The Skills for Industry Project :
Insights from global data

Presentation for the „FOBBIZ-Talk" series on 25 October 2022

Markus Maurer
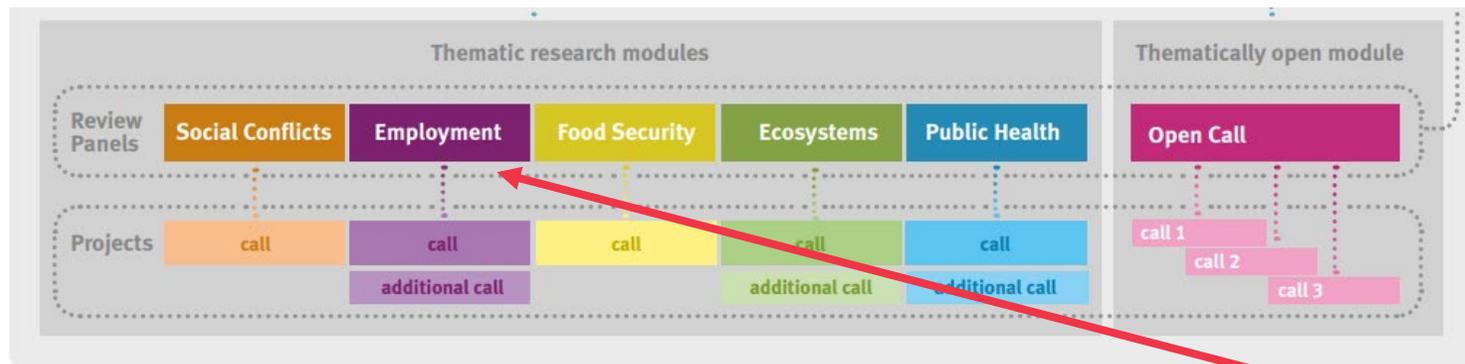
Professor of Vocational Education, Zurich University of Teacher Education PHZH, Switzerland

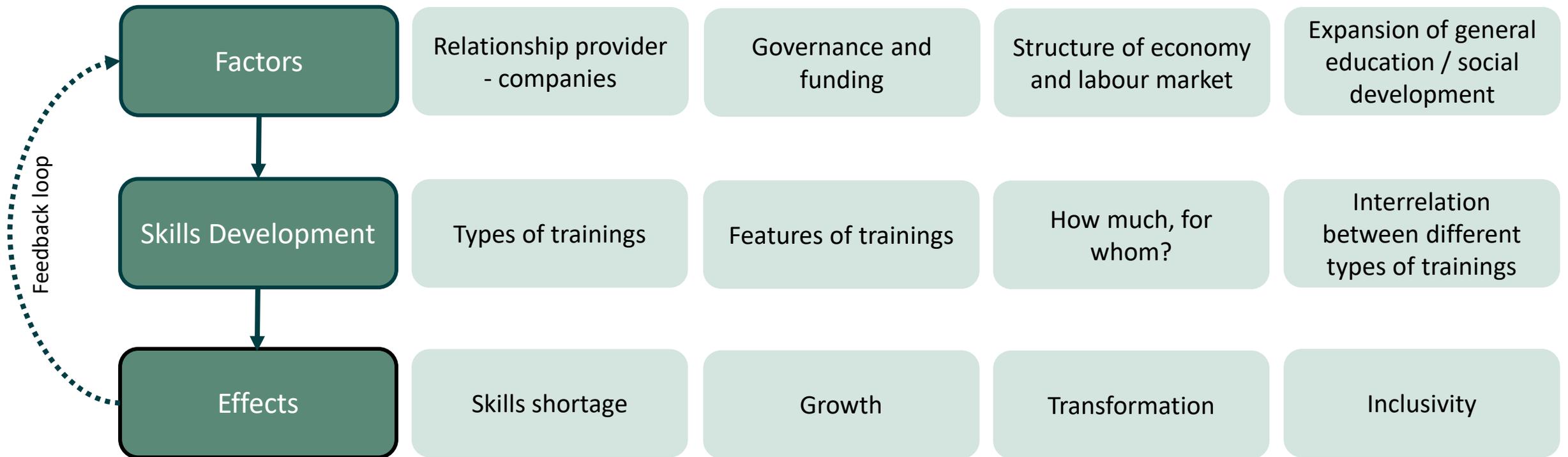**Michael Morlok**

orange & teal

The r4d programme (research for development)

