

The Skills Balancing Act in Sub-Saharan Africa

Main findings and policy implications

Team: Omar Arias, Indhira Santos, David Evans (co-TTLs)

Daniel Alonso Soto, Moussa P. Blimpo, Muthoni Ngatia, Jamele Rigolini, Shobhana Sosale

Contributors: Jenny Aker, Zirra Banu, Magdalena Bendini, Jorgen Billetoft, Shelby Carvalho, Peter Darvas, Jutta Franz, Valeria Perotti, Sergio Urzua, Amarachi Utah

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Framing the skills building challenge in SSA

1. Throughout history and across regions, the challenge of skills development has many similarities

- Investing in skills of new cohorts to reap the demographic dividend and in skills needed to facilitate economic transformation
- Institutional weaknesses in skills building systems

2. But, in fundamental ways, the challenge for SSA countries is unique

- Need to address huge gaps in basic cognitive (literacy, numeracy) skills of new cohorts, while accumulated skills deficits in the out-of-school population are (and will remain) too large to be ignored
 - Rising youths' aspirations after decades of independence, entrenched inequalities, as well as recovery from armed conflicts in many cases
- Need a wider set of skills (socio-emotional, digital) for a world that is radically more demanding (than that faced by today's richer economies during their economic transformation) and that puts a premium on adaptability of individuals and systems:
 - Job creation comes increasingly from services (often as informal self-employment or in micro-enterprises) rather than manufacturing
 - Technological change, more international competition and volatility, and urbanization are also rapidly changing the demand for skills



This makes it harder to achieve simultaneously three key goals of skills policies: 1. accelerating overall productivity growth; 2. promoting economic inclusion; and 3. ensuring adaptability of the workforce

3. At the same time, SSA countries have opportunities to invest smarter and to even “leapfrog” progress:

- By leveraging the expanding body of evidence on what works in skills building, the opportunity to learn from others, the use of new technologies, and the advantages of service delivery in more urban societies

The Skills Building challenge in SSA: A Balancing Act

Within a generation, Sub-Saharan Africa can achieve substantial progress in building the skills of its workforce, but countries need to make hard choices across two fundamental trade-offs: investing in skills to optimize overall productivity growth versus for inclusion, and investing in skills for today's needs versus tomorrow's. In managing these trade-offs, policy priorities need to be tailored to countries' context and create the enabling environment for skills investments to pay off.

In working to achieve **equity, quality/relevance** and **efficiency** in skills building systems, countries need to:

- **Sustain current skills investment levels**—may need expansion in some countries, in some areas— and must make **spending more efficient** and integrated with other social policies
- **Prioritize universal foundational skills** (cognitive and socio-emotional) through early investments, emphasis on inputs that matter most for quality, support to those who miss out in basic skills, and reforms to improve relevance of education and training for today's and tomorrow's workers
- Use **learning and other performance metrics** to guide investments and systemic policy reforms and to enable more responsive systems through adaptive learning (WDR2018)
- Harness the roles of key **stakeholders in skills building systems**

Outline

I. Skills formation in Sub-Saharan Africa

- Skills for what
- Looking back, today and forward

II. Skills investments in SSA countries: A policy framework

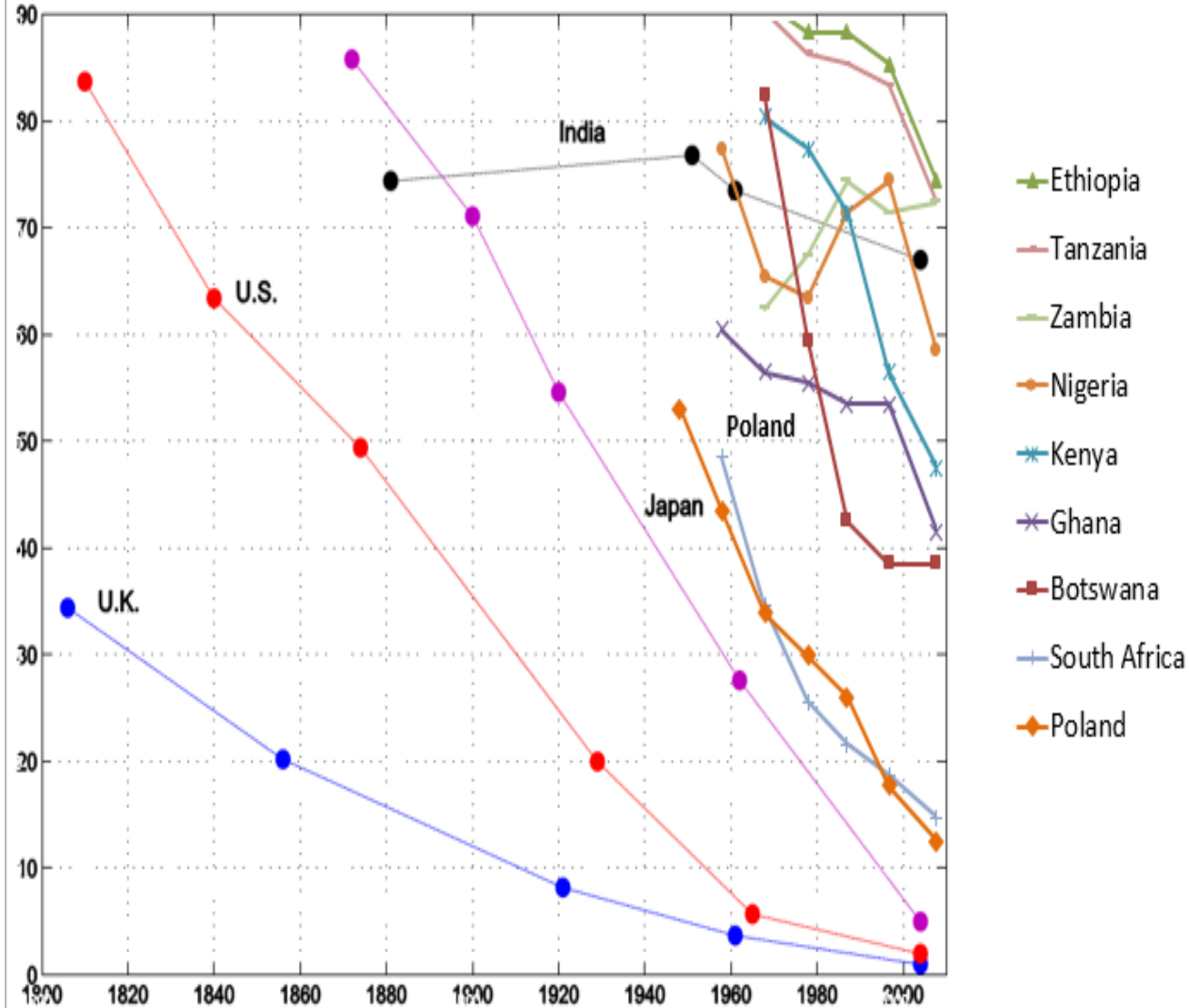
- Which skills, for whom, when to develop them, and policy trade-offs

III. Main messages and policy implications

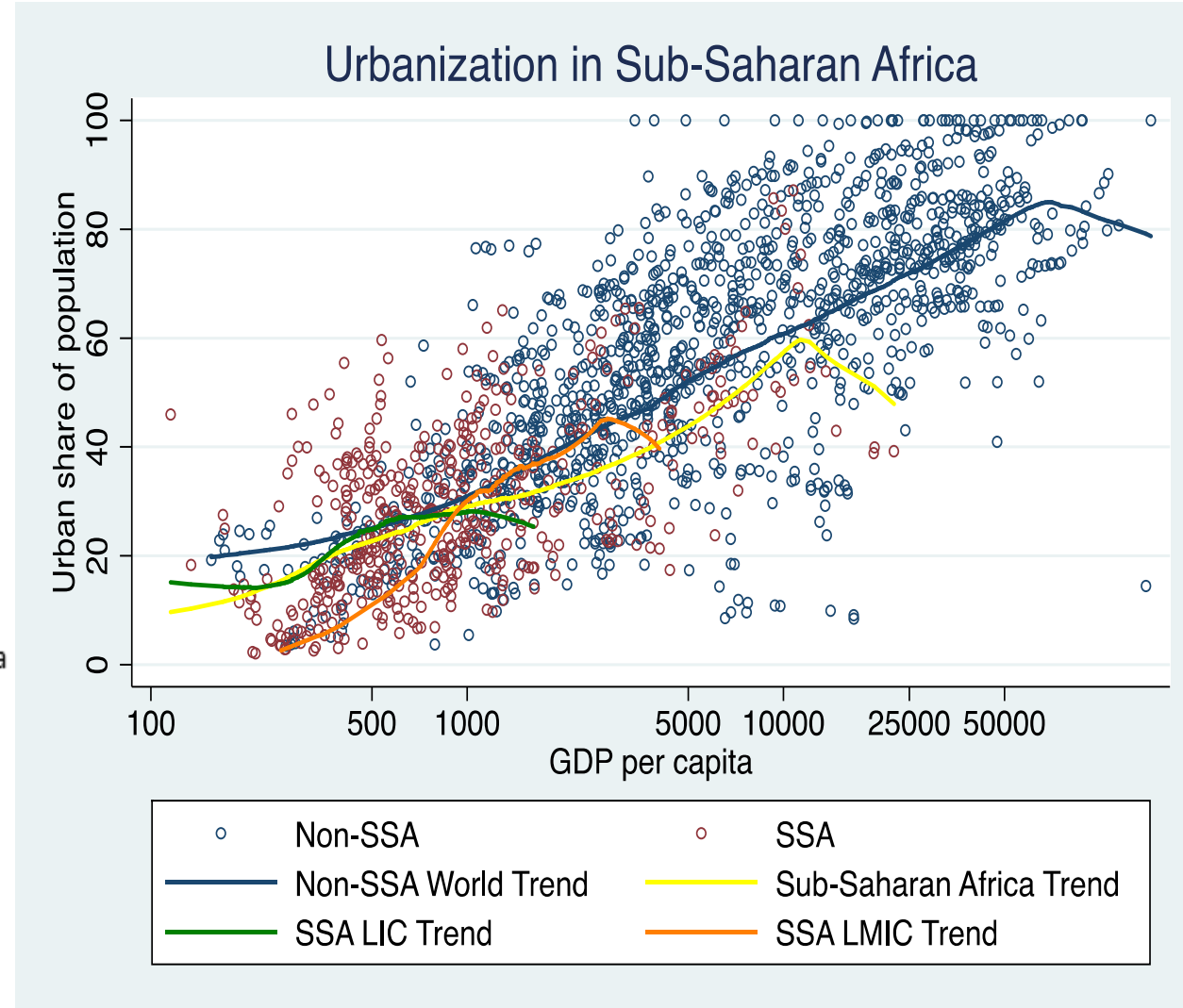
Skills Formation in SSA: Skills for What

Skills development needs to support economic transformation in SSA...

Historical evolution of the share of agricultural employment, selected countries



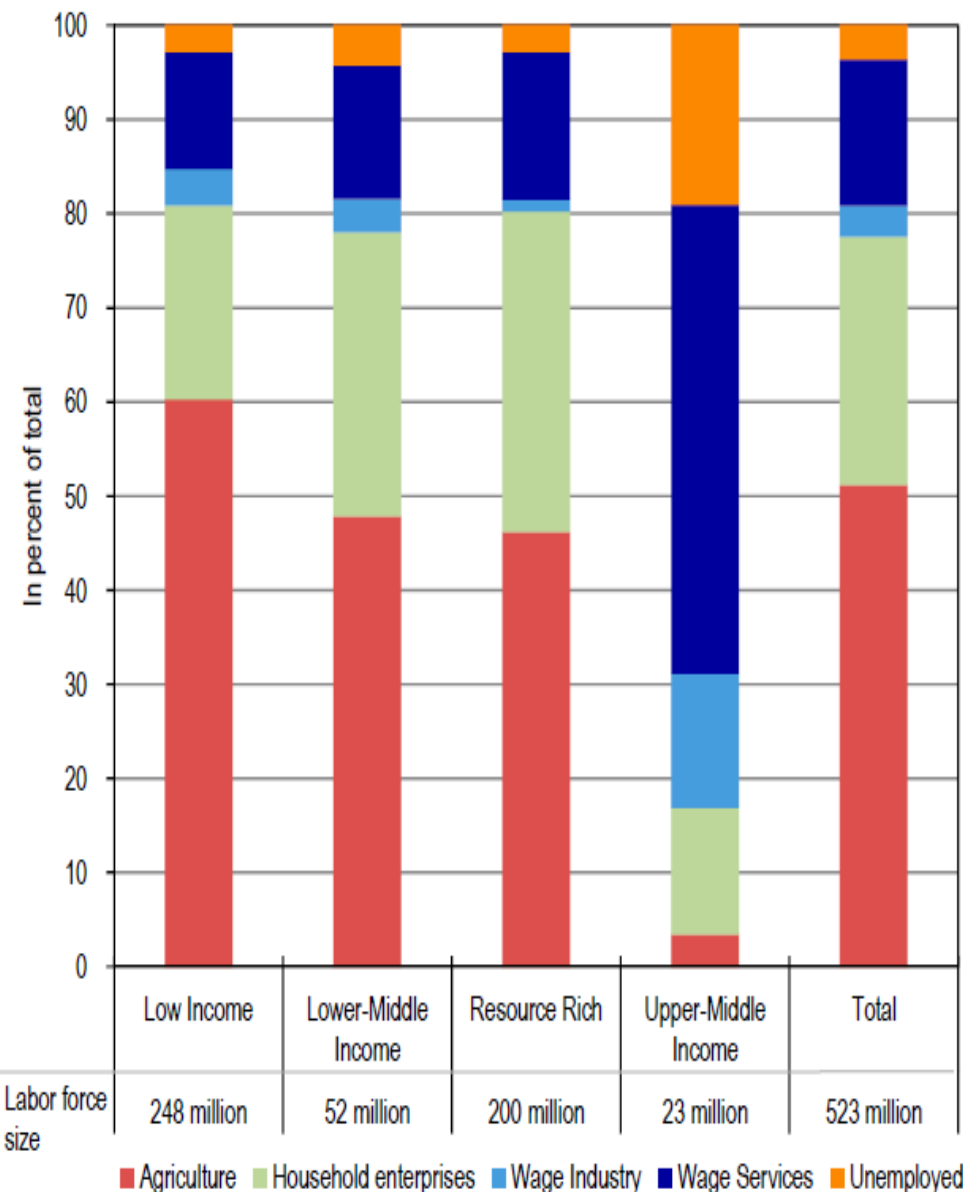
Urbanization in SSA is happening as fast as predicted by income levels



