

Cost-Benefit Analysis and Tools - the Swiss experience



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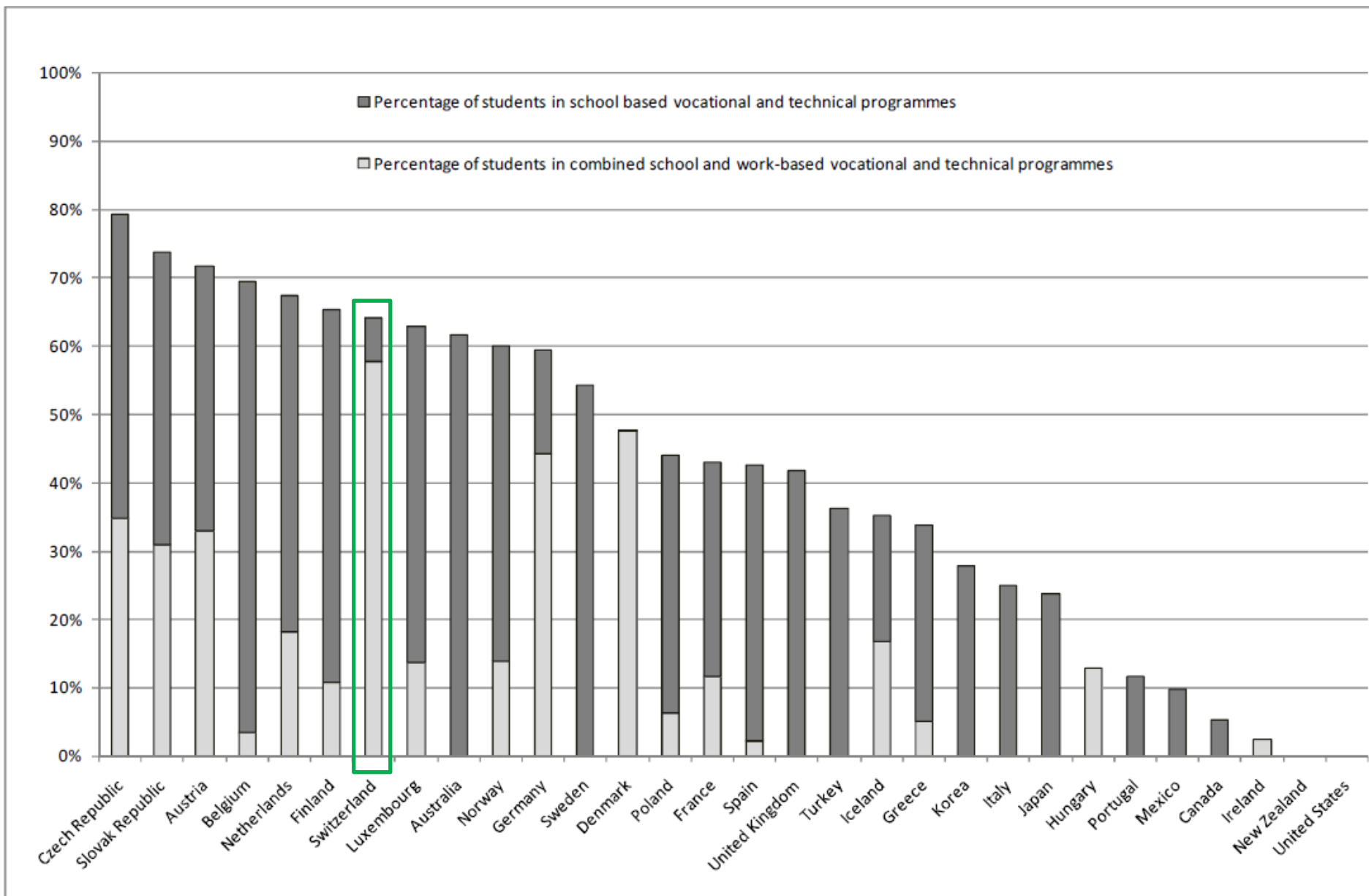
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Structure of the talk

1. Motivation for Cost-Benefit Analyses in Switzerland
2. Experience from large-scale CB Surveys
3. Experience with a tool for Cost-Benefit simulations
4. Summary



Figure 1.2 VET as a share of upper secondary education, in 2006



Source: OECD (2008c), *Education at a Glance*, Table C1.1, OECD, Paris.

