

# WORK-BASED LEARNING IN B&H



## *Work-Based Learning and Cooperation between Schools and Companies in Bosnia and Herzegovina*

*Company Survey Findings and Resulting Courses  
of Action/Reform Options*

*Kurt Schmid / Benjamin Gruber / Vienna, May 2018*



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# Impressum

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### Work-Based Learning and Cooperation between Schools and Companies in Bosnia and Herzegovina

ibw Research Report No. 190, Vienna 2018.

Kurt Schmid, Benjamin Gruber

ISBN 978-3-903210-18-9

#### Media owner and publisher

ibw

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(CEO: Thomas Mayr MA)

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**www.ibw.at**

CAR No. 863473670

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This publication was supported by:





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# 1

## Executive Summary

Initial vocational education in Bosnia and Herzegovina takes place exclusively in a school environment – at various vocational schools. Students do have the possibility to try practical training at companies and/or school workshops and acquire skills. However, when it comes to the scope, depth and quality, these options – and in particular work-based learning – are frequently marginal and insufficient to achieve meaningful learning outcomes. There are multiple reasons for limited results, especially in case of work-based learning. A series of reasons certainly lies in the basic possibilities and the regulatory framework that companies have at their disposal in order to offer and implement work-based learning. In addition to this, companies have only limited experiences in relation to the manner in which such a learning format should be implemented in terms of quality and what benefits a company has/can have.

This raises the question as to how individual formats of work-based learning (summer internship, alternance) can be improved in order for a larger number of companies to participate in them. In addition to this, there are interesting additional forms of cooperation between companies and schools. In order to obtain relevant information, an online company survey was conducted in the last quarter of 2017 (Austrian companies operating in Bosnia and Herzegovina and Bosnian and Herzegovinian companies).<sup>1</sup>

### *The key company survey findings are as follows:*

The cooperation between companies and schools takes place in different formats – mostly one or more of the following formats are implemented: **company visits** (in order to make the students acquainted and inform them about the world of work/business world), **alternance** (1-3 days per week of work-based learning at a company and

obligatory practical training), **exercises, final and seminar papers** related to the company, as well as voluntary summer internships, which take place somewhat less frequently. Other forms of partnerships, such as infrastructure/money donations, presence of company representatives in school bodies, part-time employment of teachers, are less frequent.

It should be considered that the **satisfaction is frequently low** specifically in case of the experience-based cooperation format, or work-based format, which is of great importance for the vocational education system (internship and alternance): only half of the companies are very satisfied or mostly satisfied with it.

Three out of four companies have had no cooperation with schools so far, but are interested in it, primarily in work-based formats (summer internship and alternance) and in career guidance activities (company visits). A work-based learning potential therefore exists and can be increased.

Companies that are already cooperating with schools consistently assess challenges related with this issue as much smaller than companies that have no experience with this cooperation format. However, all companies stress that the greatest challenge is a **lack of support by public institutions**. A lack of sustainability of cooperation and **excessively complex/bureaucratic regulations** are also stressed as particular obstacles.

It is obviously necessary to overcome great obstacles in order to encourage companies that have had no cooperation with schools so far to enter into a specific engagement. However, on a positive note, companies expect the least difficulties regarding their human resources/financial expenditures and the inclusion of students in their production process (e.g. alternance or practical training).

<sup>1</sup>The survey was available in two language versions (with identical contents), a German and Bosnian language version. Around 100 companies participated in the survey. The survey is not representative in strict statistical terms – the sample contains a disproportionately high number of companies from the area of Sarajevo, Austrian companies (40% in comparison to 60% Bosnian and Herzegovinian companies), mostly medium and large companies, as well as a disproportionately high number of companies from the production sector. In spite of this, very similar answers were given to most questions (so that the survey should mostly accurately reflect the experiences and interests of companies related to “practical training at companies” and “cooperation with vocational schools” in general.

Components of work-based initial vocational education in Bosnia and Herzegovina depend to a much larger degree on the **social interests of companies** to provide support to young persons than on their **own considerations related to investments/benefits** for the company. This is also demonstrated by the answers to questions related to reasons for companies to provide training opportunities.

The **reasons why certain companies have not yet had any students** in the framework of alternance are also interesting. It is obvious that it is of crucial importance that...

... these companies do not really recognise the added value of company-based training.

... that there is too little information about legal and organisational framework conditions, or that the bureaucratic burden is too big/seems too big.

... that vocational education needed/requested by companies is not sufficiently available, that curricula are "obsolete" and/or there are professions that would be interesting for companies, but there are no school curricula and vocational education programmes.

This points to a **great need for systemic reforms** from the perspective of companies. Companies have very frequently and firmly mentioned reform programmes: more opportunities for companies to participate in decision making and support in the selection of students for practical training, better adapted educational content and qualification needs of companies, a longer period of training at companies and flexibility in terms of time schedule of trainings, simplified and clearer legal provisions (in particular in relation to occupational safety and insurance-related aspects, division of roles and responsibilities between the school and company where the training takes place, and, last but not least, better support of public institutions for companies providing training).

The reform programme is obviously comprehensive and challenging. For this reason, only marginal adaptations of the existing systematic environment will not be sufficient for a significantly increased participation of companies in the initial vocational education than this has been the case so far – especially when it comes to taking over specific educational components. This is also shown by the final section of questions about the **medium-term/long-term reform option of "apprentice training"** (similarly to the one in Austria, Germany or Switzerland), in relation to which companies have

a very positive attitude.

Based on such company survey findings and several discussions during round tables organised on site with stakeholders from Bosnia and Herzegovina (schools, companies, chambers, ministries), it is possible to define certain key **recommendations for action** for the purpose of improving framework conditions for work-based learning:

- Explanation of work-based formats regarding their goals, structure, as well as roles and responsibilities of schools and companies providing training
- Defining obligatory minimum standards/criteria for companies providing training
- Designing company training components in compliance with legitimate entrepreneurial cost-benefit analyses, needs for flexibility and education quality assurance for students
- Establishment of support structures by public institutions and instruments for companies for the purpose of promoting their competences for high-quality implementation of work-based learning
- Building/expanding of school competences and brushing up the expert knowledge of teachers regarding theoretical and practical learning
- Definition of framework conditions for cooperation formats between schools and companies, e.g. contract templates for practical training and donations
- Inclusion of institutional actors such as representatives of employers in the process of vocational education management in Bosnia and Herzegovina and ensuring adequate expert knowledge on vocational education at these institutions
- Last, but not least, criteria, regulations and administrative procedures should be standardised throughout the country, if possible, in order to guarantee the transparency of the access to and quality of work-based learning for students and companies.

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<sup>2</sup> In countries with established systems of dual education/apprenticeship, such as Austria, Germany or Switzerland, the interests of companies play a key role in their engagement, as opposed to those in Bosnia and Herzegovina. Companies train young qualified personnel (in the form of apprenticeship) primarily in order to ensure the next generation of their own qualified personnel.

# 2

## Initial situation and project goals

The present report contains the findings of the online company survey regarding their experiences related to the "cooperation with vocational schools" and "practical training at companies" (as voluntary summer internship and/or alternance). The survey also explicitly included reform questions/aspects related to the vocational education system in Bosnia and Herzegovina that are necessary in the opinion of entrepreneurs, in particular those that would be necessary for an increased participation of companies in initial vocational education (work-based learning).

The issue of an increased participation of companies in the initial vocational education can be analysed only in the context of the existing system for the acquisition of professional qualifications in Bosnia and Herzegovina: The initial vocational education namely currently takes place exclusively and fully at schools (various vocational schools).<sup>3</sup> Although students of these schools have the possibility to participate in practical training at companies and/or school workshops, the scope, depth and quality of such options (especially of work-based learning) are frequently marginal and insufficient for achieving meaningful learning outcomes. In addition to this, such practices or alternating formats (alternance) are actually foreseen only in case of three-year vocational schools, and not in case of four-year technical schools.<sup>4</sup>

Based on the findings of the **company survey** and **round table discussions held with stakeholders from Bosnia and Herzegovina** (schools, companies, chambers and ministries), recommendations on courses of action were made in fall/winter of 2017, which should ensure a higher engagement of companies, improved cooperation between companies and schools and better quality of vocational education in Bosnia and Herzegovina.

The following terms were used for work-based learning:

**Practical training** throughout the year: These are those parts of obligatory practical training that takes place at companies and are foreseen in the curriculum.

**Voluntary summer internship:** The curriculum does not contain any provisions in this respect. Internships take place during summer holidays, and students search for internship positions at their own initiative. Schools do not have a supervisory function.

<sup>3</sup> There is a common basic structure of the educational system, irrespective of the political and administrative division (education is mostly the competence of the entities, Republika Srpska (RS) and Federation of Bosnia and Herzegovina (FB&H) – the latter is divided into ten cantons, which have their competences in culture and education) throughout the country:

- Eight-year or nine-year primary education
- Ensuing secondary education with...
  - ... four-year general education schools
  - ... three-year vocational schools
  - ... four-year technical secondary schools.

In addition to this, there are numerous one-year or two-year vocational education programmes. Education is obligatory up to the ninth grade. Four-year technical schools give access to higher education institutions, but three-year vocational schools also grant such access, given the fact that the access to higher education institutions is primarily regulated through an entrance exam. A legal regulation that is of particular relevance from the reform perspective is the so-called "30% autonomy clause/regulation": The school management can independently decide on 30% of teaching content/schedule as part of the school autonomy. Any wishes for changes that exceed this framework must be approved by pedagogical institutes. In case of their approval, they are applicable to the whole region. As a result, schools already have a general possibility to autonomously decide on an important set of teaching content and time. This opens up space for expanding and deepening the cooperation with companies, such as more extensive practical trainings at companies. Such a legal background, among other things, explains/makes possible heterogeneous practices at companies in terms of practical training duration and content.

<sup>4</sup> In case of alternance, learning alternates between the school and company during practical training (usually 1/2/3 days per week at the company; and the number of days increases at higher grades). The [general] scope and content of professional and practical training are defined by the curriculum and they are obligatory. The curriculum provides for the possibility of conducting part of the education at companies in the form of work-based learning ("practical training at companies"). On the one hand, the scope and content of the training conducted at a specific company in the form of practical training ("practical training at companies") depends on the availability of positions and possibilities for training at companies. However, on the other hand they also depend on the interest of the school itself, which decides to what extent practical training should even take place outside its workshops.

# 3

## Survey design, participation, representativeness



The **survey** was conducted **online** in the period from mid-October to mid-December 2017. The Austrian Foreign Trade Chamber, Advantage Austria (Regional Office in Sarajevo) sent an e-mail to Austrian companies operating in Bosnia and Herzegovina. The Foreign Trade Chamber of Bosnia and Herzegovina assumed the task of contacting Bosnian and Herzegovinian companies. Two language versions were available, a German and a Bosnian one (which were identical in terms of content).

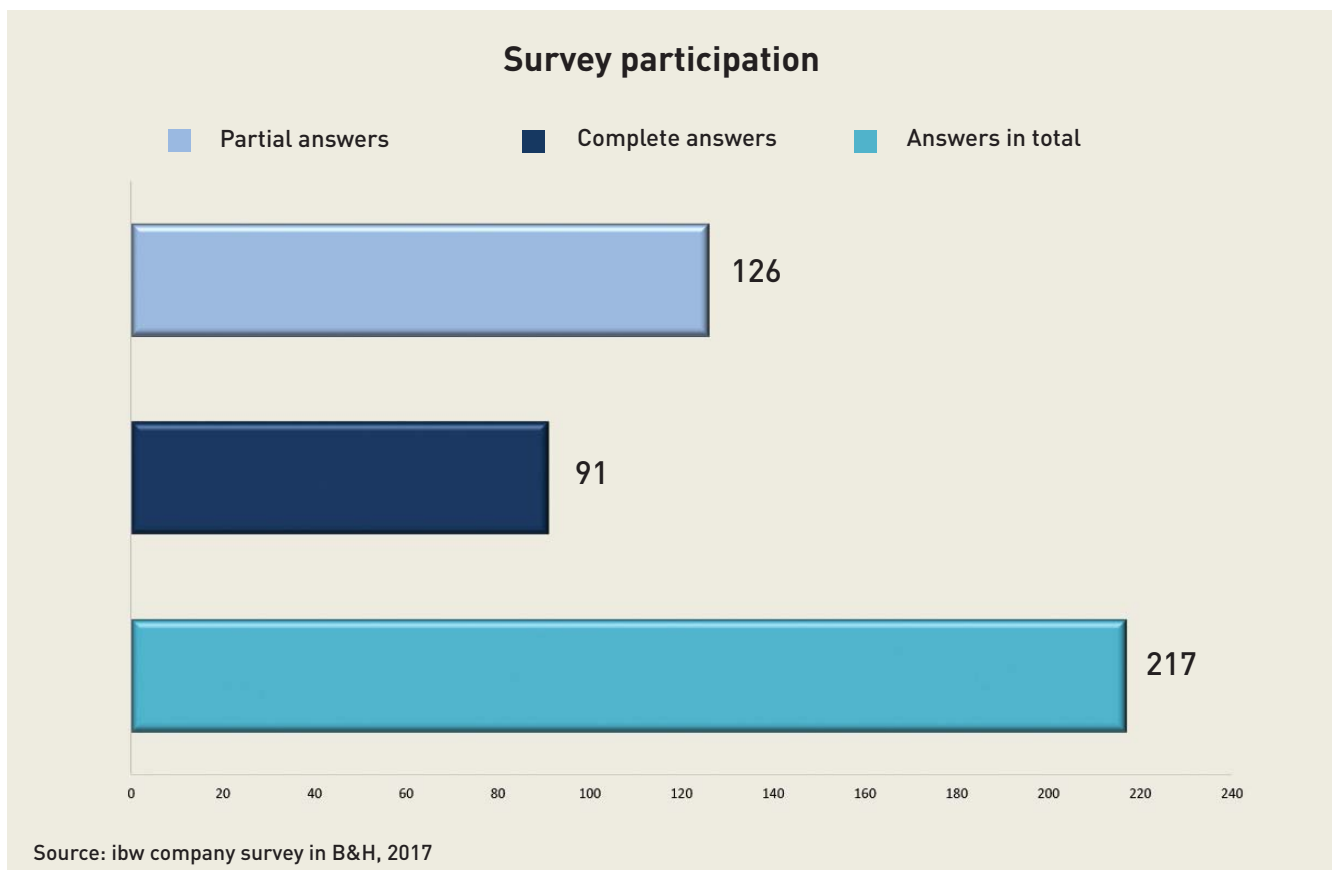
### Survey participation:

Following several e-mails that were sent as reminders to fill out the survey, 217 companies participated in the survey, and 91 of them filled in the whole questionnaire, so that it was possible to analyse their statements (please see chart 1).

### *Characteristics of companies that participated in the survey and survey representativeness*

A more detailed analysis of characteristics of companies that participated in the survey (please see chart 2) indicates that there was a great variety in terms of region, company size and activity/business sector<sup>5</sup>, however, **the survey is not representative** in strictly statistical terms. The sample contains a disproportionately high number of companies from the area of Sarajevo (57%), Austrian companies (40% versus 60% of Bosnian and Herzegovinian companies), mostly medium-sized and large companies, as well as around 40% of companies from the production industry.