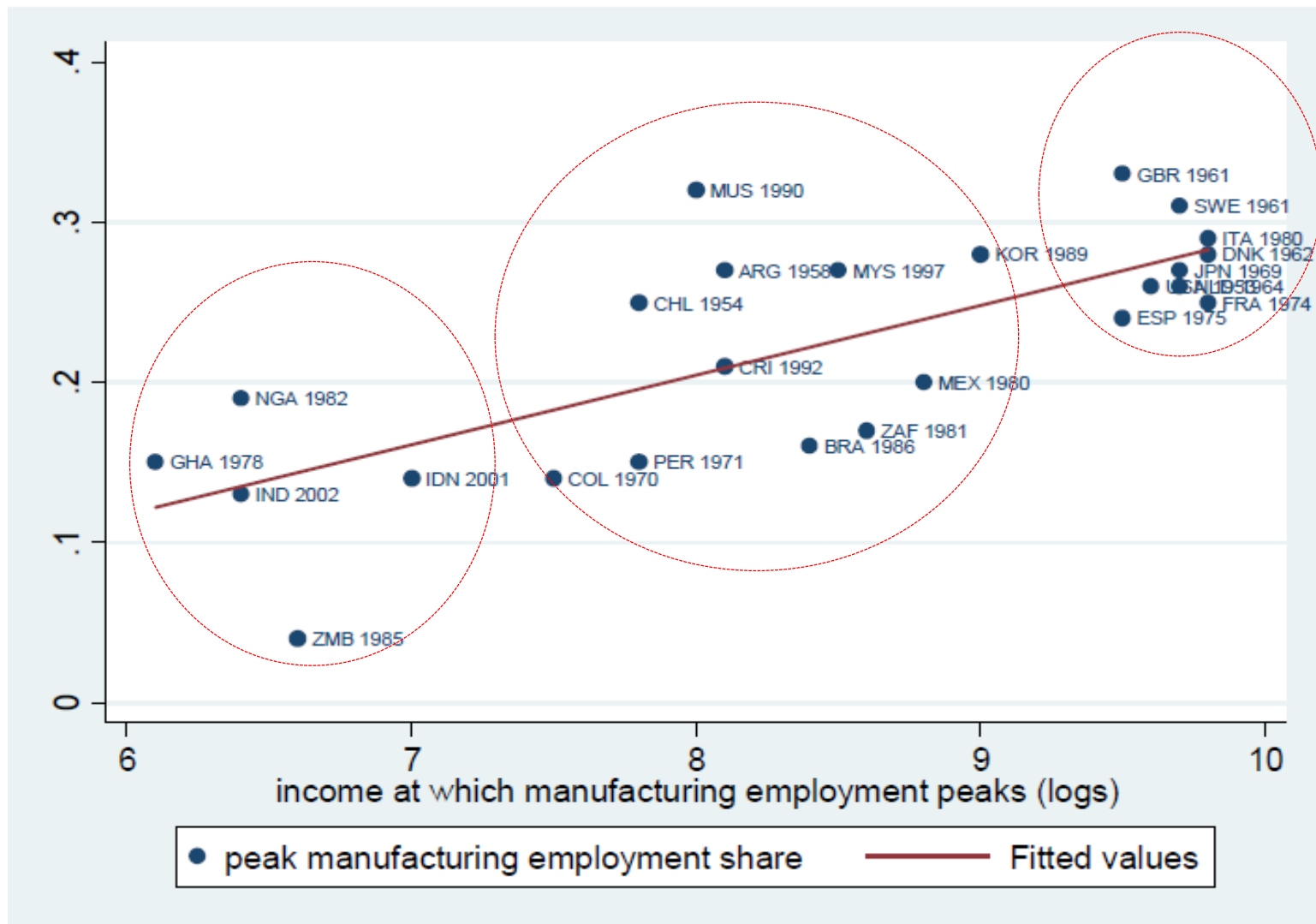
Source Based on data from Lucas, R., Penn Tables and WDI.

Skills development needs to support economic transformation in SSA while reckoning with non-wage informal employment as the most prevalent source of jobs, and a shrinking role of manufacturing

Estimated sectoral distribution of employment in SSA by 2020

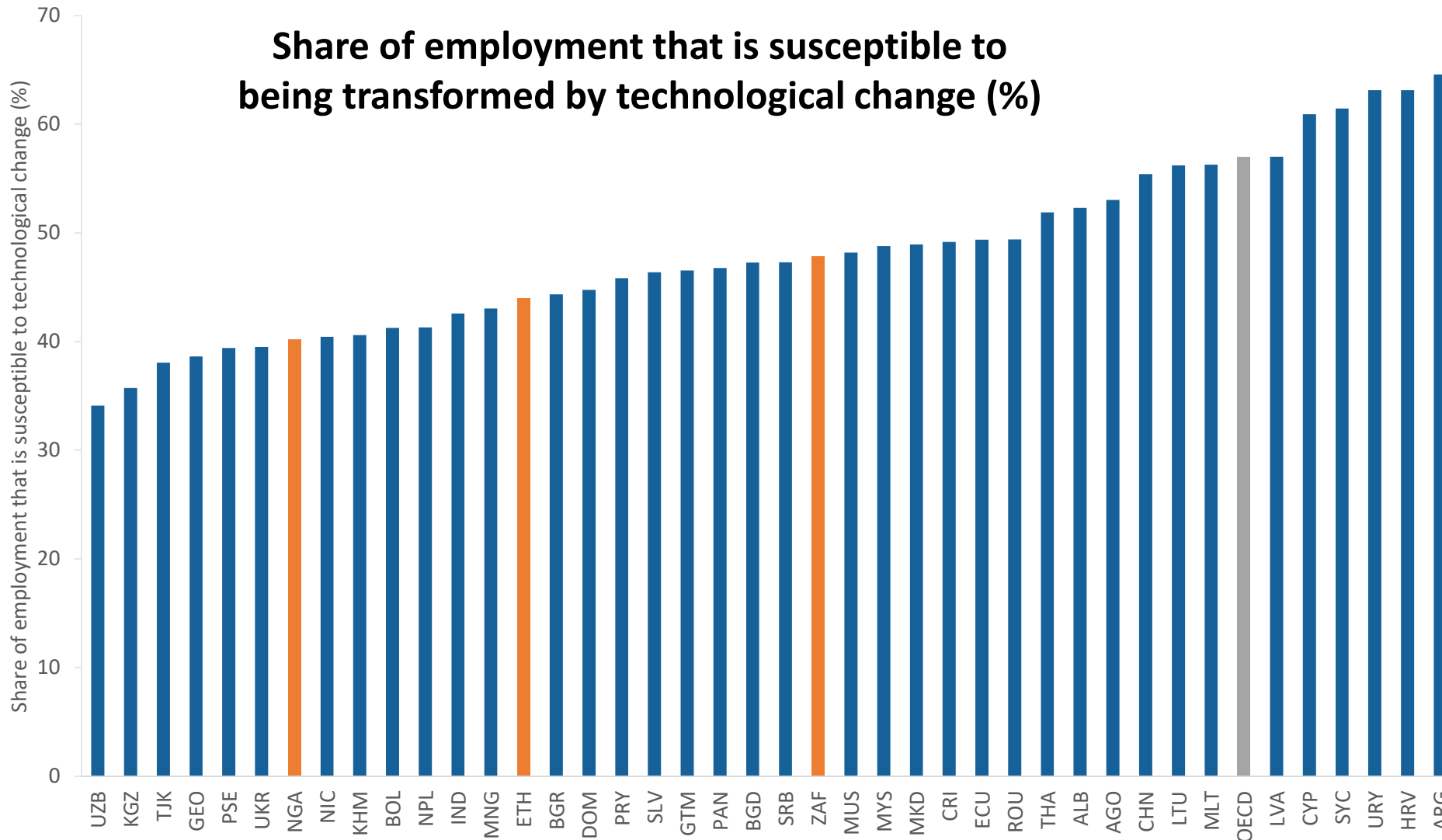


Year and per capita income at which the manufacturing employment share peaks



Source: Based on Fox et al 2015 and Rodrik (2015).

And skills investments need to prepare workers -especially new cohorts- for a rapidly changing world of work...



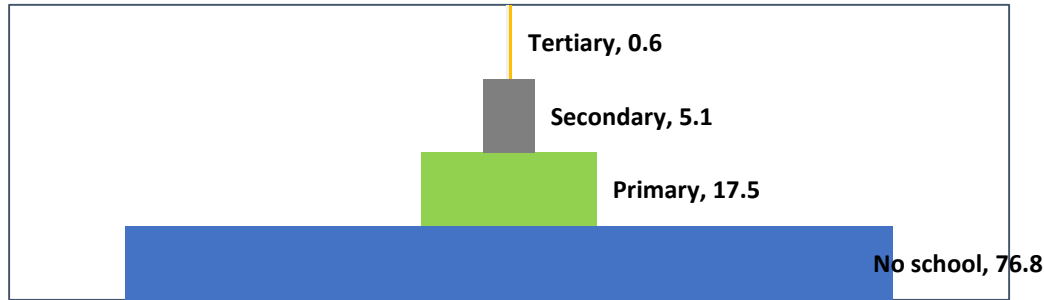
Megatrends:

- Automation of routine tasks (in China!)
- Increasing economic interdependence and trade in tasks
- Shrinking role of manufacturing as a source of jobs
- Fast urbanization

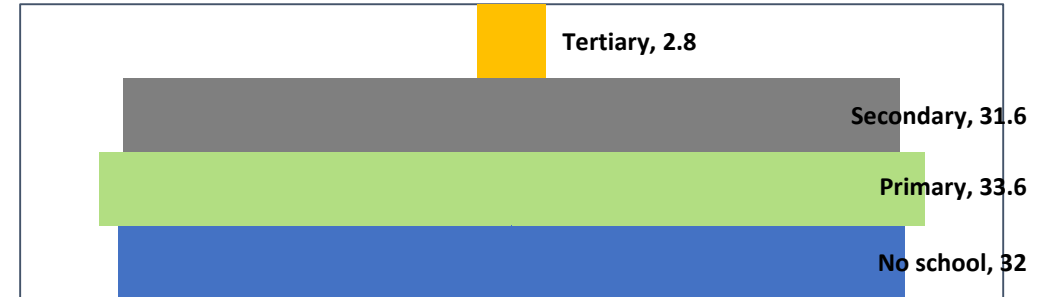
Skills Formation in SSA: Past, Present and Future

SSA lags behind global progress in educational attainment – although there is much variation across countries

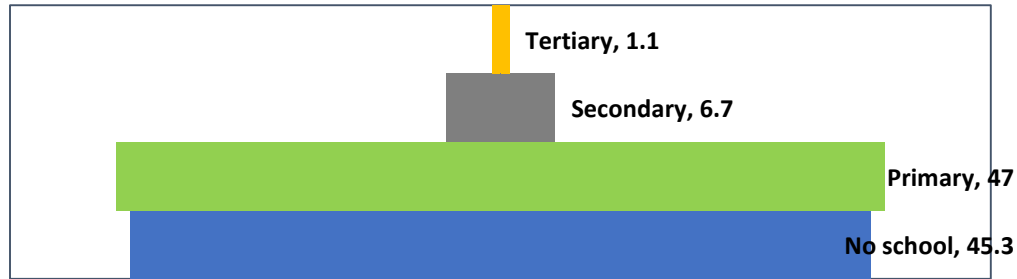
Sub-Saharan Africa - 1950



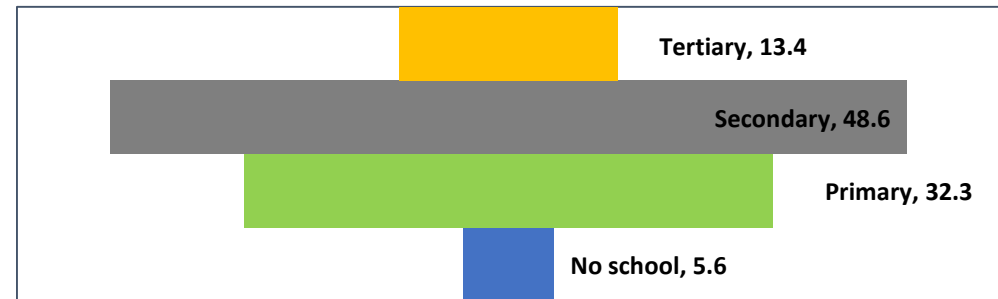
Sub-Saharan Africa - 2010



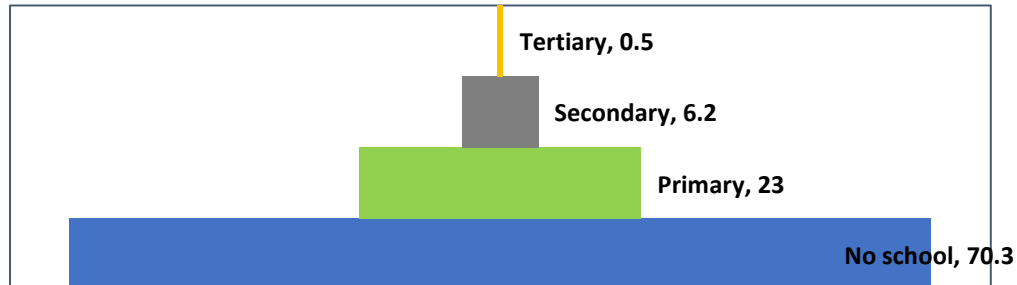
Latin American & Caribbean - 1950



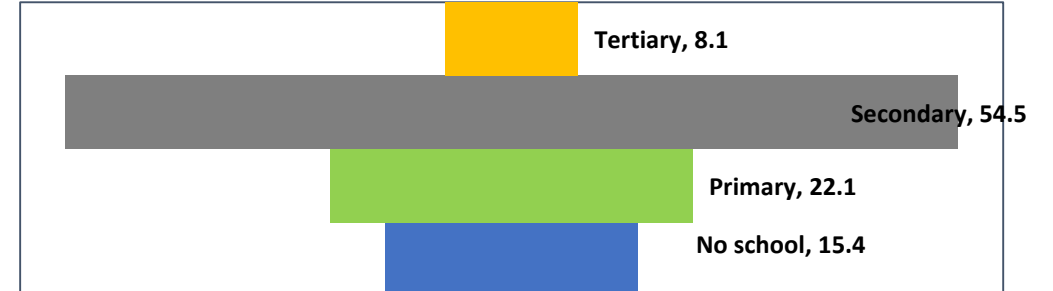
Latin American & Caribbean - 2010



Asia & Pacific - 1950

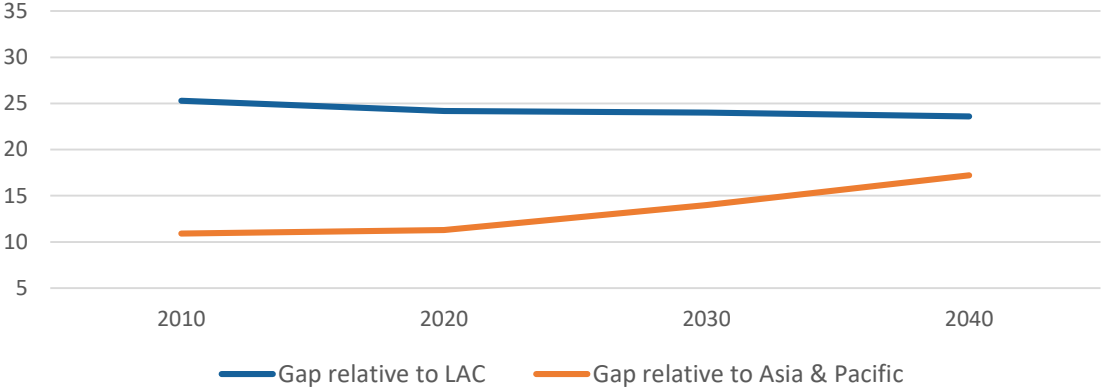


Asia & Pacific - 2010

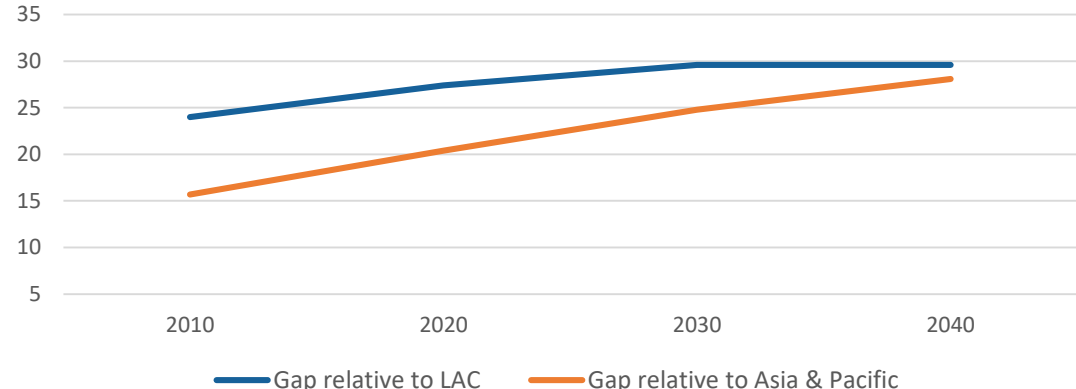


With recent enrollment and demographic trends, SSA will continue to diverge in human capital formation