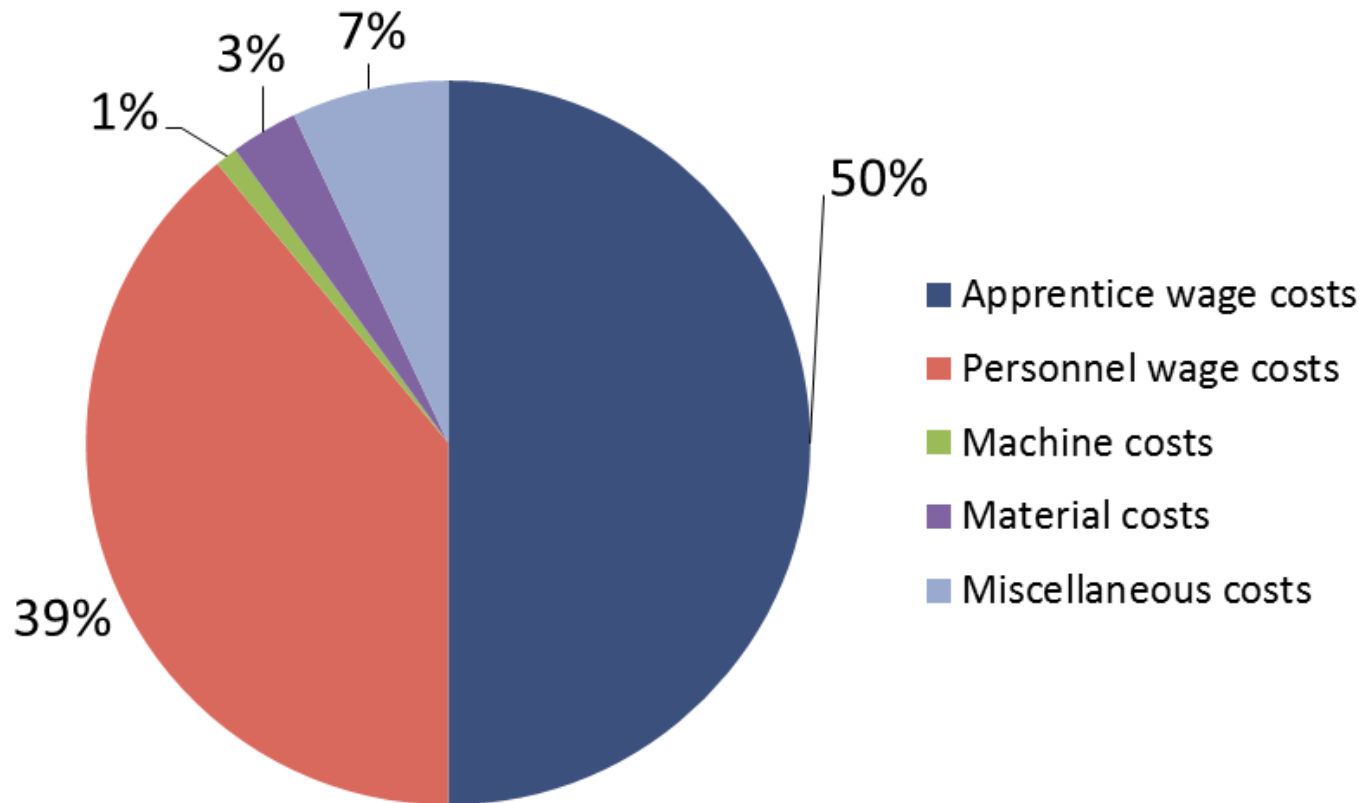
1. Motivation for CBA

- Firms are entirely free to offer apprenticeship places
 - ~70000 firms train apprentices (Mueller & Schweri 2012), 2/3 of a cohort opt for apprenticeship training
 - About 250 apprenticeship programmes are defined in national training ordinances
 - Professional associations have a large influence in developing training ordinances, especially in defining training objectives and curricula
- ⇒ What are determinants of firms' willingness to train apprentices, and what is the role of economic incentives?
- ⇒ How can the stakeholders of the VET system ensure that firms remain willing to train apprentices?

2. Existing large-scale CB surveys of host companies

- Since 2000: four national surveys on costs and benefits by the University of Bern or SFIVET
(Schweri et al. 2003, Mühlemann et al. 2007, Fuhrer & Schweri 2010, Strupler & Wolter 2012)
- Further surveys by SFIVET targeted at specific occupations (ex. nurse training)
- Most recent national survey: Strupler and Wolter (2012)
 - 2400 Swiss host companies (random sample)
 - provided data on costs and benefits for training their apprentices
- Scientific publications: see literature in EENEE Analytical Report No. 16, prepared for the European Commission

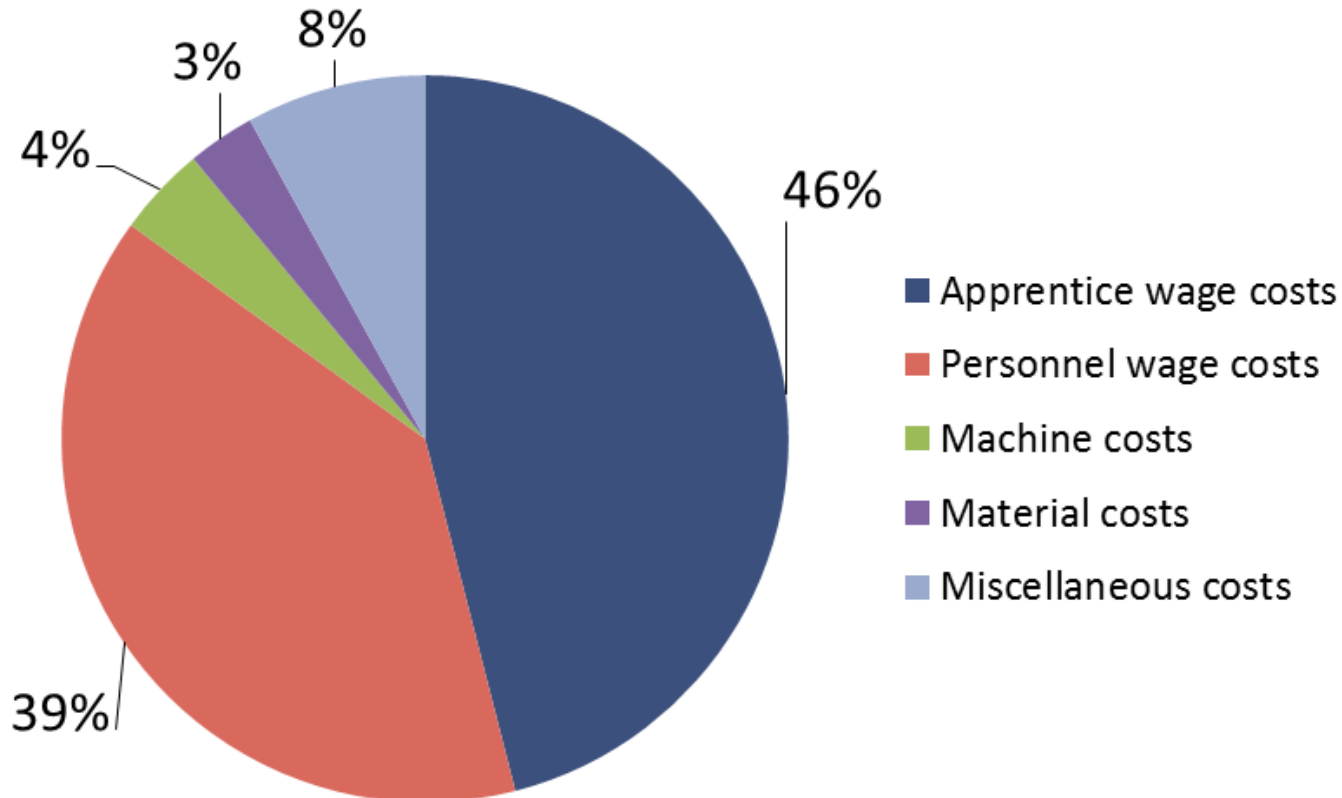
Gross cost for host companies (3-year programmes)



