

Costs and benefits of company-based training in Vietnam

Chances and limitations of applying the BIBB cost-benefit model



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Many countries aim to involve more companies in the vocational education and training system. Transparency of the actual costs and benefits of company-based training activities helps governmental authorities to steer this process adequately and can be used to convince firms to increase their involvement in company-based training. This article illustrates the challenges of implementing a cost and benefit study in Vietnam. It discusses the application of the BIBB cost-benefit model, the implementation of the survey, and the interpretation of the main results under special consideration of the different contextual conditions.

Background

In contrast to the German Dual System, which has a long tradition of high participation by firms, the TVET system in Vietnam is mainly organized in a school-based way. Company involvement in TVET is relatively low and consists mainly of the implementation of internship programs within the scope of school-based initial vocational education. Consideration also needs to be given to the fact that these internship programs are neither standardized with respect to content nor with respect to duration. The Vietnamese Government has recognized this as a problem and initiated a comprehensive reform of the vocational education system. One focus in this reform process is on improving the cooperation between vocational training institutes and firms as well as on extending and improving the company-based training phases. Moreover, in the course of the current reform process, the aim is to improve the monitoring and reporting system of the vocational education sector.

Since 2010, BIBB, the National Institute of Vocational Training in Vietnam (NIVT), and the Gesellschaft für Internationale Zusammenarbeit und Entwicklung (GIZ) [German Agency for International Cooperation and Development] have been working together on the development of vocational training reports for Vietnam (cf. ERCKELENS et al. 2014 and ERCKELENS et al. 2015). Within the framework of this trilateral cooperation, the plan was to complement the report for the reference year 2013/14 with a focal

theme on firms' costs and benefits of internship programs. Due to the long standing experience in the conception and implementation of quantitative cost-benefit surveys (cf. SCHÖNFELD et al. 2010), BIBB was requested to provide technical advice and support for the cost-benefit study in Vietnam.

Thus, the cost-benefit study in Vietnam had two goals. On the one hand, the objective of the study was to supplement the latest vocational training report by providing initial assessments of the cost-benefit relation of internship programs. A second goal was to use these insights to convince firms to start or intensify their training activities and cooperation with vocational schools.

Adaption of the cost-benefit model

The starting point for the calculation of the costs and benefits was the BIBB cost-benefit model. This is based on a differentiated concept, which was developed in 1974 by the so called Edding-Commission (cf. Sachverständigenkommission Kosten und Finanzierung der beruflichen Bildung [Council of Experts for costs and financing VET] 1974). Since 1980, BIBB has refined this model and conducted five representative surveys.

The gross costs of this model are made up of four different components. These are “costs of apprentices”, “costs of trainers”, “physical costs”, and “other costs”. The last mentioned also include administrative costs and the costs of recruiting apprentices. The benefits mainly comprise the pro-

ductive contribution made by the apprentices. On the basis of this model, cost and benefit analyses were conducted in Albania and Georgia (cf. AHNFIELD et al. 2011)¹ as well as in South Vietnam in the year 2012 (cf. AIPPERSPACH/SPECHT/AHNFIELD 2012).²

The questionnaire for this cost-benefit analysis in Vietnam was developed on the basis of these previous experiences and a preceding pre-test. While the broad cost categories of the cost-benefit model could be transferred, the fine adjustment of the cost-benefit positions as well as their operationalization had to be adjusted according to the specific contextual conditions in Vietnam. In the following, we present some examples of the contextualization of the cost-benefit model and corresponding similarities and differences. It should be noted that, in the Vietnamese context of internship programs, the cost categories refer to interns.

Training allowances: The cost positions in the category of personnel costs for interns were assessed in the same way as the costs of apprentices in the BIBB cost-benefit model.

Costs of trainers: Even though this cost category is also relevant in Vietnam because interns are supervised by personnel who need to be paid, the elicitation of personnel costs for trainers was relatively challenging. None of the companies surveyed explicitly employs training personnel. The interns were guided and supervised by foremen involved in production or by trained personnel “who looked after them from time to time”. Therefore, it was very important to identify the exact proportions of time during which the employees of the firms were involved in the supervision of the interns. The opportunity to ask further control questions and to visit the production sites helped immensely in terms of estimating these proportions realistically.

Physical costs: Due to the low degree of standardization of the training organization, interviewees might have subsumed different cost items under the category of physical costs. In order to ensure comparability, the interviewees were asked to specify the exact cost item and their respective costs. The costs of this category were only counted when they could be clearly attributed to the companies’ training activities and not to the production process.