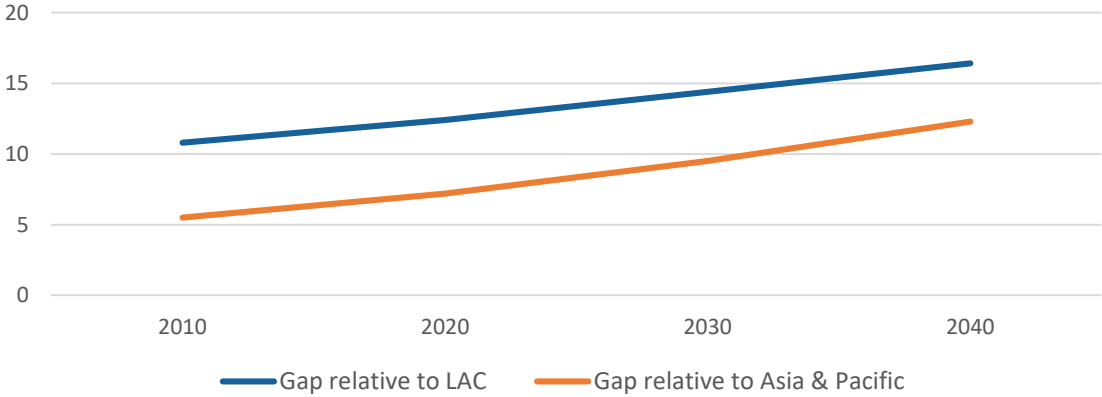
Projected **GAP** in the % of adult population (25+) that completes at least primary in SSA vis-à-vis other regions



Projected **GAP** in the % of adult population (25+) that completes at least secondary in SSA vis-à-vis other regions



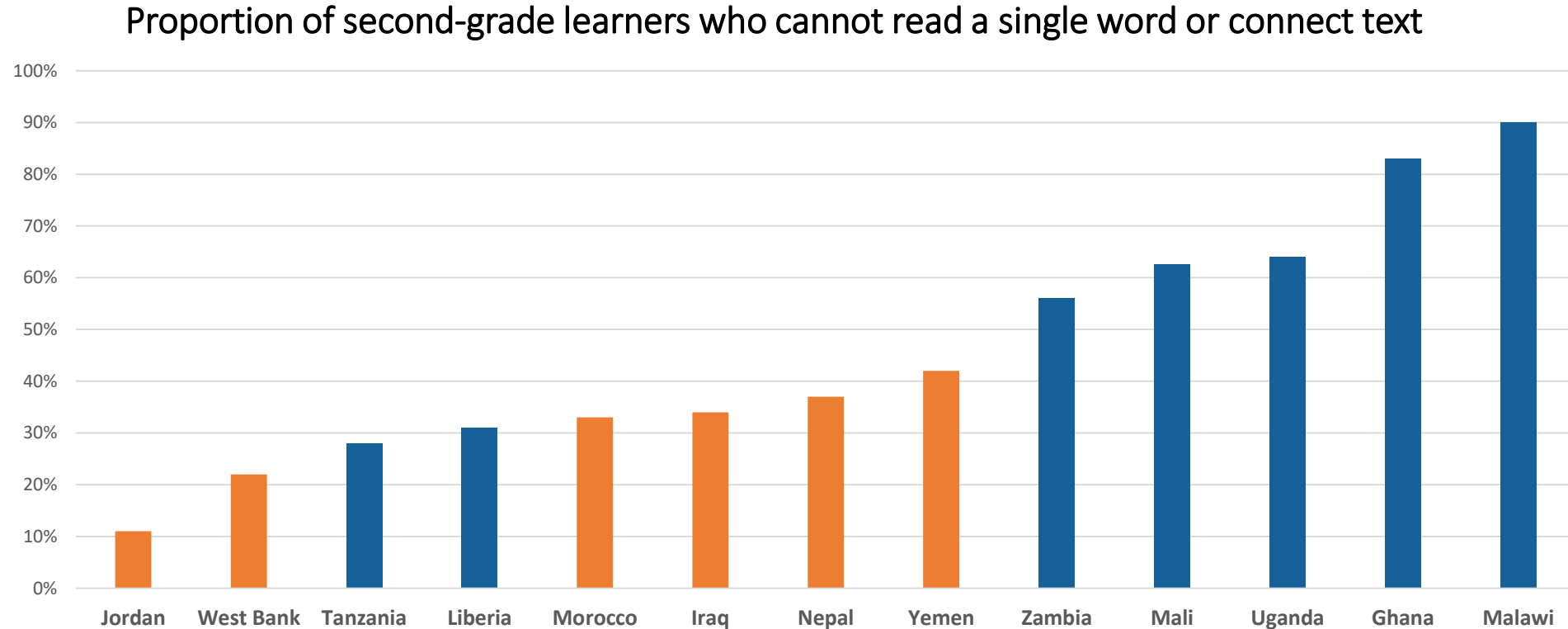
Projected **GAP** in the % of adult population (25+) that has some tertiary in SSA vis-à-vis other regions



While access to basic education is improving, completion rates remain much lower, likely a result of gaps in school readiness, poor school quality as well as family demand-side constraints.

Source: Africa Skills regional study, based on Barro and Lee 2015.

And schooling is not leading to skills – Too many children are not learning and fail to develop key foundational skills



These poor learning outcomes start early in life (e.g, high stunting), are compounded by low schooling quality, and translate into major gaps in both foundational (cognitive, socio-emotional) and technical skills as adults

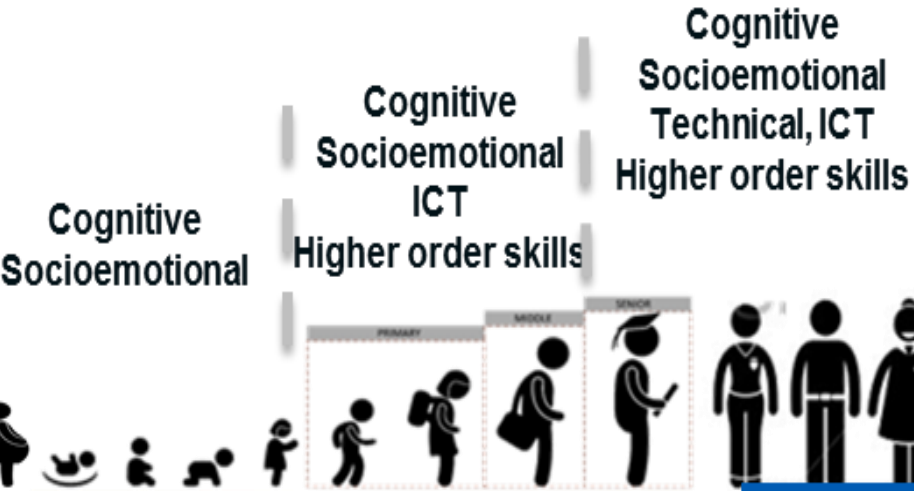
Investing in skills in SSA: A Policy Framework

Investing in Skills: Which, When, for whom

Future Workforce (flow)

Current Workforce (stock)

What Skills?



Foundational Cognitive, Socioemotional
Technical, Job-specific, ICT
Higher-order skills



When/for whom?



How to develop?

ECD, basic/post-secondary Education **Short & Long Term Training (remedial), OJT**

Main actors?

Families, schools, TVET providers, universities, employers Families, TVET providers, employers

Source: Based on Valerio, Venegas, and Arias (2016).

Investing in Skills in SSA: A Policy Framework

INVESTING IN SKILLS: A POLICY FRAMEWORK

SKILLS INVESTMENTS AIM AT...

AND FACE...

THREE POLICY GOALS



TWO POLICY TRADE-OFFS



SKILLS FOR
PRODUCTIVITY
VS. INCLUSION



SKILLS FOR
TODAY'S NEEDS VS.
TOMORROW'S NEEDS

THREE EDUCATION & TRAINING SYSTEM GOALS



ACCESS
/ EQUITY



QUALITY /
RELEVANCE



EFFICIENCY

AND AN ACTIVE
& DISTINCTIVE
ROLE FOR
MULTIPLE ACTORS...



PUBLIC SECTOR



FAMILIES



PRIVATE SECTOR

Main Messages and Implications

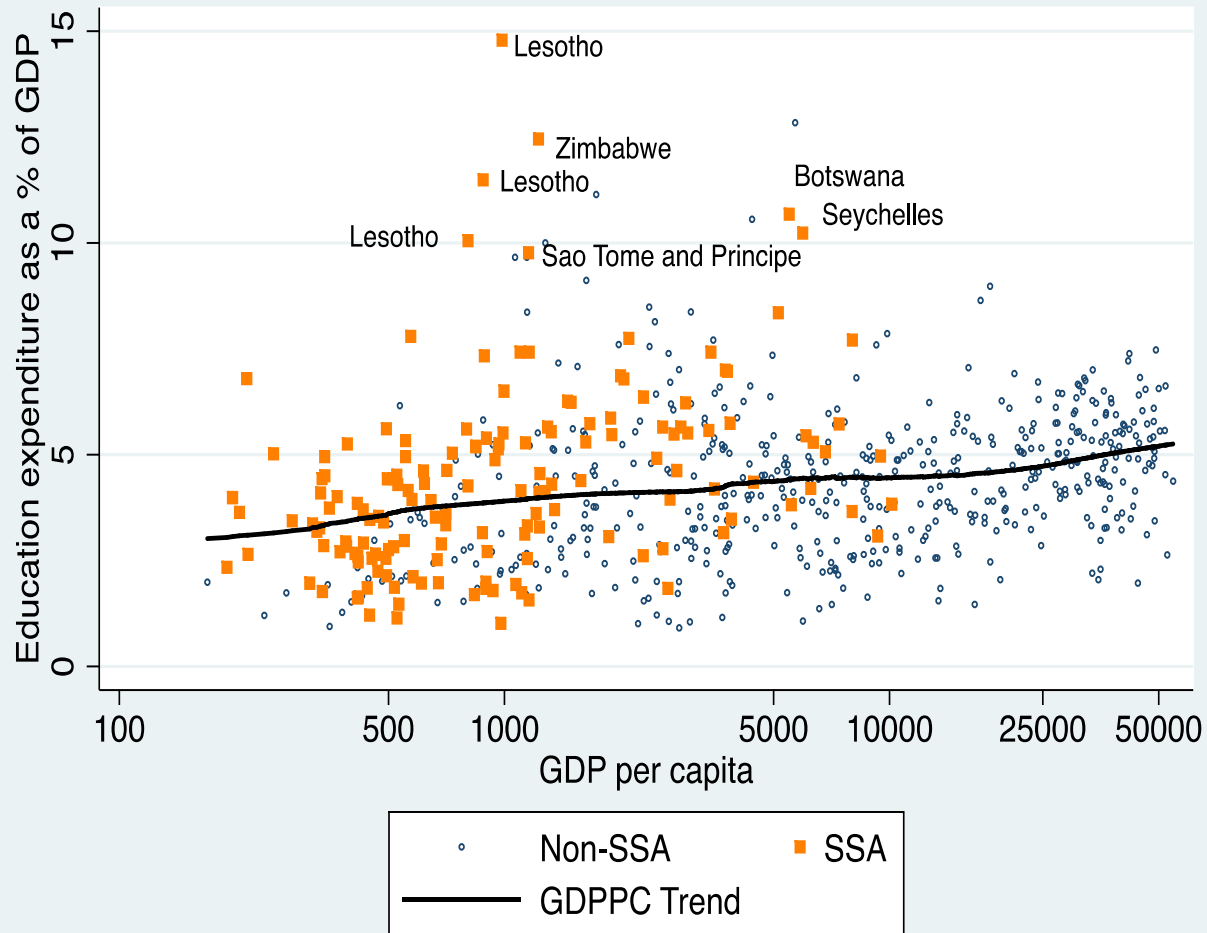
Five policy questions:

1. Are SSA countries investing adequately in skills?
2. Are skills investments in SSA well-aligned with the needs of economies today and toward the future?
3. Is skills development in SSA countries being built on a solid foundation?
4. Is there a good case for investing in the skills of out-of-school youths and adults in SSA?
5. How can SSA countries best manage the expansion of their skills building systems?

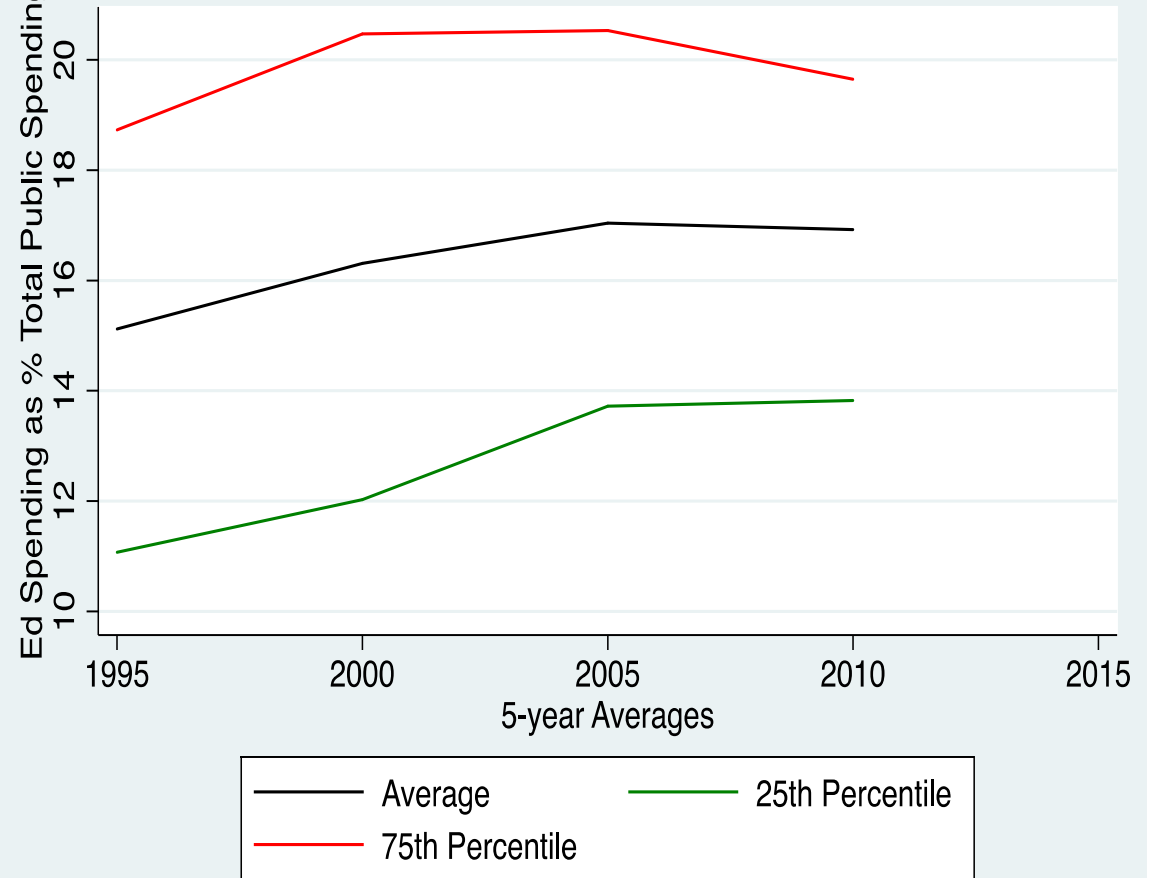
1. Are SSA countries investing adequately in skills?