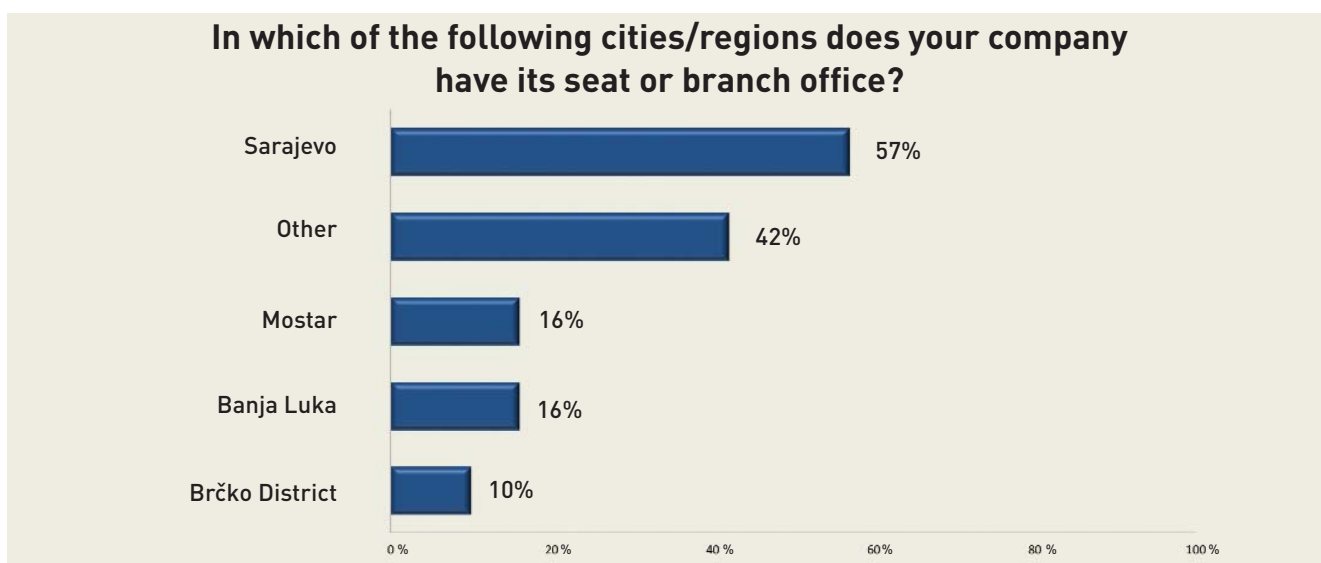
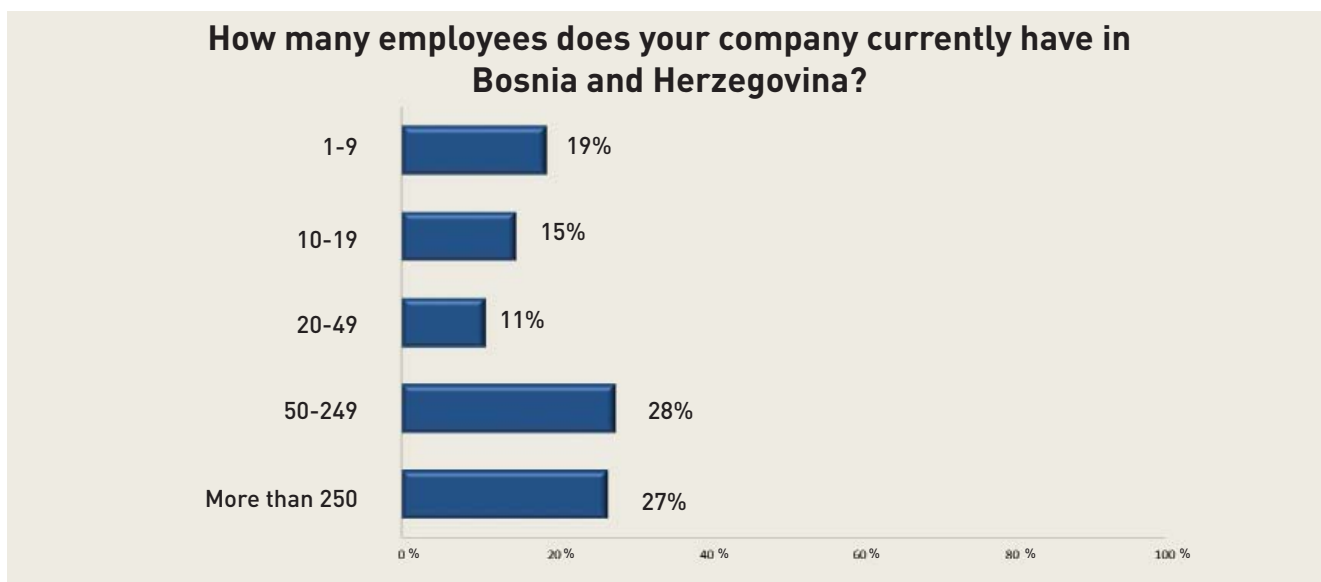
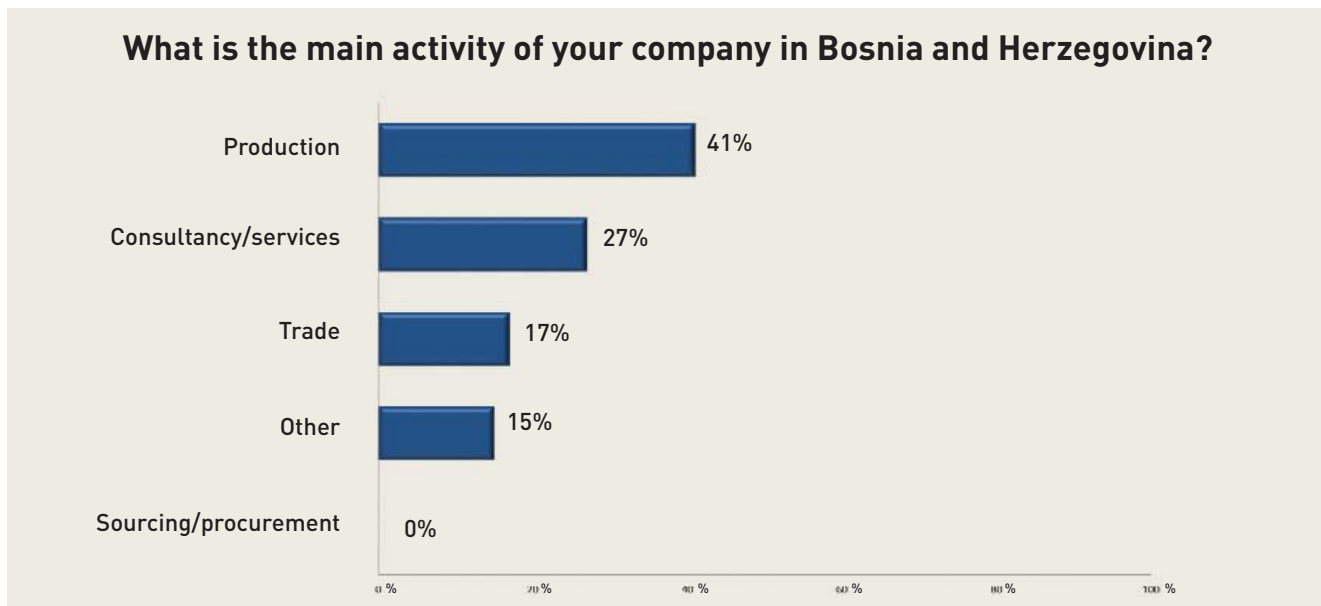
*Chart 1: Survey participation*



<sup>5</sup> The sector structure is given in chart 3 in attachment I.



Chart 2: Characteristics of the net sample  
(complete answers)



Source: ibw company survey in B&H, 2017  
 Note: Only those companies that completed the whole questionnaire (n=91)

However, given the fact that the **answers of companies were mostly very homogenous**, the mentioned distortions are not really problematic in terms of their content, i.e. irrespective of company ownership (Austrian versus Bosnian and Herzegovinian companies), their regional position<sup>6</sup>, their size<sup>7</sup>, their experience in work-based learning so far, as well as their cooperation with vocational schools, companies provided very similar answers to most of the questions.

Survey findings would therefore have been only slightly different had there been a representative sample. The statements can therefore be assessed

as very valid, and it can be said that the experiences and interests of companies regarding company training and cooperation with vocational schools in general are well reflected in the survey.

Different perspectives are present only in those cases when distinction is made between companies that already have experiences in cooperation and companies that have not had any such experiences, and in particular in relation to work-based learning (in the form of an internship or alternance). As could have been expected, in case of reasons for providing training and perceived and expected challenges, there were great differences.

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<sup>6</sup>The political competence for (vocational) education in Bosnia and Herzegovina is largely decentralised: The two entities, Republika Srpska (RS) and Federation of Bosnia and Herzegovina (FB&H) are thus largely competent for culture and education – the latter is divided into ten cantons, and every canton is competent for its own sector of culture and education. In addition to this, there is also Brčko District, which has its own competences. A typical fact of Bosnia and Herzegovina, but also of most countries of Southeast Europe or successor states of Yugoslavia, is a lack of apprentice training similar to the Austrian, German or Swiss model. In the former Yugoslavia, there was a certain form of dual education: The three-year and four-year education programmes provided for obligatory practical training at companies. Such practical training had to frequently be offered by companies. During the war and the process of transformation, this obligation disappeared. On the other hand, companies practically fully withdrew from this form of cooperation in education. The acquisition of qualifications in vocational education therefore currently takes place exclusively in the school environment (at various vocational schools). The students of these schools have the possibility to do practical training at companies (internships and/or alternance) or school workshops. However, these options are present to a meaningful extent only in case of three-year vocational schools, but they do not exist in case of four-year technical schools.

<sup>7</sup>Only smaller companies have a somewhat higher tendency of agreeing with various sections of questions.

# 4

## Company survey findings



The fourth chapter presents the most important company survey findings. All subsequent analyses and statements are based on 91 questionnaires that have been fully completed.

### 4.1 Cooperation experience and satisfaction

At the beginning, companies were asked whether they have already had or whether they have cooperation with vocational schools and what kind of cooperation. When interpreting this chart, one should consider that the share values in terms of their size do not constitute reliable values. If more of those companies, which already have experience in cooperating with vocational schools, participated in the survey, then all of the stated shares in the chart would be too high, and in a contrary case, they would be too low. There are no official empirical findings regarding the form of cooperation between companies and vocational schools. It is therefore impossible to verify the values of shares resulting from this survey, and consequently also impossible to make statements about the real extent of cooperation based on the survey.

However, the **structure of these cooperation formats** should be well presented based on the survey. Chart 3 thus shows surprisingly wide-ranging cooperation positions and formats entered into by respondents and vocational schools.

Around 40% of companies almost equally often stated both individual days for company visits (such as open door days, career guidance days, company visits) and practical learning and acquisition of experience at companies in the form of alternating educational programmes or obligatory practical training at companies. Every third company also stated that students could do exercises, final and seminar papers related to the company.

Every fourth company has already had a student doing a voluntary internship. A similar number of companies have a regular exchange of opinions with teachers regarding developments in their profession and/or have entered into partnerships with

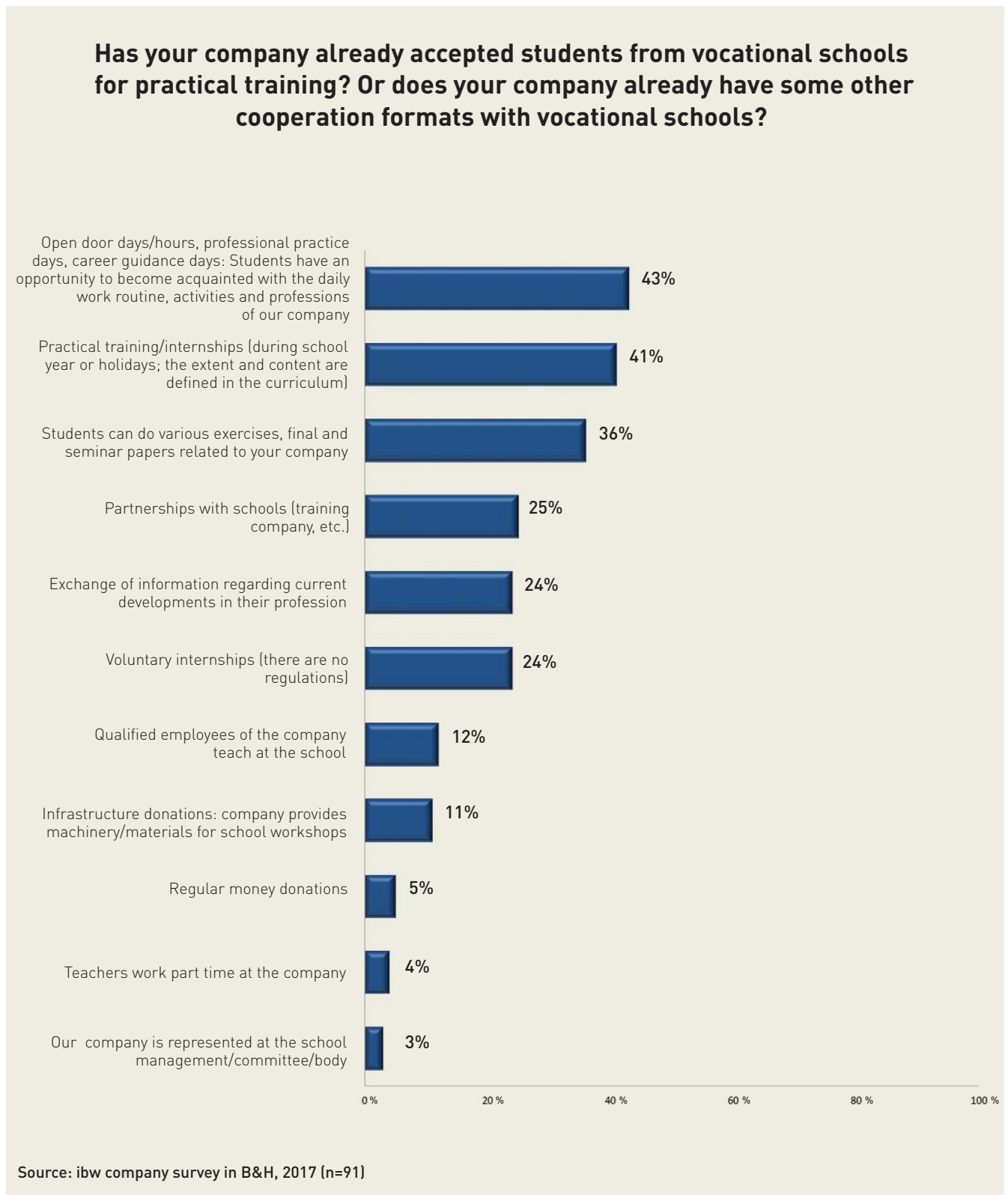
schools (e.g. training companies).

