

REPORT ON COST AND BENEFIT ANALYSIS OF TVET INTERNSHIP PROGRAMMES IN ENTERPRISES



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INTERNSHIP PROGRAMMES IN ENTERPRISES

ABBREVIATIONS

BIBB	Federal Institute for Vocational Education and Training, Germany
CIM-IE	Integrated expert of the Centre for International Migration and Development
FDI	Foreign Direct Investment
GDVT	General Directorate of Vocational Training
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GoV	Government of Viet Nam
MoLISA	Ministry of Labour, Invalids and Social Affairs, Viet Nam
NIVT	National Institute for Vocational Training, Viet Nam
SME	Small and medium-sized enterprise
TVET	Technical and Vocational Education and Training
VND	Vietnamese Dong
SEDP	Socio-economic Development Plan
SEDS	Socio-economic Development Strategy
TC	Technical Cooperation
TS	Tracer Study
TVET	Technical and Vocational Education and Training
VVTA	Vietnam Vocational Training Association
WM	Workshop Management

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1. PURPOSE, RESEARCH QUESTION, OBJECTIVES AND METHODOLOGY OF THE SURVEY

1.1 Introduction

The TVET system in Viet Nam is currently in a reform process to improve its quality and better meet the requirements of the labour market. The improvement of the cooperation with enterprises and the diversification of funding sources for TVET are crucial challenges of this reform. The objective of this survey is to gain evidence on the costs and benefits when enterprises invest in TVET.

Presently, few types of cooperation between enterprises and TVET institutions exist, such as (limited) exchange of human resources, joint development of occupational skills standards, TVET institutions owned and run by enterprises. However, the most common type of cooperation is internship programmes conducted by enterprises. Therefore, this cost-benefit analysis focuses on internship programmes.

'Socialisation' of TVET funding intends to mobilise more available resources in the society for TVET, in particular to stimulate private investment in vocational training activities. Currently, TVET institutions in Viet Nam are mainly funded by the government and/or private households by paying fees. Current strategies and legal regulations being developed (especially the TVET Law and the related directives and implementation guidelines) aim at stimulating employers' involvement in TVET. The development of these strategies should be based on evidences.

In 2014, NIVT, jointly with BIBB, GIZ, and CIM experts, developed and implemented a pilot Cost-Benefit Analysis of TVET internship programmes to contribute relevant information to this strategy development process.

In the preparation process of this survey, several meetings were carried out since June 2014 with participation of NIVT researchers, CIM expert, GIZ coordinator and BIBB experts. The concept, a questionnaire and a data entry template were jointly developed. A pre-test of methodologies and instruments was carried out in August/September 2014. Based on the lessons learnt from the pre-test, the questionnaire was finalized and the sample of companies was constructed.



1.2 Information needs, research question and objectives of the survey

The formulation of the research question depends on the information needs and the interests of the recipients of the study. The most important recipients of this study are:

1. Policy makers in the vocational training system, in particular the General Directorate of Vocational Training (GDVT) of the Ministry of Labour, Invalids and Social Affairs (MoLISA) and managers of vocational training institutions (principals): The most important information needs of this group are summarised in the following questions: How can the share of involvement/investment in vocational training by enterprises be increased and how can the cooperation between enterprises and the TVET system in Viet Nam be strengthened? What benefits can enterprises gain when they cooperate with/invest in the vocational training sector?
2. Managers of enterprises with the main possible interests/information needs: What types and amounts of benefits do I get when my enterprise invests in (cooperation with) TVET?

The mentioned information needs of the recipients of the survey lead to the following general guiding question for the cost-benefit analysis:

What types and amounts of benefits will enterprises gain in relation to their costs when they invest in TVET?

On the basis of the information gained by the survey, the motivations, interests and strategies of the enterprises were analysed to identify possible potentials and opportunities to increase the involvement and investment of companies in TVET.

Regarding this main outline of the survey, its objectives refer mainly to three levels:

1. On the policy level, the collected data of this survey provide evidence on the cost-benefit relation for enterprises when they run internship programmes. This serves as specific examples for GDVT/MoLISA as a governmental management agency in TVET and other relevant stakeholders and as input for further discussions with the business community in order to intensify their involvement and cooperation with the TVET sector.
2. On the level of companies, the survey aims at sensitising the management of enterprises for useful involvement/investments in TVET and possible benefits when increasing their activities in the area of vocational training.
3. On the level of NIVT, the research institute for vocational training of GDVT/MoLISA, this pilot survey provides experience in the research topic of cost-benefit analyses in order to increase its research capacity. This topic should be developed in NIVT as an innovative research area in the field of results-based monitoring and evaluation of TVET to provide GDVT/MoLISA useful evidences for the steering of the sector.

Table 1: Cost model

Gross Costs	Cost category	Indicators/Items
	Costs for trainees	- Allowance for trainees - Payment of social security fees (payment of health insurance etc.) and other insurances - Transportation costs - Catering costs - Housing costs - Costs for protective clothing
	Costs for trainers and other staff involved in the training (shares per analysed trainee cohort have to be estimated/ calculated)	- Salaries for trainers, who are involved in the training, incl. social security - Salaries for personnel involved in supervision, e.g. foremen (pro rata temporis) - Salaries for personnel involved in administration and management of the training activities (pro rata temporis) - Total additional allowances for trainers, administrative staff and management staff
	Investment and maintenance costs for infrastructure	- Investment in buildings and maintenance of buildings - Investment of additional infrastructure by item: e.g. computers, furniture for training, administration and management staff (shares per analysed trainee cohort have to be estimated/ calculated) - Cleaning (shares per analysed trainee cohort have to be estimated/calculated)
	Costs training material	- Investment in tools, training equipment - Investment in machines - Maintenance costs of tools, training equipment, machines - Consumable material
	Other costs	- E.g. costs for recruitment of interns

Table 2: Benefit model

Benefit categories			Indicators/Items
Benefits measured by the analysis	Quantifiable benefits	Opportunity benefits through savings in the production process	- Saved costs by substitution of (not hired) technical trained personnel (= 1. monthly salary per technical trained employee minus monthly costs per trainee, 2. minus lower productivity of trainee) - Productive work (products/service) which otherwise had to be ordered externally (calculation: same as above) - Compensation of vacancies in the production process
		Opportunity benefits through saved recruitment costs (if not quantifiable see column unquantifiable saved recruitment costs)	- Employment of trainees after training: saved costs incurred by external recruitment (campaigns, fairs, personal costs and other costs of HRD department, e.g. for interviewing applicants) - Employment after training: saved cost for re-training of new staff (salary of new employee, cost of supervisors) - Employment after training: saved cost of unsuccessful/repeated recruits
		Opportunity benefits through savings in the retraining scheme of the enterprise	- Avoidance of cost of external further training through utilization of training equipment (if not quantifiable see column unquantifiable saved recruitment costs)
		Direct payments of trainee	- Trainees' fees paid to the enterprise/enterprise-run TVET institution
	Un-quantifiable benefits	Long run productivity differences	- Higher quality of products/services - Lower defection rate
		Benefits in marketing/sale	- Tax shield for training cost/other benefits provided by the state - Fulfilment of prequalification conditions in public tenders
		Enterprises image	- More influence /eased representative work at associations or public authorities - Improved reputation valuable for sales/part of CSR strategy
		Unquantifiable saved recruitment costs	- Improved loyalty of staff/lowered effect of staff fluctuation in long term - Avoidance of cost of external further training through utilization of training equipment - Avoidance of vacancies in the production process - Good relationship to the TVET institution to recruit their graduates later on (for internship programmes only) - Employment after training: saved costs incurred by external recruitment (fairs, campaigns, effort of HRD department) - Employment after training: saved cost for re-training of new staff (salary of new employee, cost of supervisors) - Employment after training: saved cost of unsuccessful/repeated recruits
Benefits not measured by the analysis		Fiscal/tax effects	- Reduced amount of taxes/tax depreciation

1.3 Methodological approach and conceptual framework of the survey

1.3.1 Methodological approach of the survey

The study was carried out as a case study because resources were too limited to implement a representative survey. Case studies can be carried out in a more simple way than representative surveys. They have a more open approach and can be implemented with a more narrowed scope and fewer resources (see Cost-Benefit-Analysis Concept/Horn 2015, p. 5).

The cases in this analysis are enterprises that have different motives to run internship programmes in the occupations of Industrial Electricians and Metal Cutting.

1.3.2 Conceptualisation of costs and benefits

To be able to compare costs and benefits in this survey in a systematic and scientific way, costs and benefits had to be based on conceptualisations and models which are theory-based and oriented towards international references.

The cost- and-benefit models which were used in this survey refer to costs and benefits of the internship programmes for the enterprises. Other costs (such as the costs of the training for the trainees and their families) and the benefits for the trainees (such as increase of income, job security in the future) or the benefits for the macroeconomic development of the country were not considered in this survey (see *ibid*, p 8).