With some exceptions, it is unrealistic to count on higher public spending efforts in education in SSA countries (at least in the near term)

Total education expenditure as a % of GDP



Education Spending as % Total Public Spending for Sub-Saharan Africa

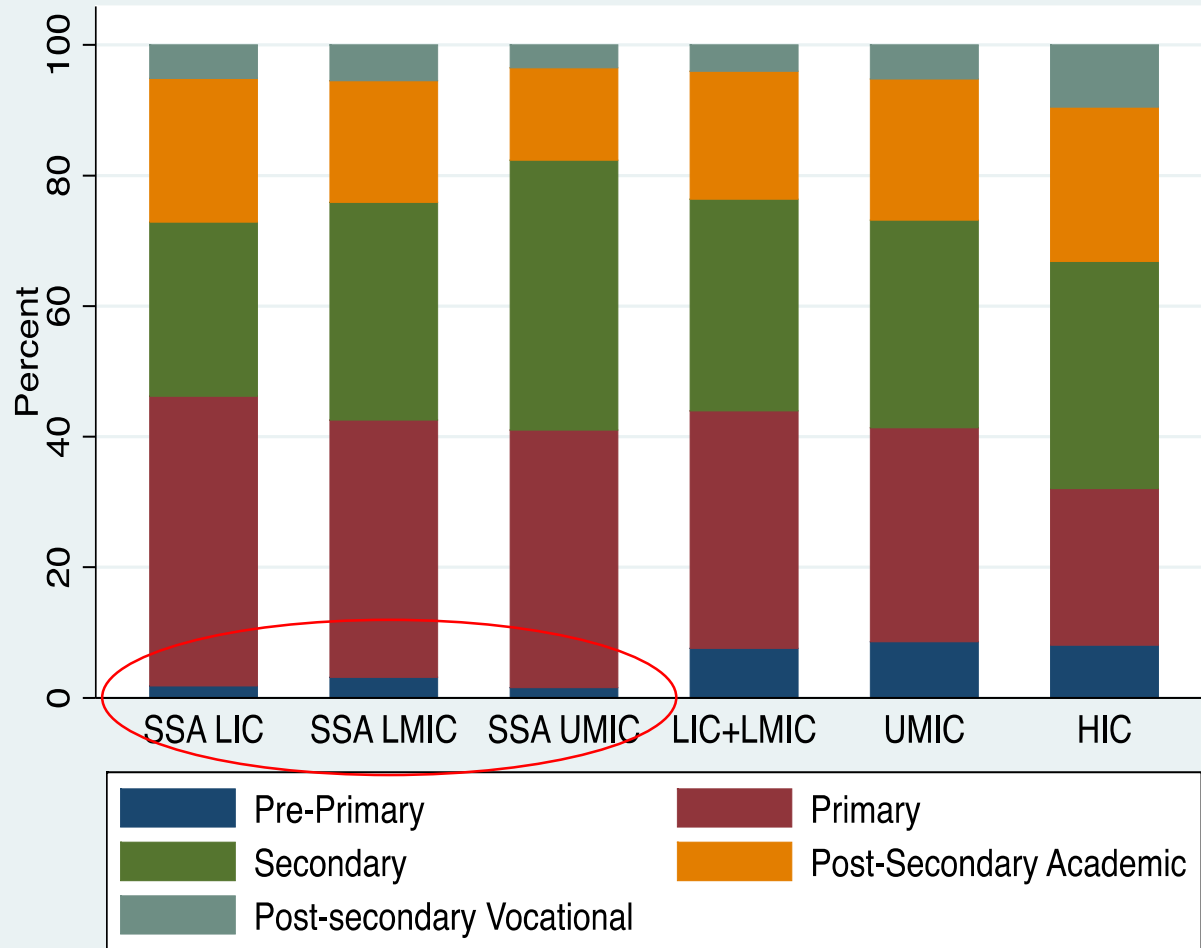


Source: Africa Skills regional study, based on UN data.

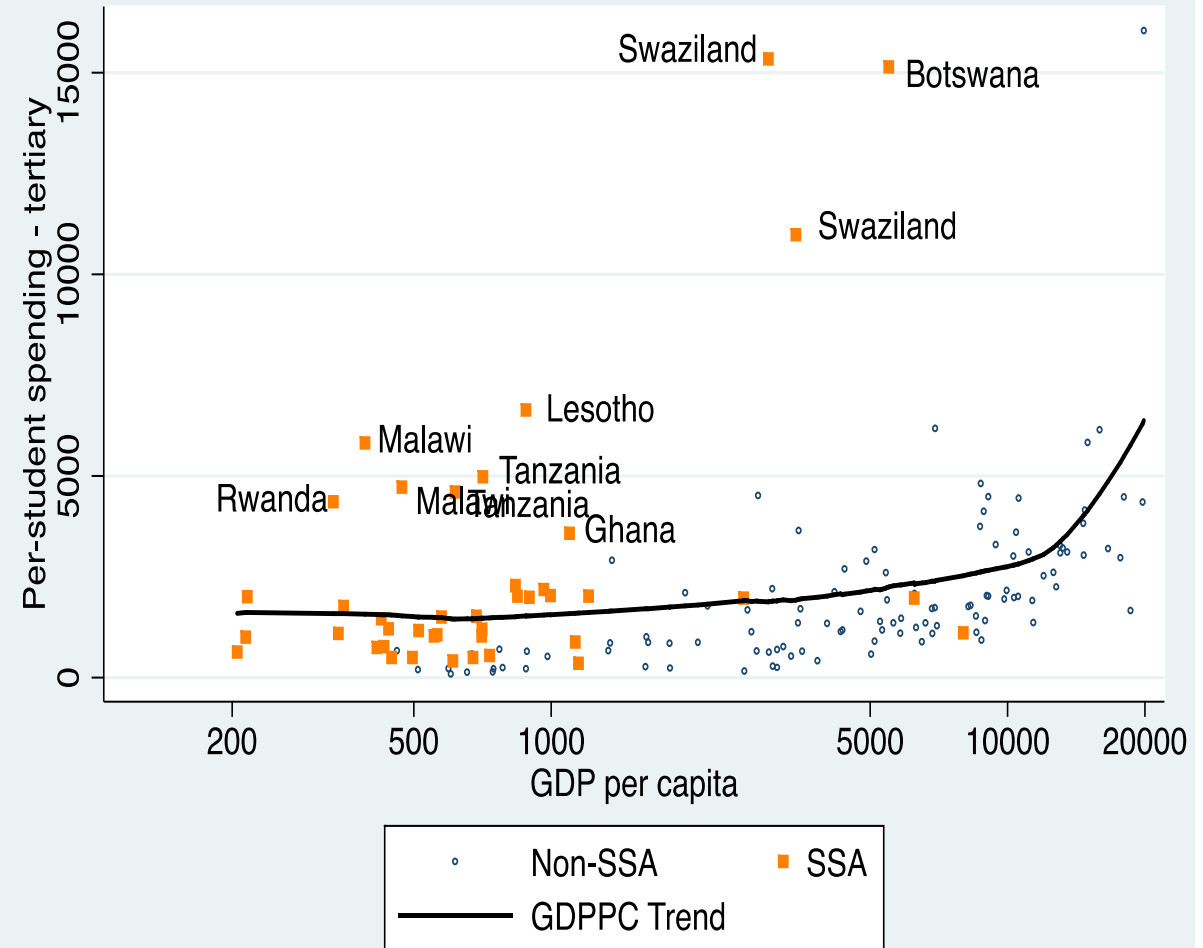
Note: Based on all available data during 1990-2015 (since 1970 for spending as % GDP).

Many SSA countries underinvest in early foundational skills; higher than expected tertiary per capita spending in some countries (in part reflects low enrollment)

Education Spending by Level



Per student spending - tertiary

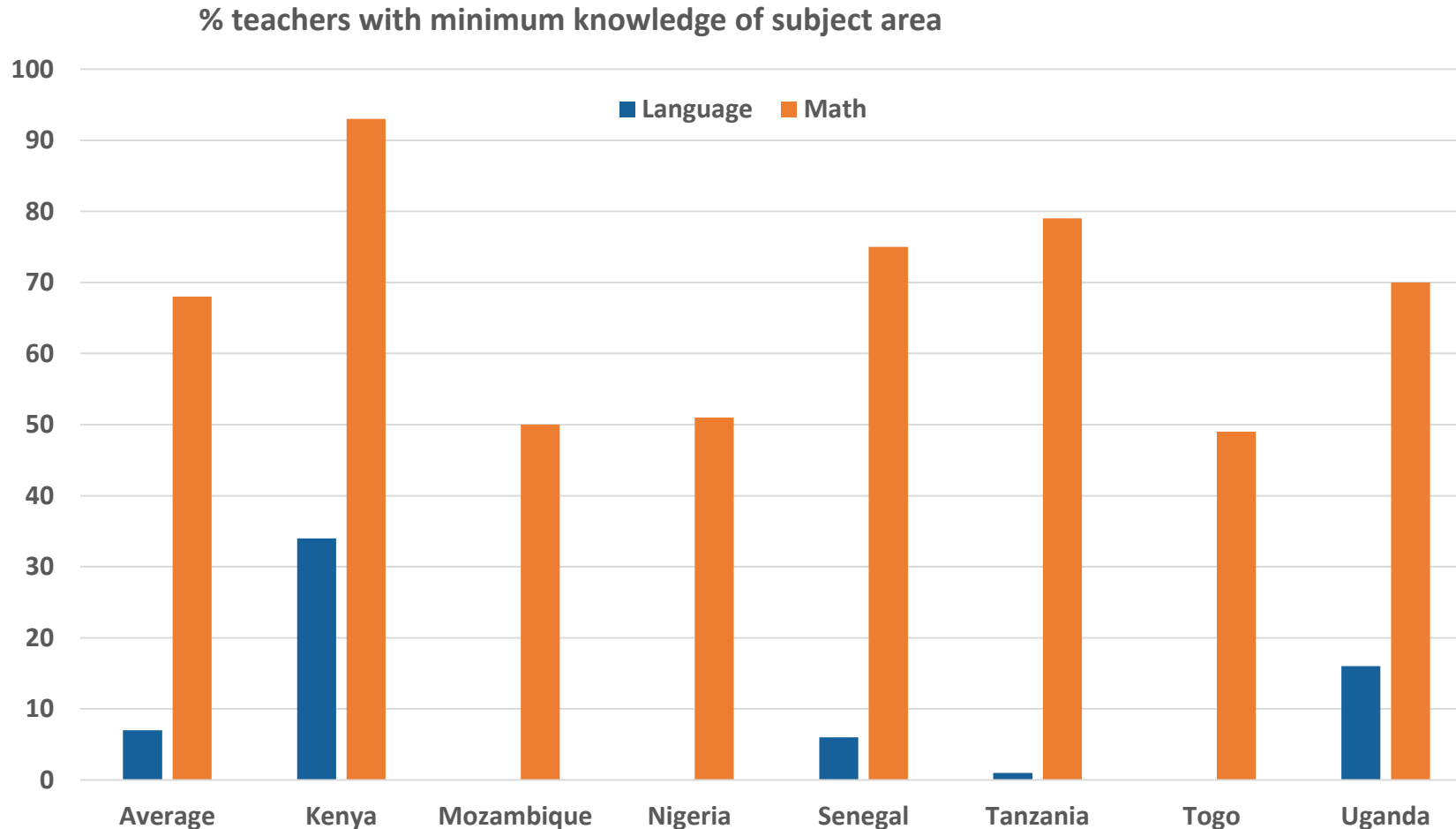


Source: Africa Skills regional study, based on UN data.

Note: On the left, average of latest 3 points in time over the last decade. On the right, data available for 1995-2015.

Patterns and efficiency of skills investment in many countries must improve

In many countries, too many teachers do not show up to school and are unfit to teach



Need to invest in making teaching effective not just buildings:

- Teacher training, support, differentiated teaching,
- Holding schools accountable for learning

Source: Africa Skills regional study, based on data from service delivery indicators (SDI).

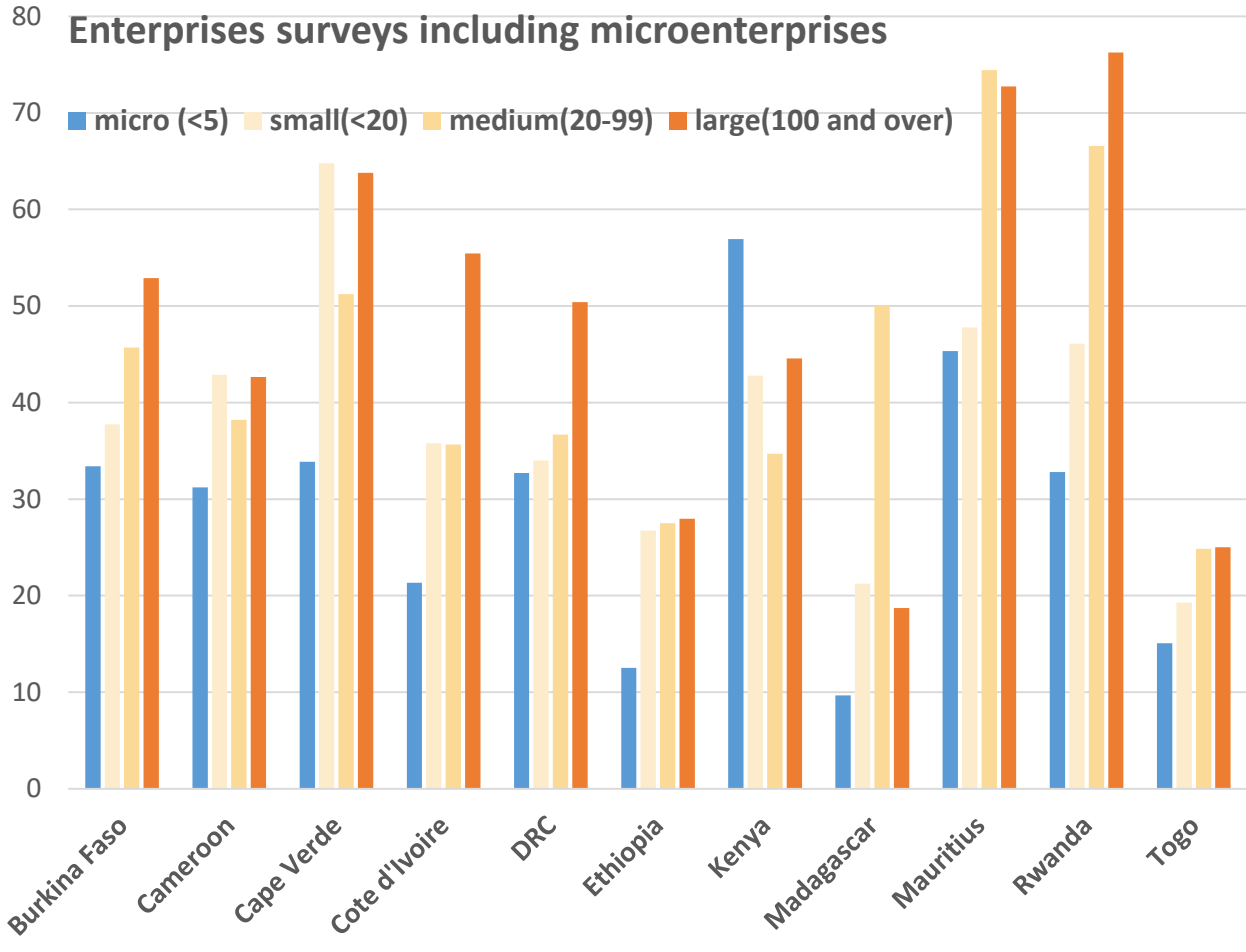
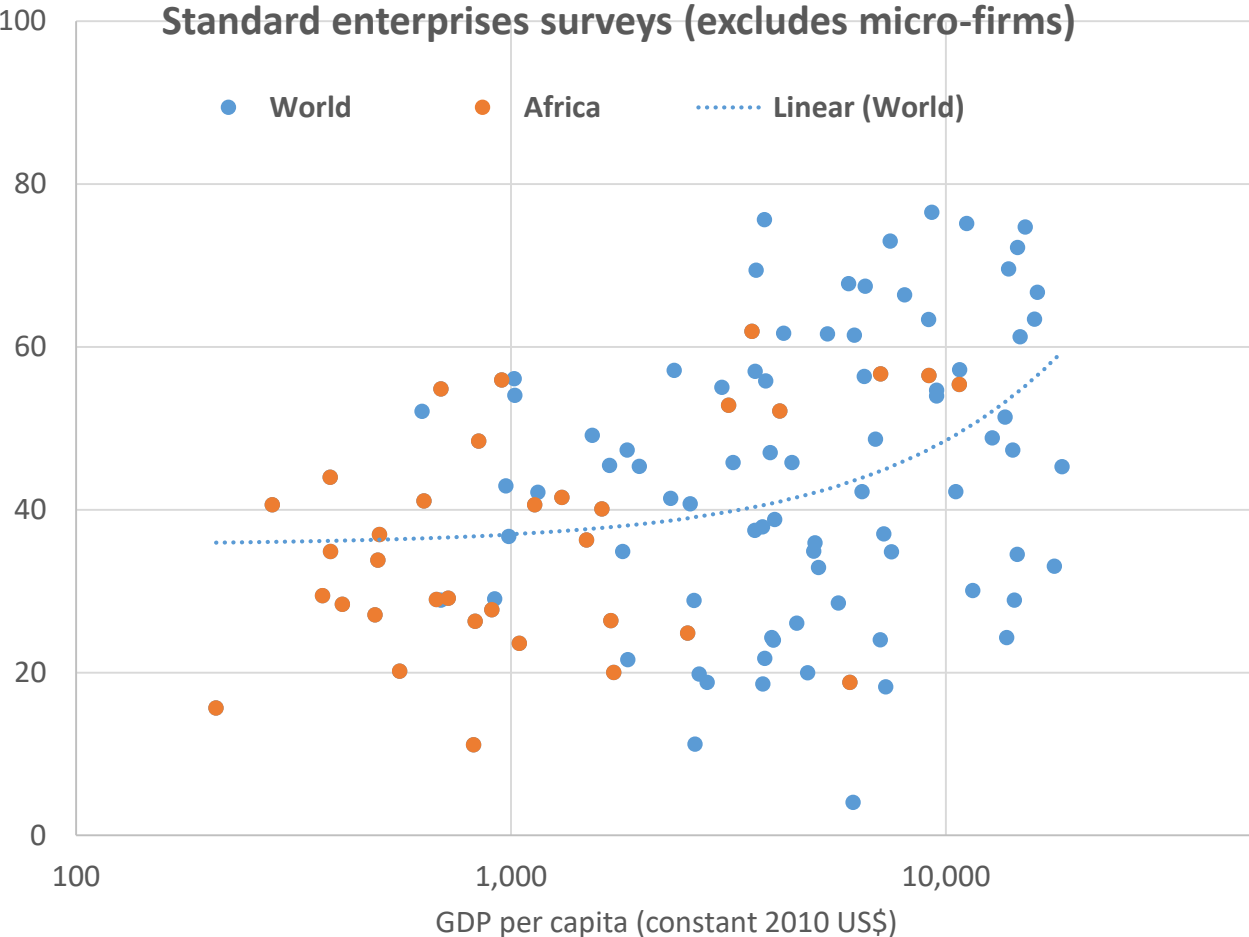
Note: Mozambique, Nigeria, Tanzania and Togo are zeroes.