Average gross cost per year and apprentice: 28805 CHF (23420 €)

Source: Strupler & Wolter (2012)

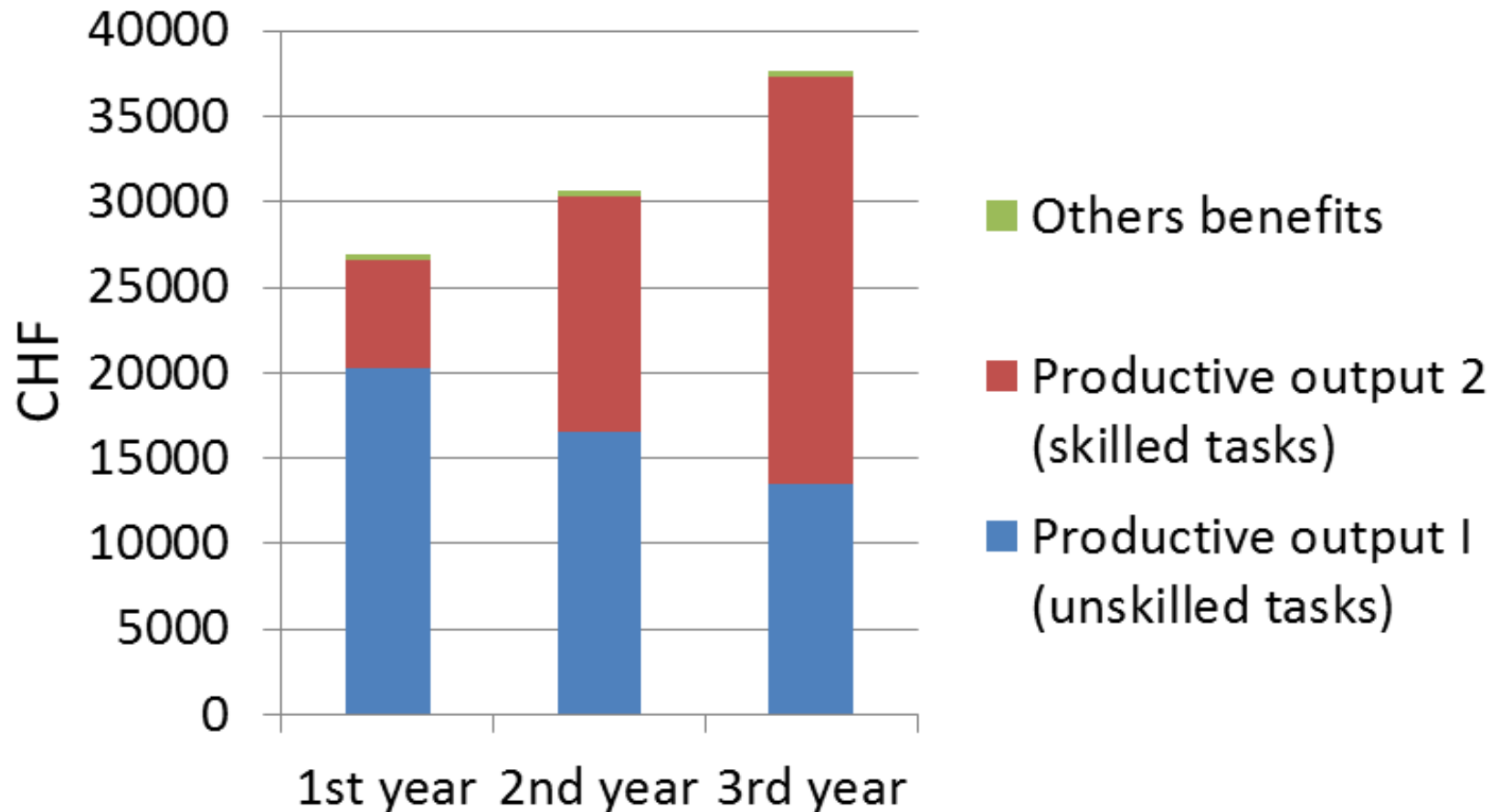
Gross cost for host companies (4-year programmes)