Other costs: Here it was important to allow for further cost categories that are relevant in the specific context of Vietnam. Beside transportation costs, costs of meals and accommodation are essential cost positions in Vietnam. Often the interns come from rural areas in the countryside and move for their internship to urban centres, where the majority of the industrial firms are located.

Benefits: In a similar way to the BIBB cost-benefit model, the benefits through productive work of interns were cal-

culated by multiplying the hours of productive work with their performance level and the hourly wage of a worker with similar tasks. In contrast to the BIBB cost-benefit model, in Vietnam the recruitment costs saved were also included in the calculation.

Implementation of the survey

A representative survey requires drawing a random sample from a complete list of items to be observed. In Vietnam, no reliable and complete statistical data source on the current status of companies providing internships is available since the labour market is informally organized to a high degree. Moreover, representative studies are relatively cost intensive. As a result, the NIVT decided to conduct a case study of 14 exemplary enterprises that provide internship programs. Each case study comprises one interview with the person responsible for training and/or human resources within the firm. It consists of a standardized section on the costs and benefits of the internships and of open questions. In addition to this, the researchers visited the production site to obtain an impression of the firms and the internship conditions.

Whereas in Germany an independent survey institute is usually commissioned with the implementation of the survey, in Vietnam the researchers themselves conducted the interviews personally. The presence of the researchers allowed instant clarification of any questions arising and an explanation of the terms and concepts used. This was necessary since, due to the low degree of standardization and regulation of internships in Vietnam, the interviewees’ understanding of terms and concepts involving training was very heterogeneous. In addition, the building of trust through the face-to-face interview was decisive for the willingness of the interviewee to provide information and ultimately for the success of the interview. All the interviews were conducted by one researcher from NIVT specialized in the Vietnamese training system and one international consultant specialized in empirical surveys. In addition, the interviews were accompanied by a translator.

This joint implementation of the interviews served both as a measure for quality assurance and as a measure for the development of capacities, which are essential to establish a new research field within the NIVT.

Main findings of the study

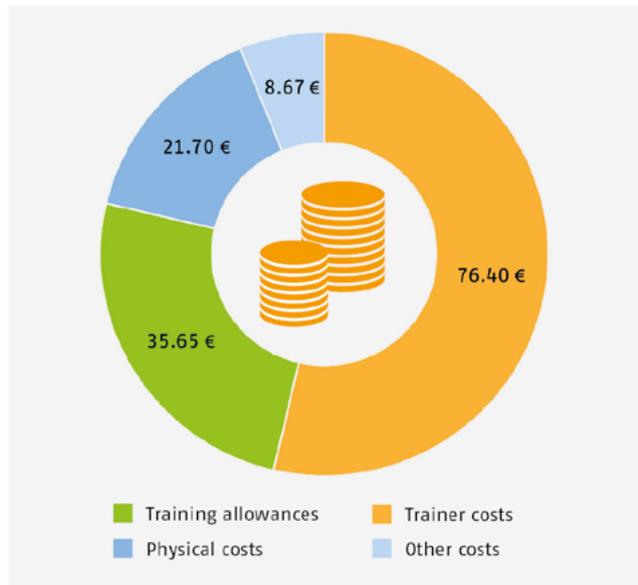
The results provide important indications for the desired cooperation between vocational schools and firms in Vietnam. Therefore, the most important findings are presented here (for additional information cf. VIET et al. 2015).

Figure 1 (p. 38) presents the average cost within the different components that firms incur per month and intern. For

¹ The study was conducted by PLANCO and financed by the GIZ.

² The study was conducted by PLANCO and financed by the KfW Entwicklungsbank.

Figure 1
Costs of internship per month and intern



better comprehensibility, the values were transformed into euro.³ We present the average values per month since the training duration varies substantially, ranging from one to six months.

On average, the 14 firms spend 142 euro per month and intern. Training allowances amount to 76 euro per month and intern and constitute the major share of costs. This is 25 per cent of the average skilled worker wage of 300 euro in the respective firms. Costs of training personnel are about 36 euro. Infrastructure and teaching materials are 22 euro and other costs eight euro. These values are average values. There is, however, a high variance between the firms. While the firm with the lowest cost pays 32 euro per month and trainee, the firm with the highest cost pays 338 euro.