1.3.2.1 Costs

The specification of the following cost categories and indicators/items is based on the latest research findings (Schönfeld et. al. 2010, Jansen 2014, PLANCO 2013, Rauner 2007):

Gross cost categories:

- Costs for trainees
- Costs for trainers and other staff involved in the training
- Investment and maintenance costs for infrastructure and equipment
- Costs for training materials
- Other costs

1.3.2.2 Benefits

For the conceptualisation of the benefits enterprises can gain, their possible expectations and interests have to be considered. According to the latest research findings the following interests/motives of enterprises are most important (see Schönfeld et. al. 2010, BIBB 2014, PLANCO 2013):

- **Productive contribution of trainees:** The enterprises expect that the trainees will contribute to the production during the time they are getting trained on the job in the enterprise. The results of the cost-benefit analysis in Southern Viet Nam in 2012, funded by KfW, indicated that this is especially true for internship programmes. In many cases this is the strongest argument for the enterprises to offer internship programmes (see *ibid*.).
- **Investment:** The enterprises invest in the training because they want to be more independent from the supply of the local labour market, expecting to hire some of the trainees which are trained exactly according to its competency requirements as employees in the future. With this investment the enterprise expects to reduce recruitment costs on the other hand.
- **Screening and selection:** The enterprises expect to get to know strengths and weaknesses of the trainees, so that they are able to select the best trainees as possible future long-term employees based on reliable evidences. Also in this case the enterprises expect to reduce recruitment costs.
- **Reputation:** With the investment in training, the enterprises try to create a positive image to their clients and potential employees.
- **Social responsibility:** The investment in training is part of the CSR-strategy of the enterprises.



1.3.3 How to compare the costs and benefits

To gain a comprehensive understanding about the internship programmes, the costs and the benefits were compared in this survey firstly for the whole internship programme (for the whole period and per month) and secondly per trainee per month based on the two models illustrated in the previous chapters.

Average values and minimum/maximum values of the benefit and cost positions were calculated to illustrate the overview referring to all surveyed enterprises.

In the second step, an in-depth analysis was carried out by identifying different groups of enterprises (see concept of the cost-benefit-analysis, Horn 2015, p 11f.). This was achieved through a detailed analysis of the figures and the interpretations of the interviews. The function of this analysis is to gain in-depth information about the reasons for the situation which were surveyed: The motivations and strategies of the enterprises. Based on this information, potentials and appropriate options to increase the involvement and investment of enterprises in TVET and to increase the quality of the internship programmes can be identified.

Benefit categories:

There are benefits which may be measured or not measured by this analysis. This depends on the relevance of the benefits for the enterprises in Viet Nam. According the experiences of the cost benefit analysis in Southern Viet Nam 2012, there are benefits which are not so relevant, such as the fiscal effects of the training (see *ibid*, PLANCO 2011, p. 10). So these benefits might exist but will not be included in the analysis.

Secondly, there are quantifiable and non-quantifiable benefits. This depends on the complexity of the calculation of these benefits. It is e.g. very complex to calculate the long-run productivity differences in an enterprise. These might be quantified in more elaborated surveys. According to the experiences of the cost-benefit analysis in Southern Viet Nam 2012, it is preferable to not quantify benefits which are too complicated to calculate. For the interviewed persons, it is very difficult to calculate these benefits in a specific and quantitative way (see PLANCO 2013). It is advisable to use a 5-level-scale to rate the benefits from very negative to very positive.

In the category quantifiable benefits, opportunity benefits of savings (saving of costs for additional personnel or services, saving of recruitment costs) are measured. This has impacts on the estimation and calculation of these benefits. The actual benefit must be estimated referring to the trainee. The opportunity benefits of savings have to be estimated by deduction from the actual expenses (again referring to the trainee).



2. SURVEYED ENTERPRISES: DESCRIPTION OF THE SAMPLE

The 14 enterprises were selected according to the following criteria:

- Enterprises that conduct internship programmes for TVET trainees in the occupations Industrial Electrics and Metal Cutting were chosen for this survey.
- The duration of the internship programmes was mostly between 2 and 3 months: 6 companies conducted the internship programmes for 2 months, 4 companies for 3 months and 3 companies carried them out for 2 – 3 months, the longest duration of internship programmes in the surveyed enterprises was 6 months (1 company) and the shortest time was three weeks (1 company) (see overview table-appendix 2, p. 32).
- To take regional variations into account, the surveyed companies were located in four regions highly relevant to the industrial sectors which the two surveyed occupations refer to: Dong Nai (6 companies), Ho Chi Minh City (2 companies), Ha Noi (4 companies), Hung Yen (2 companies).
- Labor size of enterprise: 50% of the surveyed enterprises are small and medium size enterprises (SME) (small enterprises: 10 – 200 laborers, medium enterprises: 201 – 300 labors, the other 50% of the surveyed enterprises employ more than 200 laborers¹, see appendix 2, p. 32)

Furthermore the surveyed enterprises show the following characteristics:

- Ownership: The surveyed companies include state owned enterprises, Joint Stock Companies, foreign owned enterprises, private enterprises with the following structure:

Table 3: Surveyed enterprises by ownership

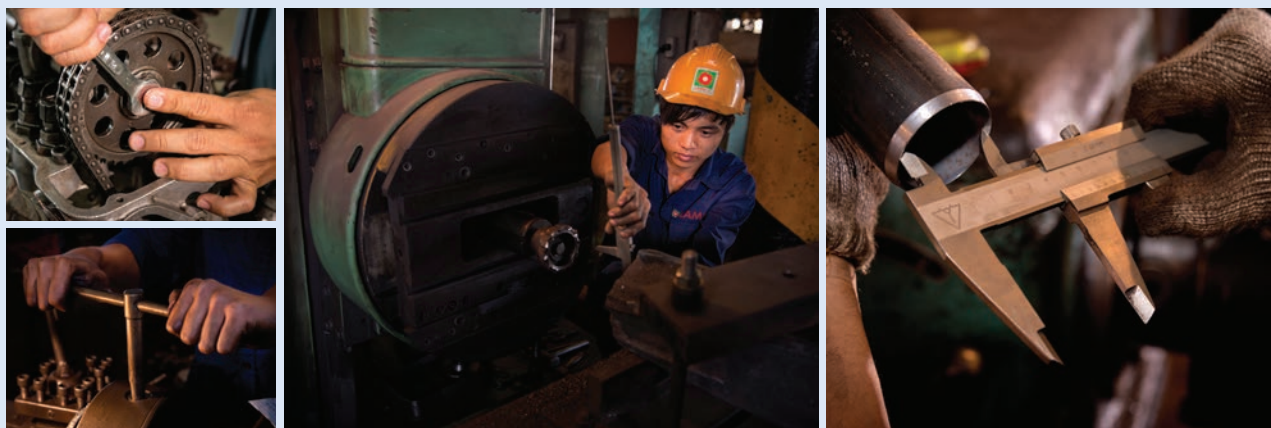
Enterprises by ownership	No. of enterprises	Share in %
Joint Stock Company	6	42,9%
Private enterprises (national)	3	21,4%
100% FDI	4	28,6%
JSC in which State owned shared capital more than 50%	1	7,1%
Total	14	100

¹The differentiation of the sizes of enterprises based on the number of employees is aligned with the official classification scheme; See Socialist Republic of Viet Nam (2009): Decree No. 56/2009/NĐ-CP dated 30/6/2009 on assistance to the development of small- and medium-sized enterprises.

- Economy sector and the market: All surveyed enterprises that conduct internship programmes for the occupation Metal Cutting belong to the industrial manufacturing sector. The enterprises which implement internship programmes for the occupation Industrial Electricians manufacture industrial electric products and provide services of industrial electric installation.
- 80% of the surveyed enterprises produce for export and 20% of the enterprises cover only the national market.
- Recruitment strategies: The enterprises rated the importance of different recruitment strategies on a 5-level Likert scale (5: very important, 1: not important at all):

Table 4: Surveyed enterprises by ownership

Recruitment strategy of the enterprises	Average value	No. of answers
Recruitment based on relations/partnership to TVET institution	4.14	14
Recruitment of selected interns	3.79	14
Recruitment based on personal relations	3.69	13
Internal retraining of untrained employees hired at the labour market	3.69	13
Job posting at the gate	3.60	5



The ratings of the companies show that the cooperation with the vocational training institutions is important to recruit skilled laborers. The selection of interns during an internship in the enterprises, the recruitment through personal relationships, the recruitment of unskilled labourers who get training at the enterprises and recruitment via job announcements were rated as important. The recruitment through newspaper advertisements, job fairs and job centers was rated as the least important strategy to recruit employees. The recruitment of interns was mainly based on traditional relationships between vocational training institutions and enterprises.



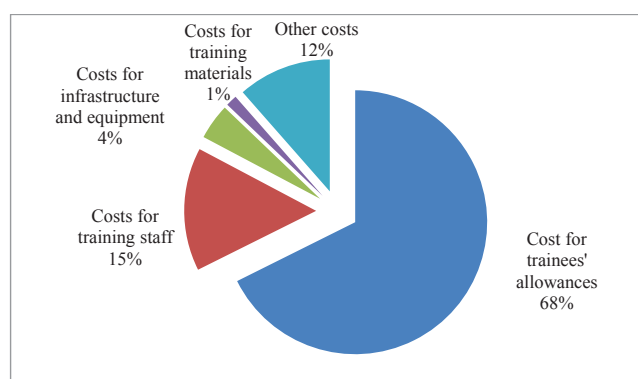


3. SURVEY RESULTS

3.1 Overview on cost positions

Referring to the cost and benefit model, in this study, the costs of the internship programmes of the enterprises include five main components: (i) Cost for trainees' allowances (and social insurance), (ii) cost for trainers, (iii) cost for infrastructure and equipment, (iv) costs for training materials and (v) other costs.