Average gross cost per year and apprentice: 28917 CHF (23510 €)

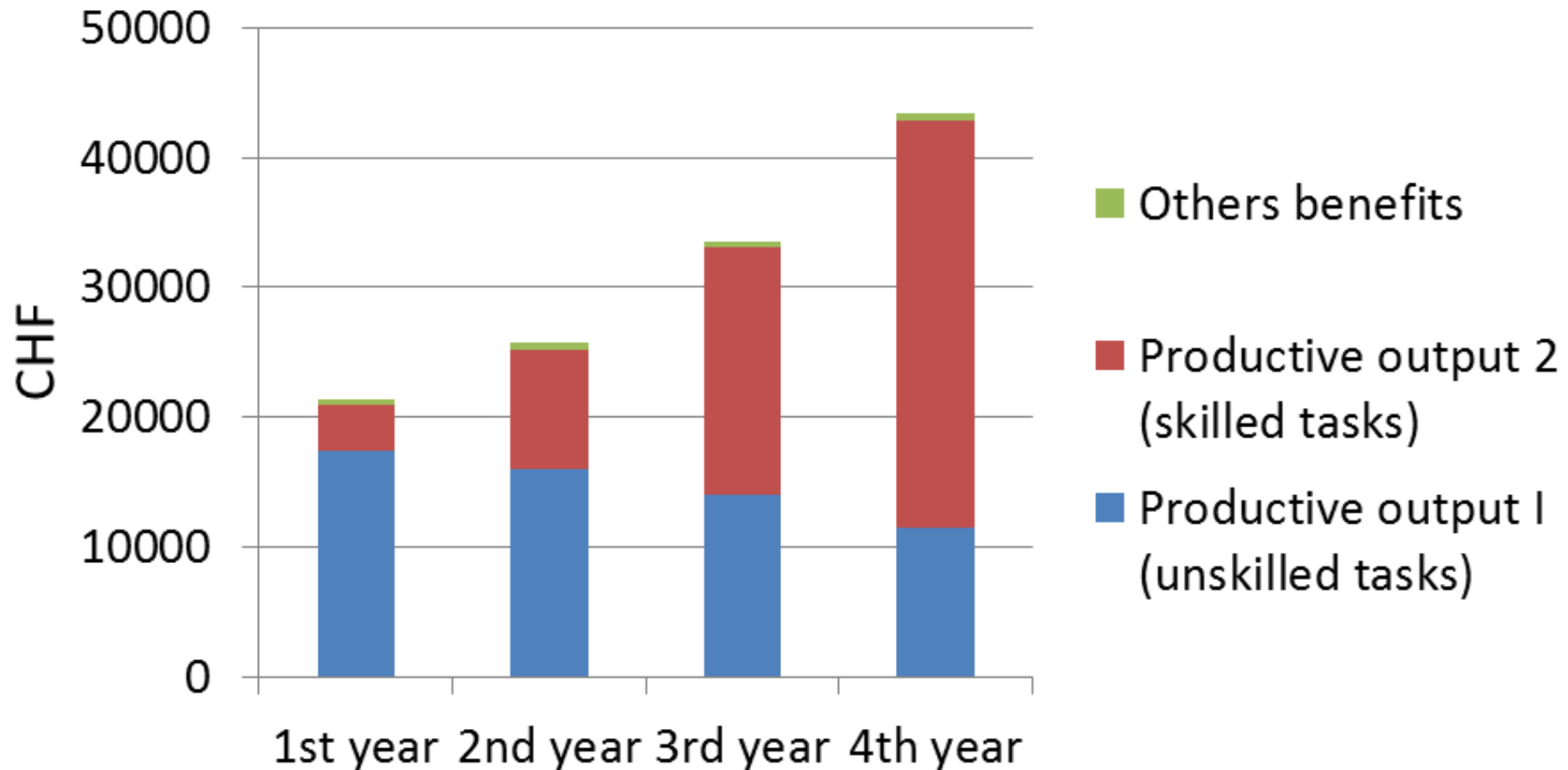
Source: Strupler & Wolter (2012)

Apprentices' productivity (3-year programmes)



