



CEDEFOP

European Centre for the Development
of Vocational Training



Costs and benefits for setting up apprenticeship programmes: examples from the field

Michael Axmann, International Labour Organisation

Presentation held at the Cedefop event 'Governance and financing of apprenticeships', Brussels, 8 and 9 February 2016

**GOVERNANCE AND FINANCING OF
apprenticeships**

**CEDEFOP
EVENT**

**BRUSSELS
8 and 9 February 2016**

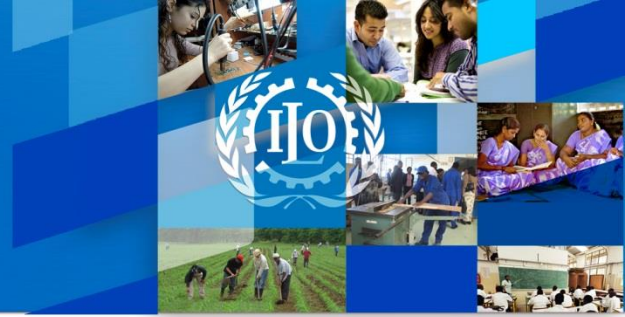


Financing Apprenticeships

Michael Axmann

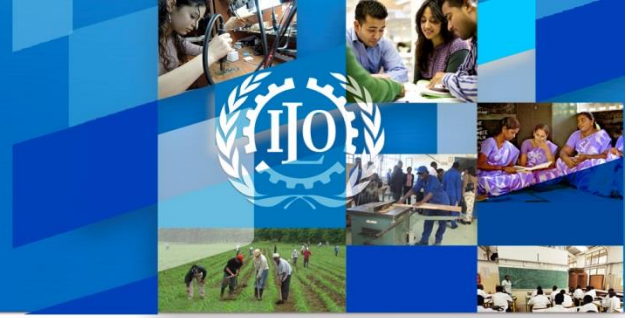
**Specialist for Skills Development Systems
International Labour Organisation**

Difficulties in cost-benefit analysis



- Latent cost/benefit: not feasible to quantify
- Measurement issues with apprentices' contribution to production
- Impact on innovation and technology adoption, spill-over effect: hard to determine
- Observation over a long period of time required

General shortcomings of apprenticeship funding



Particularly in developing countries

- TVET usually under-resourced
- Fragmented funding system
- No market-responsive mechanisms or incentives

5 main ways to increase apprenticeship funding



Cost and benefits for Employers



Apprenticeship period

Cost

- Wage and social security premium (apprentices' and supervisor's)
- School tuition
- Training materials, space
- Recruitment and admin costs