- A research programme jointly funded by the Swiss National Science Foundation (SNSF) and the Swiss Development and Cooperation Agency (SDC)
- Ojective: Research findings to contribute to implementation of Sustainable Development Goals (SDG)

The Skills for Industry Project

Our theoretical model

Factors	Relationship provider - companies	Governance and funding	Structure of economy and labour market	Expansion of general education / social development
Skills Development	Types of trainings	Features of trainings	How much, for whom?	Interrelation between different types of trainings
Effects	Skills shortage	Growth	Transformation	Inclusivity

Feedback loop

Focus of the Skills for Industry Project

Industries

Garment (BD, CB, ET, LA, SA, VI)
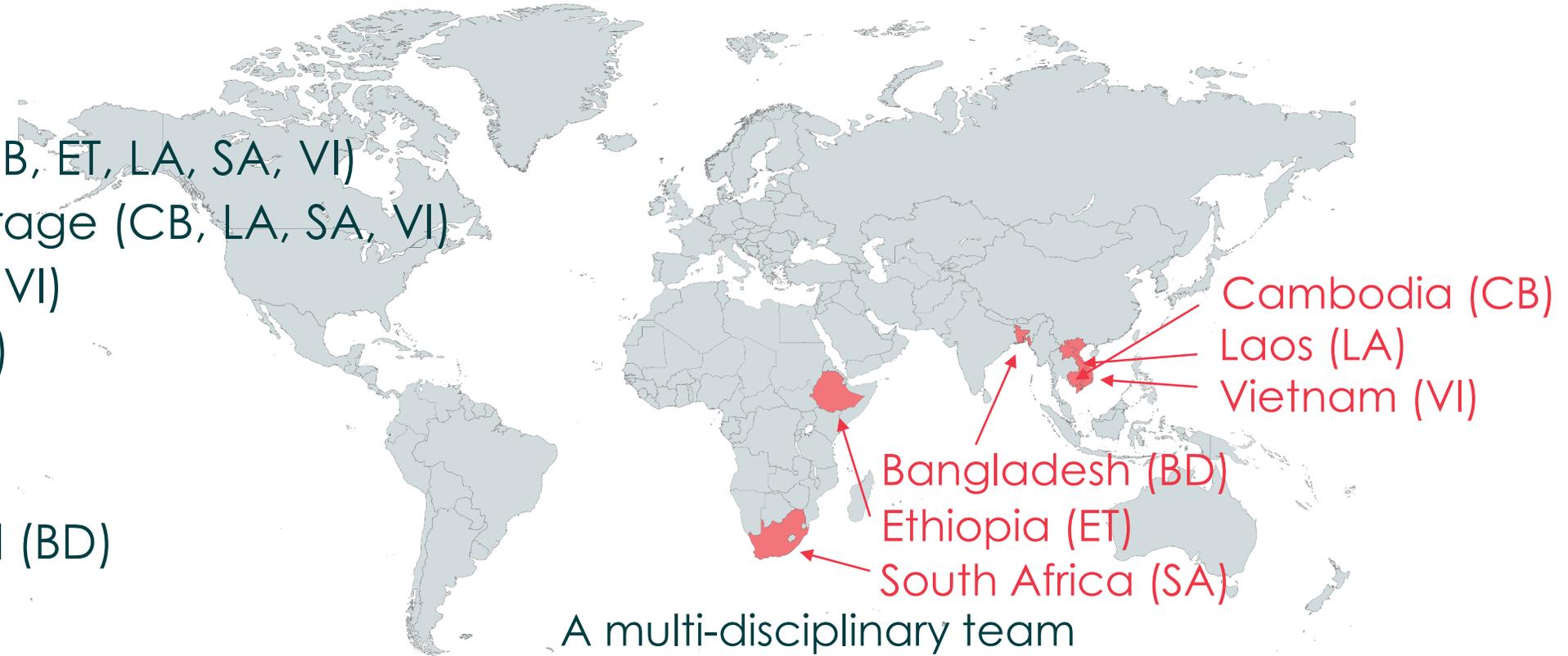
Food and Beverage (CB, LA, SA, VI)

Electronics (CB, VI)