2. Are skills investments well aligned with the needs of AFR economies?

Many employers see inadequate skills as one of the more binding obstacles to their business, particularly larger firms...

Firms rating workforce skills as a greater constraint than average (%)

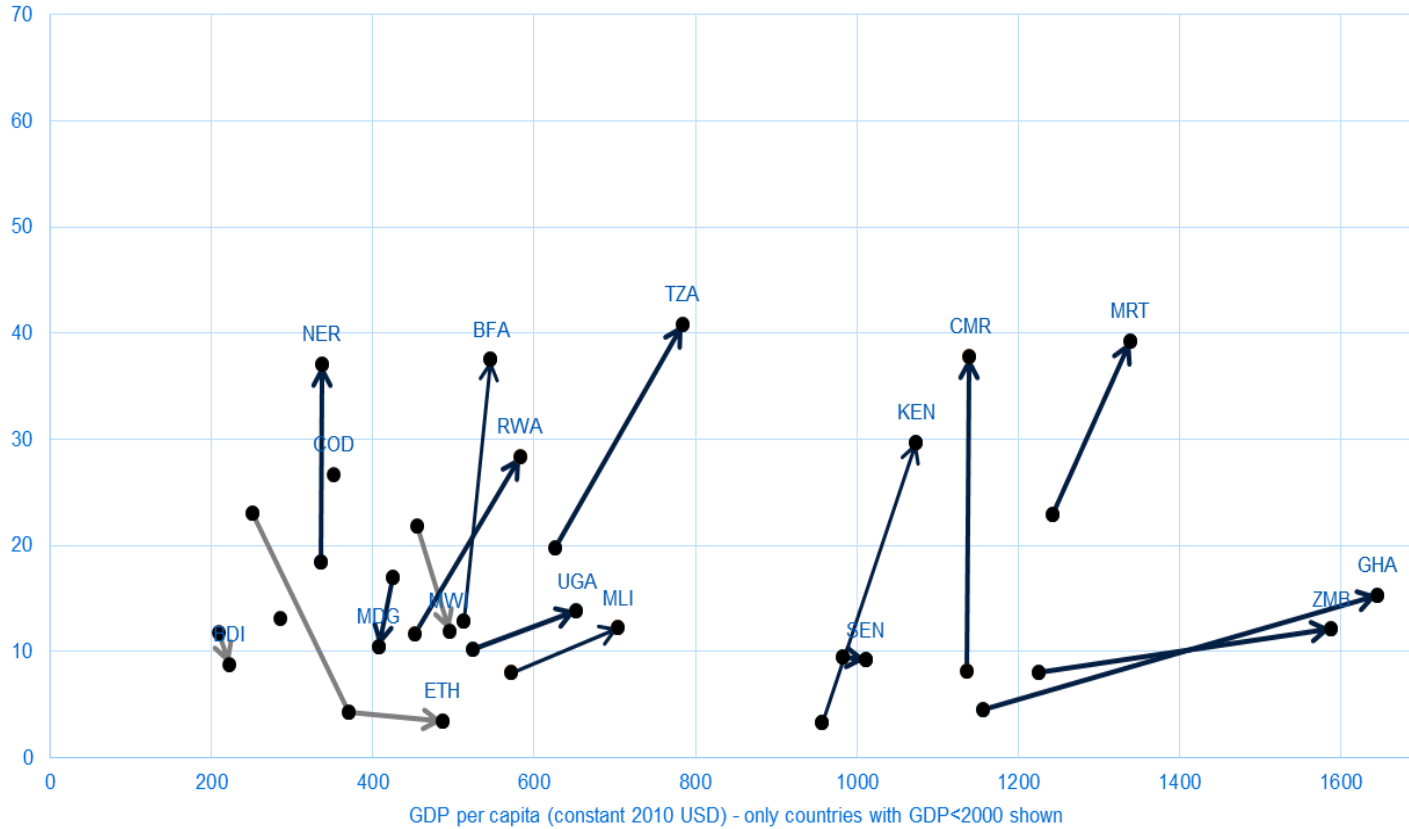
(vis-à-vis 14 other business environment factors)



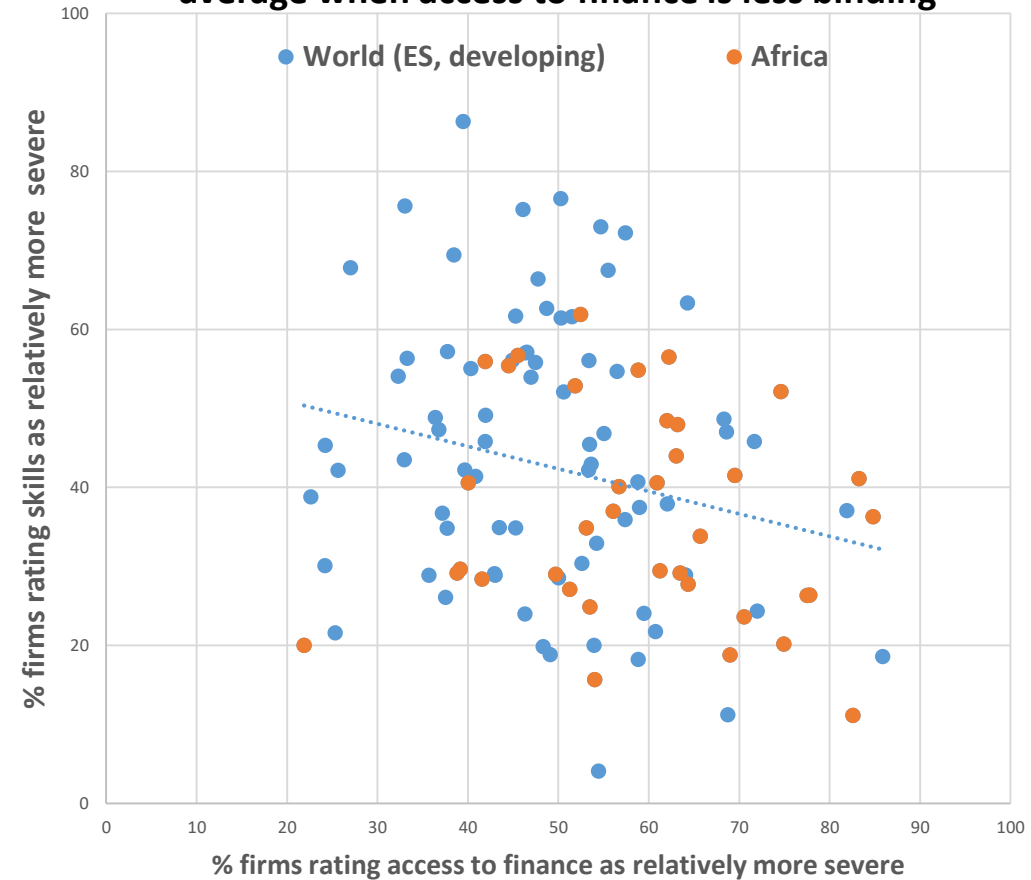
Source: Perotti, Valeria, forthcoming, for the Africa Skills regional study, based on World Bank Enterprise Surveys.

Employers are increasingly feeling the pinch of skills gaps as economies grow, and as other shorter-term constraints to business are addressed

Firms in SSA identifying an inadequately educated workforce as a major constraint (%)



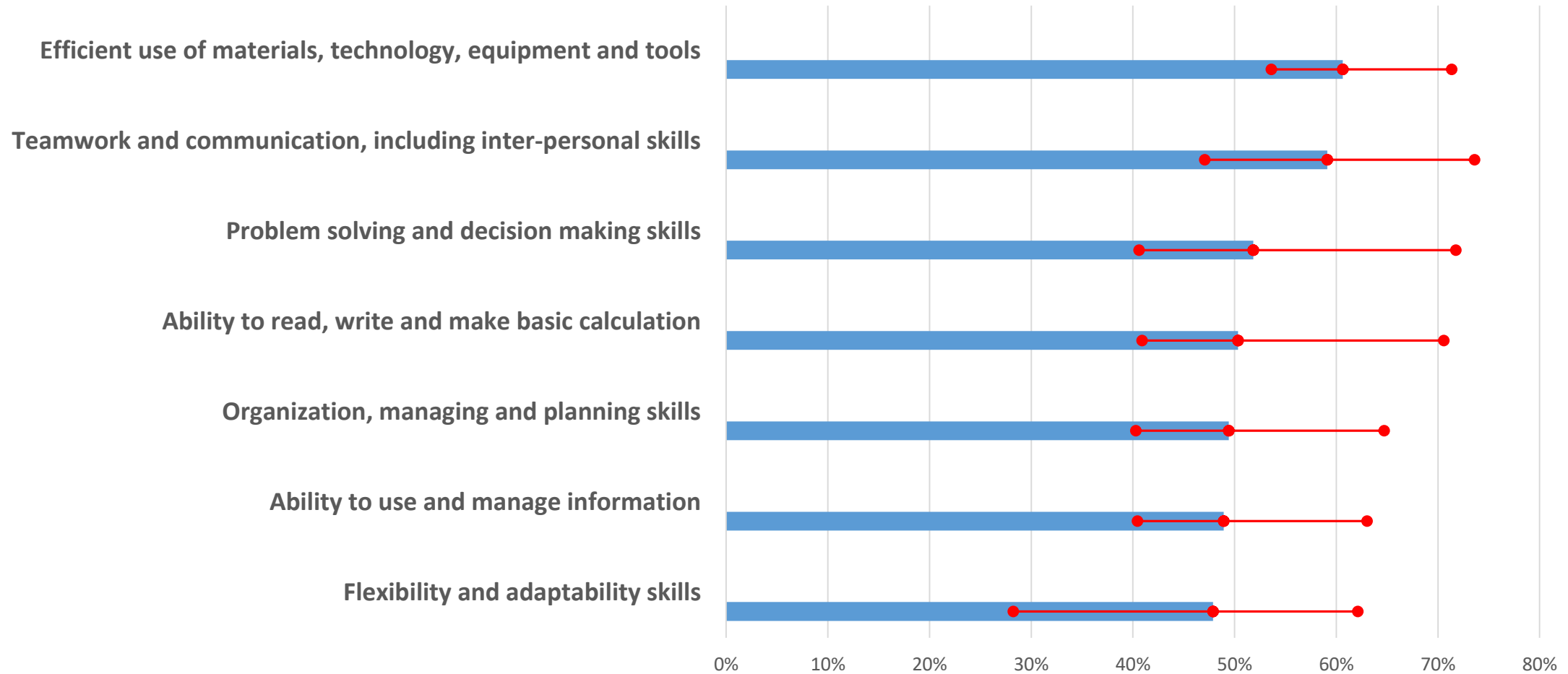
Firms rate workforce skills as a greater constraint than average when access to finance is less binding



More productive firms, those exporting and growing tend to rate skills gaps as more severe and invest more in training

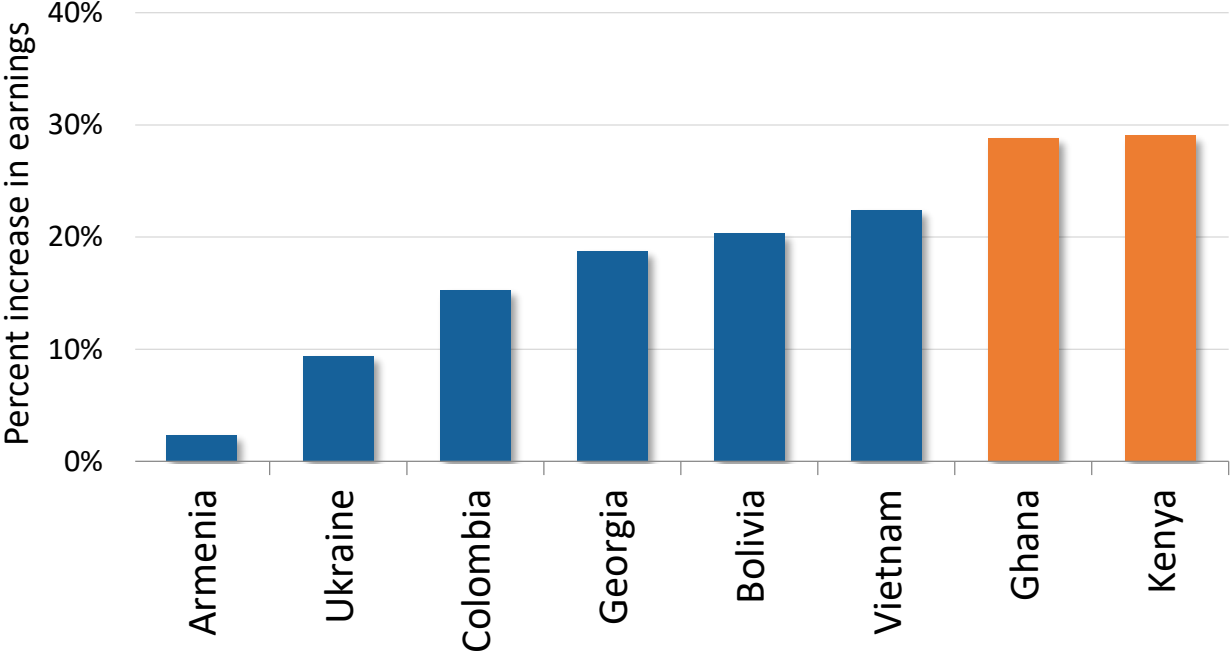
And employers are looking for a multiplicity of skills