Digram 1: Cost structure of internship in programs in %



According to the study results, two cost positions are most important:

- Costs for trainees' allowances (incl. mainly a small allowance and the payment of meals and drinking water) (68% of total costs)
- Costs for training staff (15% of total costs)

The other cost positions accounted only for low shares of the enterprises' costs for the internship programmes.

Cost for trainees as wages and equivalent

9 out of 14 enterprises paid allowances to interns at a basic rate based on the number of days of internship/work at the enterprises. The monthly allowances per trainee ranged from lowest VND 520.000 (about USD 25) per intern/month to highest VND 4.000.000 (about USD 190) per intern/month.

Five enterprises provided lunch and drinking water only to the trainees, spending VND 500,000 to VND 900,000 (about USD 25 – 45) per intern/month.

The findings of the analysis show that whether an enterprise pays a certain amount of wage to interns depends on the enterprise's needs of additional labour covered by the interns and on their reputation. In the interviews, 3 large FDI enterprises said that they can easily attract interns because of their

reputation/"trademark" although they would not offer any payment. Quite on the contrary, it was illustrated in the interviews that domestic SMEs face difficulties when they try to recruit interns although they are willing to pay considerable wages due to lack of reputation (5 of 7 surveyed SMEs paid wages to the interns, 2 SME did not pay wages because the time of the internship programmes were either short or the interns were not involved in the enterprises' production).

Costs for personnel

In all surveyed companies, no personnel was explicitly assigned for training purposes. Rather technical staff members (normally foremen or experienced skilled workers) of production units were responsible for supervising and coordinating the interns' activities.

To calculate the costs for instruction, the total salaries and related expenditures of the staff (such as bonus, health insurance, social insurance and other payments, for example money for transportation, telephone, lunches) directly involved in the coordination of the interns was recorded, as well as their total working hours and the time spent for the provision of training. By calculating the share of their time spent for the instruction (related to their total working time) the costs for instructing personnel could be identified.

Most of enterprises conduct a short introduction in the beginning of the internship for 2 to 5 days instructing students about the rules and regulations on production and work safety. Then, depending on the specific tasks assigned to the interns, the company allocated an appropriate number of technical staff or skilled workers for supervision or mentoring them.

The results of the analysis show that the costs for personnel of 14 companies account for 15% of the total cost they spent for the internship programmes. However, as mentioned earlier, the personnel costs for internships vary strongly among enterprises depending on the occupation: The highest amount was recorded in one enterprise that spent VND 412 million (nearly USD 20,000) while the lowest amount that was identified accounted for VND 1.5 million (ca USD 70). The average personnel cost of an enter-

prise is VND 91 million (4,270 USD), and the average personnel costs per one intern per month is around VND 937,000 (about 45 USD). The cost for personnel of most companies does not include the cost for senior management staff as Director, Head of HR department or as administrative and accounting division because they were not directly involved in the training. This cost is only included if the enterprise confirms that this staff spent a significant amount of time for the coordination of the interns.

Costs for infrastructure and equipment

According to the survey results, the costs for infrastructure, machinery, equipment (including the cost of depreciation, maintenance and fuel) is only about 5% of the total cost. If the enterprises used facilities and equipment solely (or partially exclusively) for the internships or reported a significantly higher defection rate caused by the interns, the costs were included.

However, in most of the surveyed enterprises, the internships were conducted right in the production line and the interns directly contributed to the production. Only 6 enterprises spent significant amounts on that cost position.

Altogether, the production activities of the business were not negatively affected by the internships. The results of the analysis show that a few companies dedicated facilities and equipment for practical training of the students while in most cases (11 enterprises in total) production and practical training is not separated.

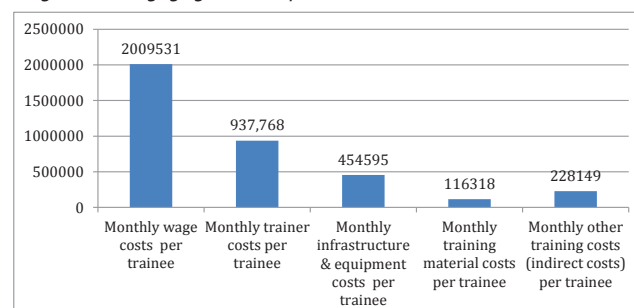
Costs for materials

The interns who took part directly in the production were either assigned to simple tasks or closely supervised by the staff. Hence, the companies reported they hardly caused a significant waste of raw materials during the production. According to the judgment and calculations of the enterprises, the cost for material loss is negligible, only about 1%.

Other costs

Other costs such as the cost for uniforms, work safety equipment, accommodation or transportation cover a substantial portion of 12%. These costs did not vary to a high extend between the surveyed firms. The maximum costs were measured by VND 370.000 and minimum costs by 20.000 VND per intern, per month; the medium is around VND 250.000 per intern, per month.

Diagram 2: Average gross costs per student/month in VND



Most important cost positions

This table below shows the importance of the two major costs positions: Allowances for trainees and



salaries for trainers. Allowance costs accounted higher than 80% of the total costs of the internship programme in five enterprises, only for about 20% and 11% in two enterprises.

Table 5: The cost positions of trainees' allowance and salary of trainers

Enterprise	Share of costs for interns allowances	Share of costs of training staff	Share of costs for trainees allowances and training staff
Enterprise 9	93.4	5	98.1
Enterprise 14	90.6	6	96.6
Enterprise 13	86.3	6	92.3
Enterprise 10	84.5	10	94.0
Enterprise 4	80.3	12	92.3
Enterprise 5	68	25.5	93.5
Enterprise 12	63.7	9.6	73.3
Enterprise 7	60.4	20.4	80.8
Enterprise 11	56.1	6.2	62.3
Enterprise 1	48.9	30.8	79.7
Enterprise 8	46	15.2	61.2
Enterprise 6	40.8	29.8	70.6
Enterprise 2	20.1	15.2	35.3
Enterprise 3	11.2	85.4	96.6

Enterprises' costs for trainers are in an inverted order. Costs for trainers accounted between 5% and 12% of the total costs in 7 enterprises, 85% in one enterprise. The enterprise with costs for trainers accounting for 85% of the total costs was an FDI enterprise that hired interns for tasks that were not that simple as in the other surveyed companies. As the company reported, the interns had to work with expensive machines/equipment. To avoid defection of these machines the company organized a one to one supervision of all interns (one intern supervised by one skilled worker).

Table 6: Total trainees allowance per month in % of labour costs of substituted skilled labourer

No. enterprise	Share in %
13	82.8
9	66.7
5	41.8
4	41
11	29.7
14	27.5
8	24.4
12	23.7
2	13
7	13
1	10.8
3	9.7
10	9.2
6	6.9

To triangulate the figures on interns allowances of the table 5, the interns' allowances should be compared with the wages of a skilled worker they (partially) substitute in the production line. The figures illustrate the different situation of the different companies: The enterprises 13, 9 and 4 are altogether domestic SMEs. These enterprises mentioned in the interviews that they have to pay comparable allowances to attract interns (but on the other side the wages they are able to pay to their regular employ-



ees are lower than in the large FDI companies).

On the other hand company 6 is a large FDI enterprise that pays only very little allowances to the interns. The company reported that it is very easy to attract interns even without paying anything for them. Because this company integrates the interns straight into the production (focused mainly on simple tasks), the internship programmes are very profitable.

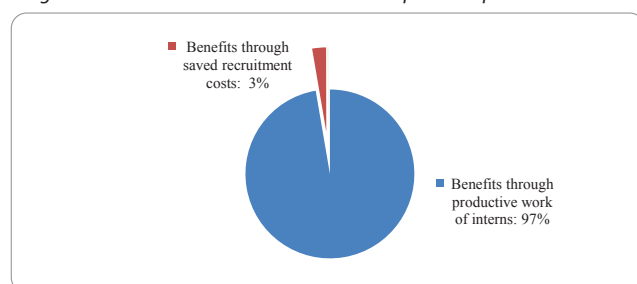
3.2 Overview on benefits

3.2.1 Quantifiable benefits

Referring to the benefit model (see chapter 1.3.2.2, p. 8) the enterprises mainly gain quantifiable benefits from internship programs in three categories: (i) Benefits through savings in the production process, (ii) Benefits through savings in the recruitment process and initial training and (iii) other benefits.

According to the survey results, productive work by the interns' substitution of assumed (not hired) qualified technical personnel was seen as the highest benefit gained by the enterprises (97% of total benefits). The remaining amount of 3% is gained by savings of recruitment costs (hiring the trainee as employee at the end of the internship instead of recruiting employee at the labour market).

