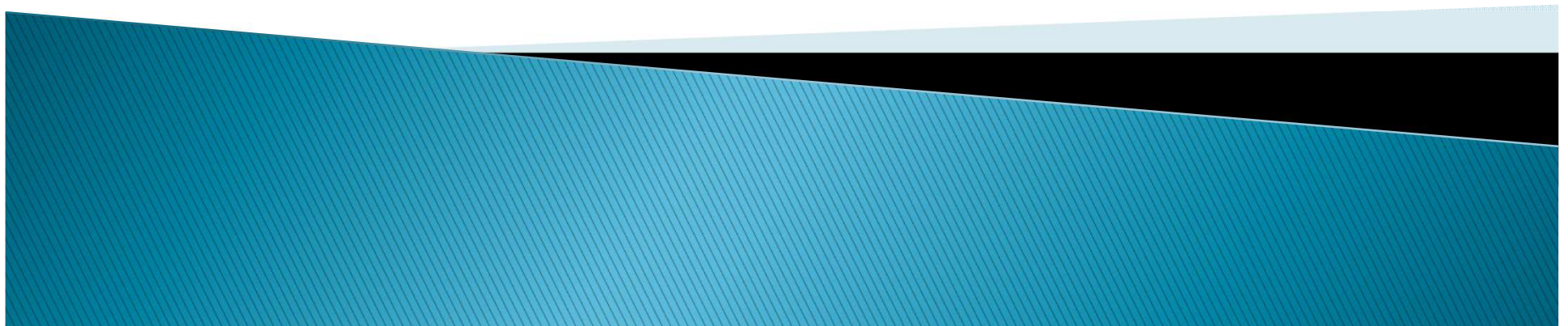


TVET in Ethiopia: A description and policy questions

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Structure of talk

- ▶ What are the key theoretical issues in vocational education/training?
- ▶ What is the evidence from other countries i) Europe ii) sub-Saharan Africa
- ▶ Features of the Ethiopian TVET system – and the context
- ▶ Given this context, what are the key questions for policy and research?



TVET in Ethiopia

Provision has been increasing because

- i) belief that low factor productivity is due to low skills
- ii) that left to itself, industry will provide less training than is socially optimal
- iii) Hence, publicly provided vocational education is seen by the government as the means to close this skill gap



TVET in Ethiopia

- ▶ Inspired by German model – a dual system, feeding students from school into vocational education
- ▶ 50–70% of training within firm – with attendance in training colleges
- ▶ Little known about
 - i) whether returns to TVET
 - ii) what the incentives are within Ethiopia for firms to take on such costs



Theoretical issues in TVET

- ▶ Becker: Firms will provide firm-specific training, (unconstrained) workers pay for general training
- ▶ However, firms do pay for general training – only 12% of training is firm-specific in Germany
- ▶ Why might they? Market imperfections....
- ▶ Compressed wage structures turn general skills into firm-specific...