Post apprenticeship

- Wage and social security premium

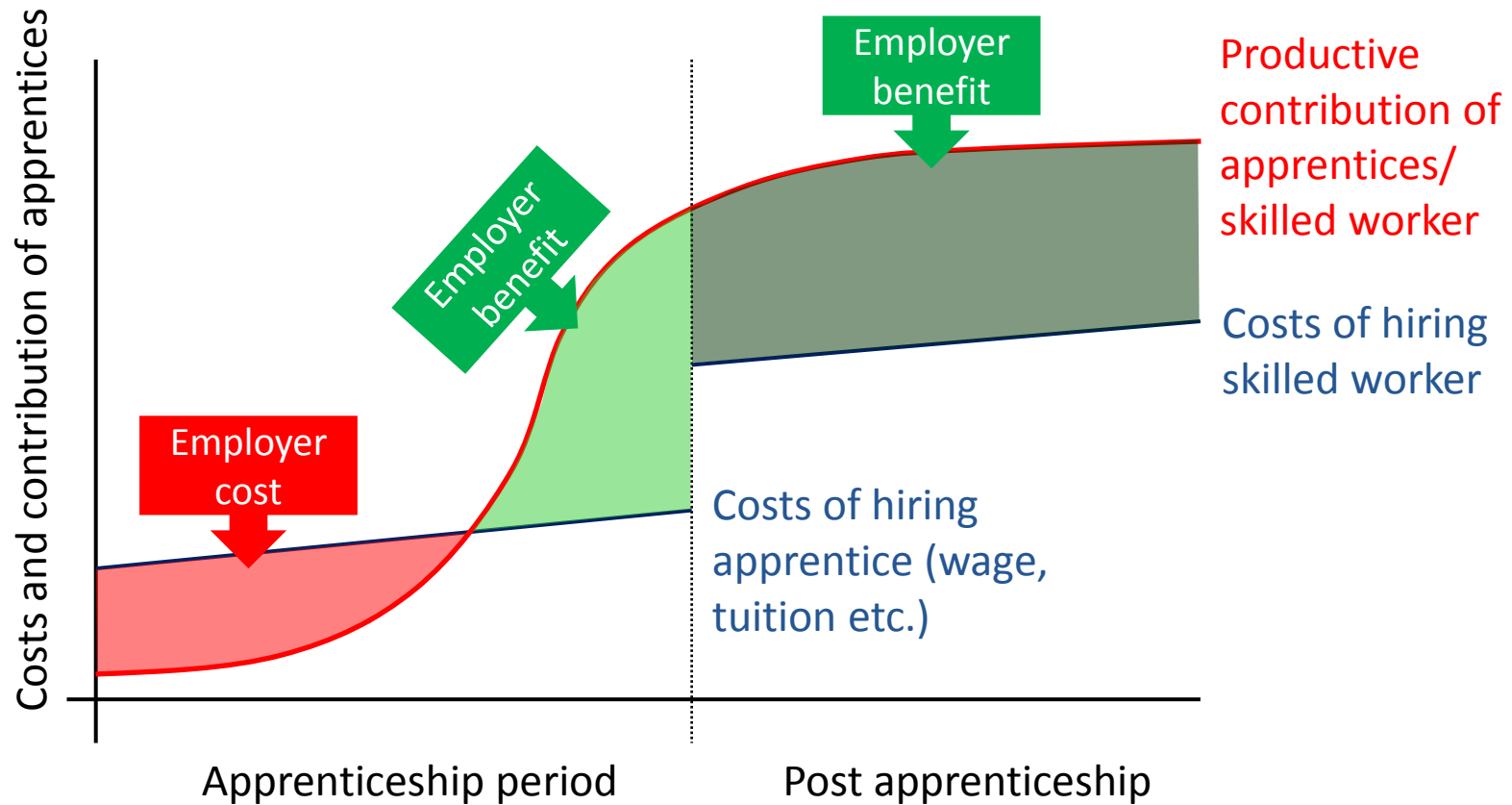
* Blue: non-monetary or latent cost/benefit

Benefit

- Apprentices' contribution to production
- Subsidies (tax credit etc.)
- Payment from training fund
- Public image, social status

- High productivity of skilled workers
- Savings from reduced turnover (e.g. recruitment and initial training costs)
- Innovation, adoption of new technology