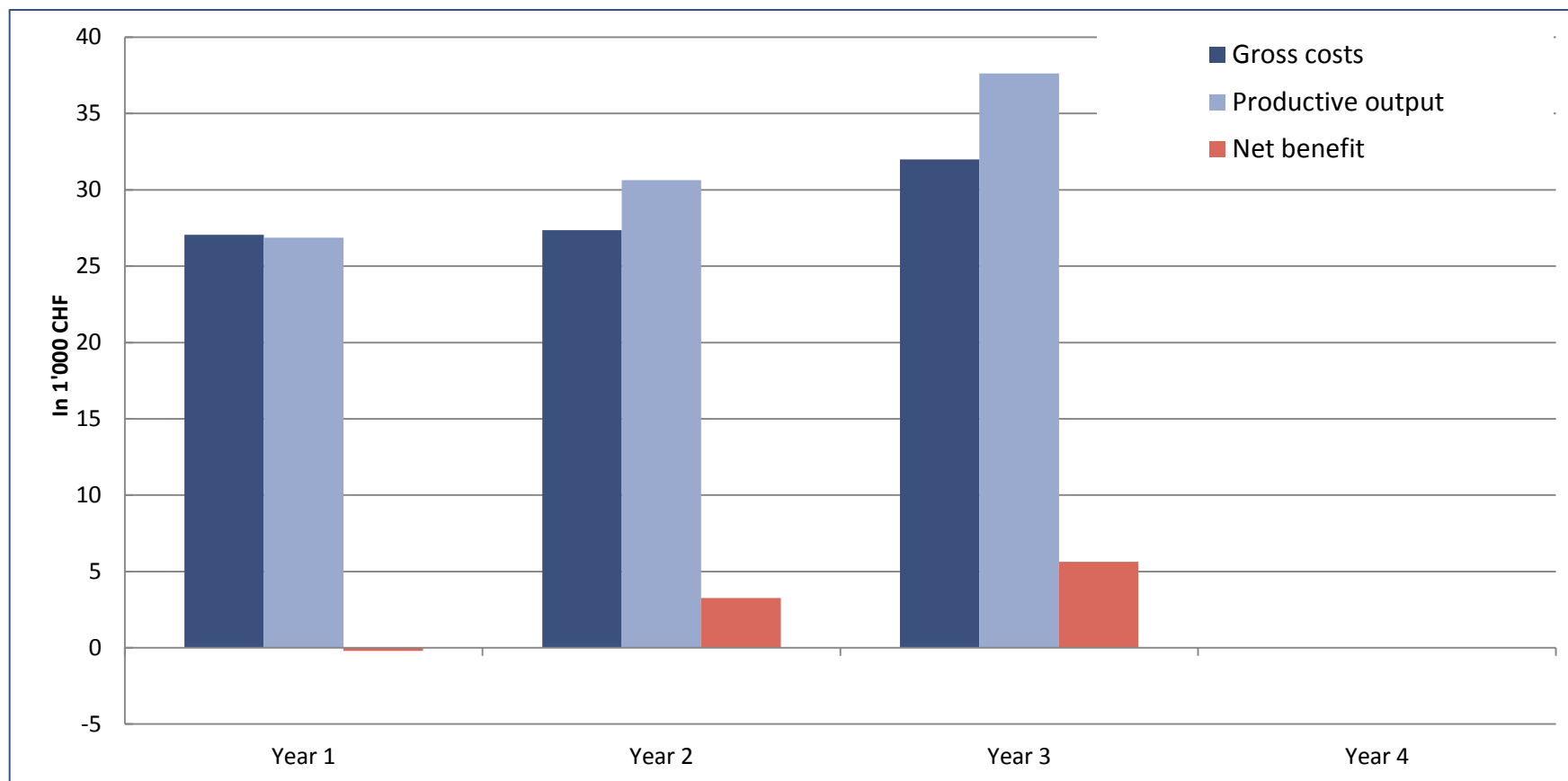
Source: Strupler & Wolter (2012)

Apprentices' productivity (4-year programmes)



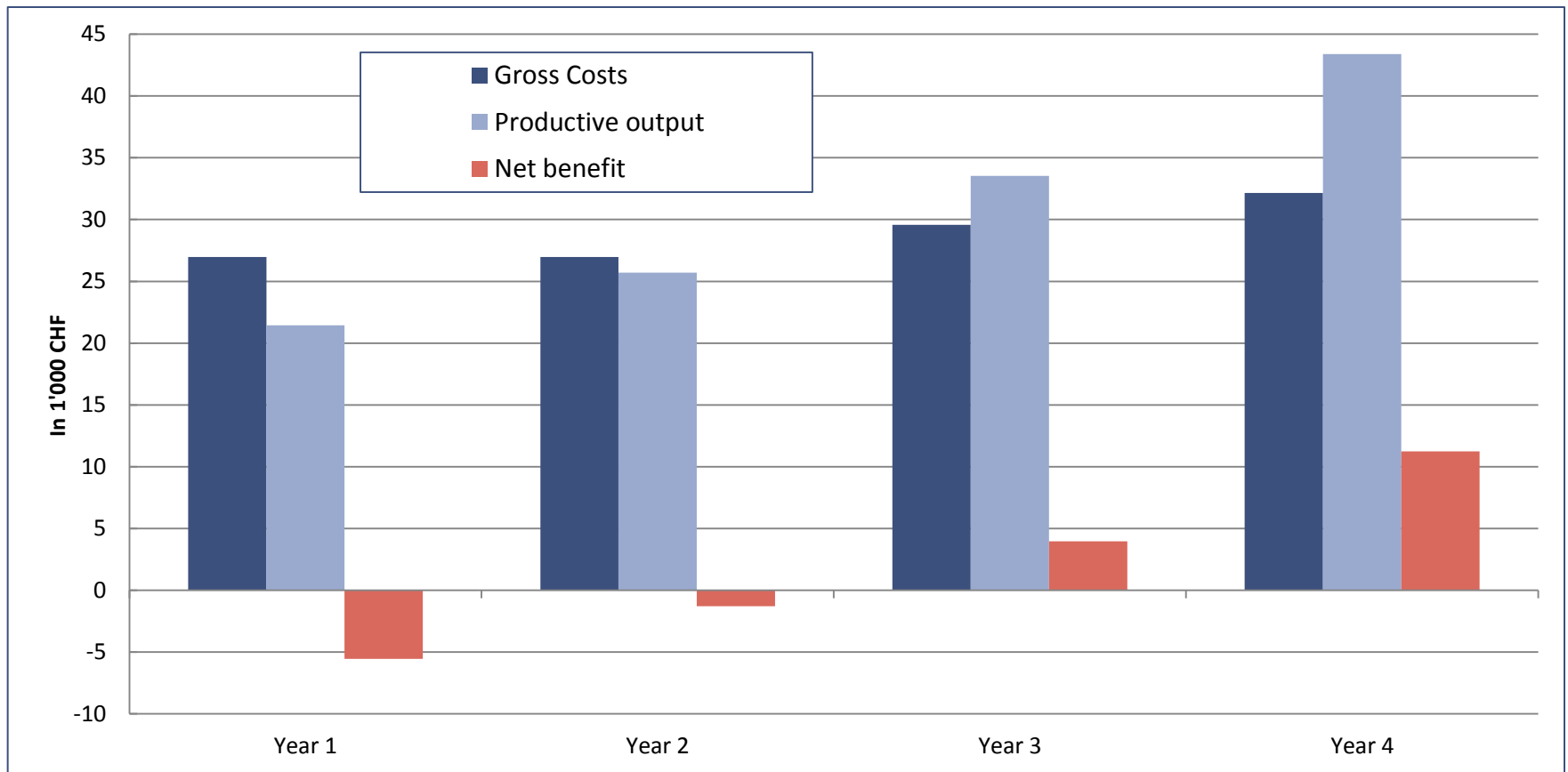
Source: Strupler & Wolter (2012)