Private firms that think this skill is very important or extremely important (%)
Average responses for Benin, Liberia, Malawi and Zambia

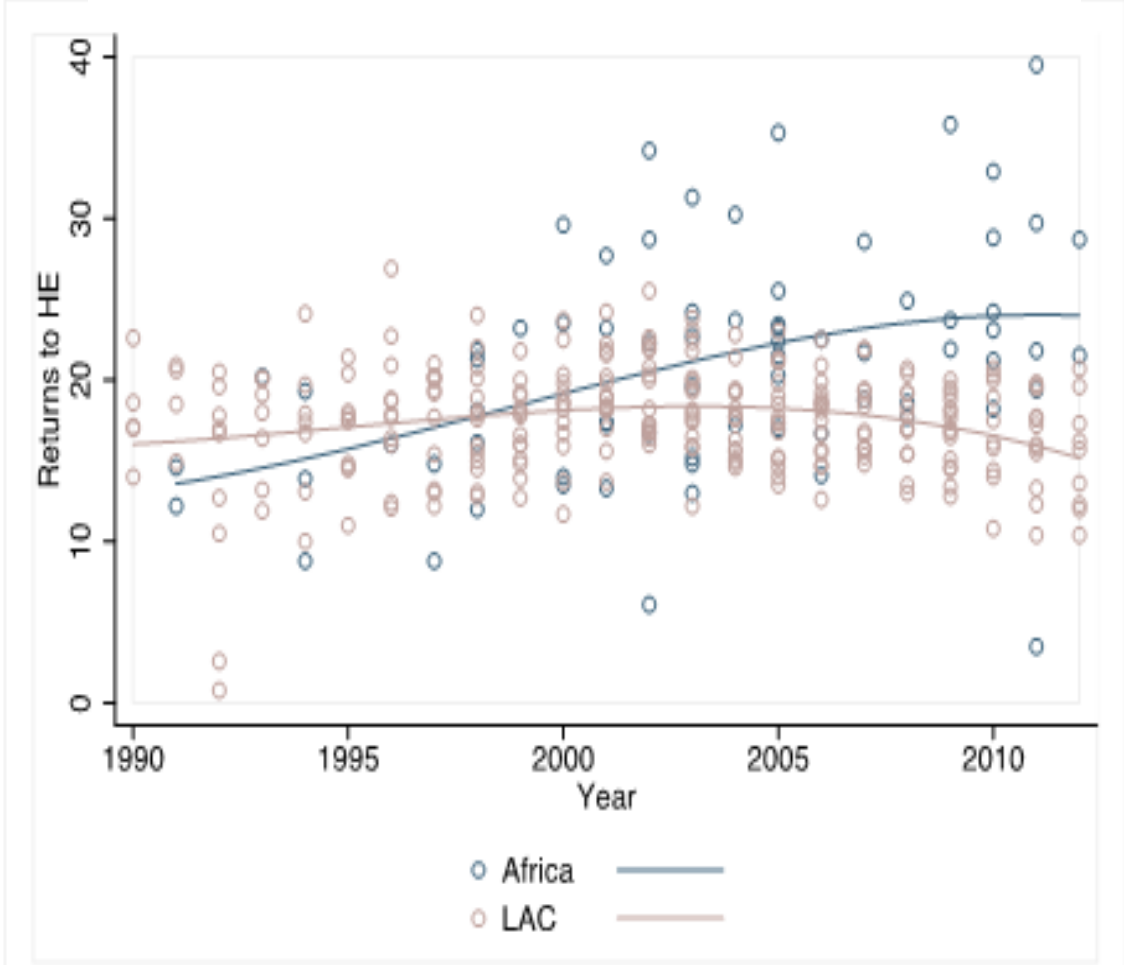


Average returns to foundational skills and education are high and on the rise

**Earnings premium to reading literacy (%)
Workers 25-54 years old in urban areas**

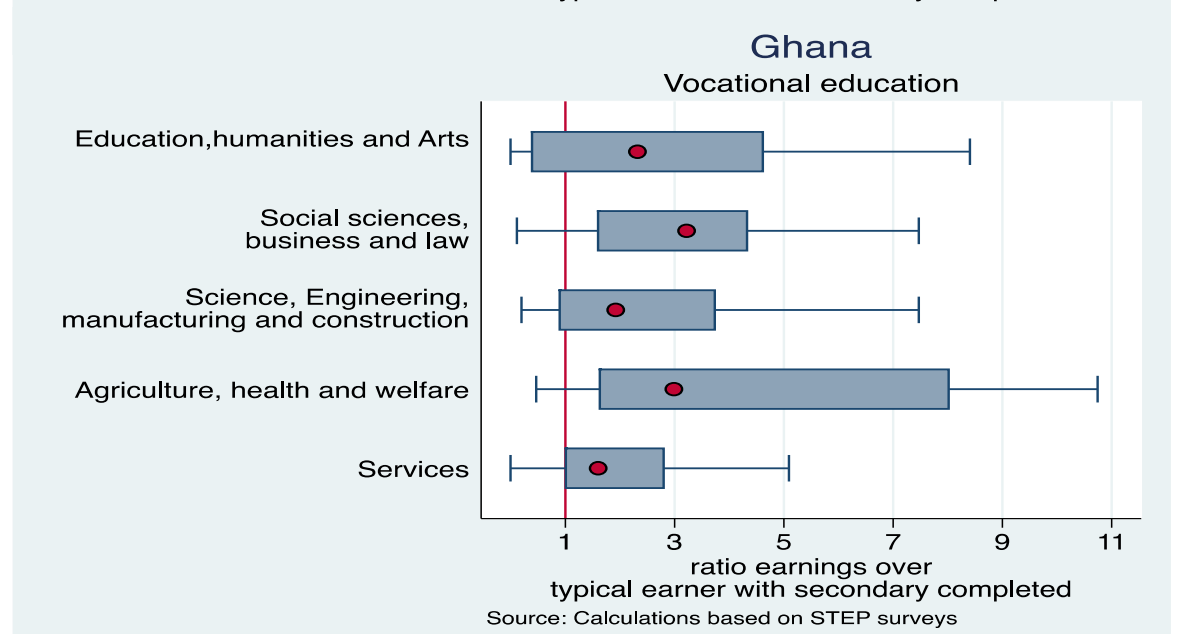
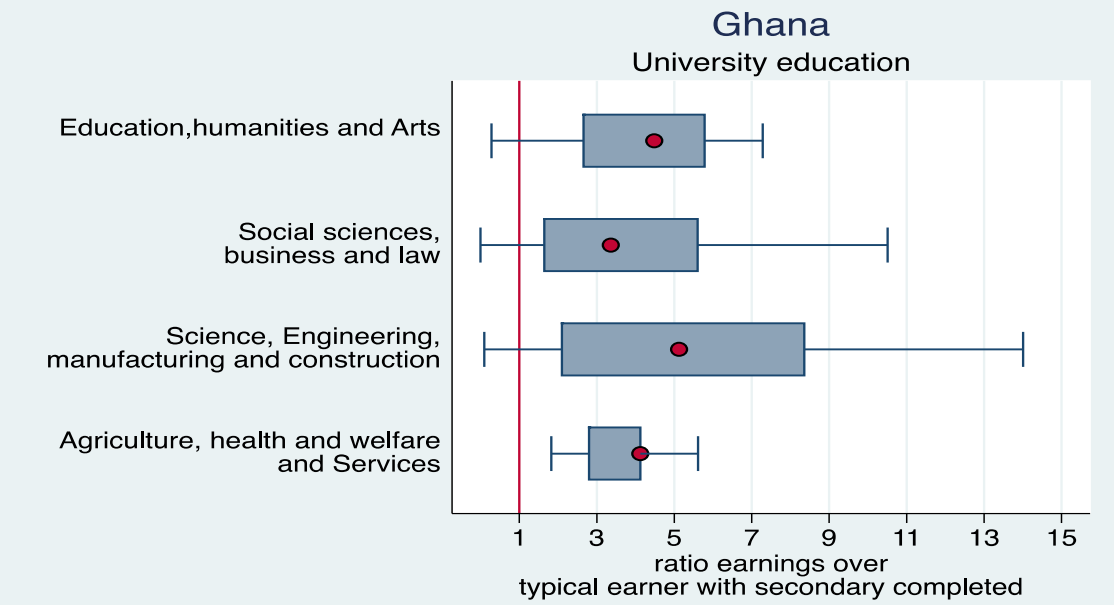
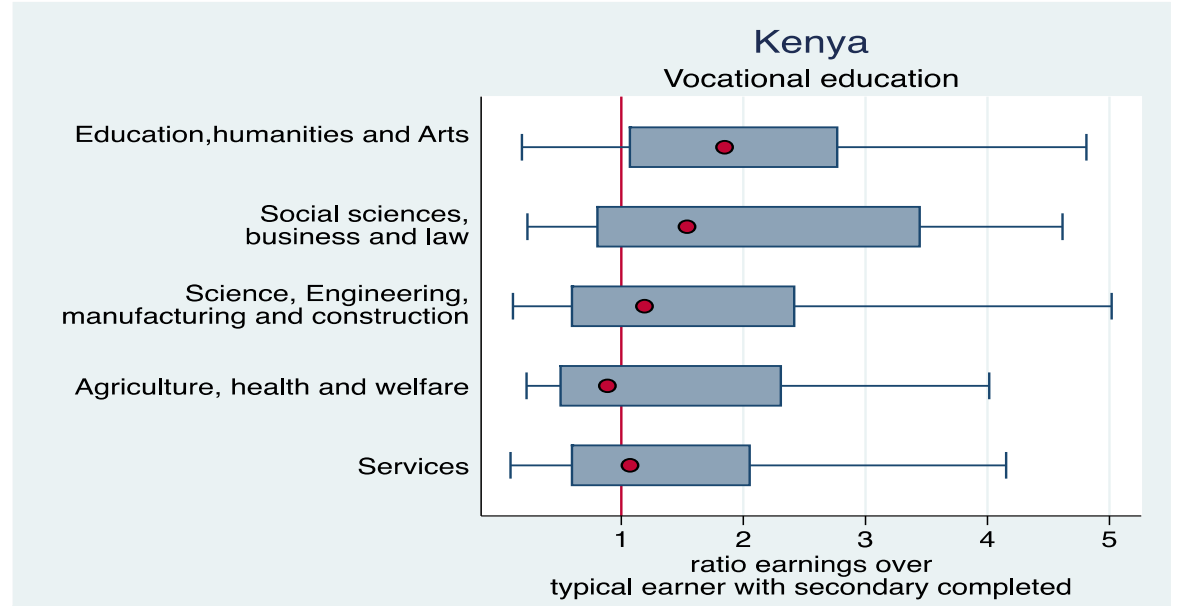
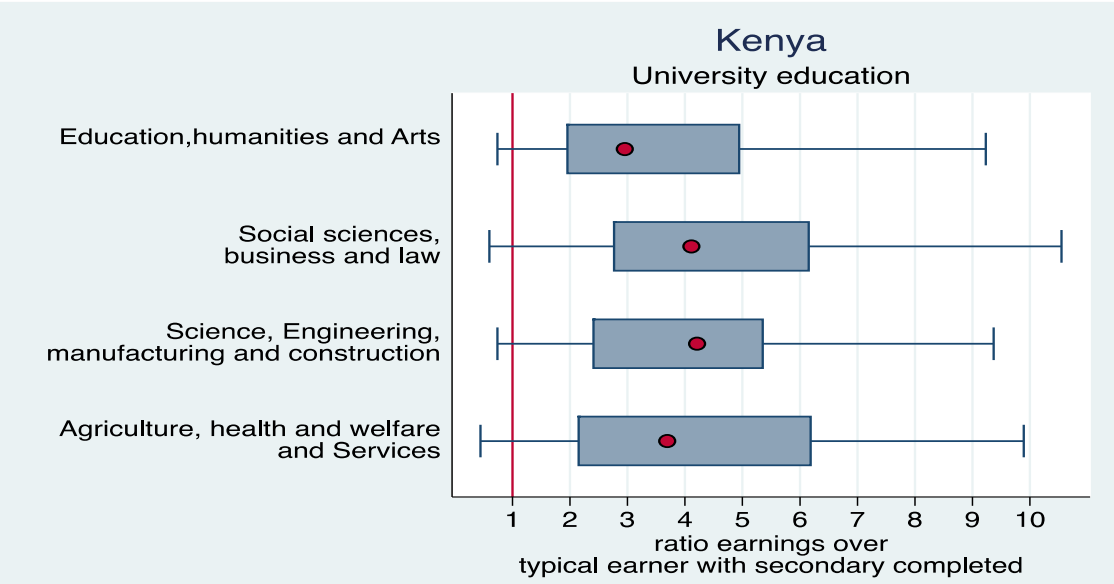


Evolution of returns to higher education, SSA and Latin America



Source: For the left figure: Tognatta, N., Valerio, A. & Sanchez-Puerta, L. (forthcoming); Urzua, forthcoming, for this Report, based on Montenegro and Patrinos (2014).

Although average returns to higher education are high and growing, there are concerns about the relevance and quality of university education and TVET

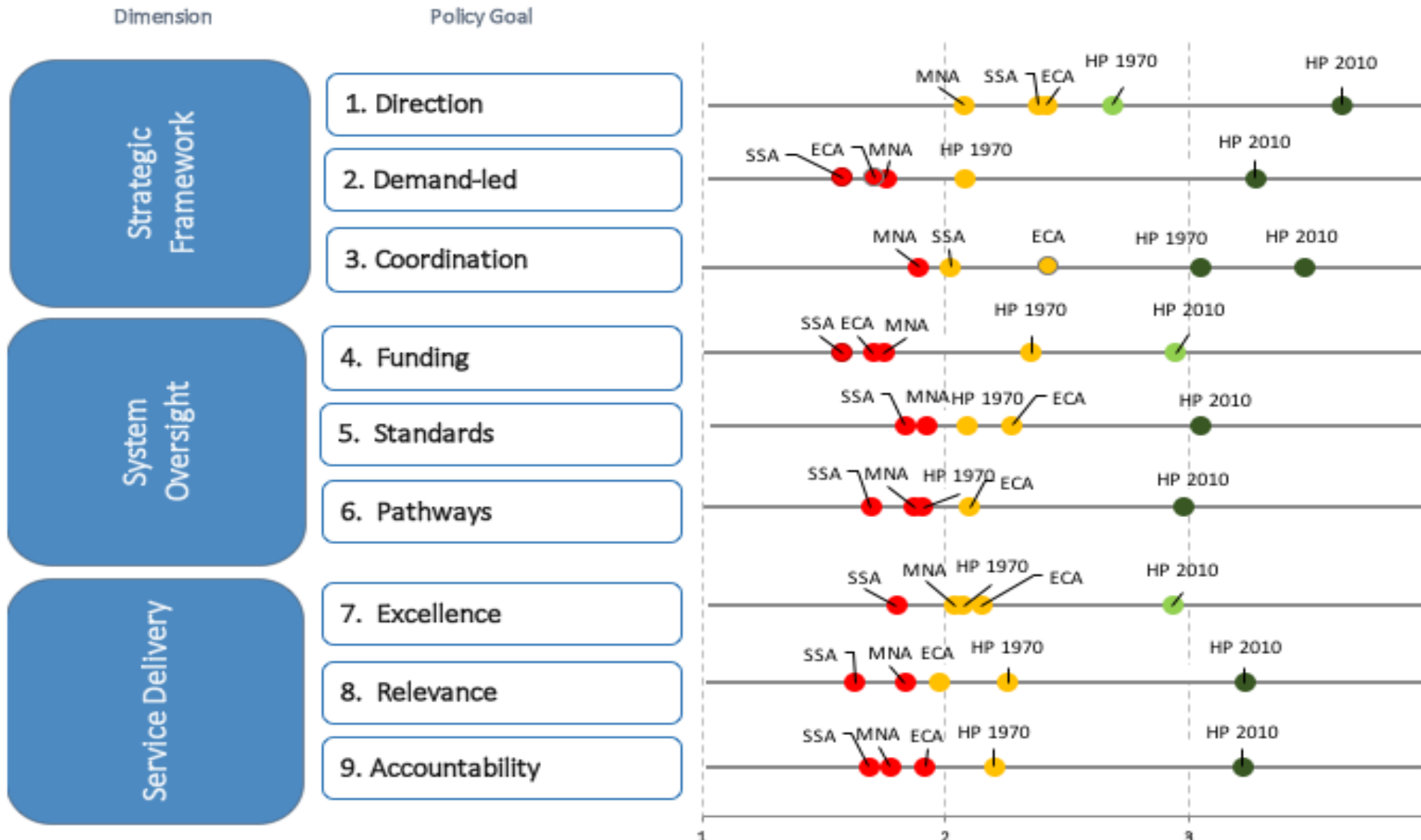


Source: Calculations based on STEP surveys

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These gaps stem from significant weaknesses in oversight and service delivery