Aligned incentives

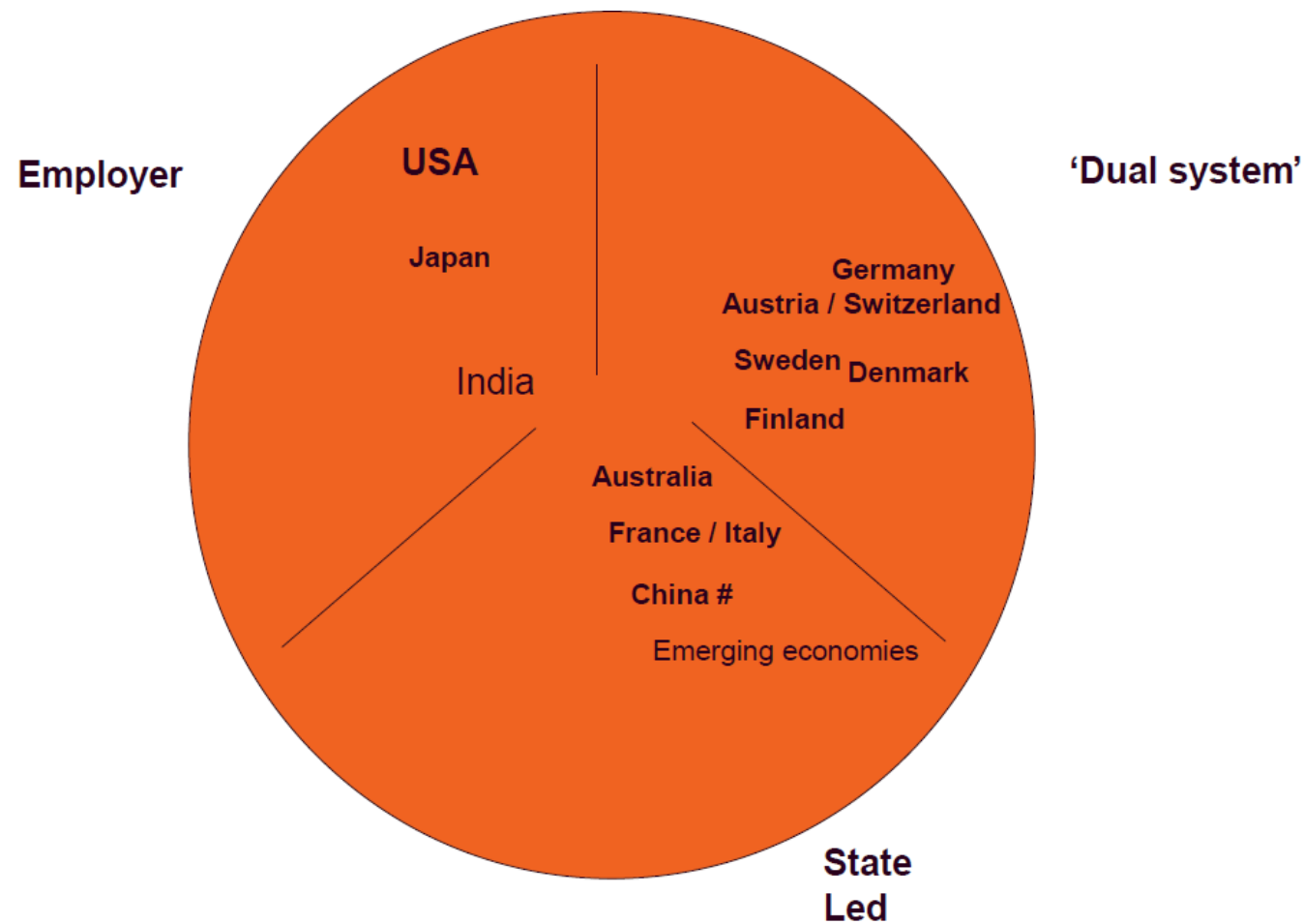
- ▶ Firm will want to offer training for someone who will stay
- ▶ Individuals have incentive to have more transferable skills that are better taught on the job
- ▶ Society – Firm-based training allows smooth transitions of firm-trained apprentices into employment
- ▶ Society has an interest in ensuring ability of the firm to credibly assure workers that they deliver the promised training quality – regulatory role



International comparisons



International systems of vocational education



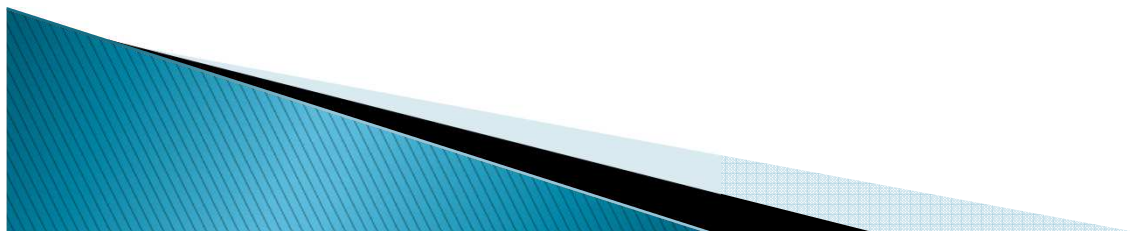
Evidence from Germany

- ▶ The apprenticeship system in German-speaking countries is highly institutionalized and externally regulated
- ▶ First, chambers of crafts, industry, trade regularly monitor training firms for training standards
- ▶ Second, in Germany apprentices obliged to attend vocational schools & taught general subjects, such as Math and English – and exchange information
- ▶ Third, apprentices sit final exams which are centralized and organized by the chambers
- ▶ Costs : Trainee allowance & other work-based costs borne by the employer. No government subsidies – the *Länder* carry the cost of the school-based training elements



Returns? Or why might firms train

- ▶ Only 12% of training is general – net costs positive
- ▶ Mixed evidence for asymmetric information (easier recruitment, screening of ability) vs mobility costs
- ▶ Share of apprentices in trade, commercial, craft and construction occupations raises contemporary gross profits – apprentices are substitutes for unskilled or semi-skilled workers.
- ▶ In contrast, an increase in the share of apprentices in the manufacturing occupations reduces contemporary gross profits
- ▶ Mixed evidence on private returns to trainees (mostly low/positive)



Sub-Saharan Africa

- ▶ Evidence is thin
- ▶ Ghana highly developed apprenticeship system of sector-specific private training, mainly used in informal sector
- ▶ Returns fall with increased education (uneducated apprentices have highest return)
- ▶ Other: (Kenya & Zambia) – on-the-job training raises wages particularly in large firms, with longer duration
- ▶ Returns high at 20pc – but are average , not marginal returns