As opposed to this, other forms of partnerships are less present: infrastructure/money donations, expert personnel from companies teaching at schools, or teachers who work (part time) at companies, as well as company representatives/participation of companies at school bodies.

The sum of multiple statements of 230% points to the fact that numerous companies do not only have one form of cooperation with schools, but that they have several ("parallel") cooperation formats with schools. However, it is not possible to find specific concentrations, so that cooperation formats of a certain company probably do not depend only on its own preferences and possibilities, but also on the willingness of schools to enter into certain types of cooperation.

Chart 3: Cooperation experiences so far

Share of companies with experiences, multiple statements



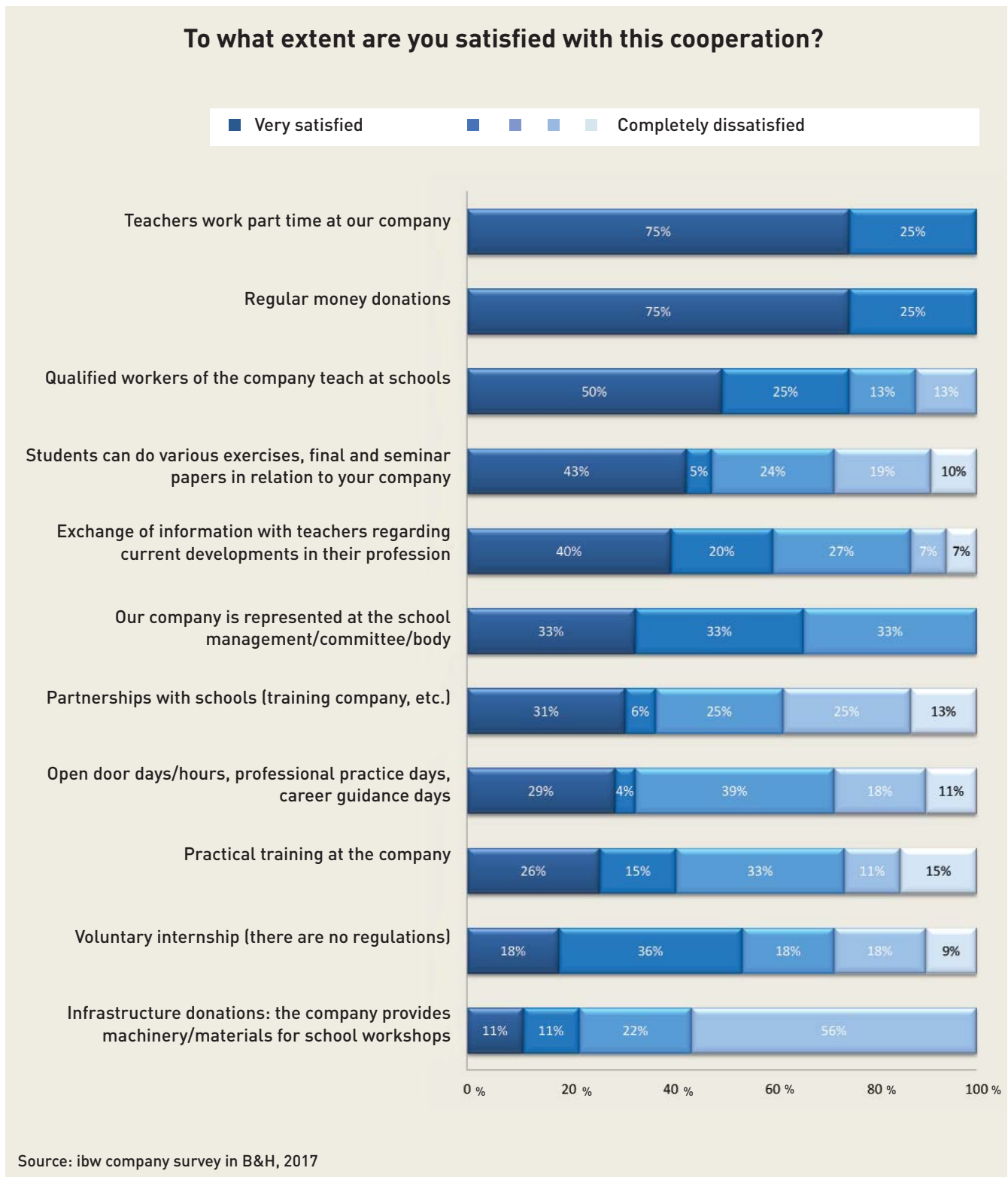
To what extent are companies **satisfied** with these cooperation formats? Companies could express their opinion on a scale from 1 to 5 (very satisfied to completely dissatisfied). However, the results are alarming (please see chart 4): Specifically,

those cooperation formats that ensure the acquisition of experience or work-based learning (internships/practical trainings at companies and alternance) that are crucial for vocational education have a low score in the comparison. Only

around half of the companies are very satisfied or mostly satisfied with them – however, many companies are satisfied only to a lesser extent or completely dissatisfied. We can only hope that this will have no negative consequences on the latter regarding their further engagement in cooperation. It is evident that the highest satisfaction was fre-

quently expressed in case of those cooperation formats that only few companies and schools engaged in, namely "cooperation for the purpose of learning/work" of teachers or qualified workers or relevant partners and money donations. It is also interesting that the satisfaction of those companies that made infrastructure donations to schools is relatively low.

**Chart 4: Cooperation satisfaction**



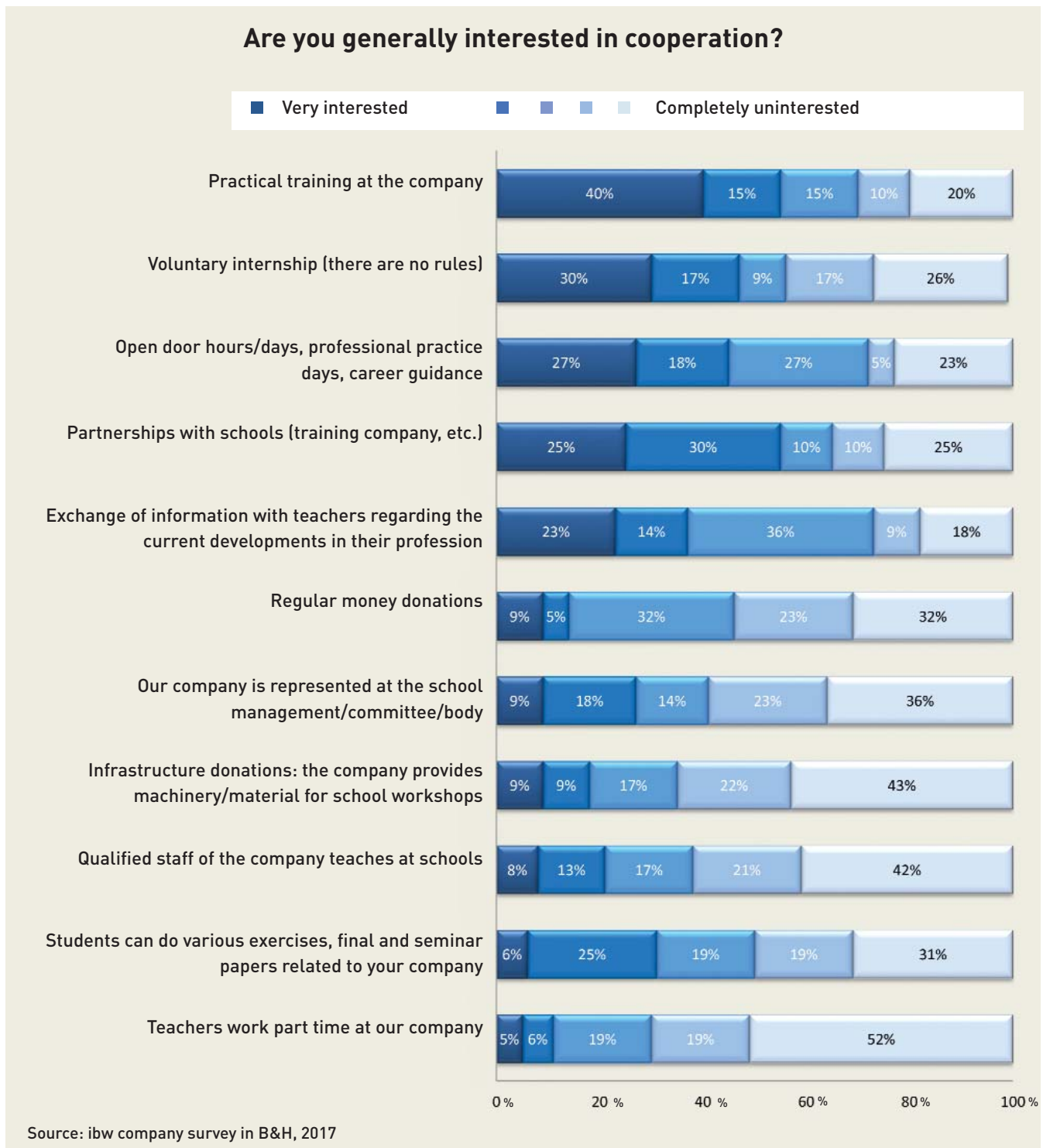
## 4.2 Interest in future cooperation formats with vocational schools

Companies were also asked whether they were generally interested in cooperation with vocational schools, if they did not have any such cooperation so far. A somewhat positive result (please see chart 5) is the fact that there is a great interest, especially in case of those cooperation formats that aim at the acquisition of ex-

perience or work-based learning (specialist/summer internship and alternance) as well as career guidance and open days for the purpose of learning about daily work routine at companies/working reality, which is of crucial importance for the vocational education system. Only one fourth of companies can even imagine a certain cooperation format. As opposed to this, as many as two thirds of respondents are interested in cooperation, although many of them obviously also have certain reservations.

Chart 5: Basic interest in cooperation

Only those companies that have not had any cooperation so far



It may therefore be assumed that there is generally a great potential when it comes to the participation of companies in Bosnia and Herzegovina in work-based learning. Further below, there is a section on improvements of framework conditions and potential further activities (information, support) needed for this.

There is generally a low interest in almost all other potential cooperation forms. That is noteworthy also because specifically these formats, as previously stated, are frequently related to the greatest satisfaction of companies applying them. This can also be interpreted in such a manner that more information and awareness raising activities in relation to potential benefits of such cooperation formats are needed.

What are then **challenges for companies** cooperating with schools? If we compare statements of companies that already have experiences in the cooperation with experiences of companies that have not cooperated with schools so far, there are pronounced differences between these two groups (please see chart 6).

In addition to this, companies that have already cooperated with schools consistently assess challenges as considerably lower than companies without such cooperation experiences.

Secondly, in case of both groups, it is obvious that companies consider the lack of support from public sector institutions to be the greatest challenge. In the opinion of many of them, the lack of sustainability of cooperation is also problematic, given the fact that it is largely based on the initiative and engagement of individuals. However, companies also complain about too complex/bureaucratic regulations.

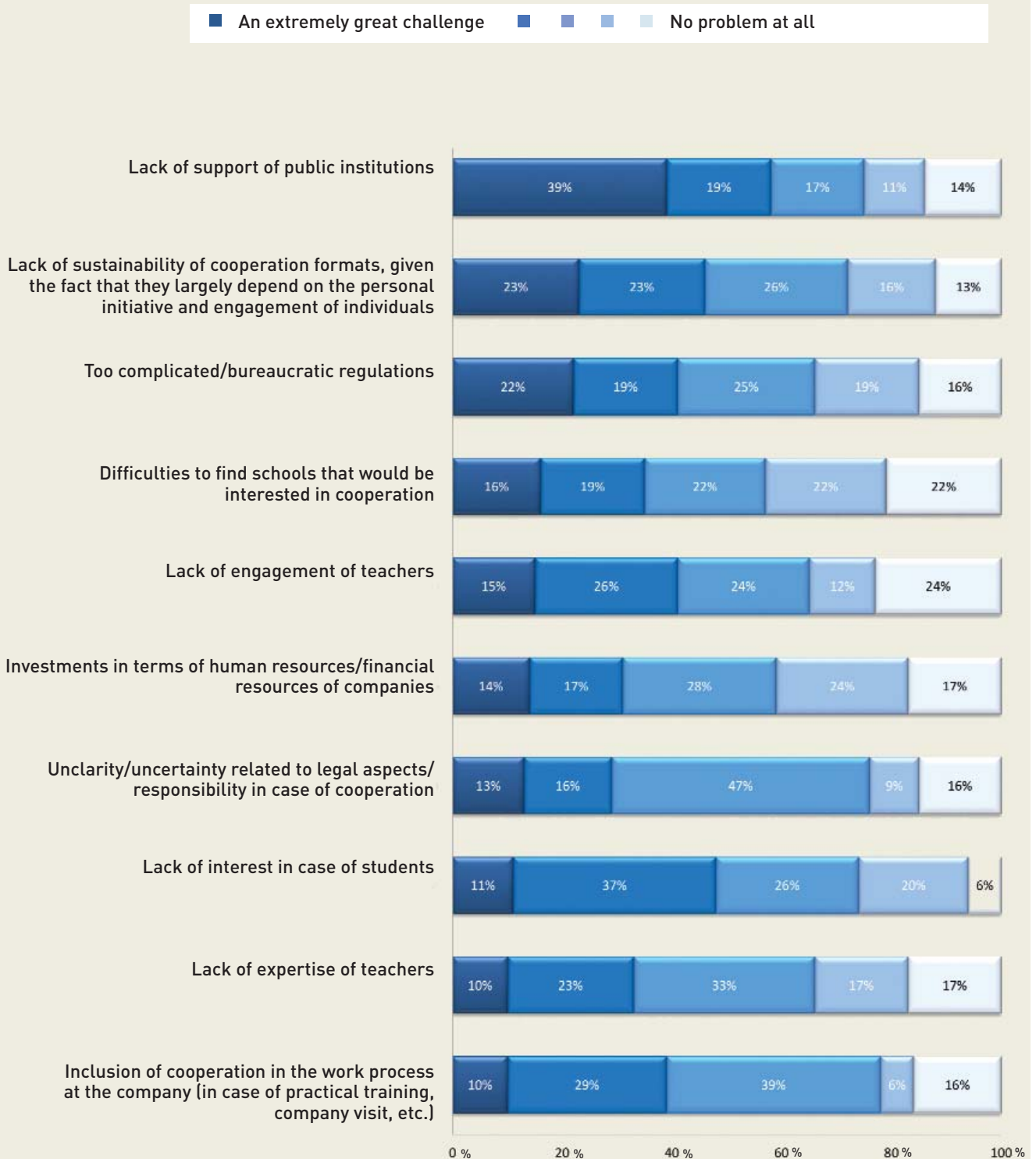
Companies without any experience in cooperation see considerable challenges related to almost all mentioned aspects. A positive thing is the fact they envision the least challenges in case of students' interest. They also do not expect too many difficulties for their companies in relation to human resources/financial resources that need to be invested and the inclusion in the production process at the company (e.g. alternance or practical training).