Workforce development performance across specific policy goals, by region



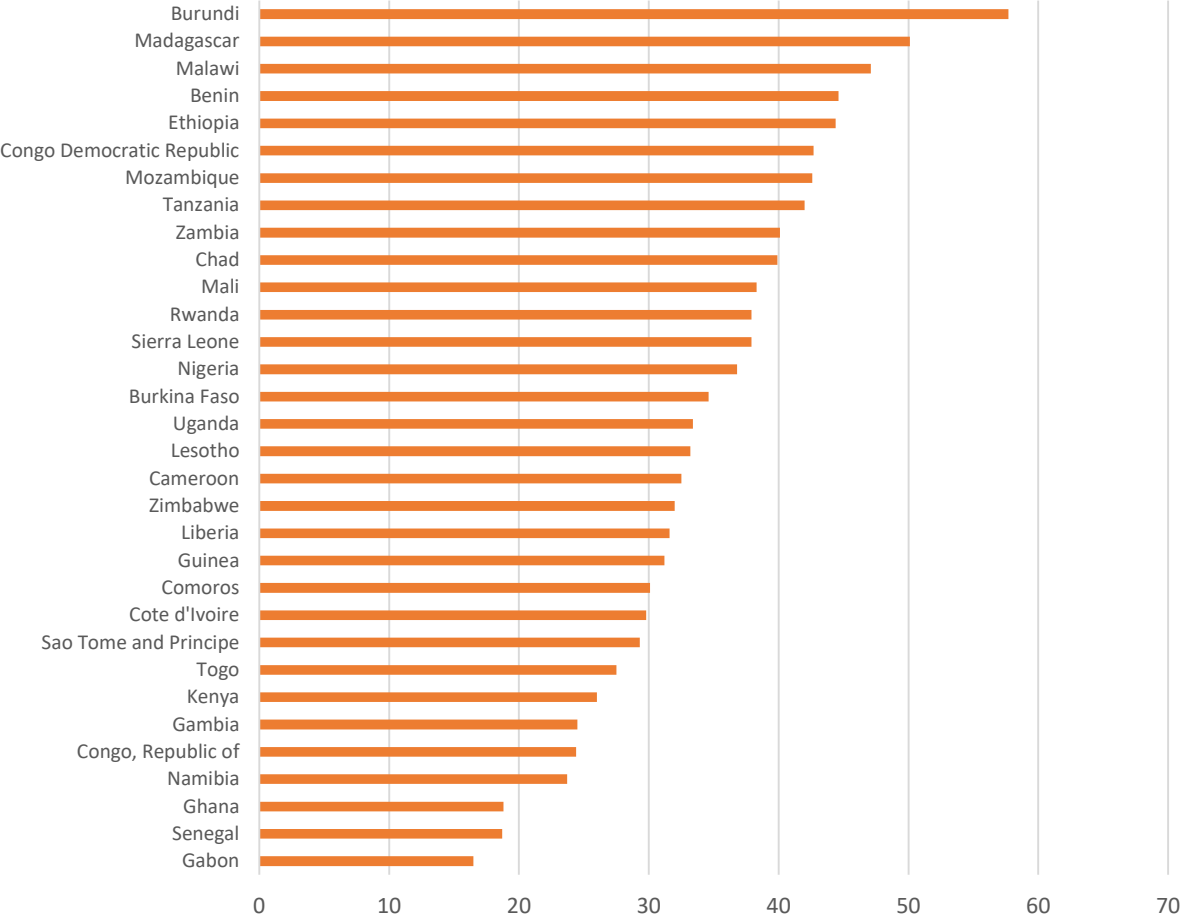
TVET weaknesses relate to:

- Access/ equity, efficiency, and relevance.
- Poor links to labor demand, lack of diverse pathways, and weak financing and accountability arrangements

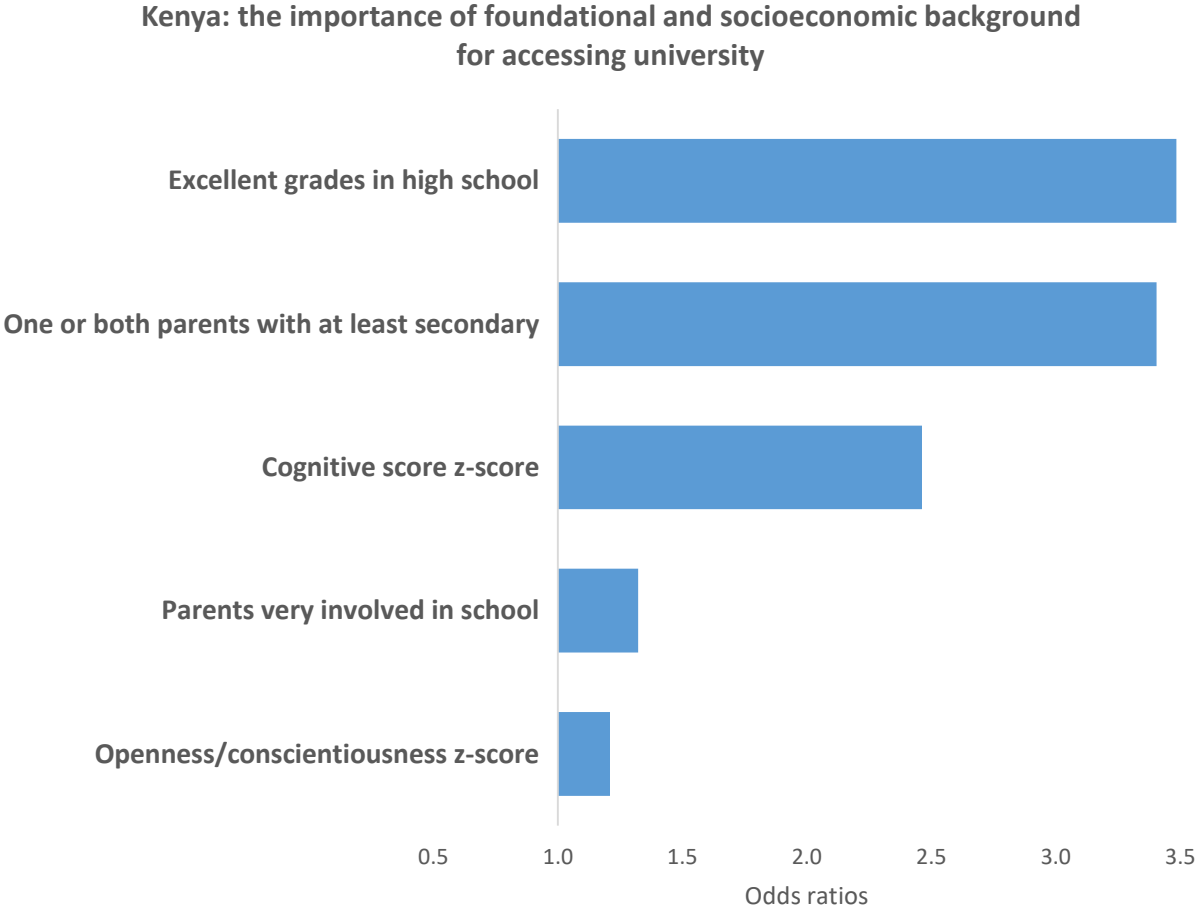
3. Is skills building in SSA countries resting on a solid foundation?

The huge gaps in ECD outcomes and learning in basic education hinder readiness for post-secondary skills acquisition

Proportion of children <5 who are stunted (%), latest year



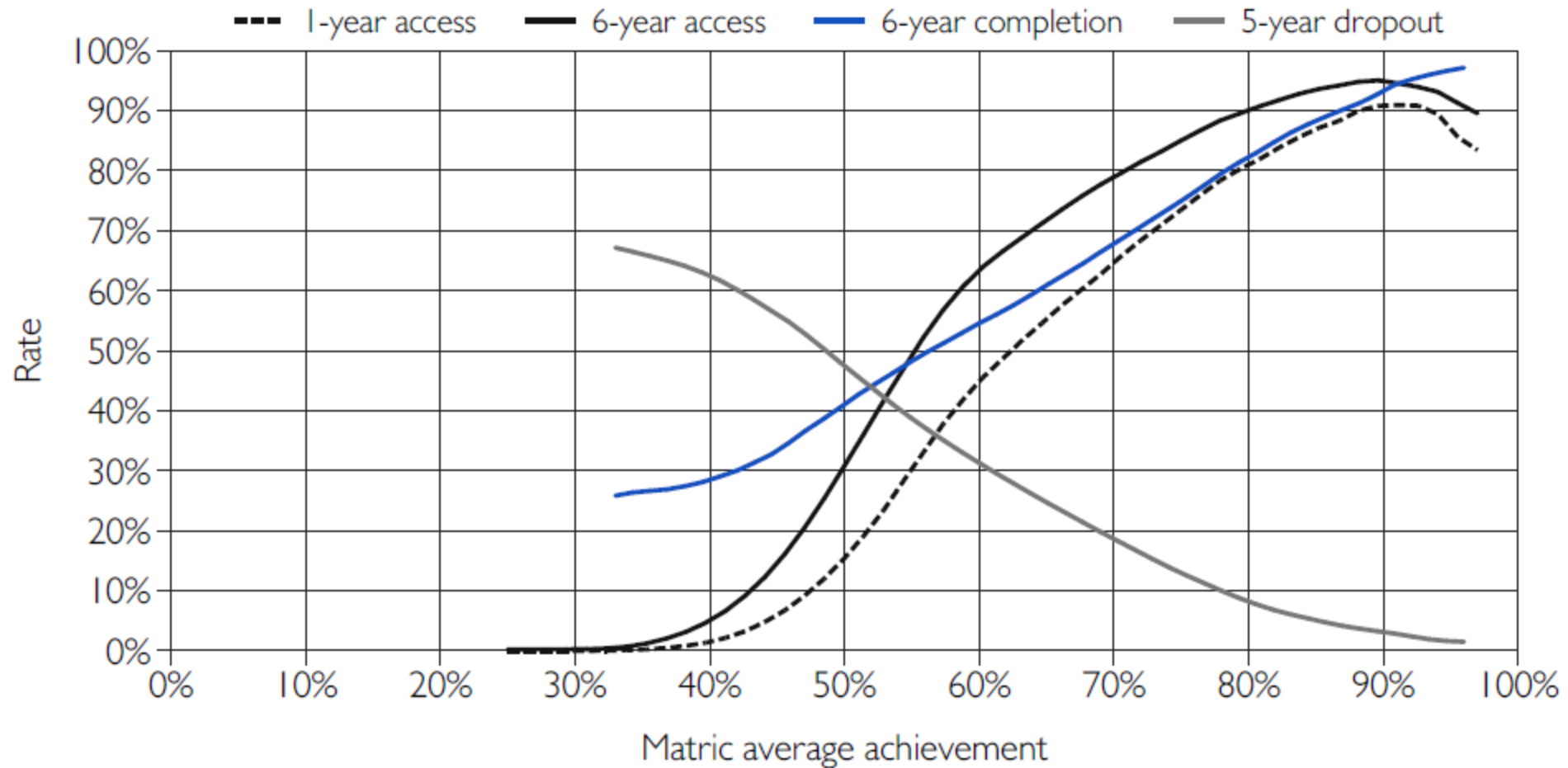
Skills beget skills



Source: Africa Skills regional study, based on Galasso, E (2016) and using data from the STEP surveys.