Ethiopian context

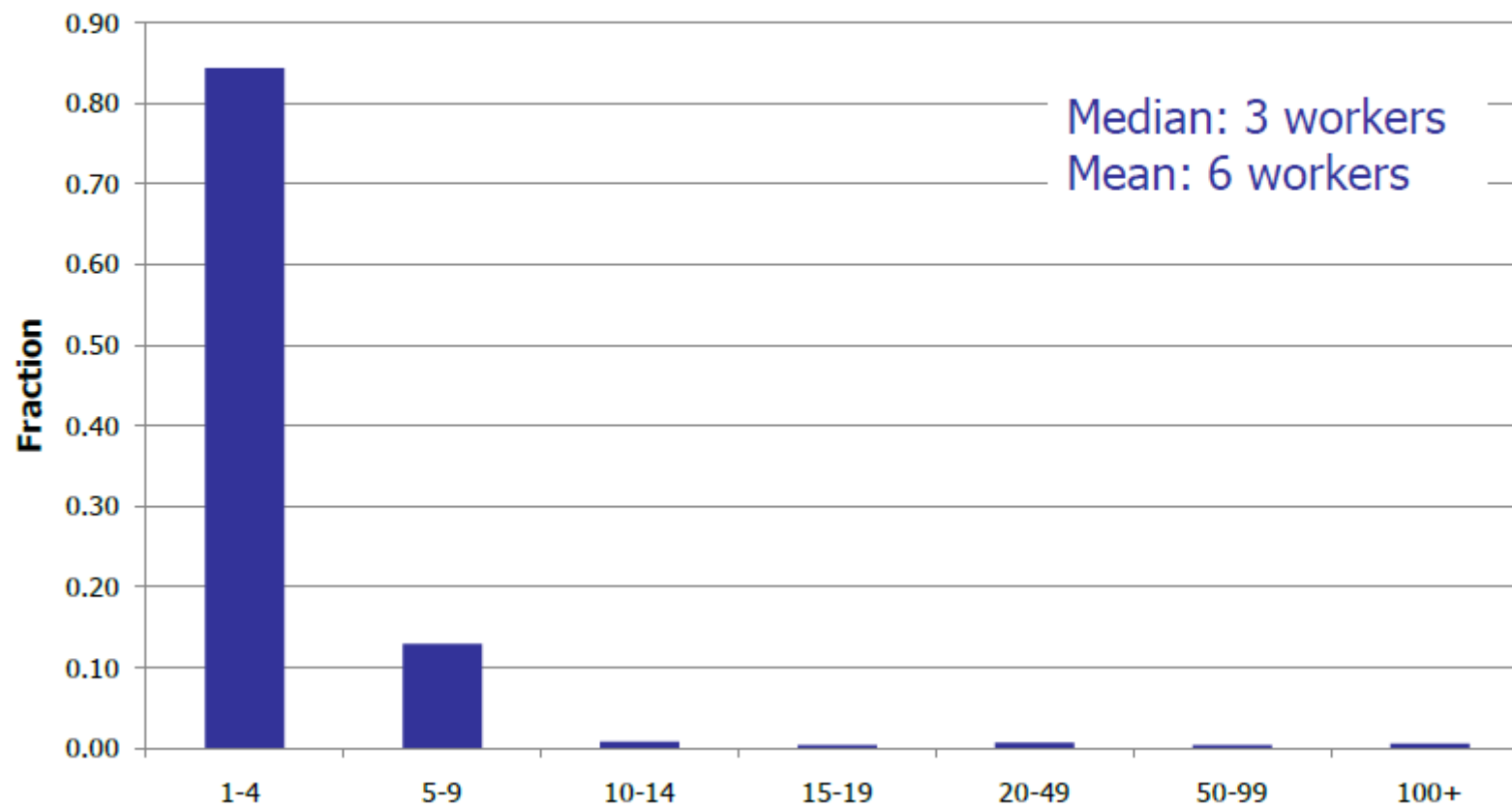
Institutional context

- ▶ Market for jobs thin
- ▶ Mobility is hindered by poor information
- ▶ State owned enterprises or enterprises aligned with the states/parties objectives – not necessarily the market leaders
- ▶ Very few firms in each sector – median firm size in 2008 was 19 – Large tail of micro enterprises with less than 5 workers
- ▶ TVET – suspicion that supply driven with allocation to training firms on command model



Firm Size Distribution

2002, Full Sample



Is there a skill shortage?