Automotive (SA)

Leather (ET)

Metal (ET)

Pharmaceutical (BD)

Cambodia (CB)
Laos (LA)
Vietnam (VI)

Bangladesh (BD)
Ethiopia (ET)
South Africa (SA)

A multi-disciplinary team

Education; economics; sociology; engineering

Skills for Industry Data Set

Phase 1 (2017 – 2020)

Phase 2 (ongoing)

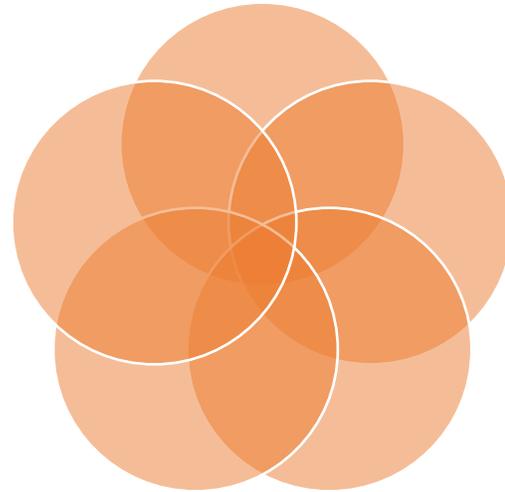| Company survey	Company case studies	Interviews: Training providers	Interviews: Industry associations	Interviews: Governing bodies
847 companies	108 companies	80 - 120 interviews	20 – 40 interviews	40 – 80 interviews

Our aims

Influence academic debate on skills development

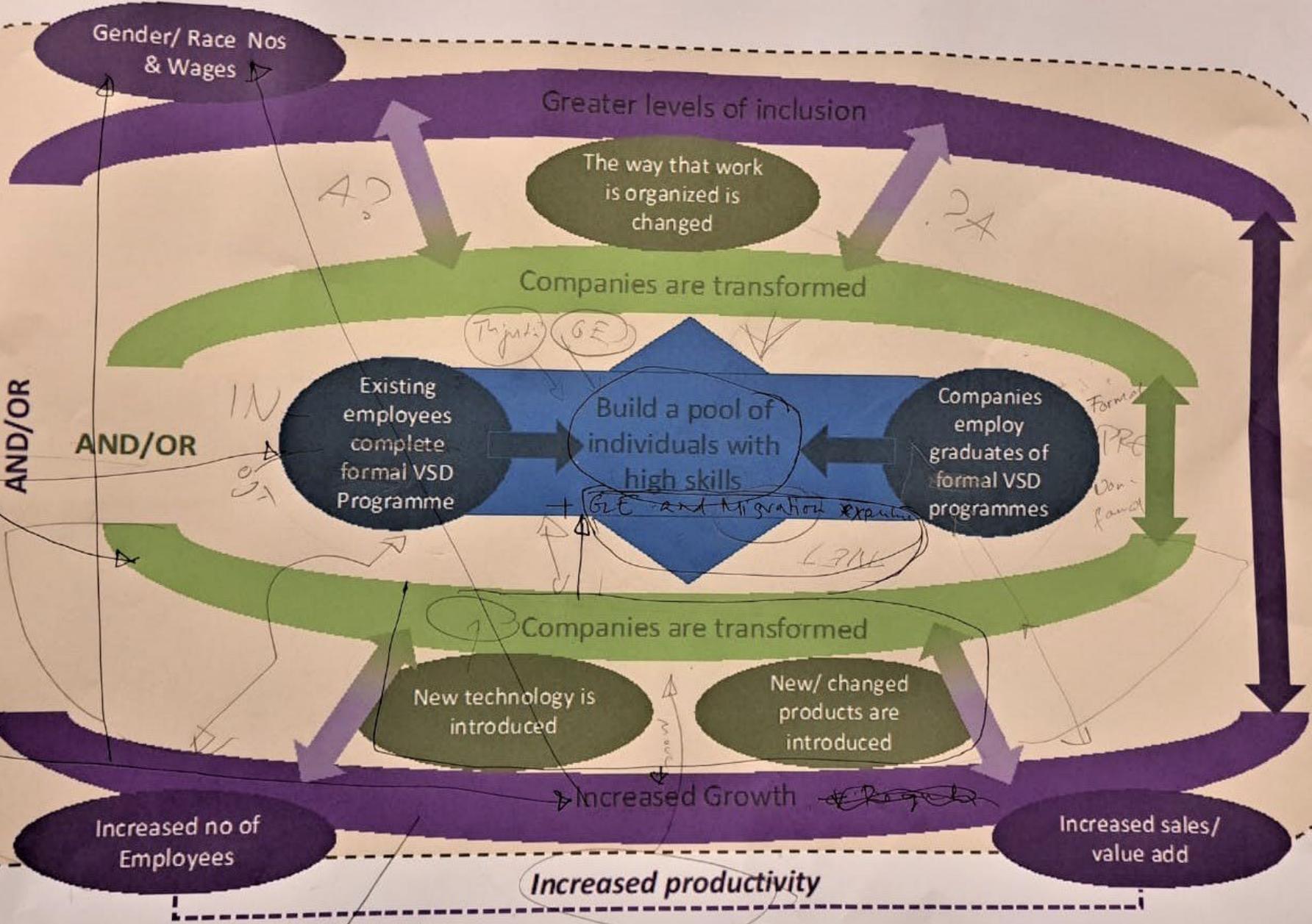Inform designers and implementers of skills development programmes