A stylized model of cost-benefit of apprenticeships

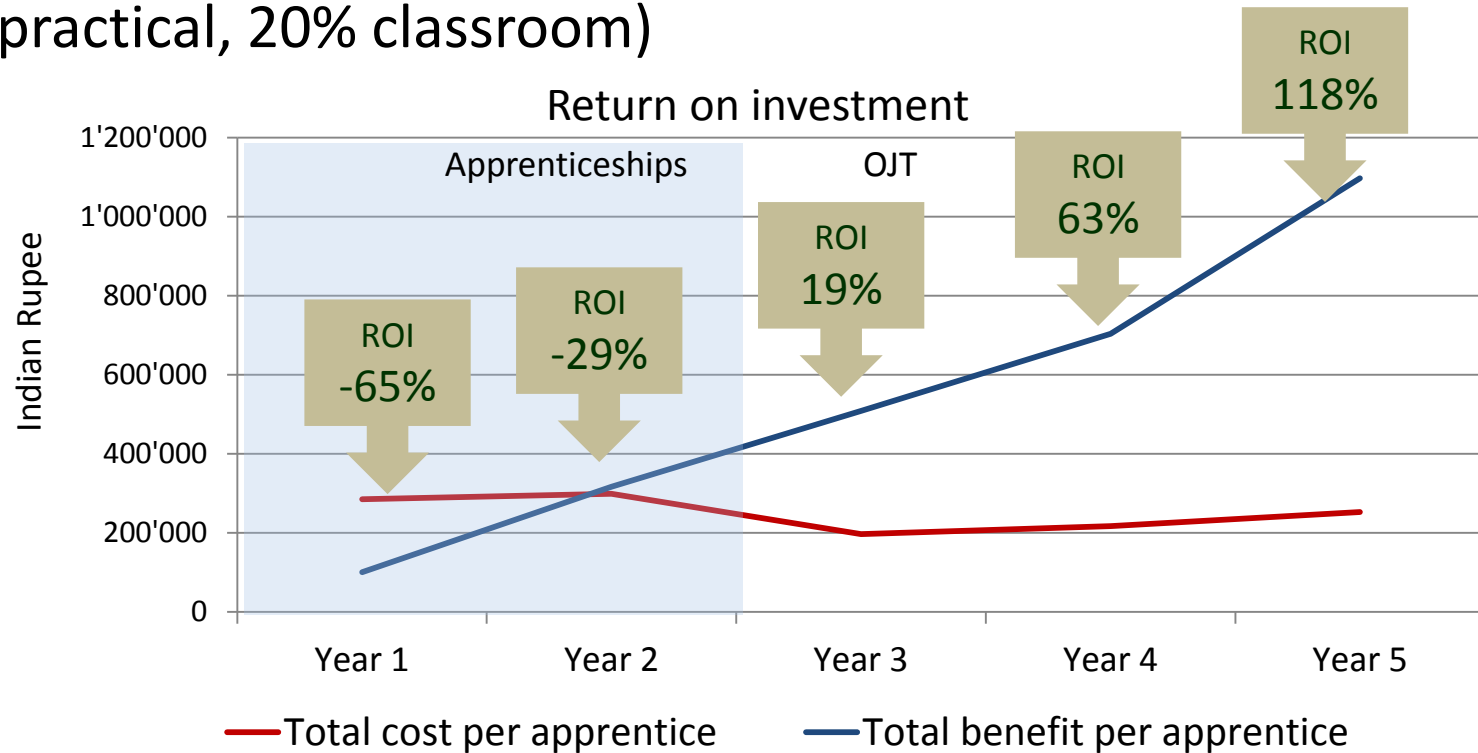


Adopted from Lerman R. "Do firms benefit from apprenticeship investment?" *IZA World of Labour* 2014:55

Return on Investment (ROI) India, Technician



- Food processing equipment manufacturer
- 2 year apprenticeship programme for technician (80% practical, 20% classroom)



Source: Rothboeck . *Using Benefit Cost Calculations to Assess Returns from Apprenticeship Investment in India: Selected SME Case studies*

Cost and benefit Government



Apprenticeship period

Cost

- Subsidies
- Running costs of public TVET institutions

Post apprenticeship

Benefit

- Higher tax revenue (e.g. payroll, VAT)
 - Savings on social security payment
 - Savings on employment programmes (e.g. ALMPs)
- Higher tax revenue (e.g. payroll, VAT)
 - Savings on social security payment
 - Savings on employment programmes (e.g. ALMPs)

Summary



Quality apprenticeships generate win-win-win situation:

- Employers recoup the cost of training before the end of (or shortly after) the apprenticeship training. More benefits if they retain apprentices.
- Substantial earning and employment stability impact on apprentices
- High economic return to public investment in apprenticeships



**Thank you for your
kind attention!**

Economic returns to public investment: USA



Government costs and benefits over a career (per apprentice)

\$1 government spending yields \$35.9 to the gov't



Source: Mathematica Policy Research (2012) *An effectiveness assessment and cost-benefit analysis of registered apprenticeship in 10 states*