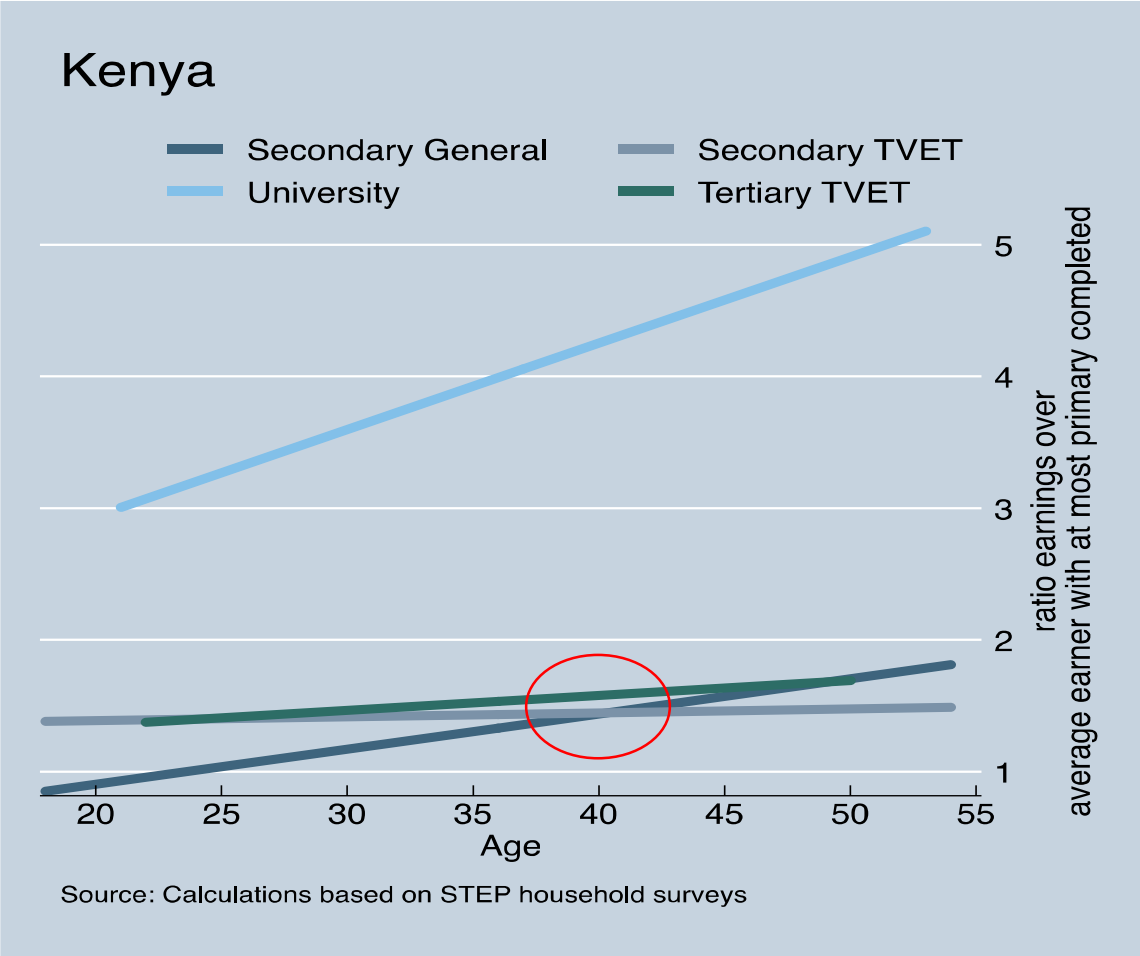
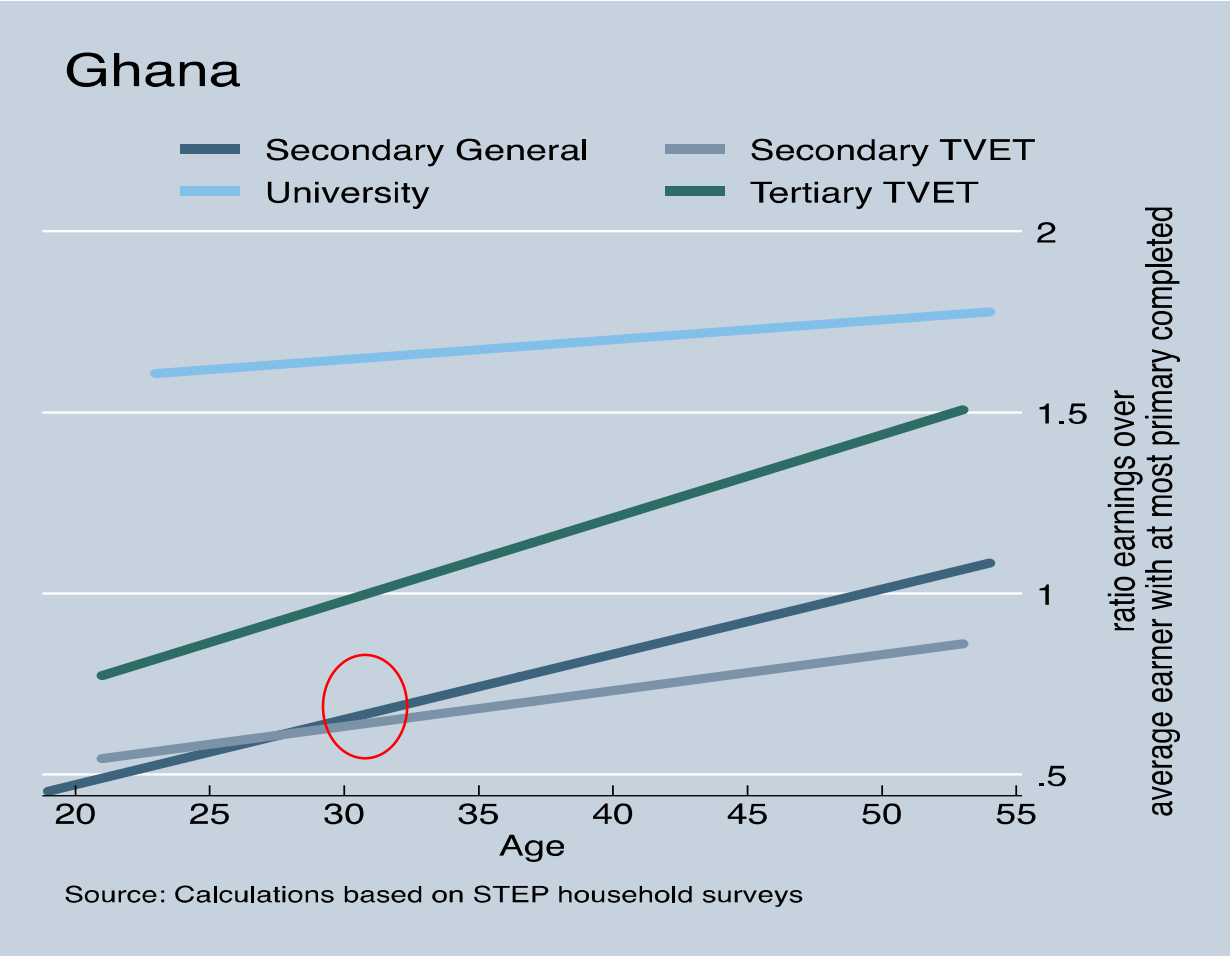
And readiness matters a lot also for performance in higher education

South Africa: Performance in matric exam vs university outcomes, 2008 matric cohort



While TVET may help in the school to work transition, lifetime earnings are higher if graduating from general education

Ratio of earnings by education level compared to average earnings if completed primary

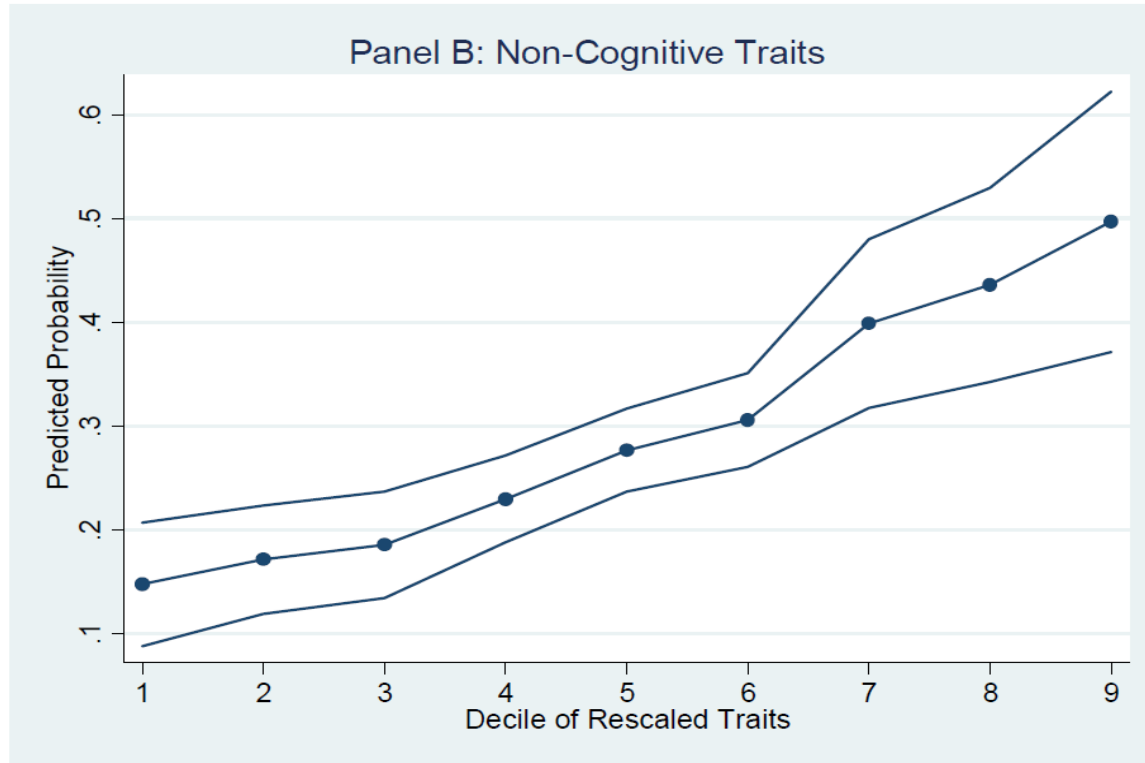


Source: Africa Skills regional study, based on STEP surveys.
 Note: Results from Mincer earnings regressions controlling for gender, work experience and location. Population age 17-55.

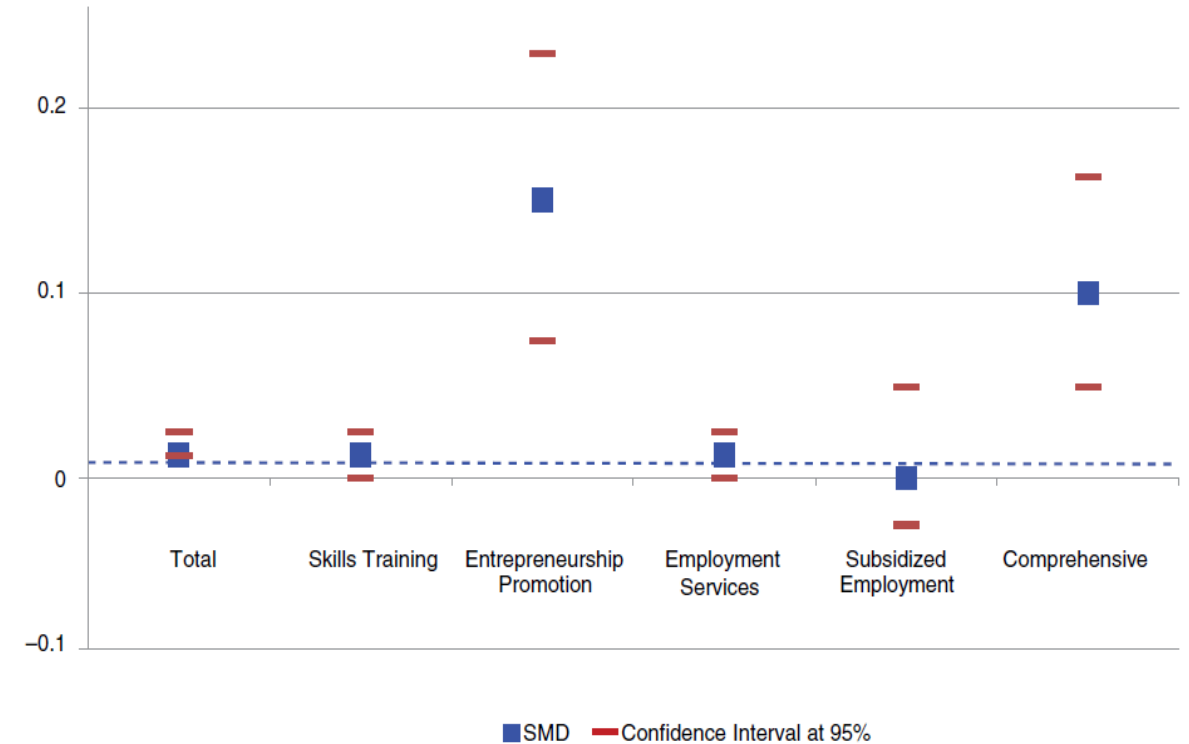
4. Is there a case for investing in skills for out-of-school youths and adults in SSA?

Programs that build foundational or technical skills among the out-of-school population can pay off, although many programs fail to deliver positive impacts

Ghana: Adoption of agricultural technology and socio-emotional skills



Impact on earnings across categories of youth employment programs



More comprehensive labor and training programs work better (particularly when assessed over the medium term):

- For self-employment, pairing technical training with cash and business skills training
- For wage employment, pairing training with internship/apprenticeship opportunities
- For both, incorporate socio-emotional skills training

5. How can SSA countries best manage the expansion of their skills building systems?

The Skills Balancing Act in SSA

- 1. Skills systems strive for three goals: equity, quality/relevance and efficiency. In achieving these goals, SSA countries, more than other countries in the past, need to make hard choices to manage policy trade-offs.**
 - Investments on the skills needs of today versus tomorrow's:
 - Skills of new cohorts versus skills of the current stock of workers
 - Skills to help workers adapt to constant changes in skills demand in a rapidly changing world of work
 - Investments on skills to accelerate overall productivity growth versus economic inclusion:
 - Skills for persistent non-wage, informal employment versus skills for catalytic (higher productivity) sectors
 - In managing these trade-offs, priorities need to be tailored to country context – today's skill levels, state of economic transformation, and the policy enabling environment for skills investments to pay off
 - Countries that start off with low basic education attainment among young cohorts face large opportunity costs from investing in tertiary and adult skills
 - Rapidly transforming economies need to pay more attention to the adaptability and reskilling of their workforce
 - Countries that have an enabling policy environment will reap higher returns from investing in tertiary and other skills programs geared to catalytic sectors; investments to support livelihoods will have a social premium in FCV contexts

The Skills Balancing Act in SSA

2. Sustain current skills investment levels—some countries need to expand it— but must make **spending more efficient** and integrated with other social policies

- Given the needs, trends and goals for expanding skills development, significant resources will continue to be needed. Countries with a need for higher spending would need to create the fiscal space
- Make the most of current spending to cut waste and improve efficiency
- In rationalizing education and training spending, governments can do less of:
 - Subsidies for the well-off in tertiary education that divert resources from other priorities, particularly on fields/diplomas that do not pass a market test (disconnected from present or future skills demand)
 - Complex regulation and quality assurance systems geared to formal employment and with high capacity requirements
 - Costly/ineffective skills training and labor programs with limited impacts or untested
- Improve efficiency of spending through financing and accountability reforms
 - Establish mechanisms for accountability, including support to school autonomy with more parental engagement
 - Strengthen the link between spending, outcomes, and reform indicators (e.g, SDI, performance-based)
- Leverage social policies and new technologies to make skills investments more cost-effective at scale
 - Leverage social programs such as cash transfers (i.e., include parenting training, adult literacy); use technology to facilitate service delivery

The Skills Balancing Act in SSA

- 3. Prioritize achieving universal foundational skills and address the huge learning and relevance gaps in education and training for today's and tomorrow's workers:**
- Promote equality of opportunities and school readiness, including through investments in maternal health, child nutrition/ECD and interventions to support those who miss out on critical foundational skills building (e.g, second chance and adult literacy programs)
 - Achieve more equity in university education expansion by establishing the basis of college readiness early on
 - Focus on quality to address the huge learning and relevance gaps in education and training, by:
 - *Investing in more effective teaching*, not just buildings – training, support, incentives, and accountability, helping teachers teach to the level of the child
 - *Incorporating socio-emotional skills* into the goals and teaching practices of schools, institutions and programs
 - *Strengthening management and autonomy* of schools and post-secondary institutions (with due accountability)
 - *Establishing robust national student learning assessments* and participating in international initiatives
 - Delay tracking too early to TVET secondary and achieving an adequate balance between in-classroom and work-based learning to ensure that students in vocational education acquire strong foundational skills
 - *Foster the private sector venturing into post-secondary education and training programs* from curricula design to on-the-job training opportunities, in order to align them with labor market needs

Investment in skills for the out-of-school population can be made more cost-effective if...

- Programs are designed with the needs and incentives (monetary and intrinsic) of adults in mind, with proper evaluations to discern impacts and implementation modalities that allow scaling up
- They are tailored to the realities of the relevant labor markets
 - Importance of informal apprenticeships in many SSA countries
 - Importance of self-employment, for which, other constraints—such as lack of working capital— are also important
- They are delivered at lower unit costs and they beat the alternative of simply giving cash transfers (over at least one year horizon).
- Some ways to make these investments more cost-effective and scalable:
 - Pair with other social programs such as cash transfers and parenting training especially for women
 - Mexico's Prospera; India's Saakshar Bharat
 - Leverage ICT technologies to improve take-up, facilitate delivery, train instructors, etc.
 - Ghana national literacy program
 - Niger adult literacy intervention (Aker et al 2012)



The Skills Balancing Act in SSA

4. Use learning metrics to guide investments and policy reforms to enact system-wide change by generating critical information for adaptive learning (WDR2018)

- Strengthen the capacity for evidence-based policy making in ministries of education (“intelligence units”)
- Generate and disseminate information on inputs, returns and results, as relevant, to critical stakeholders, especially families and civil society

5. Harnessing the roles of key stakeholders

- The public sector – equity, market and coordination failures should be the focus of public intervention by:
 - Implementing skills and complementary policies that ensure *readiness, opportunities* and *incentives* for skills development
 - Tackling the complex political economy of reform by fostering cooperation, commitment and coordination through strategic leadership, social dialogue and better incentives (e.g. working with teacher unions)
- The private sector - actively engage in national social dialogue to prioritize skills development and reforms to create a policy enabling environment for investments to pay off, participate effectively in service delivery, invest in OJT, engage with education and training providers to ensure programs are aligned with their needs
- Families – childhood ECD and parenting (including values attuned to socio-emotional skills), actively engage with children’s education and schools to hold them accountable for effective service delivery, investments that complement public investment according to means.



The Skills Balancing Act in Sub-Saharan Africa

THANK YOU!