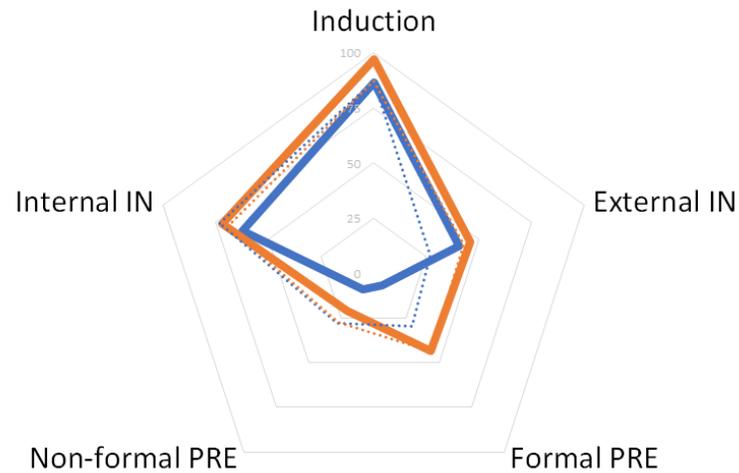Inform the policy debate

Preliminary findings

Differences in training & training uptake between countries
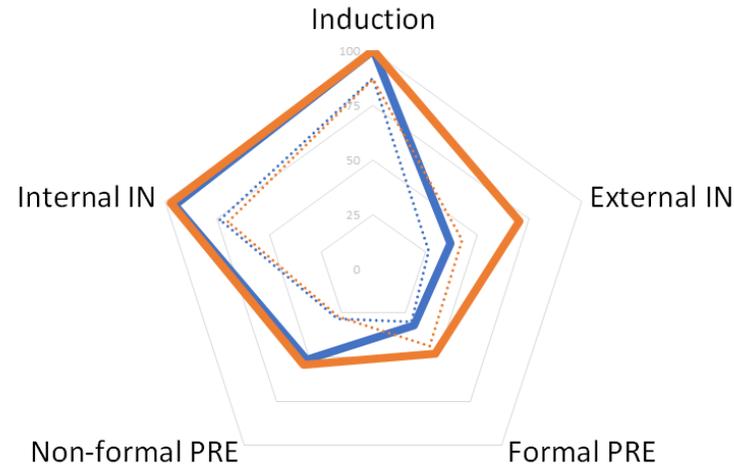
Blue: medium-skilled workers
Orange: highly-skilled workers