However, all other aspects were assessed as challenges. There are obviously great obstacles that must be overcome if these companies are to be motivated to engage in specific cooperation. Companies that are already cooperating with schools, might become pioneers/provide testimonials about their experiences, given the fact that they have an increasing trust when it comes to a realistic assessment of the situation from the perspective of the company.

Chart 6: Challenges related to the cooperation with schools from the perspective of companies

Companies **with** experience in cooperation

You stated that you have already cooperated with vocational schools. What are the greatest cooperation-related challenges based on your experience?



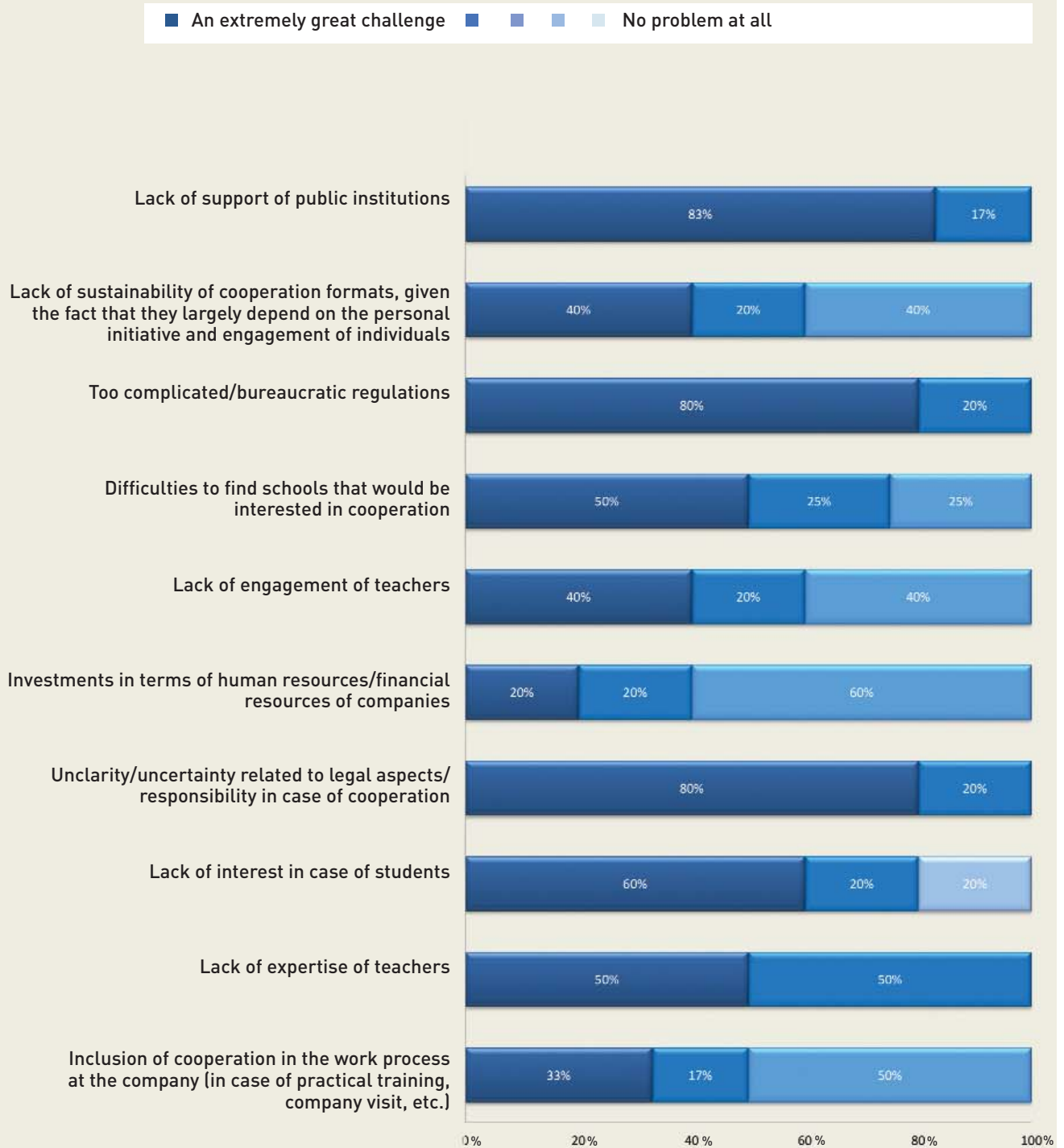
Source: ibw company survey in B&H, 2017

Note: For the purpose of easier comparison, the challenges for both charts were given in the same order [according to statements of companies with experience in cooperation]



## Companies *without* experience in cooperation

You stated that you were interested in cooperation with vocational schools. What are, in your opinion, the greatest challenges related to cooperation with vocational schools?



Source: ibw company survey in B&H, 2017

Note: For the purpose of easier comparison, the challenges for both charts were given in the same order (according to statements of companies with experience in cooperation)

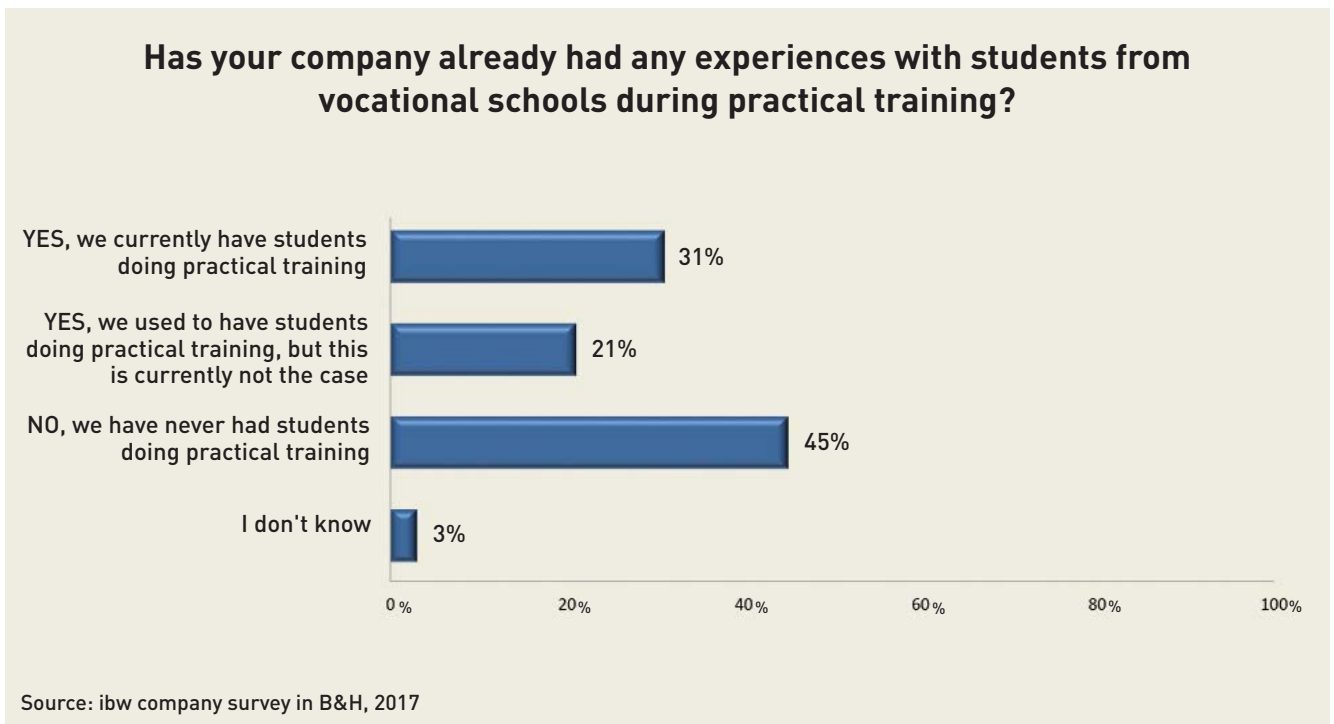
### 4.3 Experiences with students from vocational schools during practical training

After an overview of potential cooperation formats between companies and vocational schools and fundamental challenges in this field, the focus lies on two cooperation formats between companies and schools, which are probably the two most important formats for (dual) vocational education: alternance and acquisition of experience in practical training setting. It turned out that as many as half of the respondents had such experiences with students, whereas the other half of respondents has not yet had any such experiences (please see chart 7).

so (chart 8). The first reason is that "they consciously wanted to give young people a chance", which is the answer provided by 75% of companies (68% of them stated that they "fully agreed"! ). There are similarly high values in case of the answer that the reason is the wish to make young people acquainted with the world of work ("in order for interested young people to acquire their first work experiences", as well as "in order to enable them to gain an insight in the daily work routine and professions").

Reasons related to companies' own interest come only second: the wish to attract students to the company in order to meet their own need for qualified workers ("a decreased risk of hiring wrong candidates" as well as "a higher prominence of the company in the region").

Chart 7: Experiences with students during practical training



#### 4.3.1 Reasons for providing practical training

Companies that are currently providing practical training or that provided practical training before, answered the questions about their reasons to do

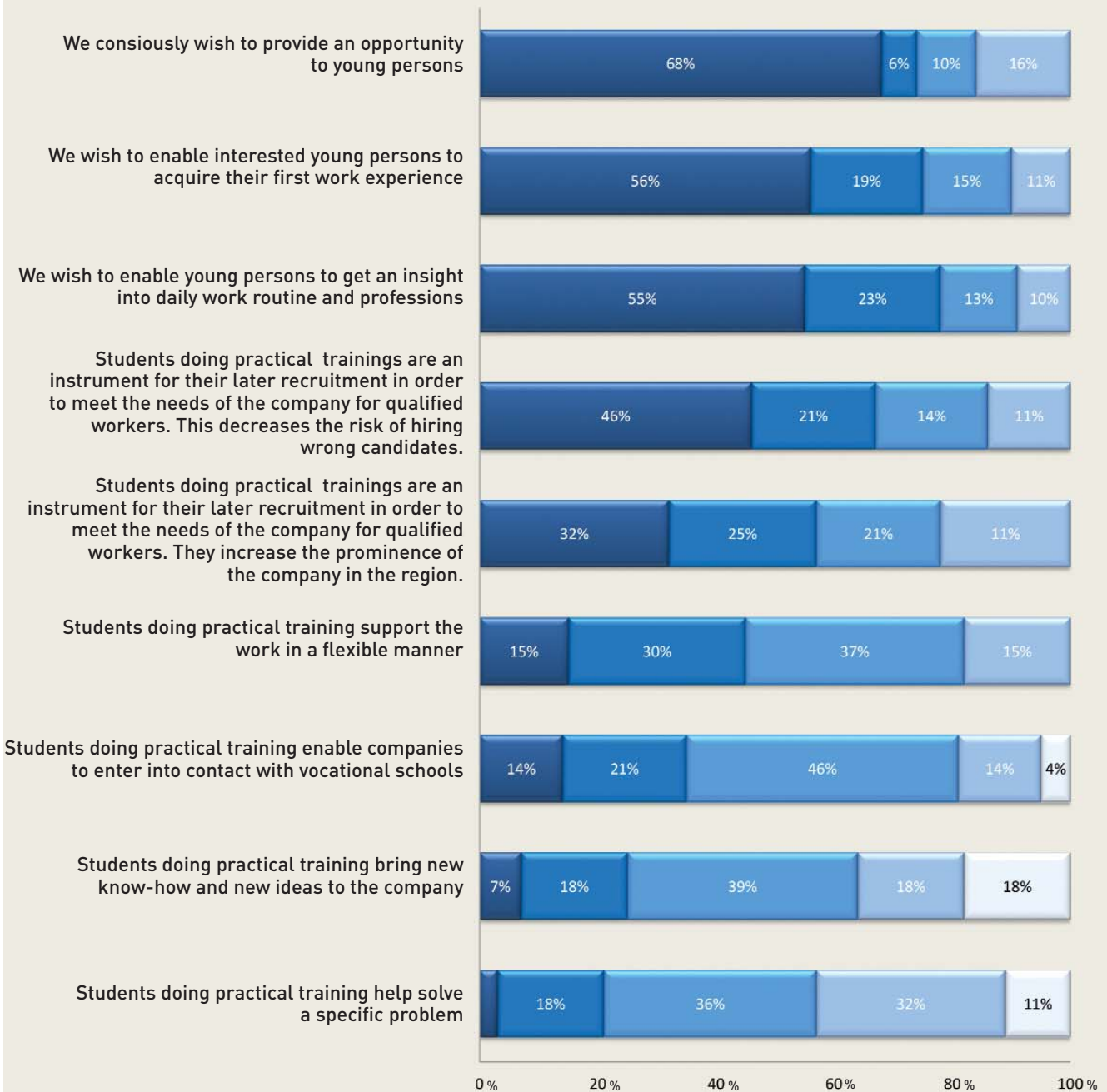
Only a small number of companies stated specific entrepreneurial reasons that are largely related to the specific work of students, such as flexible support in their work, impulses/new knowledge, or problem solving. The fact that 20-40% companies nevertheless agreed with these aspects to a somewhat less strong form is noteworthy.

Chart 8: Reasons for providing practical training positions

Only companies that have already had students doing practical training

**What is (was) your reason to provide practical training?**

■ I fully agree      ■ ■ ■ ■ I fully disagree



Source: ibw company survey in B&H, 2017

If the structure of these statements is compared to reasons stated by companies in countries such as Austria, Germany or Switzerland when they accept students for practical training, a great difference may be perceived: in these countries, the key reason for providing practical training is a company's own interest. They train young qualified workers (in the form of apprenticeship) primarily in order to ensure their own new qualified workers. Many companies also give young persons an insight in daily work routine and enable them to acquire work ex-

perience – however, that is not the primary goal of most companies.

Components of work-based initial vocational education in Bosnia and Herzegovina thus depend to a much larger extent on the social interest of companies to provide support to young persons than on their wish to invest/achieve benefits for the company. As a result, tighter quantitative limits of participation of the "economy" in initial vocational education are drawn.

### 4.3.2 Reasons why companies have not yet provided practical training

There are obviously numerous reasons that result in the fact that companies do not provide components of initial practical training at companies (whether internships or alternance) (please see chart 9).

It is obviously crucial that...