Net benefit for training firms (3-year programmes)



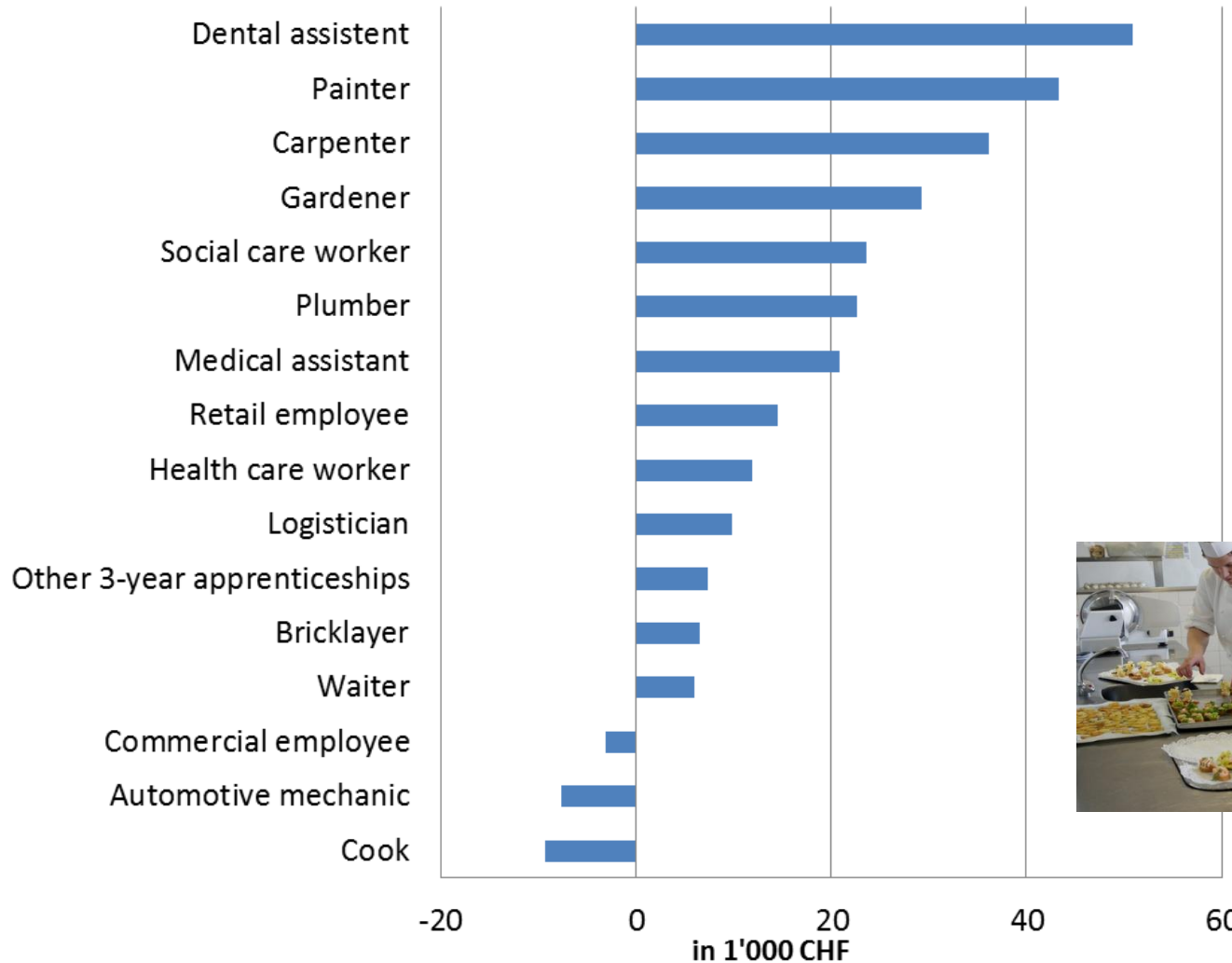
Source: Strupler & Wolter (2012)