PRE: pre-employment training
IN: in-employment training

Ethiopia

Vietnam

Source: Phase 1 data

Differences in training & training uptake between industries
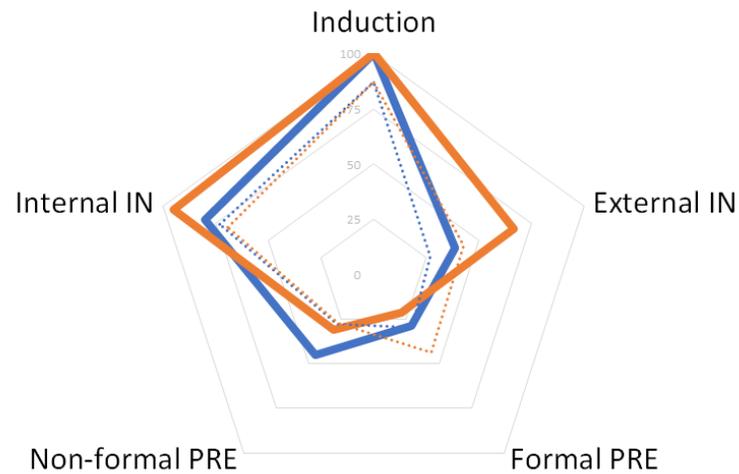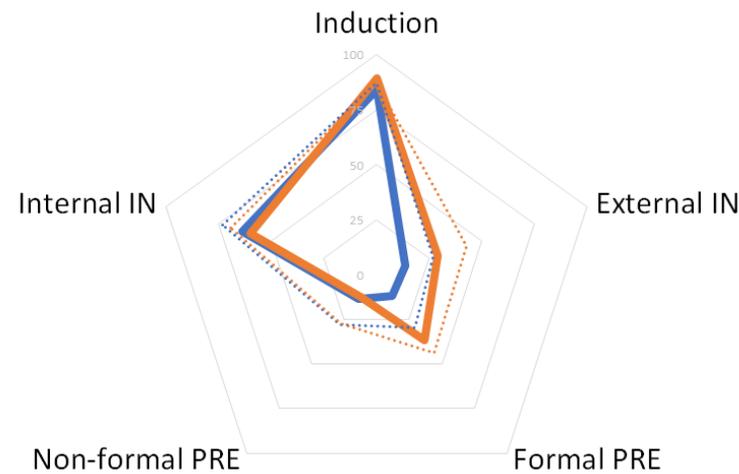
Blue: medium-skilled workers
Orange: highly-skilled workers

PRE: pre-employment training
IN: in-employment training

Automobile

Garments

Source: Phase 1 data

Some differences in uptake can be explained …

|	General workers	Operators	Supervisors	Technicians
Firm Characteristics				
Age (years)	-	+	+	+
Foreign ownership		-	+	-
Firm Dynamics				
Change to more advanced products				+
Exporting	+	+	+	+
Industry/ Sector Characteristics				
Sector is a net-importer (import competition)			+	+
Main export destination: High Income countries		+	+	+

Red (+): firms with this characteristic report a higher uptake of formal VSDs
Green (-): firms with this characteristic report a lower uptake of formal VSDs