Ethiopian Firms that Find Worker Skills a Severe or Very Severe Constraint on Business

	Services	Manufacturing
Ethiopia as a Whole	15	26
Type of Firm		
Small	10	19
Medium	40	33
Large	100	43
Domestic	16	26
With Foreign Investment	0	24
Non-exporting	15	25
Exporting	25	32

Source: (World Bank, 2009)



TVET provision in Ethiopia

- ▶ Allocation to training specialities determined at regional level – so first choice not guaranteed
- ▶ (Private sector interview) The major concern was that having been a TVET graduate makes the employees more mobile, and more prone to being “poached”.
- ▶ Because of this reason, non-TVET graduates are sometimes preferred, because they earn less and are less mobile.
- ▶ As TVET student numbers expand ensuring sufficient training spots in firms is of concern.



Provision increasing

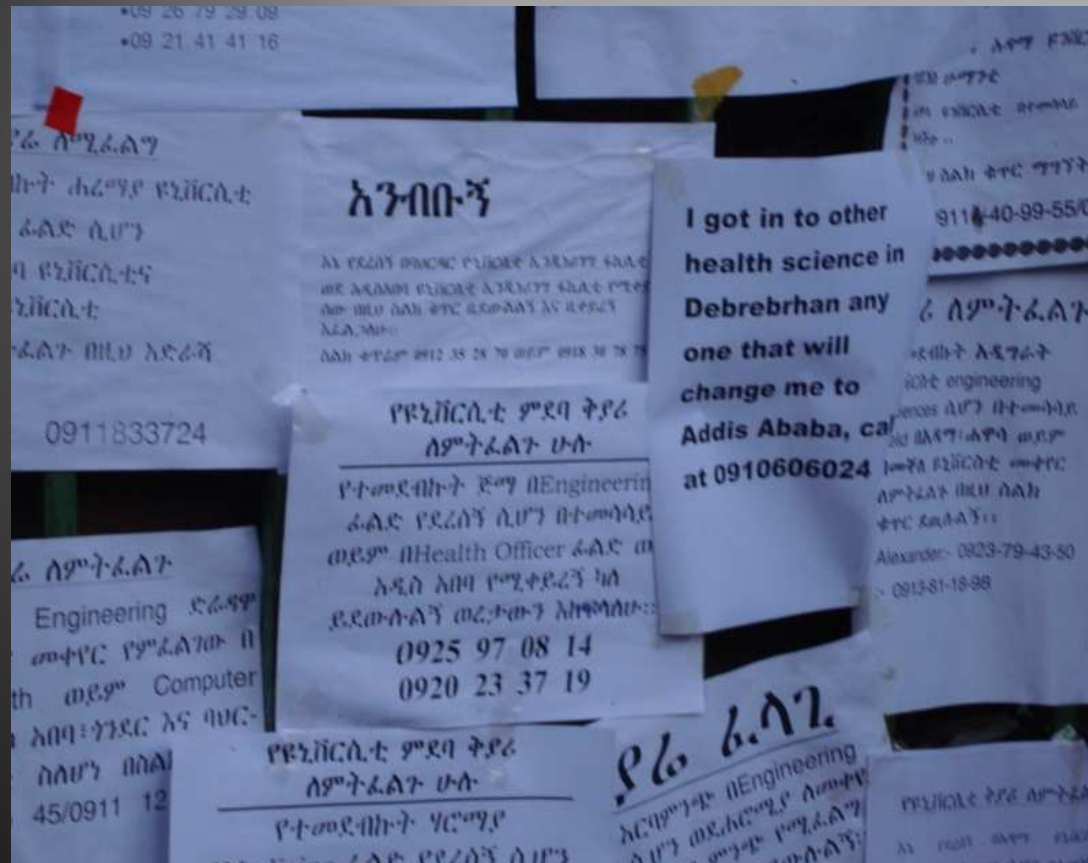
TVET Enrolment by Gender, 2004 - 2009

Sex	2004-05 (1997 E.C.)	2005-06 (1998 E.C.)	2006-07 (1999 E.C.)	2007-08 (2000 E.C.)	2008-09 (2001 E.C.)	Average Annual Growth Rate
Male	51,940	61,415	107,327	119,123	165,910	33.70%
Female	54,396	62,142	83,824	110,129	142,591	27.20%
Total	106,336	123,557	191,151	229,252	308,501	30.50%
% Male	48.8	49.7	56.1	52	53.8	
% Female	51.2	50.3	43.9	48	46.2	

Source: Education Statistics Annual Abstract, 2010/11 (MOE, 2010)



The informal market for place exchanges for TVET



Implications for TVET

- ▶ Relative costs of taking on employees high – even if mobility low
- ▶ Low skilled jobs imply largely transferable skills – so firms have poor incentives
- ▶ Only state owned enterprises have German style incentives possibly
- ▶ Little incentive for private sector firms to bear training costs?



So what are the questions of interest?

- ▶ Apriori, little reason to expect returns in this setting
- ▶ Background paper lays out potential ways to evaluate TVET
- ▶ Is it worth doing?