Net benefit for training firms (4-year programmes)



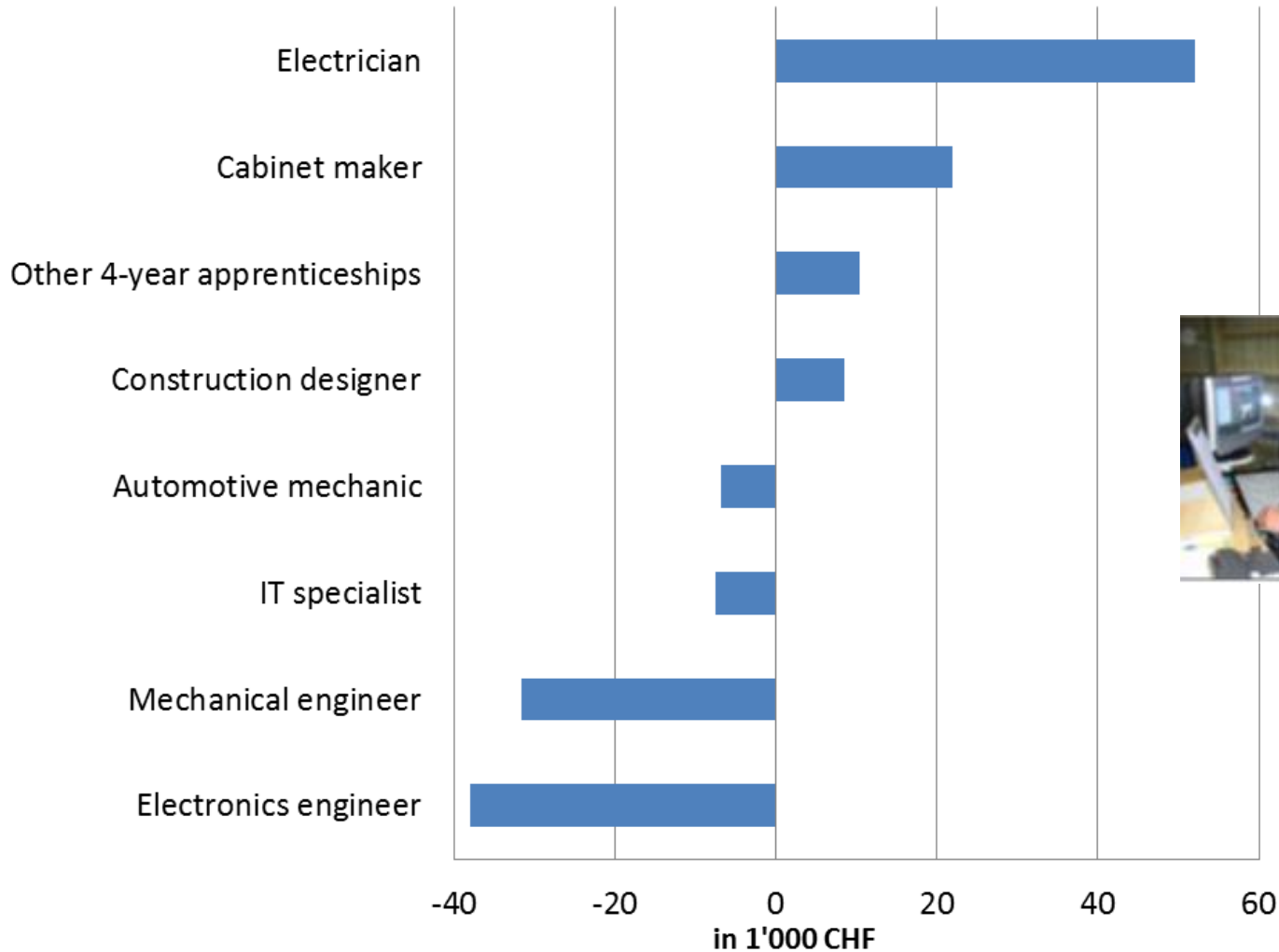
Source: Strupler & Wolter (2012)

Net benefits by occupations (3y.)



Source: Strupler & Wolter (2012)

Net benefits by occupations (4y.)



Source: Strupler & Wolter (2012)