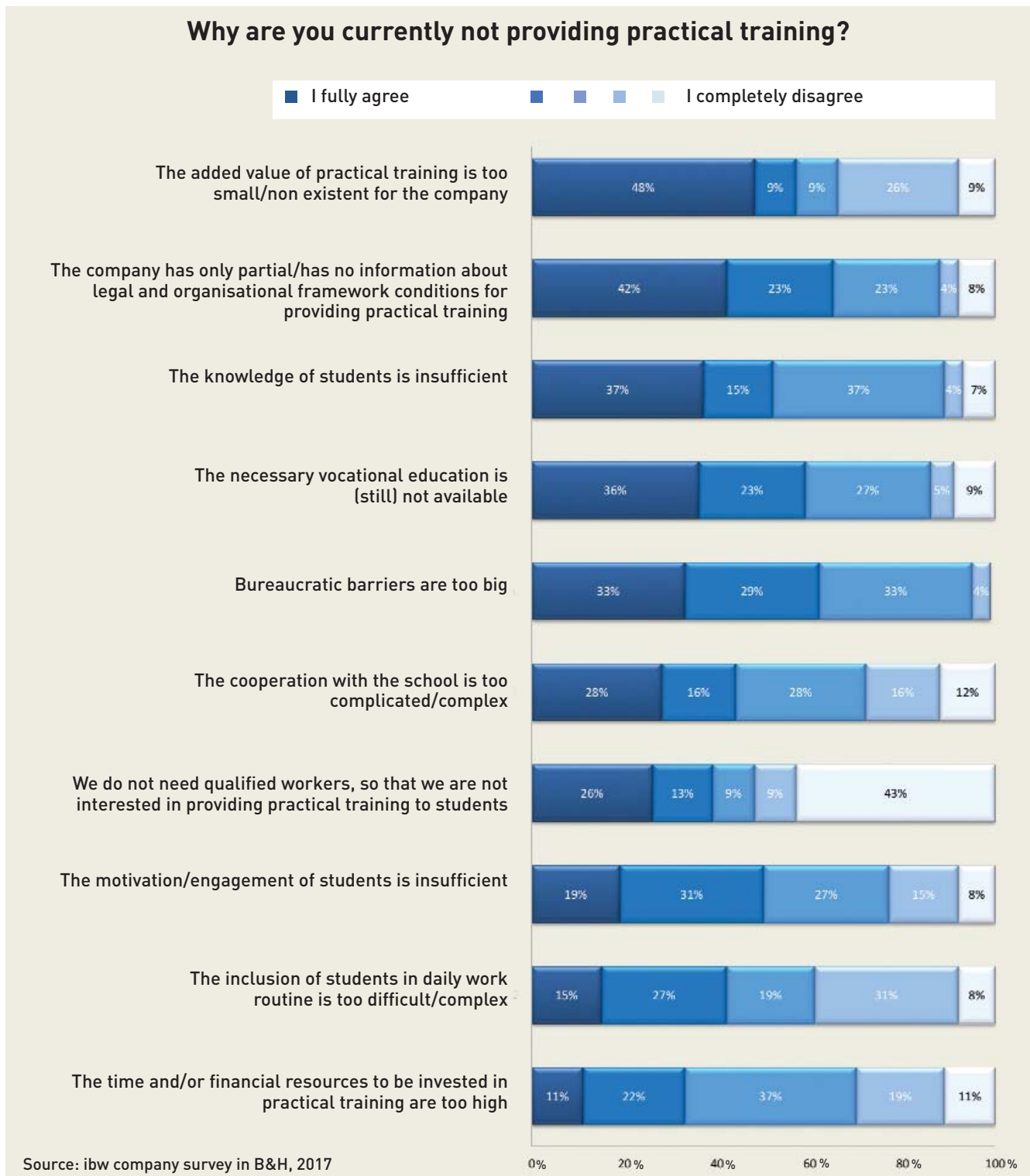
... companies do not really recognise the added value of company-based training.

... there is too little information about legal and organisational framework conditions or that bureaucratic obstacles are too big/seem too big.

... that vocational education needed/requested by companies is not sufficiently available, that curri-

Chart 9: Reasons why companies have not yet provided practical training

#### Only those companies that have not yet provided practical training



ricula are "obsolete" and/or there are professions that would be interesting for companies, but there are no school curricula and vocational education programmes.

In addition to this, there are frequently pronounced reservations regarding the knowledge of students and willingness of schools to cooperate (especially in terms of the extent to which such cooperation is complicated and complex in reality).

"The good news" resulting from answers given by companies is that there are small reservations regarding the engagement/motivation of students and that many companies believe that practical training at companies mostly can be integrated in daily production routine, as well as that most companies believe that the time and financial resources that need to be invested are entirely acceptable.

#### ***4.4 Basic requirements for the organisation of company-based practical training***

Irrespective of the fact whether a certain company already provided training to students or not, companies were asked about the manner in which practical training should be structured, so that a larger number of companies would participate in initial vocational education (by taking over compo-

nents to be implemented as part of company-based training). The topic of systemic reform options/necessities was thus explicitly discussed.

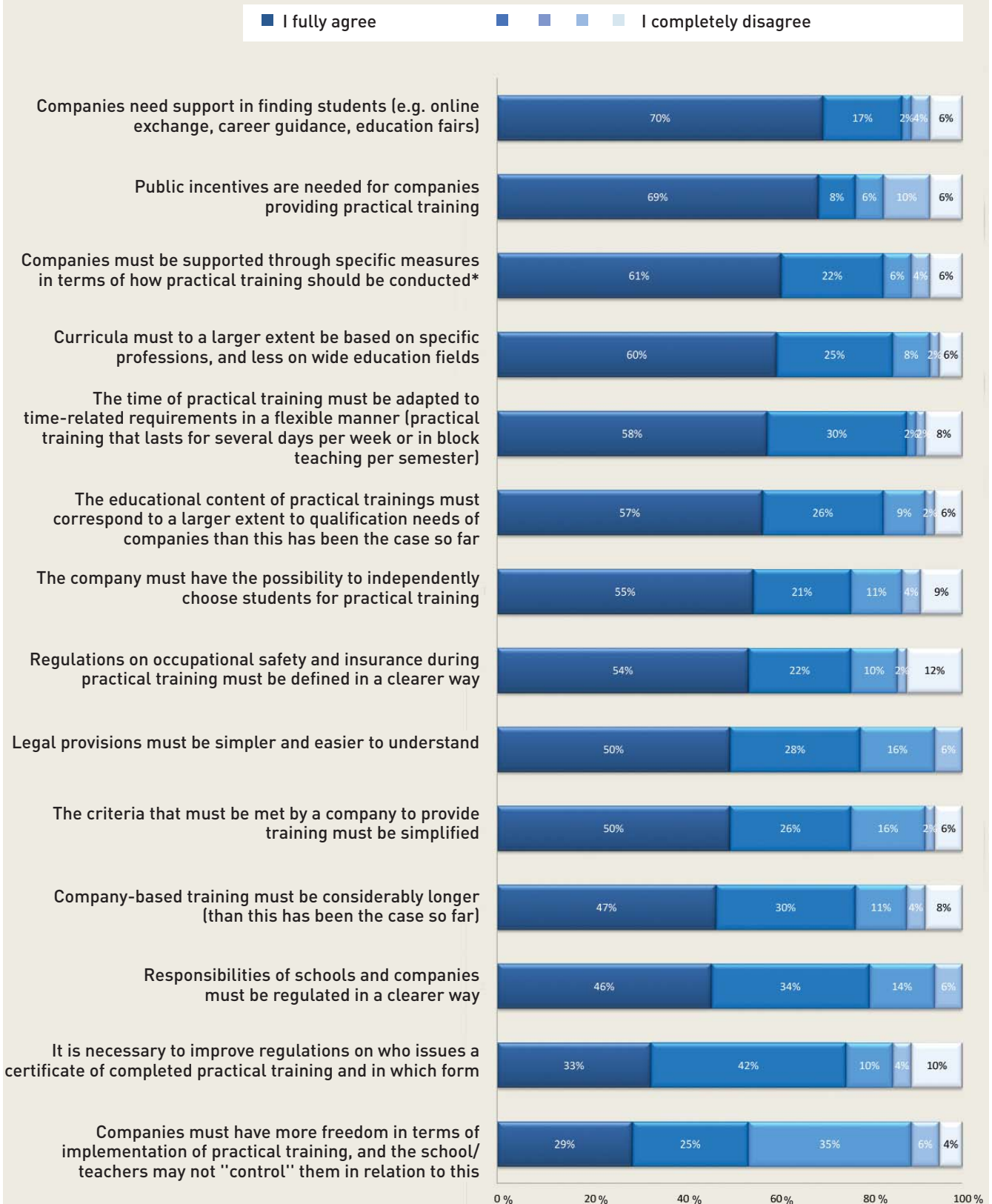
The basic picture is clear: in case of all thematic fields/reform options that were mentioned, there was a high level of agreement (please see chart 10). Companies thus expressed a great need for a systemic reform. It is obviously needed in order for a larger number of companies to participate in initial vocational education.

Reform programmes include all basic aspects: greater possibilities for entrepreneurial action as well as support in selecting students, improved adaptation of education content to company needs for certain qualifications, longer training at the company as well as flexibility in terms of training schedule, simpler and clearer legal regulations (in particular in relation to occupational safety and insurance, distribution of roles and responsibilities between the school and company that provides the training, and last, but not least, better support for companies providing training from public institutions).

The reform programme is obviously comprehensive and challenging. It will therefore not be sufficient to only make small adaptations of the existing system in order to for a significantly higher number of companies to participate in initial vocational education, and specifically to take over concrete educational components.

Chart 10: Requirements for the organisation of practical training

**Irrespective of the fact whether you already have specific experiences related to company-based training or not: what should practical training be like in order for a larger number of companies to provide practical training?**



Source: ibw company survey in B&H, 2017

The opinions of the respondents are extremely homogenous, i.e. there are no differences, irrespective of the fact whether these are Austrian or Bosnian and Herzegovinian companies, small, medium-sized or large companies, companies from the production industry or some other sector (trade, services, etc.). ALL companies therefore basically want the same reform programme.

If company-based training in Bosnia and Herzegovina could take place in an environment structured in such a way, 75% of respondents would provide practical training. As a result, there would be around 800 additional jobs per year at all these companies. At the same time, such a large number of positive answers points to a great potential, but also to the necessity of comprehensive/far-reaching reforms.

#### **4.5 Reform option "apprentice training"**

A final set of question relating explicitly to reform options regarding apprentice training (e.g. based on the Austrian system) was created in order to assess the scope/depth of the need for reforms in the opinion of companies.

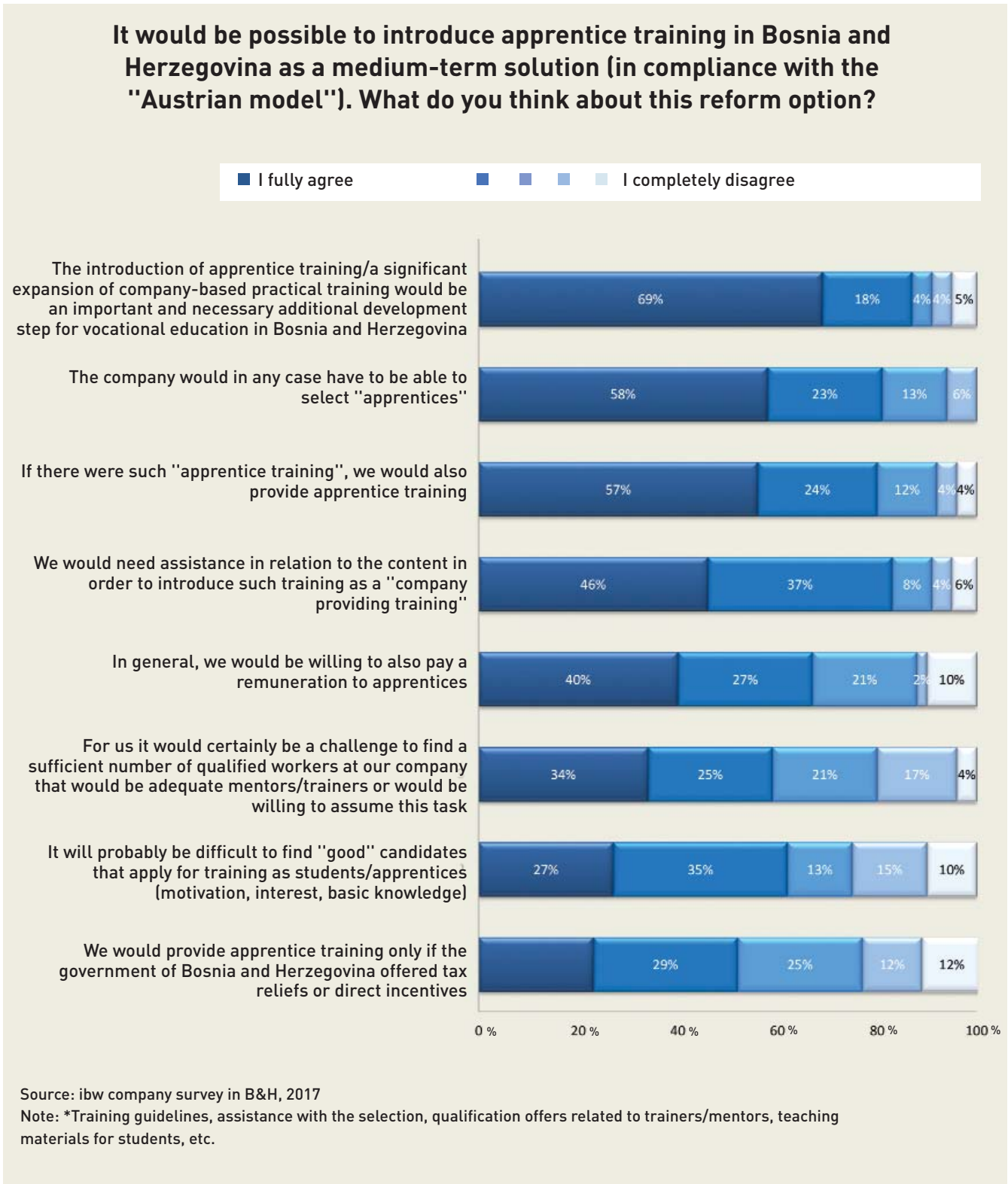
The result basically reflects the necessary reforms from company perspective, as also stated in the previous chapter: this in a way stresses the depth of necessary reforms (please see chart 11).

In case of apprentice training based on a model similar to the "Austrian model", around 80% of respondents would be willing to provide apprentice training. On the one hand, this points to a great interest of companies in actively implementing initial

vocational education themselves, i.e. in taking over meaningful education components. On the other hand, it points out the importance of reform programmes. It is not about "copy-pasting" the entire German, Austrian or Swiss apprenticeship system, but rather about acknowledging basic components (such as the duration, places of learning, roles, responsibilities, etc.) of dual systems of these countries and their adaptation, as well as independent concepts for and in Bosnia and Herzegovina, i.e. in compliance with the characteristics and framework conditions of the country. In doing so, the possibility of companies to independently select students for practical training is certainly of crucial importance. A series of questions also explicitly relate to potential difficulties of such a reform programme. Most companies are essentially willing to pay remunerations to apprentices, however, many of them expect financial support from the state. A certainly more important question is how obviously great specific needs of companies in terms of content-related support could be met when introducing and implementing company-based training. Who would be competent/responsible for it? Who has the capacity and competences and in what way should such content-related support be provided/have to be provided? Another challenge from the perspective of companies would certainly also be the issue of finding a sufficient number of qualified workers at companies, who would be interested in being mentors/trainers and their adequate qualification for this task. There are also some reservations/doubts as to whether there would be a sufficient number of "good" students who already have certain qualifications and are motivated.