Diagram 3: Benefit structure from the internship in enterprise in %



Benefits from productive contribution of trainees

Although labor productivity of the interns is lower than the employees assigned, the comparison in most enterprises shows that the benefits brought to the enterprise by the students is significant. Half of the surveyed firms said the interns could understand the job requirements and be able to use the machinery and equipment as well as perform appropriate skills to meet the job requirements within a period of 2-3 weeks. Beside of that, interns were often assigned to simple tasks. As a consequence, after 1-2 weeks their productivity ranged between 60% and

97% of the employees working in the same position. While a few enterprises mentioned that a number of interns did not have a good working attitude during their internship, in general, the students contributed to the production at 80% and above of the average productivity of the enterprise's employees. Thus, the calculation and comparison between students' productivity and employees' salary shows that the total benefits from productive contribution of students in 14 enterprises is significant. However, the benefits that surveyed enterprises obtained are greatly different with the largest amount recorded of 3.58 billion VND and the lowest of approximately VND 100 million. Apart from the productivity of the trainees, it is clear that any business with larger number of trainees and longer training period will gain greater total benefits. It should be noted this is not a net benefit, i.e. the big total revenue does not mean that the internship brings about "profits", but rather estimated by deduction from the actual expenses. This content will be further presented in section 3.3.

Benefits from cost savings of recruitment, initial training

Table 7: Share of total benefits by productive work and recruitment

	Productive work	Recruitment
Enterprise 1	100	0
Enterprise 9	100	0
Enterprise 10	100	0
Enterprise 12	100	0
Enterprise 13	100	0
Enterprise 6	97,9	2,1
Enterprise 5	97,6	2,4
Enterprise 4	96,3	3,7
Enterprise 3	95,2	4,8
Enterprise 7	95,0	0
Enterprise 2	93,9	6
Enterprise 8	93,2	6,8
Enterprise 14	92,7	7,3
Enterprise 11	76,2	23,8

Beside the benefits of the productive contribution of trainees, the survey results show the amount of savings from hiring former interns is only 3% of total benefits. Instead of recruitment, organization of examination, interviews, job probation and costly initial training for new employees, the recruitment of the trainees who have demonstrated good capacity and quality during their internship is beneficial and cost and time-efficient choice for the business. Oth-



er benefits from trainees such as cleaning buildings, cleaning and maintaining machinery are negligible and regarded as regular task of the workers at work.

The above table shows that the surveyed enterprises gained the highest amounts of benefits by production of the interns. 5 enterprises claimed that benefits from productive work of interns accounted for 100%. One company (number 11) has the share of productive work only accounted for 76.2%. This company paid significant amounts for recruiting skilled labour and therefore, the saving from recruitment of the interns in this company was much higher than other companies (23.8%).

3.2.2 Non-quantifiable benefits

In addition to the quantifiable benefits through the productive work of the interns and the savings of recruitment costs, the enterprises were asked about unquantifiable benefits. These benefit were rated by the enterprises on a 5-level-Likert scale (5: very important, 1: not important at all).

Table 8: Non-qualified benefits rated by the enterprises

Non-quantifiable benefits	Average value	No. of answers
Improved reputation valuable for sales/part of the CSR strategy	4,21	14
Improved loyalty of staff/lowered effect of staff fluctuation in long term	3	14
Improved quality of products / services	2,38	13
More influence / improved position at associations or public authorities	1,83	12
Fulfillment of prequalification conditions at public tenders	1,46	13
Tax reduction for training cost/other benefits provided by the state	1	10

The table illustrates that the improved reputation of the enterprise which is valuable for sales and/or part of the CSR strategy is rated as important by the companies. All enterprises said that through this activity they were able to create a better image and brand, as well as a “better local voice and position” (the average value of ratings is 4.21 out of 5). The improved loyalty of staff/lowered effects of staff fluctuation in long term and the improved quality of products and/or services was rated on an average level (average value: 3) by the enterprises.

Furthermore, 5 of 14 enterprises mentioned that the interns from TVET institutions have good technical competences that helps them improve the quality of their products or services (ratings at level 3 and 4) while 5 enterprises mentioned that the interns’ influence on the quality of products or services of the company was negligible (ratings at level 1 and 2).

Recruitment benefits were mentioned by three enterprises as important **unquantifiable benefits** (These three companies were not able to state

exact figures for the calculation of quantifiable recruitment benefits.):

Table 9: Non-quantifiable recruitment benefits rated by the enterprises

Not quantifiable recruitment benefits	Average value	No, of answers
Saved costs incurred for external recruitment (newspaper-, internet advertisement, fairs, campaigns, effort of HR department)	4	3
Saved cost for re-training of new staff (salary of new employee, cost of supervisors)	4	3
Saved costs for unsuccessful hired employees	3,33	3

lowest measured amount is VND 170,000 (ca USD 8) per intern per month.

The survey results also show that for four enterprises

The table shows that the saved costs incurred for external recruitment and saved cost for re-training of new staff are important for the surveyed enterprises. These enterprises, therefore, highly appreciate the cooperation with TVET institutions. The survey also recorded a shortage of skilled labour in three big enterprises, which are willing to receive about 200-300 interns for the two surveyed occupations and to spend considerable costs, paid to the interns and the TVET institutions during the internship. This shows that many enterprises were actually aware of the benefits they could gain from the internship programmes to satisfy their actual labour demands.

3.3 Overview on the cost-benefit relation

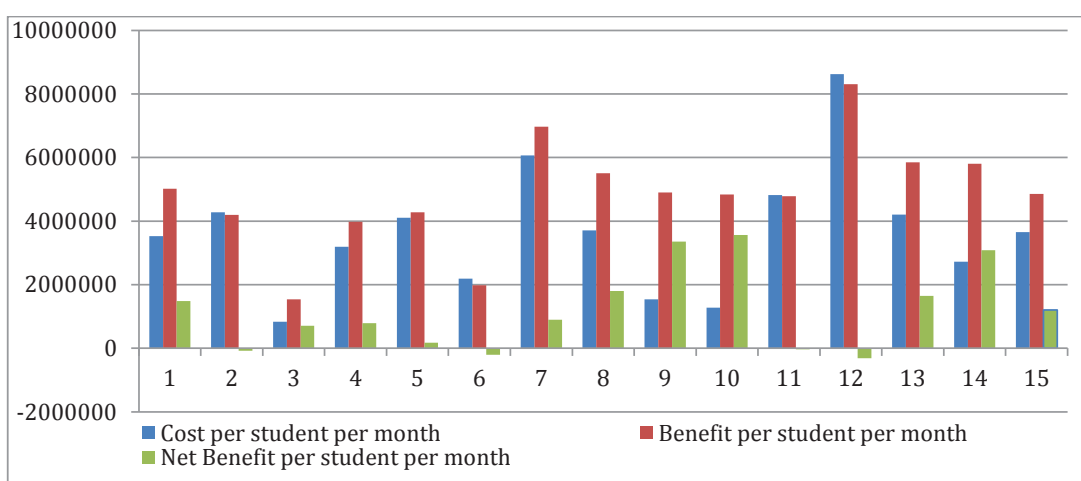
The results of the cost-benefit analysis show that 10 of 14 enterprises (accounts for 71%) gained higher benefits from the internship programmes than the costs they spent. Two enterprises gained a net profit of about 1 billion VND (USD 47,000). The comparison between costs and benefits shows a high variation of profit among the surveyed companies: Three enterprises achieved a profit of over VND 3 million (ca USD 140) per intern per month, three other enterprises earned VND 1.5 – 1.8 million (USD 70-85) per intern per month. The

whose expenses for internships are higher than benefits, the loss is not that big, in particular, the largest loss is only on average VND 82,000 (> USD 4) per student per month. Furthermore, the mentioned loss is only the result of the calculation of the quantifiable costs and benefits. Unquantifiable benefit are not included in this calculation.

On average, the monthly cost for an intern is VND 3.65 million (ca USD 174) while the benefit gained is VND 4.85 million. Thus, the surveyed enterprises gained an average profit of VND 1.2 million (ca 57) USD per intern/month.

Therefore, it can be stated that the surveyed enterprises gained significant benefits from the internship programmes. This result can be considered as a major factor to encourage enterprises to cooperate with vocational training institutions in organizing internship programmes.

Diagram 4: Cost and benefit per student per month by surveyed enterprises in VND

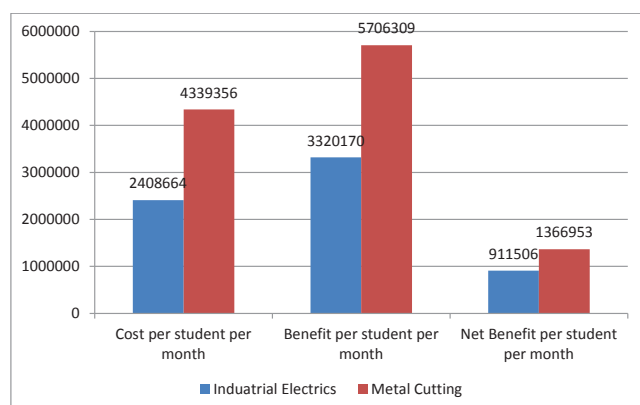


3.4 Analysis of the costs and benefits by occupation

According to the survey results, the average costs of the nine enterprises conducting internship programmes for the occupation metal cutting was around VND 4.34 million (ca. USD 206) per student per month while the costs for industrial electricians internships was nearly 1 million VND lower (about VND 2.4 million/USD 114). However, the benefit gained from metal cutting internship programmes was quite high, up to VND 5.7 million (ca. USD 270) per student per month, which resulted in a net benefit of approximately VND 1.37 million (ca. USD 65) per intern per month. As a consequence, the net profit of the internship programmes for Metal Cutting was around VND 400,000 (ca. USD 19) per intern per month, higher than for the occupation Industrial Electricians (average net benefit for Industrial Electricians: VND 911,000).