Source: Phase 1 data

… others not (yet)
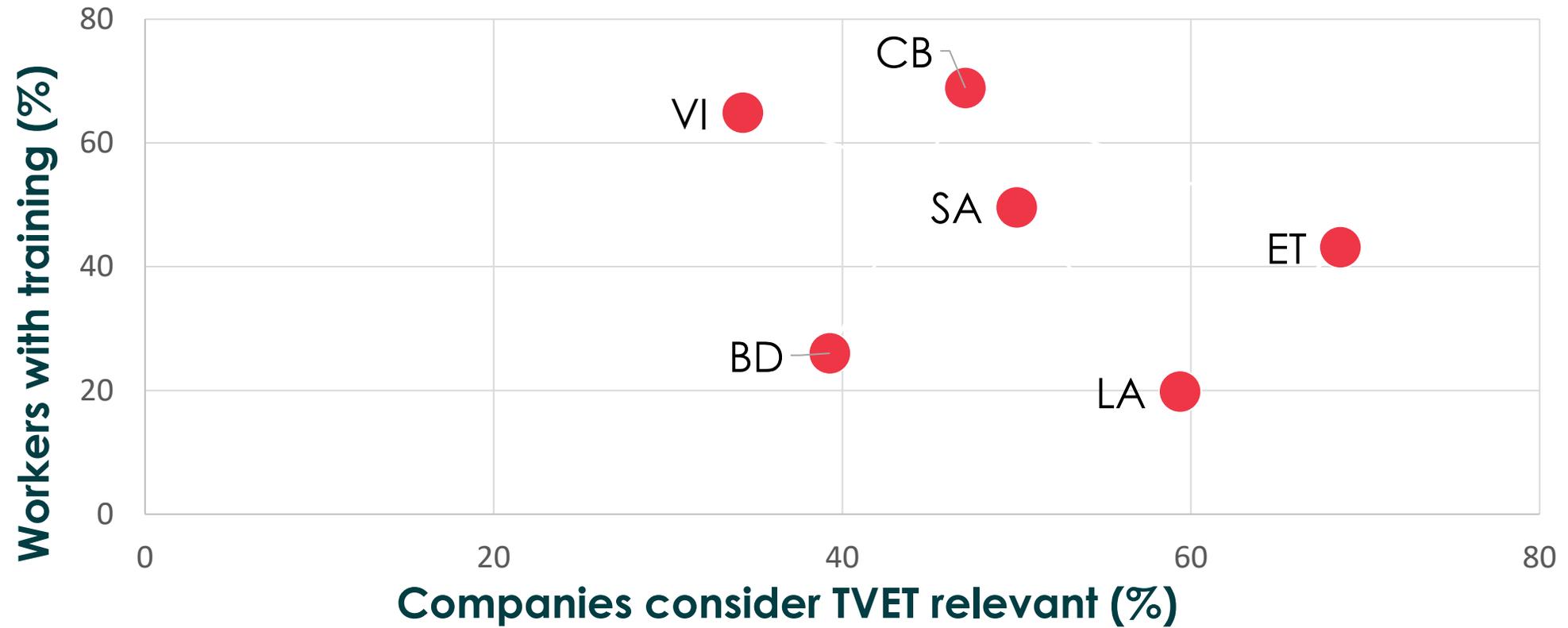
Source: Phase 1 data

Highly complex interactions with transformation

– Industrial transformation has resulted in the need for new and more skills
– Complex two-way interaction between skills development and transformation
– Perception that (formally) skilled employees adopt quicker to transformation
– Common to use technical support from machine suppliers and/or buyers.
– View that on-the-job informal or non-formal training are also important in companies for responding quickly to transformation

Inclusive growth?

Change (2012-2017, %)	General Workers	Operators	Supervisors	Technicians	Higher Managem.
Bangladesh	17	6	9	5	5
Cambodia	25	20	15	22	23
Ethiopia	2	4	9	6	6
Laos	9	9	9	4	9
South Africa	14	6	10	1	-2
Vietnam	12	6	2	0	16

Discussion

See also: Maurer & Marks, 2021

Questions

– What confirms your own observations, what do you find surprising?

– Are there (emerging) implications for what development partners can / should do resp. not do?

Project publications (selection)

Allais, S., Schoer, V., Marock, C., Kgalema, V., Ramulongo, N., & Sibiya, T. (2021). Rethinking 'supply and demand' of technical and vocational education and training: insights from a company survey in three manufacturing sectors in South Africa. *Journal of Education and Work, 34*(5-6), 649-662. doi: 10.1080/13639080.2021.1967302

Kalam, M. A., & Shimu, S. S. (2020). Perceived Roles of Skills in Growth and Transformation of Ready Made Garments and Pharmaceutical Industries in Bangladesh: Results from an Industry Survey. *Asian Journal of Education and Training, 6*(4), 671-682. doi: https://doi.org/10.20448/journal.522.2020.64.671.682

Maurer, M., Morlok, M., Khammounty, B., & Teutoburg-Weiss, H. (2019). *Boosting Growth and Transformation in Laos' Industry. Zurich: Zurich University of Teacher Education.*

Maurer, M., & Marks, A. (2021). Industrielle Transformation in Entwicklungs- und Schwellenländern: Reicht Bildung on-the-job? *Newsletter Transfer, 3. Online: https://sgab-srfp.ch/reicht-bildung-on-the-job/ [14.10.2022].*

Maurer, M., & Morshed, M. (2022). Promoting the Recognition of Prior Learning (RPL) in the context of development cooperation: The case of Bangladesh. *International Journal of Educational Development. doi: https://doi.org/10.1016/j.ijedudev.2022.102592*

Morlok, M., Teutoburg-Weiss, H., Khounvilay, K., Nguyen, H. L., & Ven, S. (2022). Achieving inclusive growth? Wage dynamics in Cambodia, Laos and Vietnam. *Development Studies Research, 9(1).* doi: https://doi.org/10.1080/21665095.2022.2116347