Chart 11: Reform option "apprentice training"



A detailed analysis has shown that companies have extremely homogenous views about this issue, irrespective of the fact whether these are Austrian or Bosnian and Herzegovinian companies, smaller, medium-sized or large companies, companies that engage in production or belong to other sectors

(trade, services, etc.). ALL companies therefore have a very positive attitude to medium-term/long-term reform options of establishing an apprentice training system, which is generally similar to the one in Austria, Germany or Switzerland.

# 5

## Recommendations for action for the purpose of strengthening work-based learning

The company survey has shown that, in the opinion of companies, there is a significant need for reforms, in order for the "economy" to be ready, i.e. in order for companies to be able to engage (more) in initial vocational education, and especially in order to provide practical training and work-based learning opportunities (alternance).

This basic view also results from a series of discussions with actors in Bosnia and Herzegovina (schools, companies, chambers, ministries). The author of the report was able to attend around a dozen of such round table discussions in the period fall/winter of 2017, which gathered stakeholders from the whole country (these round tables were held in Sarajevo, Banja Luka and Mostar). The external perspective shows that...

... initial vocational education in various parts of Bosnia and Herzegovina has very different forms, in part independently from legal framework conditions.

... work-based learning is implemented in various ways – however, the actors frequently lack a common vision/understanding of goals related to various formats. In addition to this, there are frequently no legal regulations, they are imprecise or they even differ in different parts of the country.

... the impact and involvement of social partners differ to a great degree in different parts of the country, and they are frequently insufficient.

... the roles and responsibilities (especially in case of schools and companies) are imprecise. This eventually also relates to unclarities regarding the criteria that companies have to meet in order to provide training.

... there is a pronounced lack of trust among the actors, which makes open discussions about existing problems more difficult/impossible (e.g. practical training that is not in compliance with the education purposes/"exploitation" of students during practical training or lack of willingness of schools to provide support to companies providing training).

Also, there is insufficient awareness from multiple points of view about the fact that schools and companies certainly have justified different interests and expectations related to benefits of work-based learning.

... the basic structure of work-based learning insufficiently incorporates companies' possibilities and needs for flexibility (e.g. lack of possibilities for (co)decision about the students that will be "accepted" for practical training, content and time of training components implemented at the company, too strict supervision by school coordinators).

... schools are frequently the ones that mostly make decisions about the scope and content of work-based learning (based on their own interest).

... there are no public support structures for companies interested in providing training.

From an external perspective, it is possible to deduct certain **options for action** as regards the manner in which the cooperation between schools and companies – and especially work-based learning – might be improved in the future. The key issues would therefore be the following ones<sup>8</sup>:

- Explanations regarding the formats of work-based learning in terms of their goals, structural forms and roles and responsibilities of schools and companies.
- Defining obligatory minimum standards/criteria for companies that provide training
- Structuring training components at companies while at the same time considering legitimate entrepreneurial cost-benefit analyses, the need for flexibility and student training quality assurance
- Introducing public sector support structures and instruments for companies in order to improve their competences for implementing high-quality work-based learning
- Establishment/expansion of school competences and update of expertise of teachers regarding theoretical and practical learning
- Defining framework conditions for cooperation

<sup>8</sup> For the purpose of an overview and discussion about fundamental "success factors" for introducing work-based learning, please see Bliem W., Schmid K., Petanovitsch A. (2014): Erfolgsfaktoren der dualen Ausbildung. Transfermöglichkeiten. [Success Factors of Dual Education. Possibilities for their Transfer.]. ibw research report number 177, Vienna  
German language version: <https://www.ibw.at/resource/download/289/ibw-forschungsbericht-177.pdf>  
English language version: <https://www.ibw.at/bibliothek/id/258/>

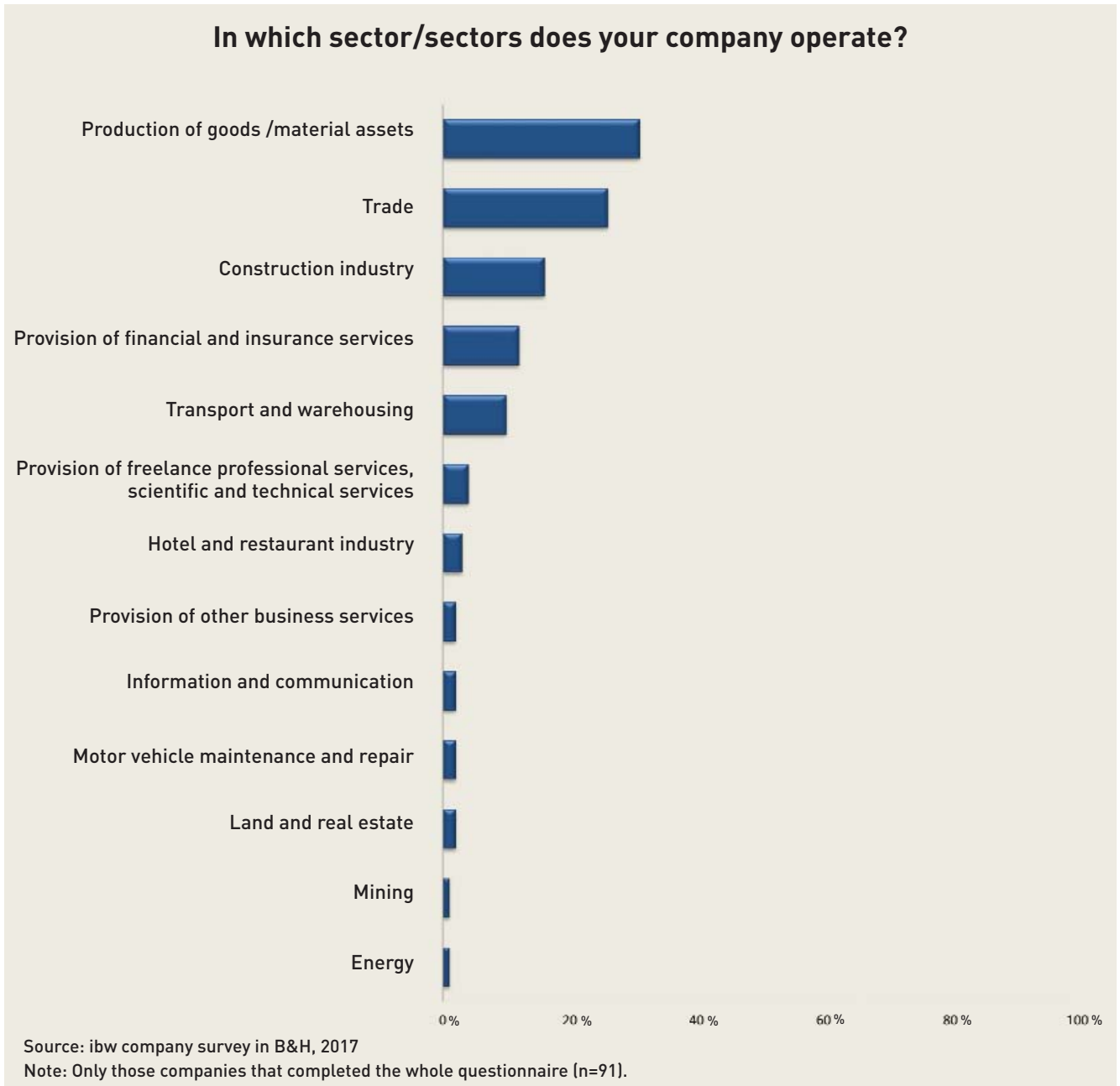
formats between schools and companies, such as practical training contract templates or donation templates

- Inclusion of institutional actors, such as the association of employers, in the process of vocational education management in Bosnia and Herzegovina. Development of a relevant expertise at these organisations in relation to vocational education
- Last, but not least, regulations and administrative procedures should be standardised throughout the country in order to guarantee transparency of access to and quality of work-based learning both for students and companies.

# 6

## Appendix I: Company survey details

Chart 12: Company structure by sectors



# 7

## Appendix II: Questionnaire



### QUESTIONNAIRE

#### Cooperation with vocational schools | Company-based training

F1a

In which sector/sectors does your company operate? (multiple answers are possible)	
<input type="checkbox"/>	Mining
<input type="checkbox"/>	Production of goods/material assets
<input type="checkbox"/>	Energy
<input type="checkbox"/>	Water supply, sewerage, waste disposal and environmental remediation activities
<input type="checkbox"/>	Construction industry
<input type="checkbox"/>	Trade
<input type="checkbox"/>	Motor vehicle maintenance and repair
<input type="checkbox"/>	Transport and warehousing
<input type="checkbox"/>	Hotel and restaurant industry
<input type="checkbox"/>	Information and communication
<input type="checkbox"/>	Provision of financial and insurance services
<input type="checkbox"/>	Land and real estate
<input type="checkbox"/>	Provision of freelance professional services, scientific and technical services
<input type="checkbox"/>	Provision of other business services
<input type="checkbox"/>	Other sectors:

Specific sector: .....

F1 b

What is the key business activity of your company in Bosnia and Herzegovina? (only one answer is possible)	
<input type="checkbox"/>	Trade
<input type="checkbox"/>	Production
<input type="checkbox"/>	Sourcing/procurement
<input type="checkbox"/>	Advisory services/services
<input type="checkbox"/>	Other: .....

## F2

How many employees does your company currently have in Bosnia and Herzegovina? <i>(only one answer is possible)</i>	
<input type="checkbox"/>	1-9
<input type="checkbox"/>	10-19
<input type="checkbox"/>	20-49
<input type="checkbox"/>	50-249
<input type="checkbox"/>	more than 250

## F3

In which city/region does your company have its seat or branch office? <i>(multiple answers are possible)</i>	
<input type="checkbox"/>	Sarajevo
<input type="checkbox"/>	Banja Luka
<input type="checkbox"/>	Mostar
<input type="checkbox"/>	Brčko District
<input type="checkbox"/>	Other city/region: .....

*First of all, we would like to know whether you already cooperate with vocational schools or whether you would be interested in cooperating with them.*

**F4** Has your company already accepted students from vocational schools? Or does your company already cooperate with vocational schools in some other format?

If your answer is affirmative, to what extent are you satisfied with the cooperation?  
*(1 = very satisfied to 5 = completely dissatisfied)*

If your answer is negative, would you in general be interested in cooperation?  
*(1 = very interested to 5 = completely uninterested)*

Cooperation	Existing cooperation? Level of satisfaction		Interest in cooperation in future?
Open door days/hours, professional practice days, career guidance: students can get acquainted with the daily work routine, activities and professions at our company	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Voluntary internship (there are no regulations)	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Practical training at the company/specialist training (during the school year or holidays; the scope and content are defined in the curriculum)	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Partnerships with schools (training company, etc.)	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Infrastructure donations: the company provides machinery/material for school workshops	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Regular money donations	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Students can do various exercises, final and seminar papers related to your company	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Exchange of information with teachers regarding current trends in the profession	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Qualified workers of the company teach at schools	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Our company is represented at the school management/board/body	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Other cooperation formats? Please indicate: .....	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Other cooperation formats? Please indicate: .....	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5

**If in F4 you indicated an existing cooperation:**

**F4a You stated that you already have an existing cooperation with vocational schools.**  
 What are in your opinion the greatest challenges of such cooperation?

*(1 = very big challenges to 5 = without any problems at all)*

**If an existing cooperation was not indicated in F4, and if interest was expressed for at least one cooperation format:**

**F4b You stated that you were interested in cooperation with vocational schools.**

What are in your opinion probably the greatest challenges when it comes to cooperation with vocational schools?

*(1 = very big challenges to 5 = without any problems at all)*

**F7 Irrespective of the fact whether you already had specific experiences with practical training or not: What should practical training in general be like in order for a higher number of companies to provide practical training?**

Challenges	Importance (1 to 5)
Difficulties to even find schools interested in cooperation	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Lack of sustainability of cooperation, given the fact that it is largely based on the initiative and engagement of individuals	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Lack of engagement of teachers	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Lack of knowledge of students	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Unclarity/uncertainty regarding legal aspects/responsibilities related to the cooperation	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Too complicated/bureaucratic regulations	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Lack of support of the public sector	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Incorporation of cooperation (in case of practical training at the company, company visit, etc.) in the work process at the company	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Investments related to human resources/financial resources of the company	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Other challenges: .....	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>

***We would now like to focus on your experiences regarding practical training of students from vocational schools (i.e. not higher education students).***



**F5 Has your company already had experiences with students from vocational schools?**

*We kindly ask you to give answers only in relation to those practical trainings that students from vocational schools must/should participate in, as well as practical training, the scope and content of which are defined in the curriculum (such as obligatory internships or practical training at the company during the school year).*

<input type="checkbox"/>	YES, we currently have students doing practical training <i>(please continue with F6a)</i>
<input type="checkbox"/>	YES, we used to have students doing practical training, however, this is currently not the case <i>(please continue with F6a, and then also F6b&amp;F6c)</i>
<input type="checkbox"/>	NO, we have never had students doing practical training <i>(please continue with F6c)</i>
<input type="checkbox"/>	I don't know <i>(please continue with F7)</i>

**If F5 = YES, now:**

F6a Why are you providing practical training?

**If F5 = YES, but only previously:**

F6a Why were you providing practical training?