However, due to the small sample of the survey, the identified differences cannot be representative. The differences are caused by the structure of the sample, especially the size and ownership of the companies.

Diagram 5: Costs and benefits per student per month for the two surveyed occupations



3.5 Analysis of the costs and benefits by groups of enterprises

3.5.1 Criteria for grouping the enterprises

To analyse the results on costs and benefits of the internship programmes in more details, the enterprises were grouped based on common methodological procedures of the construction of types/typification (see concept of the Cost-Benefit Analysis/Horn 2015, p. 11f.). The surveyed enterprises were grouped according to the following criteria:

- Structure of the cost-benefit relation,
- Size and ownership of the enterprise,
- Motives for conducting internship programmes (this information is mainly gained from the analysis of the narrative information given in the interviews).

3.5.2 Analysis of costs and benefits by enterprise group

According to the above criteria, the 14 surveyed enterprises were categorized into 4 groups with the following specific characteristics:

Group 1: Domestic small and medium size enterprises (SMEs) (≤ 300 employees) which use the internship programmes mainly for additional labour

The first group includes five enterprises: Three enterprises carry out internship programmes for Industrial Electricians (company 9, 10 and 12); one enterprise for Metal Cutting (company 4), and one enterprise (which produces glass) run internship programmes for Metal Cutting but adapted to the glass production process.

Concerning the comparison of costs and benefits, the only relevant cost position for all of the enterprises in this group are salaries of the interns and other allowances (mainly for lunches, drinks) (accounting



for an average of 82% for the whole group). Almost all benefits are gained by production (approximately 99, 8% for the whole group; 100% for companies 9, 10 and 13). Only one enterprise experienced a loss of 81,736 VND (per student/per month); the remaining obtained profits of averagely VND 790.000 (per student/per month):

Table 10: Overview on costs and benefits of Group 1 in VND

No.	Total costs per internship programme	Average costs per trainee per month	Total quantifiable benefits per internship programme	Average quantifiable benefits per trainee per month	Result per internship programme	Result of net benefits per trainee per month
4	176,445,067	3,528,901	250,887,700	5,017,754	74,442,633	1,488,853
9	1,926,793,200	4,281,763	1,890,000,000	4,200,000	-36,793,200	-81,763
10	16,718,563	835,928	30,786,500	1,539,325	14,067,937	703,397
12	2,669,403,000	3,195,458	3,582,773,810	3,980,860	913,370,810	785,402
13	431,168,100	4,106,363	449,456,000	4,280,533	18,287,900	174,170

The detailed figures (see annex 2, p. 30) illustrate that these enterprises spend almost nothing for trainers, infrastructure and equipment, training materials and other support for the interns. The interviews about the motivation of the enterprises to run internship programmes support the picture drawn from the analysis of the figures:

- The enterprises use the interns mainly to cover seasonal or project related labour shortages.
- Some of the enterprises use the interns constantly for cheap additional labour in the production process.
- The interviews and also the observations of the production sites proved a low level of training in the internship programmes.

The figures show a similar picture drawn from the interviews and proved by the observations: The domestic SMEs have only a low potential to increase their investments for TVET and also to increase the quality of their internship programmes. The interviewed SMEs explained that their resources are too limited to carry out competency-based internship programmes with a clear training schedule. They

use the interns mainly for additional labour - esp. for simple tasks in the production line. According to the statements of the enterprises in the interviews, it is too expensive for them to employ adequately qualified personnel to train the interns.

Group 2: SMEs which use the internship programmes for additional labour, recruitment and training

This group includes two companies which run internship programmes for Industrial Electrics. The comparison of costs and benefits illustrates a diverse picture: Company 7 gains a small loss and the other two companies gain average (company 8) and significant (company 11) profits.

Table 11: Overview on costs and benefits of group 2 in VND

No.	Total costs per internship programme	Average costs per trainee per month	Total quantifiable benefits per internship programme	Average quantifiable benefits per trainee per month	Result per internship programme	Result of net benefit per trainee per month
7	109,354,400	2,187,088	99,033,333	1,980,667	-10,321,067	-206,421
8	633,771,400	6,070,306	658,519,500	6,968,460	24,748,100	898,154

Identified potentials to increase the cooperation with/investment in TVET and to improve of the quality of the internship programmes by the enterprises of group 1:

Both firms mentioned that the internship programmes are an essential element in their recruitment strategy. That is why they said that they pay



more attention to the development of working experiences and the interns' skills.

Company 8 in Ho Chi Minh City runs two internship programmes (for 3 months and for 6 months). In the 3-month programme, the students were trained in basic skills and introduced to the actual production process. This is similar to the internships of Group 1. However, in the next 3 months of the 6-month internship programmes, the interns are trained in more specialized skills. They were trained with the equipment reserved for the practical training of the interns. Hence, this cost factor of the programme was significant (VND 3 million/USD 143 per intern/month).

In the interview, the director of the company explained that he was well aware of the costs and benefits of the internship programme in his company. He explicitly developed a systematic and precise business plan and planned a training schedule for the internship programmes. He pointed out (and this is also reflected by the figures, see appendix 2, p. 32ff.) that his company used the internship programmes completely for recruitment. Because he was satisfied with the trainees, he retained them after the internship programme and his company did not use other resources for recruitment.

Company 7, which runs internship programmes for Industrial Electrics, mentioned that the installation of various electrical equipment at the construction site required the workers to have a certificate of work safety. Without this certification the interns were not allowed to directly participate in the practical work.

That is why the interns in this company only participate in administrative, planning and supportive work. The company was not allowed to integrate the interns directly into the production which led to an average loss of about VND 200,000 (ca USD 10) per intern/month. Moreover, the company mentioned that the training schedule of the TVET trainees did not really match with their recruitment schedule. They, thus, could not gain significant benefits from recruitment of selected interns. However, in the interview, it was mentioned that the company runs the internship programmes as part of its image building and corporate social responsibility (CSR) programme. Identified potentials to increase the cooperation with/investment in TVET and to improve the quality of the internship programmes by the enterprises of group 2:

It can be summarized that the companies in group 2 invest more resources in the training of the interns, especially in the field of practical skills because their main motivation was recruitment (company 8) or reputation/CSR (company 7).

This indicates potentials for the increase of enterprises' investments into TVET, particularly the quality improvement of internship programmes. If SMEs, especially medium sized enterprises, are not only focused on short-term labour demands for simple tasks and pay more attention to recruitment and a mid-term staff development strategy, the results show that they were willing to invest more resources into the training of interns. This should be considered in policy development for the TVET system in Viet Nam.

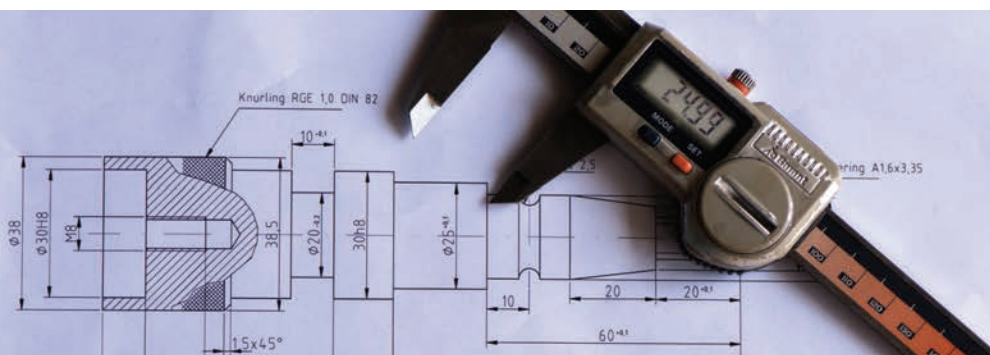


Table 13: Data and relation of cost – benefit for the internship of company 4

No.	Total costs per internship programme	Average costs per trainee per month	Total quantifiable benefits per internship programme	Average quantifiable benefits per trainee per month	Result of net benefits per internship programme	Result of net benefits per trainee per month
2	144,580,000	4,819,333	143,557,500	4,785,250	-1,022,500	-34,083
3	482,828,400	8,621,936	465,066,100	8,304,752	-17,762,300	-317,184
5	554,825,178	4,202,710	760,775,167	5,852,117	205,949,989	1,649,407
11	222,581,250	3,709,688	330,500,000	5,508,333	107,918,750	1,798,646

All the companies in this group mentioned a constantly high labour demand. That is why these companies conduct the internship programmes mainly for recruitment. All companies mentioned that they pay much attention on the training of the interns.

