' skills development strategies and programmes". *UNESCO.* 2012/ED/EFA/MRT/PI/26.

IFC. 2013. IFC Jobs Study: Assessing Private Sector Contributions to Job Creation and Poverty Reduction.

ILO. 2013. Emerging economies: has growth translated into more and better jobs.

IMF. 2013. Regional Economic Outlook: Sub-Saharan Africa Keeping the Pace. October. http://www.imf.org/external/pubs/ft/reo/2013/afr/eng/sreo1013.pdf

Johanson, Richard K. and Arvil V. Adams. 2004. Skills Development in Sub-Saharan Africa. World Bank. World Bank Regional and Sector Studies.

Mincer, Jacob. 1981. Human Capital and Economic Growth. NBER Working Paper No. 803. http://www.nber.org/papers/w0803.pdf.

Mincer, Jacob. 1995. Economic Development, Growth of Human Capital, and the Dynamics of the Wage Structure. 1994-95 Discussion Paper Series No. 744.

Norad. 2010. Evaluation of Norwegian Business-related Assistance Main Report. Report 3/2010 – Evaluation. http://www.norad.no/en/tools-and-publications/publications/evaluations/publication?key=176080.

Okada, Aya. 2012. Skills Development for Youth in India: Challenges and Opportunities. Journal of International Cooperation in Education. 15(2): 169-193. http://home.hiroshima-u.ac.jp/cice/wp-content/uploads/publications/15-2/15-2-10.pdf.

Puerto, Susana, Jochen Klueve and Friederike Rother. 2014. Evidence on Youth Employment. http://www.worldbank.org/content/dam/Worldbank/Event/social-protection/Jochen%20Kluve%20Friederike%20Rother%20.pdf

Rodrik, Dani and Margaret McMillan. 2011. Globalization, Structural Change and Productivity Growth. HKS Working Paper.

http://www.hks.harvard.edu/fs/drodrik/Research%20papers/Globalization,%20Structural%20Change,%20and%20Productivity%20Growth.pdf.

Rodrik, Dani and Margaret McMillan. 2012. Globalization, Structural Change and Productivity Growth. IFPRI Discussion Paper 01160. http://www.ifpri.org/sites/default/files/publications/ifpridp01160.pdf.

The Economist Intelligence Unit. 2013. Skills Development in South Asia: Trends in Afghanistan, Bangladesh, India, Nepal, Pakistan and Sri Lanka. A custom research report for British Council by the Economist Intelligence Unit. http://www.britishcouncil.in/sites/britishcouncil.in2/files/eiu-bc_s_asia_skills_report_17_sep.pdf.

UNESCO. 2002. Private technical and vocational education in sub-Saharan Africa: Provision patterns and policy issues. http://www.unesco.org/iiep/PDF/PrivateTechVoc.pdf.

UNESCO. 2012. Youth and Skills – Putting Education to Work. EFA Global Monitoring Report. http://www.uis.unesco.org/Education/Documents/gmr-2012-en.pdf

WDR. 2013. Chapter 3 – Jobs and Productivity. World Bank. http://elibrary.worldbank.org/doi/pdf/10.1596/9780821395752_ch3

World Bank. 2008a. Africa Development Indicators 2007. Washington D.C.: The World Bank.

World Bank. 2008b. Accelerating Catch-Up: Tertiary Education for Growth in Sub-Saharan Africa. Washington D.C.: The World Bank.

World Bank. 2008c. Education in Sub-Saharan Africa: A Comparative Analysis. Washington D.C.: The World Bank.

World Bank. 2013a. "More and better jobs in South Asia," South Asia Development Matters.

World Bank. 2013b. "Implementation Status & Results: Afghanistan Skills Development Project (P102573)" Report No: ISR12293. http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/SAR/2013/12/31/090224b082190ff9/1_0/Rendered/PDF/Afghanistan0000Report000Sequence012.pdf

World Bank. 2014. Egypt: Skills Development Project. http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/0,,contentMDK:22745026~menuPK:64282137~pagePK:41367~piPK:279616~theSitePK:40941,00.html.

World Bank / Filmer, Deon; Fox, Louise. 2014. Youth Employment in Sub-Saharan Africa. Washington, DC: World Bank and Agence Française de Développement. ©World Bank.