*(1 – I fully agree, 2 I agree, 3 I am neutral – I neither agree nor disagree, 4 I disagree, 5 I completely disagree)*

Reasons	Grade (1 to 5)
Students are an instrument for meeting the needs of the company for qualified workers	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
They reduce the risk of hiring wrong candidates	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
They increase the level of prominence of the company within the target group of candidates	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We would like to offer interested young persons an insight into daily work routine and professions	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We would like to give a chance to interested young persons to acquire their first work experiences	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Students that do practical training support the work in a flexible manner	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Students doing practical training help solve a specific problem	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Students doing practical training bring new know-how and new ideas to the company	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Students doing practical training are a manner of entering into contact with vocational schools	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We consciously wish to give an opportunity to young persons	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Other/additional reasons: .....	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>

**F6b Scope of practical training of students at the company:**

Obligatory internship:

... number of weeks during holidays

Practical training at the company during school year:

... number of days per week or

... number of weeks per semester

**If F5 = NO:** F6c Why are you currently not providing practical training?

*(Categories of answers are identical as in case of F6a)*

Reasons why your company is not providing practical training	Grade (1 to 5)
The added value of practical training is too small/non-existent for the company	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The inclusion of students in the daily work routine is too difficult/complicated	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The necessary vocational education is (still) not available	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The time and/or financial resources to be invested in practical training are too high	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Bureaucratic barriers are too big	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The cooperation with the school is too complicated/complex	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The motivation/engagement of students is insufficient	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The knowledge of students is insufficient	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The company has only partial/has no information about legal and organisational framework conditions for providing practical training	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We do not need qualified workers, so that we are not interested in providing practical training to students	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Other/additional reasons: .....	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>

*(1 – I fully agree, 2 I agree, 3 I am neutral – I neither agree nor disagree, 4 I disagree, 5 I completely disagree)*

Reform options	Grade (1 to 5)
Company-based training must be considerably longer (than this has been the case so far)	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The company must have the possibility to choose students for practical training on its own	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The content of practical trainings must correspond to a larger extent to qualification needs of companies	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The time of practical training must be adapted to time-related requirements of the company in a flexible manner (practical training that lasts for several days per week or in block teaching per semester)	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Companies must have more freedom in terms of implementation of practical training and the school/teachers may not "control" them in relation to this	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Curricula must to a larger extent be based on specific professions, and less on wide education fields	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Regulations defining who issues the certificate of practical training and in which form must be improved	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Legal provisions must be simpler and easier to understand	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Responsibilities of the school and company must be regulated in a clearer way	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Regulations on occupational safety and insurance during practical training must be defined in a clearer way	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The criteria that must be met by a company to provide training must be simplified	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Companies need support in finding students for practical training (e.g. online stock exchange, career guidance, education fairs)	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Companies must be supported through specific measures in terms of how practical training should be conducted (training guidelines, assistance in selection, qualifications for trainers/mentors, teaching materials for students, etc.)	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
There have to be public incentives for companies that provide practical training	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Other/additional reform options that are absolutely necessary: .....	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>

**F8 Would your company be willing to offer (more) practical training positions under the above conditions?**

YES



I am not sure



NO (please continue with F9)

**F8b In case of which profession/professional field would your company be interested in providing practical training for students? How many students would that approximately be per year?**

Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_

**"Apprentice training": Is this a necessary medium-term reform option?**

**F9 Medium-term reform options could also include the introduction of apprentice training in Bosnia and Herzegovina (similarly to the Austrian model), or the time spent doing practical training at the company within the existing practical training might be extended in such a way that at least half of the training takes place at the company. What is your opinion on these reform options?**

*(1 – I fully agree, 2 I agree, 3 I am neutral – I neither agree nor disagree, 4 I disagree, 5 I completely disagree)*

Reform options "apprentice training"	Grade (1 to 5)
The introduction of apprentice training/significant expansion of company based practical training would be an important and necessary development step for vocational education in Bosnia and Herzegovina	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
If there were such "apprentice training", we would also provide apprentice training	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The company would in any case have to be able to select "apprentices"	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
For us it would certainly be a challenge to find a sufficient number of qualified workers at our company that would be adequate mentors/trainers or would be willing to assume this task	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
In general, we would be willing to also pay a remuneration to apprentices	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
It will probably be difficult to find "good" candidates that apply for training as students/apprentices (motivation, interest, basic knowledge, etc.)	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We would need assistance in relation to the content in order to introduce such training as a company providing training	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We would provide apprentice training only if the government of Bosnia and Herzegovina offered tax reliefs or direct incentives	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>

*Thank you very much for taking the time to participate in our survey. Over the coming weeks, we will analyse the data we gathered in order to see your opinion as to the direction in which our support to the process of reforms in vocational education in Bosnia and Herzegovina should/would have to go. In addition to this, we are working on a manual – so that in it you will obtain information on possibilities for regional cooperation with vocational schools.*

Would you like to receive the key findings of this survey and the manual by e-mail?

- No
- Yes, please send them to (e-mail address): .....

Would you like to continue participating in the discussion about reform options in vocational education?

- No
- Yes, please send them to (e-mail address): .....



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# **WORK-BASED LEARNING IN B&H**

**Work-Based Learning and Cooperation  
between Schools and Companies in Bosnia  
and Herzegovina**

**Company Survey Findings and Resulting  
Courses of Action/Reform Options**

**Kurt Schmid  
Benjamin Gruber**

Vienna, May 2018

# Impressum

## WORK-BASED LEARNING IN B&H

### Work-Based Learning and Cooperation between Schools and Companies in Bosnia and Herzegovina

ibw Research Report No. 190, Vienna 2018.

Kurt Schmid, Benjamin Gruber

ISBN 978-3-903210-18-9

#### Media owner and publisher

ibw

Institute for VET Research and Development in Economy  
(CEO: Thomas Mayr MA)

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CAR No. 863473670

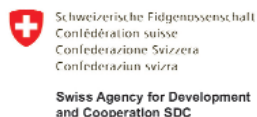
#### Photo (front page)

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This publication was supported by:





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# 1

## Executive Summary



Initial vocational education in Bosnia and Herzegovina takes place exclusively in a school environment – at various vocational schools. Students do have the possibility to try practical training at companies and/or school workshops and acquire skills. However, when it comes to the scope, depth and quality, these options – and in particular work-based learning – are frequently marginal and insufficient to achieve meaningful learning outcomes. There are multiple reasons for limited results, especially in case of work-based learning. A series of reasons certainly lies in the basic possibilities and the regulatory framework that companies have at their disposal in order to offer and implement work-based learning. In addition to this, companies have only limited experiences in relation to the manner in which such a learning format should be implemented in terms of quality and what benefits a company has/can have.

This raises the question as to how individual formats of work-based learning (summer internship, alternance) can be improved in order for a larger number of companies to participate in them. In addition to this, there are interesting additional forms of cooperation between companies and schools. In order to obtain relevant information, an online company survey was conducted in the last quarter of 2017 (Austrian companies operating in Bosnia and Herzegovina and Bosnian and Herzegovinian companies).<sup>1</sup>

### ***The key company survey findings are as follows:***

The cooperation between companies and schools takes place in different formats – mostly one or more of the following formats are implemented: **company visits** (in order to make the students acquainted and inform them about the world of work/business world), **alternance** (1-3 days per week of work-based learning at a company and

obligatory practical training), **exercises, final and seminar papers** related to the company, as well as voluntary summer internships, which take place somewhat less frequently. Other forms of partnerships, such as infrastructure/money donations, presence of company representatives in school bodies, part-time employment of teachers, are less frequent.

It should be considered that the **satisfaction is frequently low** specifically in case of the experience-based cooperation format, or work-based format, which is of great importance for the vocational education system (internship and alternance): only half of the companies are very satisfied or mostly satisfied with it.

Three out of four companies have had no cooperation with schools so far, but are interested in it, primarily in work-based formats (summer internship and alternance) and in career guidance activities (company visits). A work-based learning potential therefore exists and can be increased.

Companies that are already cooperating with schools consistently assess challenges related with this issue as much smaller than companies that have no experience with this cooperation format. However, all companies stress that the greatest challenge is a **lack of support by public institutions**. A lack of sustainability of cooperation and **excessively complex/bureaucratic regulations** are also stressed as particular obstacles.

It is obviously necessary to overcome great obstacles in order to encourage companies that have had no cooperation with schools so far to enter into a specific engagement. However, on a positive note, companies expect the least difficulties regarding their human resources/financial expenditures and the inclusion of students in their production process (e.g. alternance or practical training).

<sup>1</sup>The survey was available in two language versions (with identical contents), a German and Bosnian language version. Around 100 companies participated in the survey. The survey is not representative in strict statistical terms – the sample contains a disproportionately high number of companies from the area of Sarajevo, Austrian companies (40% in comparison to 60% Bosnian and Herzegovinian companies), mostly medium and large companies, as well as a disproportionately high number of companies from the production sector. In spite of this, very similar answers were given to most questions (so that the survey should mostly accurately reflect the experiences and interests of companies related to “practical training at companies” and “cooperation with vocational schools” in general.

Components of work-based initial vocational education in Bosnia and Herzegovina depend to a much larger degree on the **social interests of companies** to provide support to young persons than on their **own considerations related to investments/benefits** for the company. This is also demonstrated by the answers to questions related to reasons for companies to provide training opportunities.

The **reasons why** certain **companies have not yet had any students** in the framework of alternance are also interesting. It is obvious that it is of crucial importance that...

... these companies do not really recognise the added value of company-based training.

... that there is too little information about legal and organisational framework conditions, or that the bureaucratic burden is too big/seems too big.

... that vocational education needed/requested by companies is not sufficiently available, that curricula are "obsolete" and/or there are professions that would be interesting for companies, but there are no school curricula and vocational education programmes.

This points to a **great need for systemic reforms** from the perspective of companies. Companies have very frequently and firmly mentioned reform programmes: more opportunities for companies to participate in decision making and support in the selection of students for practical training, better adapted educational content and qualification needs of companies, a longer period of training at companies and flexibility in terms of time schedule of trainings, simplified and clearer legal provisions (in particular in relation to occupational safety and insurance-related aspects, division of roles and responsibilities between the school and company where the training takes place, and, last but not least, better support of public institutions for companies providing training).

The reform programme is obviously comprehensive and challenging. For this reason, only marginal adaptations of the existing systematic environment will not be sufficient for a significantly increased participation of companies in the initial vocational education than this has been the case so far – especially when it comes to taking over specific educational components. This is also shown by the final section of questions about the **medium-term/long-term reform option of "apprentice training"** (similarly to the one in Austria, Germany or Switzerland), in relation to which companies have

a very positive attitude.

Based on such company survey findings and several discussions during round tables organised on site with stakeholders from Bosnia and Herzegovina (schools, companies, chambers, ministries), it is possible to define certain key **recommendations for action** for the purpose of improving framework conditions for work-based learning:

- Explanation of work-based formats regarding their goals, structure, as well as roles and responsibilities of schools and companies providing training
- Defining obligatory minimum standards/criteria for companies providing training
- Designing company training components in compliance with legitimate entrepreneurial cost-benefit analyses, needs for flexibility and education quality assurance for students
- Establishment of support structures by public institutions and instruments for companies for the purpose of promoting their competences for high-quality implementation of work-based learning
- Building/expanding of school competences and brushing up the expert knowledge of teachers regarding theoretical and practical learning
- Definition of framework conditions for cooperation formats between schools and companies, e.g. contract templates for practical training and donations
- Inclusion of institutional actors such as representatives of employers in the process of vocational education management in Bosnia and Herzegovina and ensuring adequate expert knowledge on vocational education at these institutions
- Last, but not least, criteria, regulations and administrative procedures should be standardised throughout the country, if possible, in order to guarantee the transparency of the access to and quality of work-based learning for students and companies.

---

<sup>2</sup> In countries with established systems of dual education/apprenticeship, such as Austria, Germany or Switzerland, the interests of companies play a key role in their engagement, as opposed to those in Bosnia and Herzegovina. Companies train young qualified personnel (in the form of apprenticeship) primarily in order to ensure the next generation of their own qualified personnel.

# 2

## Initial situation and project goals

The present report contains the findings of the online company survey regarding their experiences related to the "cooperation with vocational schools" and "practical training at companies" (as voluntary summer internship and/or alternance). The survey also explicitly included reform questions/aspects related to the vocational education system in Bosnia and Herzegovina that are necessary in the opinion of entrepreneurs, in particular those that would be necessary for an increased participation of companies in initial vocational education (work-based learning).

The issue of an increased participation of companies in the initial vocational education can be analysed only in the context of the existing system for the acquisition of professional qualifications in Bosnia and Herzegovina: The initial vocational education namely currently takes place exclusively and fully at schools (various vocational schools).<sup>3</sup> Although students of these schools have the possibility to participate in practical training at companies and/or school workshops, the scope, depth and quality of such options (especially of work-based learning) are frequently marginal and insufficient for achieving meaningful learning outcomes. In addition to this, such practices or alternating formats (alternance) are actually foreseen only in case of three-year vocational schools, and not in case of four-year technical schools.<sup>4</sup>

Based on the findings of the **company survey** and **round table discussions held with stakeholders from Bosnia and Herzegovina** (schools, companies, chambers and ministries), recommendations on courses of action were made in fall/winter of 2017, which should ensure a higher engagement of companies, improved cooperation between companies and schools and better quality of vocational education in Bosnia and Herzegovina.

The following terms were used for work-based learning:

**Practical training** throughout the year: These are those parts of obligatory practical training that takes place at companies and are foreseen in the curriculum.

**Voluntary summer internship:** The curriculum does not contain any provisions in this respect. Internships take place during summer holidays, and students search for internship positions at their own initiative. Schools do not have a supervisory function.

<sup>3</sup> There is a common basic structure of the educational system, irrespective of the political and administrative division (education is mostly the competence of the entities, Republika Srpska (RS) and Federation of Bosnia and Herzegovina (FB&H) – the latter is divided into ten cantons, which have their competences in culture and education) throughout the country:

- Eight-year or nine-year primary education
- Ensuing secondary education with...
  - ... four-year general education schools
  - ... three-year vocational schools
  - ... four-year technical secondary schools.

In addition to this, there are numerous one-year or two-year vocational education programmes. Education is obligatory up to the ninth grade. Four-year technical schools give access to higher education institutions, but three-year vocational schools also grant such access, given the fact that the access to higher education institutions is primarily regulated through an entrance exam. A legal regulation that is of particular relevance from the reform perspective is the so-called "30% autonomy clause/regulation": The school management can independently decide on 30% of teaching content/schedule as part of the school autonomy. Any wishes for changes that exceed this framework must be approved by pedagogical institutes. In case of their approval, they are applicable to the whole region. As a result, schools already have a general possibility to autonomously decide on an important set of teaching content and time. This opens up space for expanding and deepening the cooperation with companies, such as more extensive practical trainings at companies. Such a legal background, among other things, explains/makes possible heterogeneous practices at companies in terms of practical training duration and content.

<sup>4</sup> In case of alternance, learning alternates between the school and company during practical training (usually 1/2/3 days per week at the company; and the number of days increases at higher grades). The [general] scope and content of professional and practical training are defined by the curriculum and they are obligatory. The curriculum provides for the possibility of conducting part of the education at companies in the form of work-based learning ("practical training at companies"). On the one hand, the scope and content of the training conducted at a specific company in the form of practical training ("practical training at companies") depends on the availability of positions and possibilities for training at companies. However, on the other hand they also depend on the interest of the school itself, which decides to what extent practical training should even take place outside its workshops.

# 3

## Survey design, participation, representativeness



The **survey** was conducted **online** in the period from mid-October to mid-December 2017. The Austrian Foreign Trade Chamber, Advantage Austria (Regional Office in Sarajevo) sent an e-mail to Austrian companies operating in Bosnia and Herzegovina. The Foreign Trade Chamber of Bosnia and Herzegovina assumed the task of contacting Bosnian and Herzegovinian companies. Two language versions were available, a German and a Bosnian one (which were identical in terms of content).