Especially company 3 should be highlighted here: This enterprise explained that they need employees which are able to handle the machines and equipment in their production line in a correct way. The company trains the interns in the production line under very close supervision (one supervisor for one intern) because some of the machines are complicated to handle and expensive. It was explained in the interview that this close supervision is cheaper for the company than possible breaks of the machines. Within this supervision the interns are screened and the best performers get retained by the company: "We have a defined production norm. Every employee who cannot reach 88% of our norm will be fired. We want to enable the interns we select to continue the work in our company to achieve this norm." So, as illustrated in the table, company 3 gains a small loss but in the interview it was mentioned that this is seen as a very useful investment which is part of the staff development strategy.

Company 11 is a toy manufacturing company. This enterprise also intends to develop the interns' practical skills to select and retain the best performers (both companies invest significant resources in training equipment, see appendix 2, p. 31.).

Identified potentials to increase the cooperation with/investment in TVET and to improve of the quality of the internship programmes by the enterprises of group 4:

Group 4 indicates clear potentials for the increase of enterprises' investments into TVET and particularly the quality improvement of internship programmes: The companies in this group pointed out the high value of the internship programmes for recruitment of medium and long term labour. Furthermore, company 2 and 3 mentioned additional training activities, especially company 3 pointed out a number of activities in cooperation with the Vocational College for Machinery and Irrigation (VCMI) in Dong Nai. It would be very useful to further develop internship programmes and cooperative training activities with this kind of companies because here a demand was visible.



4. KEY FINDINGS AND RECOMMENDATIONS

4.1. Key findings

The following points can be summarised:

- Regarding all surveyed costs and benefits (including both quantifiable and the non-quantifiable benefits), 12 of 14 surveyed companies have a positive cost-benefit relation. Even without considering unquantifiable benefits, 8 of 14 companies could gain significant profits by running the internship programmes: The sum of the cost-benefit relation shows a clear plus for these companies.
- Only one company mentioned that the internship programme was not useful for the company. All other company pointed out that the internship programmes are useful for their company:

Firstly, the companies use the internship programmes for recruitment of selected (high performing) interns. Here the screening and selection motive and the investment motive (see page 7) were identified as reason why companies conduct the internship programmes.

Secondly, most of the companies used the interns for additional labour to cover seasonal or contract-related short-term labour shortages which refers to the production motive (see page 7). This was the most frequent motivation of the enterprises identified in the survey. Especially the surveyed national SMEs need the interns to cover short term labour shortages. This motivation was also identified in the cost-benefit analysis which was carried out on behalf of KfW in the south of Viet Nam in 2012 (see PLANCO 2013).

- The range of manufacturing in most of the interviewed companies was limited (especially in group 1 and 2) and the labour needs focused mainly on simple tasks.
- The labour demand of the companies referred often to tasks instead of occupations (based on high quality vocational training), for example: "We need people who can handle a stamping machine".
- None of the surveyed companies employed per-

sonnel who were explicitly assigned as training personnel.

- Most of the surveyed enterprises (12 of total 14) mentioned that their training schedule for the internship programme was very simple (short introduction in the beginning, for ca. one week). The interns' practical training often focused on simple tasks and the paid allowances were mostly low.
- Especially the national SMEs (group 1) responded that they have no resources to further develop internship programmes with a more structured training schedule.
- Larger enterprises that were surveyed (group 3) use the interns as continuous cheap labour in their production lines, pay only very little allowances and do not invest in the training of the interns.
- But on the other hand, 6 of the 14 enterprises were identified (in group 2 and 4) which were interested in the quality development of internship programmes such as the development of a training schedule (esp. enterprise 8 of group 2) and to intensify their cooperation with vocational training institutions (esp. company 8 and 14, both national) and company 2, 3 and 5, all FDI). All of these companies conducted internship programmes for Metal Cutting. They pointed out the high value of the internship programmes for recruitment of medium and long term labour. Furthermore, some of these companies mentioned additional training activities and a number of activities in cooperation with a vocational college in Dong Nai (VCMI). This indicates potentials for a further improvement of the internship programmes.
- 12 of 14 companies mentioned that a training schedule for the internship programme exists on a low level: This includes orientation (for showing them the equipment of the company), work safety (1-2 weeks) and production. This also indicates potentials for the improvement of internship programmes.

4.2 Recommendations

Overall recommendation:

- Internship programmes should be further developed/institutionalized: Training standards for the internship programmes should be developed and elements of a cooperative training approach should be developed and integrated in the internship programmes. The demand of the companies should be taken into consideration.

Recommendations for policy makers in the technical and vocational education and training system:

- Regulations which ensure a high training quality of internship programmes should be developed: As it was identified in the survey that the training aspects in the internship programmes of the surveyed enterprises were quite low and none of the surveyed enterprises hired staff who is explicitly responsible for training and supervising the interns, it is recommended that training standards, qualification standards for the in-company instructors in charge of the training and supervision of the interns should be applied. Furthermore, regulations which introduce elements of a cooperative training approach in the TVET system should be developed because this would strengthen both sides of the cooperation: The quality of the in-company training activities and the practice-orientation of the training provided by the vocational training institutions.
- As it was identified in the survey, the frequency of in-company training activities is low in Viet Nam. Therefore it is suggested that regulations should be developed to support companies to conduct in-company training activities, such as internship programmes, e.g. by tax incentives. On the other hand, it could be regulated that companies that do not conduct internship programmes should pay a fee e.g. to a training fund (which should be established in future).
- It was identified in the survey that the salaries of the interns ranged in many surveyed companies on a low level (esp. in the SMEs) and some of the bigger (FDI) companies (group 3) used the interns mainly for cheap labour. Finally it is strongly recommended that further advisory inputs on the development of regulations to increase the

quality and quantity of in-company training activities should be provided by the Programme Reform of TVET in Viet Nam to the GDVT. These advisory inputs should be based on this and also further analyses:

1. Advertise success models of cooperation between TVET system and enterprises.
2. Develop M&E instruments to evaluate and improve internship programmes.
3. Conduct further research on enterprises' participation in TVET (on further in-company training activities)

Recommendations to enterprises:

- It is suggested to enterprises to further develop the training aspects in the internship programmes. It would be very useful to closely cooperate with the TVET institutions in this process.
- As it was identified in the survey, very few of the surveyed enterprises run other in-company training activities than internship programmes (see especially company 2, as illustrated in overview in the annex 2, page 30). These other in-company training activities could be regarded as role models. It is therefore recommended to enterprises that such cooperation activities with the vocational training institutions should be increased on the basis of mutual benefits.
- It is strongly recommended to enterprises that use internship programmes just for additional cheap labour: Pay adequate allowances to the interns.
- Recommendations to vocational training institutions:
- The vocational training institutions should strengthen cooperation with enterprises:
- As it was identified that none of the surveyed enterprises employed explicit training staff, it is recommended that the cooperation with enterprises should be intensified: The staff of the enterprises that is in charge for the supervision and training of interns in the companies could be further trained in the TVET institutions in the field of teaching and learning methods. On the other hand, the teachers of the TVET institutions could be sent to the enterprises to update their

practical skills. In both options the exchange of knowledge and ideas between the teachers of the TVET institutions and the staff of the enterprises that is in charge for the supervision and training of the interns should be in the focus.

- It is suggested to enhance the relationship with the enterprises in order to develop training pro-

grammes and training standards in cooperation with enterprises and define the roles and responsibilities of each party.

- Furthermore, it is suggested to develop jointly with enterprises mechanisms for skills assessment after internship programmes.



References

1. PLANCO (2011): Kosten-Nutzen-Analyse beruflicher Bildung. Discussion Paper. Hamburg
2. PLANCO (2013): Cost-Benefit Analysis of Enterprise-based Vocational Training in Vietnam. Hamburg
3. Jansen, A. (2014): The BIBB Survey "Costs and benefits of apprenticeship training for the firm".
4. Presentation at the Videoconference for NIVT. Bonn, Hanoi. March 2014
5. Rauner, F. (2007). Kosten, Nutzen und Qualität der beruflichen Ausbildung. Bremen
6. Schönfeld, G. et al. (2010): Kosten und Nutzen der dualen Ausbildung aus Sicht der Betriebe.
7. Ergebnisse der vierten BIBB-Kosten-Nutzen-Erhebung. Bielefeld 2010.
8. Socialist Republic of Viet Nam (2015): Law on Vocational Education and Training. Law No. 74/2014/QH13, dated 27/11/2014 (VET Law).
9. Socialist Republic of Viet Nam (2009): Decree No. 56/2009/NĐ-CP dated 30/6/2009 on assistance to the development of small- and medium-sized enterprises.
10. Socialist Republic of Viet Nam (2015): Decree 48/2015/ND-CP dated 15/5/2015 regulating in details several articles of the Law on Vocational Education.

ANNEX 1:

THE RIGHTS AND OBLIGATIONS OF ENTERPRISES UNDER THE VET LAW

(Vocational Education and Training Law- Law No. 74/2014/QH13 dated 27/11/2014)

Chapter IV: RIGHTS AND OBLIGATION OF ENTERPRISES IN VOCATIONAL EDUCATION AND TRAINING

Article 51. Rights of enterprises in vocational education and training

1. Establish vocational education and training institutions to train direct workers for production, sales and service in the enterprises and society.
2. Be allowed to register for delivery of vocational education and training to provide vocational training of elementary level prescribed at Points a, b, c and d, Clause 1 Article 40 of this Law for employees working in enterprises and other workers; receive State funding for training for people with disabilities who study and learn in the enterprises.
3. Be allowed to cooperate with vocational education and training institutions to implement vocational education and training of primary, intermediate, diploma levels and continuing education vocational education and training programs.
4. Participate in syllabus and curriculum development, organization of training; instructing practical training and assess learning outcomes of students in vocational education institutions.
5. Expenses for vocational training activities of enterprises are deducted when determining the taxable income under the provisions of the tax law.