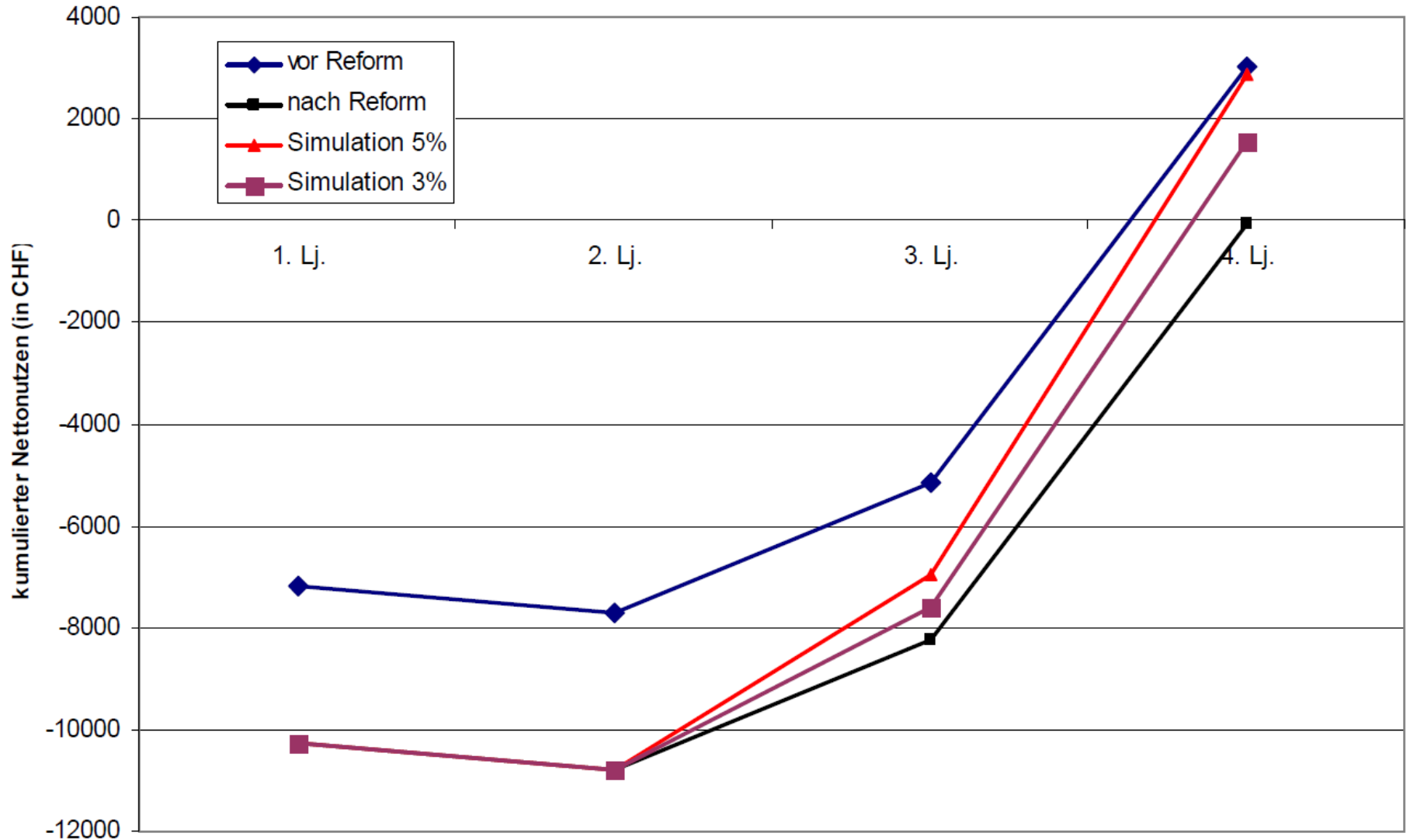
What can we learn from CB surveys ?

- Persons who fill in questionnaire: trainers in firms
- Questions in questionnaire are demanding
- Data quality: extensive plausibility checks
- High variance of net benefits between and within occupations

3. A Tool for Cost-Benefit Analysis

- Developed by SFIVET to support the reform of occupational curricula with an economic analysis: simulate the effect of changes
- The Tool was designed to collect data and show simulations in real time
- Example: reform of the curriculum for opticians

Ex.: simulation (for the occupation optician)



Experience with CBA tool

- Helpful to engage in an intensive discussion process with representatives of professional associations
- Representatives found it easy to understand the results and ideas...
- ... when guided by an expert with good knowledge of the cost-benefit model underlying the tool
- Discussion helps to connect cost-benefit analysis with organizational and educational issues
=> holistic view on training

A CBA tool for firms?

- Needs to be used by somebody with good knowledge of apprenticeship training and the firm's production processes
 - Needs careful explanation of concepts and questions
 - Needs to be userfriendly and easy to use
 - Needs plausibility checks
 - Needs to support a correct interpretation
- ⇒ additional challenges when used in countries without full-fledged apprenticeship system?

4. Summary

- Firms (and professional associations) play a major role in Swiss apprenticeship training
- On average, firms derive net benefits from training
- But large variation in costs and benefits
- CBA tool on occupation level: successful when combined with coaching
- CBA tool for training firms: demands a lot from firms and users



Thank you for your attention!

References

- Fuhrer, Marc und Jürg Schweri (2010). Kosten und Nutzen von zweijährigen beruflichen Grundbildungen aus der Sicht der Betriebe. Schlussbericht. Zollikofen: EHB.
- Hoeckel, K., Field, S., & Grubb, N.W. (2009). Learning for Jobs. OECD reviews of Vocational Education and Training: Switzerland. Paris: OECD.
- Mühlemann, Samuel, Stefan C. Wolter, Marc Fuhrer; Adrian Wüest (2007). Lehrlingsausbildung - ökonomisch betrachtet. Rüegger Verlag, Zürich/Chur.
- Mühlemann, Samuel, Stefan C. Wolter (2013). Return on investment of apprenticeship systems for enterprises: Evidence from cost-benefit analyses. European Expert Network on Economics of Education, Analytical report No. 16, European Commission.
- Schweri, Jürg, Samuel Mühlemann, Yasmina Pescio, Belinda Walther, Stefan C. Wolter und Lukas Zürcher (2003). Kosten und Nutzen der Lehrlingsausbildung aus der Sicht Schweizer Betriebe. Chur; Zürich: Rüegger Verlag.
- Strupler, M. & Wolter, S. (2012). Die duale Lehre eine Erfolgsgeschichte - auch für Betriebe. Ergebnisse der dritten Kosten-Nutzen-Erhebung der Lehrlingsausbildung aus der Sicht der Betriebe, Glarus/Chur: Rüegger Verlag.