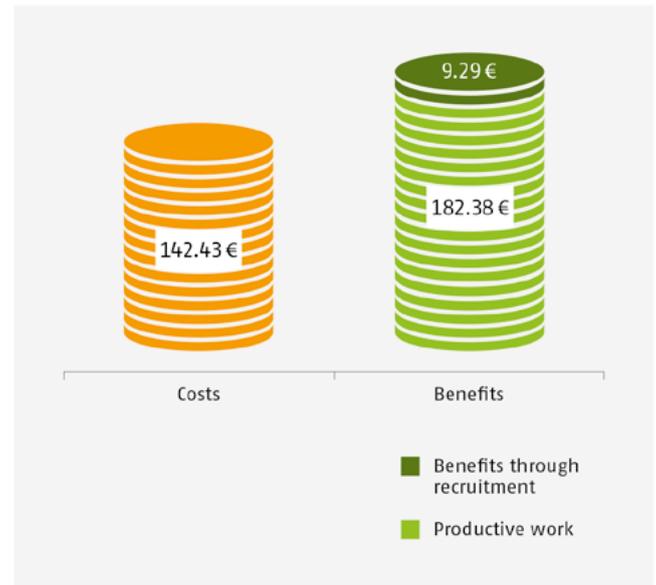
Contrasting the total costs against the benefit, we can see that the total benefits are 191 euro (182 euro via the productive contribution of interns and nine euro via recruitment costs saved). This figure is much higher than the total costs (cf. Figure 2). Even excluding the benefits which arise through the retention of the interns, evidence of a positive cost-benefit balance is shown.

However, the survey did not only contain quantifiable benefits. Firms indicated that an enhanced reputation was the most important non-quantifiable type of benefit (cf. VIET/NGUYEN/HUYEN 2015, p. 21).

In addition to this, the open questions on the firms' training motives reveal further insights. Even though some

³ For the conversion, we used the exchange rate from the 1 January 2015: 26,303.5 Vietnamese Dong = 1 euro. Source is OANDA: <http://www.oanda.com/lang/de/currency/converter/> (retrieved: 07.09.2017)

Figure 2
Average costs and benefits per intern and month



firms mentioned that they provide internships in order to recruit skilled workers, most firms said in the qualitative interviews that they offer internships in order to make use of cheap labour. These statements shed a different light on the relatively high benefits created via the interns' productive work. While small firms use the interns mainly to cover seasonal or project related labour shortages, large firms belonging to this group tend to use interns as cheap labour constantly. The visits to the production sites showed that interns are often completely integrated into the production for simple tasks and work under bad conditions in some cases.

Potentials and limits of the adaption

The trilateral cooperation on the conception, implementation, and interpretation of the results led to the gathering of experiences from which valuable insights can be derived, both for the foreign partner institute as well as for the external advisors involved. If a research institute has no experiences in the field of cost-benefit analysis, it seems reasonable firstly to choose a simple survey design, e.g. in the form of case studies. In this way, it was possible to ensure the feasibility of the study despite limited time and financial resources and limited data availability. Moreover, the explorative part of the interview provided new insights, which can be used to derive further research hypotheses. As the suitability of the questionnaire for a standardized quantitative survey was also tested, these first experiences represent an important foundation for possible subsequent representative surveys. Representative surveys are recommended when complete and reliable lists of training firms

already exist, methodological knowledge on sample selection has been acquired, and sufficient research questions on firms' training involvement have been developed. Employing an already existing model for the cost-benefit analysis proved to be a good starting point for the structuring of the investigation, especially for the conceptualization of the questionnaire. It was shown that the four main cost components as well as the conceptualization of the benefits are also relevant to internship programs in Vietnam and can be used for their analysis. Thus, the rough structure of the cost-benefit model can be also applied in countries with less developed training systems. The exact specifications of the questions, however, need to be adapted to the contextual conditions of the respective country. Therefore, even though the concept of costs and benefits are also relevant in Vietnam, a simple transfer of the survey instrument is not possible.

The different contextual conditions should also be considered when interpreting the results. The result that the firms interviewed gain a benefit when offering internships can convince other firms to intensify their training activities. Nonetheless, qualitative elements of the interviews and the visits to the production sites pointed towards a relative low quality of the internship programs. Interpreting the result, account needs to be taken of the fact that virtually no regulations on content, duration, and organization of the internship programs, which can guarantee the quality of firms' training activities, exist in Vietnam. In Germany, where apprenticeships are highly standardized, it is useful to focus on the firms' costs and benefit ratio. In countries with less regulated vocational education systems, it is advisable also to consider the quality of firm's training activities in order to be able to make an appropriate interpretation of the research results. ◀

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