Article 52. Obligation of enterprises in vocational education and training

1. Provide information on training needs, on deployment of employees by occupation and annual employment needs to the state agency in vocational education and training.
2. Provide training or place training order to vocational education and training institutions to train workers recruited to work in the enterprises.
3. Fulfil responsibilities agreed upon in the cooperative training with registered vocational education and training institutions.
4. Participate in syllabus and curriculum development, organization of training; instructing practical training and assess learning outcomes of students in registered vocational education and training institutions; receive teachers and students to visit and do practical training, internship to improve vocational skills through contracts with registered vocational education and training institutions.
5. Pay wages for learners and teachers participate directly or work to produce products which meet technical specification requirements during training, practical training, internship in enterprises under the agreement by the parties.
6. Coordinate with vocational education and training institutions to organize vocational education and training, fostering skills and retraining for workers of the enterprise.
7. Create conditions for employees to do in- service training to improve their professional skills under the provisions of the Labor Law.
8. Only employ trained workers or workers possessing certificates of vocational for occupations listed in the portfolio of the Minister of Labour - Invalids and Social Affairs.
9. The Government regulates specifically about rights and responsibilities of enterprises in the field of vocational education and training

ANNEX 2: OVERVIEW AND SYNOPSIS OF ALL COSTS & BENEFITS OF 14 ENTERPRISES

General information													
No. of company	Surveyed year	Training activities: occupation of internship programme	Other training activities	Region	Sector	Size		No. of interns in total	No of interns in analysed occupation	Lenth of the analysed internship programme (no. of months)	Ownership	Market national / international	Main product
						Whole enterprise	Subsidiary						
Group 1:													
4	2014	Metal cutting	no	Dong Nai	Industrial production	100	no sub.	30	25	2	private owned	both	Precise mechanical spare parts
9	2014	Industrial electrics	no	Ha Noi	Industrial production	100	no sub.	150	150	3	private owned	both	Installation of electrical substations
10	2014	Industrial electrics	no	Ha Noi	Industrial production	33	no sub.	50	30	0,67	private owned	both	Production of electrical substations (cases only)
12	2013	Industrial electrics	no	Ha Noi	Industrial production	250	no sub.	400	300	2 and 3	(Joint Stock Comp.)	national	Electric air conditions, Water pumps
13	2014	Metal cutting	no	Hung Yen	Industrial production	160	no sub.	35	35	3	Joint stock company (100%private)	national	Glass products
Group 2:													
7	2014	Industrial electrics	no	HCMC	Industrial production	70	no sub.	80	80	2	Joint Stock Co., Ltd.	national	Installation of electrical substations
8	2014	Metal cutting	no	HCMC	Industrial production	98	no sub.	21	21	3 and 6	Joint Stock Co., Ltd.	both	Precision spare parts
Group 3:													
1	2014	Industrial electrics	no	Dong Nai	Industrial production	500	100	30	20	3	Private owned Ltd, State Ldt >50%	both	Electrical spareparts
6	2014	Metal cutting	no	Dong Nai	Industrial production	1300	100	200	150	2	100% FDI	both	Steel frames for motorbikes, medical beds etc.
14	2014	Metal cutting	no	Hung Yen	Industrial production	7000	1500	200	120	2,5	(Joint Stock Comp.)	both	Furniture
Group 4:													
2	2014	Metal cutting	own training center for further training of own employees, practical training for the teachers of VCMi college, CNC courses at VCMi college for employees of the company	Dong Nai	Industrial production	1600	163	40	15	2	100% FDI	both	Motorbike spareparts/engines
3	2014	Metal cutting	own training workshop for further	Dong Nai	Industrial production	1100	350	80	28	2	100% FDI	both	Steel frames of e.g. medical beds
5	2014	Metal cutting	no	Dong Nai	Industrial production	2000	365	120	65	2	100% FDI	both	Shock absorber for motorbikes
11	2014	Metal cutting	no	Ha Noi	Industrial production	800	500	200	20	3	(Joint Stock Comp.)	both	Toys

Costs: Sum of all costs for the intership programmes																					
No. of company	Total trainees allowances per internship programme	Total trainees allowances per trainee	Monthly trainees allowances per trainee	Total trainer costs per internship programme	Total trainer costs per trainee	Monthly trainer costs per trainee	Total infrastructure & equipment costs per internship programme	Total infrastructure & equipment costs per trainee	Monthly infrastructure & equipment costs per trainee	Total costs of training material per internship programme	Total costs of training material per trainee	Monthly costs of training material per trainee	Other training costs (indirect costs) per internship programme	Total other training costs (indirect costs) per trainee	Monthly other training costs (indirect costs) per trainee	Total direct cost	Total indirect cost	Total Costs per internship programme	Total costs per trainee	Monthly costs per trainee	
Group 1:																					
4	141.600.000	5.664.000	2.832.000	21.095.067	843.803	421.901	0	0	0	8.750.000	350.000	175.000	5.000.000	200.000	100.000	171.445.067	5.000.000	176.445.067	7.057.803	3.528.901	
9	1.800.000.000	12.000.000	4.000.000	90.793.200	605.288	201.763	0	0	0	0	0	0	36.000.000	240.000	80.000	1.890.793.200	36.000.000	1.926.793.200	12.845.288	4.281.763	
10	14.123.077	470.769	706.154	1.595.486	53.183	79.774	0	0	0	1.000.000	33.333	50.000	0	0	0	16.718.563	0	16.718.563	557.285	835.928	
12	1.700.000.000	5.000.000	2.000.000	255.303.000	770.094	310.758	16.600.000	57.600	24.283	0	0	0	697.500.000	2.125.000	860.417	1.971.903.000	697.500.000	2.669.403.000	7.952.694	3.195.458	
13	372.150.000	10.632.857	3.544.286	26.018.100	743.374	247.791	0	0	0	7.800.000	222.857	74.286	25.200.000	720.000	240.000	405.968.100	25.200.000	431.168.100	12.319.089	4.106.363	
Group 2:																					
7	66.000.000	2.440.000	1.220.000	22.354.400	894.176	447.088	0	0	0	1.000.000	40.000	20.000	20.000.000	800.000	400.000	89.354.400	20.000.000	109.354.400	4.374.176	2.187.088	
8	289.800.000	14.617.500	3.177.500	95.950.000	5.084.528	970.435	221.621.400	18.468.450	3.078.075	21.000.000	1.000.000	250.000	10.800.000	1.000.000	133.333	622.971.400	10.800.000	633.771.400	30.436.253	6.070.306	
Group 3:																					
1	45.240.000	2.262.000	754.000	28.560.000	1.428.000	476.000	18.785.100	939.255	313.085	0	0	0	0	0	0	92.585.100	0	92.585.100	4.629.255	1.543.085	
6	156.000.000	1.040.000	520.000	114.000.000	760.000	380.001	0	0	0	0	0	0	112.500.000	750.000	375.000	270.000.000	112.500.000	382.500.000	2.550.000	1.275.000	
14	554.625.000	6.162.500	2.465.000	33.668.167	374.091	149.636	6.000.000	66.667	26.667	0	0	0	17.700.000	196.667	78.667	594.293166,7	17700000	611.993.167	6.799.924	2.719.970	
Group 4:																					
2	29.100.000	1.940.000	970.000	22.013.333	1.467.556	733.778	66.666.667	4.444.444	2.222.222	11.200.000	746.667	373.333	7.800.000	520.000	260.000	136.780.000	7.800.000	144.580.000	9.638.667	4.819.333	
3	53.872.000	1.924.000	962.000	412.156.400	14.719.871	7.359.936	0	0	0	0	0	0	16.800.000	600.000	300.000	466.028.400	16.800.000	482.828.400	17.243.871	8.621.936	
5	377.325.000	5.805.000	2.902.500	141.500.178	2.240.419	1.120.210	0	0	0	46.350.000	705.000	352.500	0	0	0	554.825.178	0	554.825.178	8.750.419	4.202.710	
11	124.800.000	6.240.000	2.080.000	13.781.250	689.063	229.688	42.000.000	2.100.000	700.000	20.000.000	1.000.000	333.333	22.000.000	1.100.000	366.667	200.581.250	22.000.000	222.581.250	11.129.063	3.709.688	

Sum of quantifiable benefits					
No. of company	Benefits through interns productive work per internship	Recruitment benefits	Other quantifiable benefits per internship	Total benefits per internship	Total benefit per month per trainee
Group 1:					
4	241.570.000	9.317.700	0	250.887.700	5.017.754
9	1.890.000.000	0	0	1.890.000.000	4.200.000
10	30.786.500	0	0	30.786.500	1.539.325
12	3.579.916.667	2.857.143	0	3.582.773.810	3.980.860
13	449.456.000	0	0	449.456.000	4.280.533
Group 2:					
7	94.033.333	0	5.000.000	99.033.333	1.980.667
8	613.519.500	45.000.000	0	658.519.500	7.839.518
Group 3:					
1	294.000.000	0	0	294.000.000	4.900.000
6	1.421.280.000	30.000.000	0	1.451.280.000	4.837.600
14	1.210.545.000	94.901.000	0	1.305.446.000	5.801.982
Group 4:					
2	134.820.000	8.437.500	300.000	143.557.500	4.785.250
3	442.713.600	22.352.500	0	465.066.100	8.304.752
5	742.153.967	18.621.200	0	760.775.167	7.607.752
11	252.000.000	78.500.000	0	330.500.000	5.508.333

Total costs and quantifiable benefits per year						
No. of company	Total costs per internship programme	Total costs per trainee per month	Total quantifiable benefits per internship programme	Total quantifiable benefits per trainee per month	Result per internship programme	Result per trainee per month
Group 1:						
4	176.445.067	3.528.901	250.887.700	5.017.754	74.442.633	1.488.853
9	1.926.793.200	4.281.763	1.890.000.000	4.200.000	-36.793.200	-81.763
10	16.718.563	835.928	30.786.500	1.539.325	14.067.937	703.397
12	2.669.403.000	3.195.458	3.582.773.810	3.980.860	913.370.810	785.402
13	431.168.100	4.106.363	449.456.000	4.280.533	18.287.900	174.170
Group 2:						
7	109.354.400	2.187.088	99.033.333	1.980.667	-10.321.067	-206.421
8	633.771.400	6.070.306	658.519.500	6.968.460	24.748.100	898.154
Group 3:						
1	92.585.100	1.543.085	294.000.000	4.900.000	201.414.900	3.356.915
6	382.500.000	1.275.000	1.451.280.000	4.837.600	1.068.780.000	3.562.600
14	611.993.167	2.719.970	1.305.446.000	5.801.982	693.452.833	3.082.013
Group 4:						
2	144.580.000	4.819.333	143.557.500	4.785.250	-1.022.500	-34.083
3	482.828.400	8.621.936	465.066.100	8.304.752	-17.762.300	-317.184
5	554.825.178	4.202.710	760.775.167	5.852.117	205.949.989	1.649.407
11	222.581.250	3.709.688	330.500.000	5.508.333	107.918.750	1.798.646

ANNEX 3:

QUESTIONNAIRE OF THE COST – BENEFIT ANALYSIS

Date: / / /2015 [dd/mm/yyyy]Questionnaire No.

Name of interviewer: _____

Cost-Benefit-Analysis Questionnaire

In this survey *costs and benefits of internship programmes* will be analysed. The survey focuses on the two occupations *metal cutting* and *industrial electrics*. Your company has been selected because it runs internship programmes in at least one of these occupations. The first two parts of the questionnaire refer to the general situation in your company esp. the employment situation (questions 1 – 16). The parts three and four (questions 17 – 28) analyse the costs and benefits of the internship programmes we want to analyse – so they refer to the interns trained in the occupation _____. Name of occupation _____.

All information provided will be kept confidential and not used for any other purposes.

Special thanks for your cooperation!

All information provided will be kept confidential and not used for any other purposes.

Special thanks for your cooperation!

I – General information

1. Contact data:

Enterprise name:	_____		
Town:	_____	Street, No.:	_____
Province:	_____	Year of establishment:	_____
Name of interviewee(s):	_____		
Position(s) of interviewee (s):	_____		
eMail:	_____	Phone:	_____

2. Type of ownership (marked "X" in the box)

- | | |
|---|--|
| ☐ State owned | ☐ State Ltd owned |
| ☐ Private owned | ☐ Joint venture |
| ☐ Private Ltd owned, State Ltd has capital $\leq 50\%$ | ☐ State Ltd with state capital $> 50\%$ |
| ☐ Joint Stock Company Ltd | ☐ Joint venture with 100% foreign capital |

3. Is this site a subsidiary of a corporate group? ☐ Yes ☐ No (skip question 9)

4. To which branch does the enterprise belong?

- | | | |
|---|--|--|
| ☐ Agriculture, forestry, fishery | ☐ Trade | ☐ Construction |
| ☐ Industry production | ☐ Transport | ☐ Education/ training |
| ☐ Services (hotel, restaurant, bank ...) | ☐ State office (ministry, province committee,...) | |
| ☐ Others, please specify: _____ | | |

5. What main products/services does the company produce/provide?

6. Which market does the enterprise's business cover?

- ☐ National market ☐ Export market ☐ Both

7. What kind of training activity does your enterprise run?

- ☐ Internship programme ☐ Other _____

II – Employees and training (stated figures should refer to the average value for the years 2014)

8. How many employees are employed in the whole enterprise (all employed staff: full time, part time, etc.)?

____ employees

9. How many employees are employed in this subsidiary (all employed staff: full time, part time, etc.)?

____ employees

☐ Estimation: _____

10. What are the occupations with the highest number of employees in your company?

Occupation 1: _____ Occupation 2: _____

Occupation 3: _____ Occupation 4: _____

11. Which occupations are most demanded in the next 12 months in your company?

Occupation 1: _____ Occupation 2: _____

Occupation 3: _____ Occupation 4: _____

12. How many interns get trained in your company in 2014 in total?

____ interns (belong to the enterprise)

13. How many interns get trained in your company in 2014 per occupation and how long do they do internship programmes in your company?

Group 1, occupation:	____	interns	____ weeks
Group 2, occupation:	____	interns	____ weeks
Group 3, occupation:	____	interns	____ weeks
Group 4, occupation:	____	interns	____ weeks
Group 5, occupation:	____	interns	____ weeks

14. What kind of training activities do you carry out for internships?

☐ Training on the job in the production line, ☐ provide lectures

☐ others: _____

15. Does your company employ staff who is explicitly hired for training (employed training staff)?

☐ Yes ☐ no If yes, how many in total: _____

16. If your company employs staff who is explicitly training staff: How many training staff per position and occupation have you hired?

Management staff:	____
Administrative (incl. supportive) staff:	____
Training staff (e.g. instructors), for occupation _____	____
Training staff (e.g. instructors), for occupation _____	____
Training staff (e.g. instructors), for occupation _____	____

III – Costs (stated figures should refer to the average value for the years 2014)**17. Allowance costs per group of interns per month** (please state the exact figures in VND)

No	Intern (person)/intern group (number of persons) in the analysed occupation	Allowance/salary per month	Social insurance costs per month	Other payments per month	One-time cost incurred
1					
2					
3					
4					
5					

18. Salary costs per training staff per month

	Analysed No groups (in the analysed occupation)	Position of training staff	No of training staff	Salary (payment) per month in VND	Personal income tax	Social insurance costs per month in VND	Other allowances per month in VND	Percentage of time spent for training
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

20. Training materials (e.g. consumables, textbooks etc.) per year (2014)

Unit	Type of training material used for the analysed groups of trainees in the analysed occupation (in case: share for analysed occupation)	Quantity of items	Costs per item of the analysed occupation in VND
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

21. Other training costs per year (2014) (all cost items in the table refer to the total number of interns trained in the analysed occupation)

Cost item for trainees in the analysed occupation (all analysed groups of interns)	Cost per year in VND
Total transportation costs	
Total accommodation costs	
Total costs incurred by intern recruitment	
Total costs incurred by external (further) training of the trainers	
Total accreditation and certification costs and exam fees	
Other insurance costs (which are not covered by question 17)	
Others: _____	
Others: _____	

IV – Benefits**22. Monthly benefit through interns productive work**

Analysed group of interns	Assumed percentage of substituted productivity per intern	Average salary of employed personnel per month who is substituted by the trainee
1		
2		
3		
4		
5		

23. Recruitment strategy (referring to the sum of trainees of the analysed occupation)

23.1 What kind of recruitment is the most important/the most applied in the recruitment process of the enterprise?	1 very important	2 important	3 average	4 not important	5 not at all
Recruitment of technical trained employees at the labour market by fairs, job centers, HR department)	☐	☐	☐	☐	☐
Recruitment based on personal relations	☐	☐	☐	☐	☐
Recruitment based on relations/partnership to TVET institutions	☐	☐	☐	☐	☐
Internal retraining of not technical trained employees hired at the external labour market	☐	☐	☐	☐	☐
Recruitment of selected interns	☐	☐	☐	☐	☐
Others:	☐	☐	☐	☐	☐

23.2 How many interns did you retain per year in your company in the last 4 years?

	2011	2012	2013	2014	Total
Total number of interns					
Number of retained interns					
Number of retained interns who did not fulfill the expectations of the company					

23.3 How many of the newly recruited employees turn out to not fulfill the companies' expectations and have to be fired by the company averagely in the last 4 years?

of newly hired employees

24. Further quantifiable recruitment benefits (if not quantifiable please jump to question No. 25)

Quantifiable benefits referring to the sum of trainees of the analysed occupation	Total saved costs per year (estimated average for the last 4 years)
Employment after training: Saved costs incurred by external recruitment (fairs, campaigns, effort of HR department)	
Employment after training: Saved cost for re-training of new staff (salary of new employee, cost of supervisors)	
Others:	

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