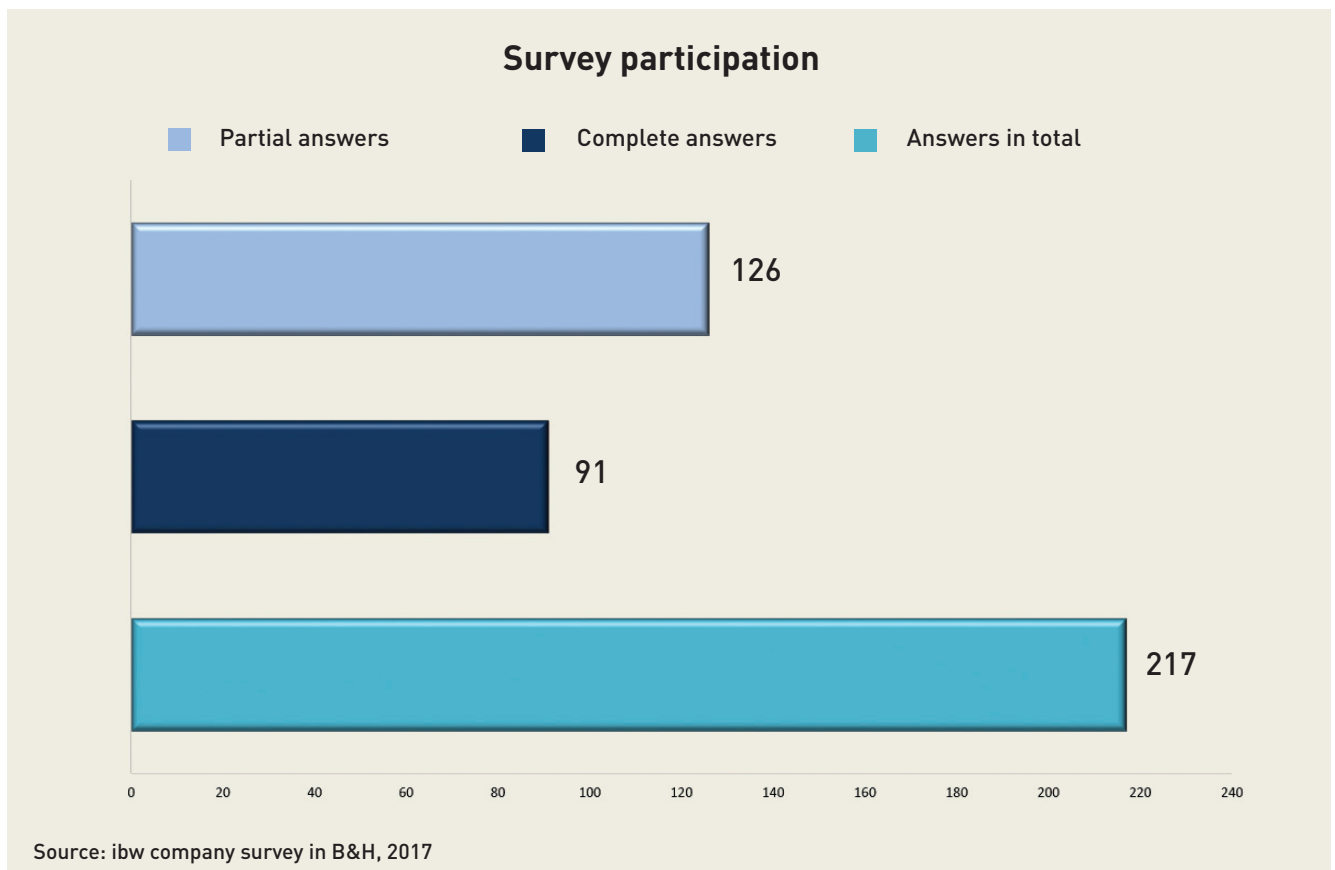
### Survey participation:

Following several e-mails that were sent as reminders to fill out the survey, 217 companies participated in the survey, and 91 of them filled in the whole questionnaire, so that it was possible to analyse their statements (please see chart 1).

### *Characteristics of companies that participated in the survey and survey representativeness*

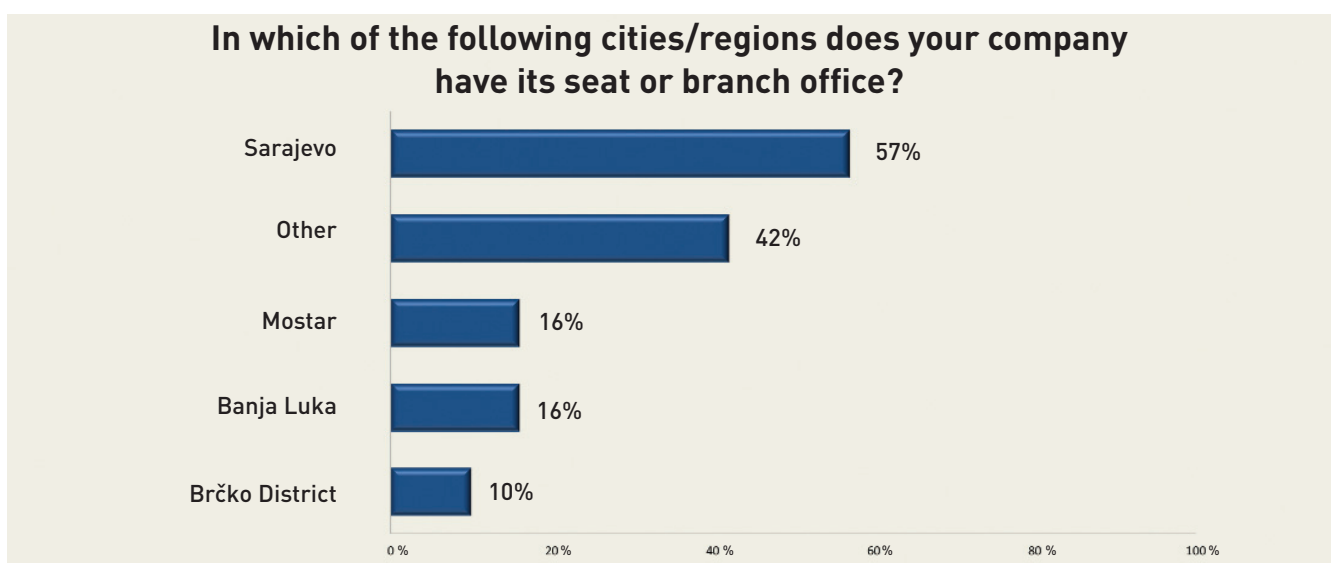
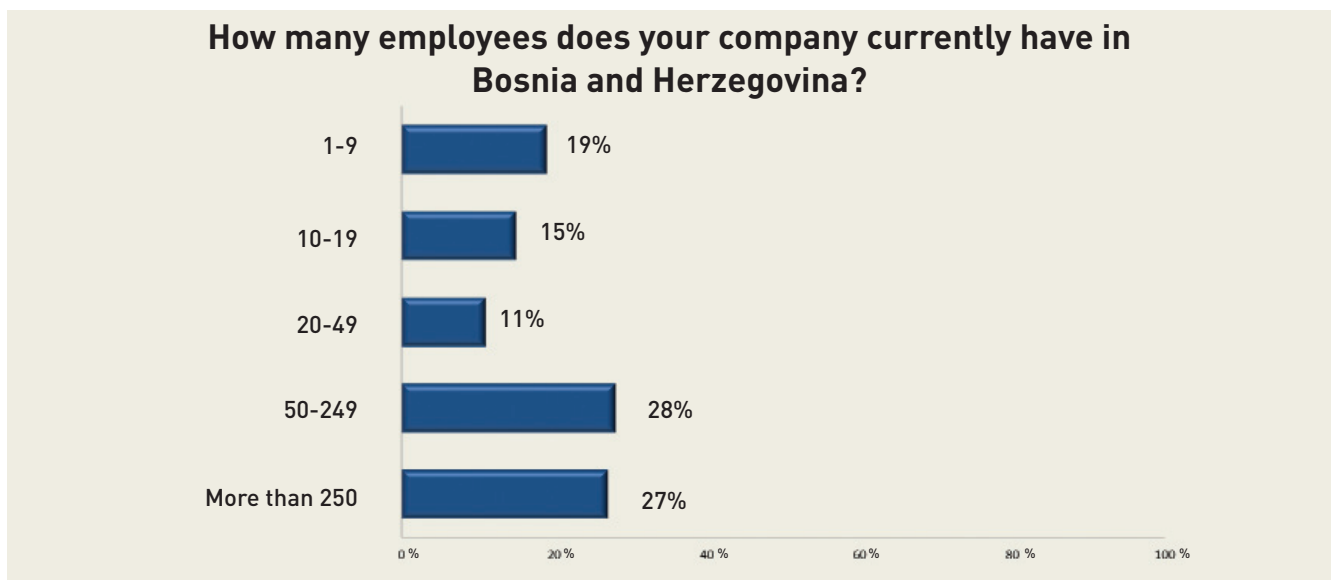
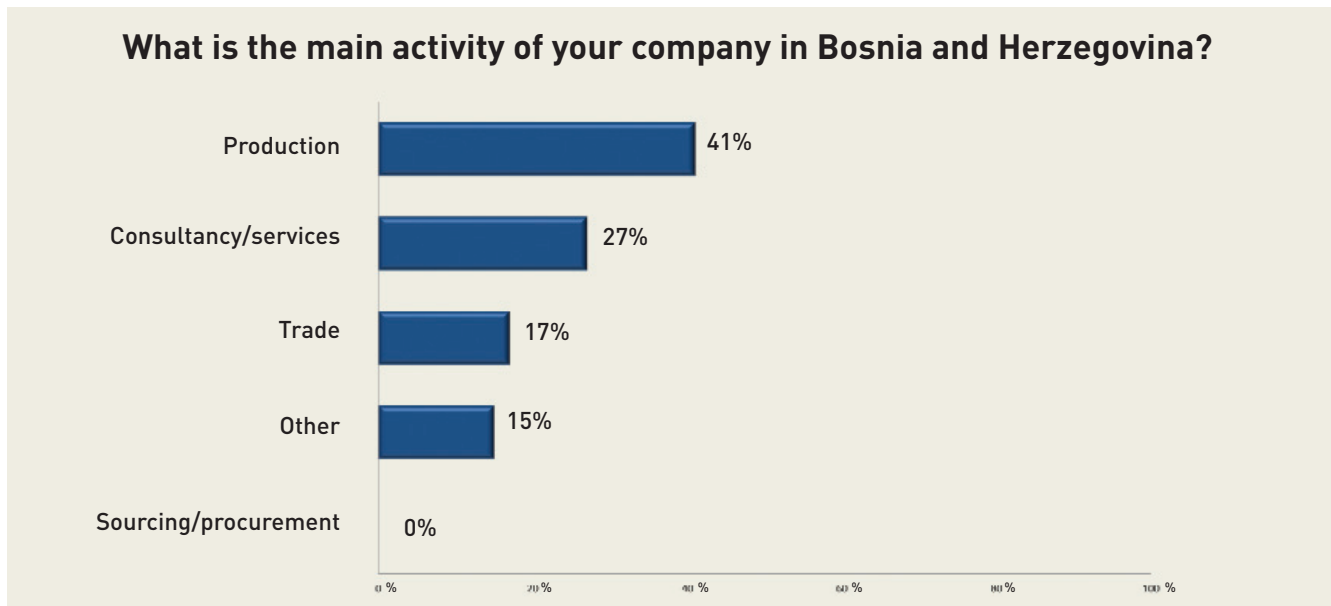
A more detailed analysis of characteristics of companies that participated in the survey (please see chart 2) indicates that there was a great variety in terms of region, company size and activity/business sector<sup>5</sup>, however, **the survey is not representative** in strictly statistical terms. The sample contains a disproportionately high number of companies from the area of Sarajevo (57%), Austrian companies (40% versus 60% of Bosnian and Herzegovinian companies), mostly medium-sized and large companies, as well as around 40% of companies from the production industry.

**Chart 1: Survey participation**



<sup>5</sup> The sector structure is given in chart 3 in attachment I.

Chart 2: Characteristics of the net sample  
(complete answers)



Source: ibw company survey in B&H, 2017

Note: Only those companies that completed the whole questionnaire (n=91)

However, given the fact that the **answers of companies were mostly very homogenous**, the mentioned distortions are not really problematic in terms of their content, i.e. irrespective of company ownership (Austrian versus Bosnian and Herzegovinian companies), their regional position<sup>6</sup>, their size<sup>7</sup>, their experience in work-based learning so far, as well as their cooperation with vocational schools, companies provided very similar answers to most of the questions.

Survey findings would therefore have been only slightly different had there been a representative sample. The statements can therefore be assessed

as very valid, and it can be said that the experiences and interests of companies regarding company training and cooperation with vocational schools in general are well reflected in the survey.

Different perspectives are present only in those cases when distinction is made between companies that already have experiences in cooperation and companies that have not had any such experiences, and in particular in relation to work-based learning (in the form of an internship or alternance). As could have been expected, in case of reasons for providing training and perceived and expected challenges, there were great differences.

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<sup>6</sup>The political competence for (vocational) education in Bosnia and Herzegovina is largely decentralised: The two entities, Republika Srpska (RS) and Federation of Bosnia and Herzegovina (FB&H) are thus largely competent for culture and education – the latter is divided into ten cantons, and every canton is competent for its own sector of culture and education. In addition to this, there is also Brčko District, which has its own competences. A typical fact of Bosnia and Herzegovina, but also of most countries of Southeast Europe or successor states of Yugoslavia, is a lack of apprentice training similar to the Austrian, German or Swiss model. In the former Yugoslavia, there was a certain form of dual education: The three-year and four-year education programmes provided for obligatory practical training at companies. Such practical training had to frequently be offered by companies. During the war and the process of transformation, this obligation disappeared. On the other hand, companies practically fully withdrew from this form of cooperation in education. The acquisition of qualifications in vocational education therefore currently takes place exclusively in the school environment (at various vocational schools). The students of these schools have the possibility to do practical training at companies (internships and/or alternance) or school workshops. However, these options are present to a meaningful extent only in case of three-year vocational schools, but they do not exist in case of four-year technical schools.

<sup>7</sup>Only smaller companies have a somewhat higher tendency of agreeing with various sections of questions.

# 4

## Company survey findings



The fourth chapter presents the most important company survey findings. All subsequent analyses and statements are based on 91 questionnaires that have been fully completed.

### 4.1 Cooperation experience and satisfaction

At the beginning, companies were asked whether they have already had or whether they have cooperation with vocational schools and what kind of cooperation. When interpreting this chart, one should consider that the share values in terms of their size do not constitute reliable values. If more of those companies, which already have experience in cooperating with vocational schools, participated in the survey, then all of the stated shares in the chart would be too high, and in a contrary case, they would be too low. There are no official empirical findings regarding the form of cooperation between companies and vocational schools. It is therefore impossible to verify the values of shares resulting from this survey, and consequently also impossible to make statements about the real extent of cooperation based on the survey.

However, the **structure of these cooperation formats** should be well presented based on the survey. Chart 3 thus shows surprisingly wide-ranging cooperation positions and formats entered into by respondents and vocational schools.

Around 40% of companies almost equally often stated both individual days for company visits (such as open door days, career guidance days, company visits) and practical learning and acquisition of experience at companies in the form of alternating educational programmes or obligatory practical training at companies. Every third company also stated that students could do exercises, final and seminar papers related to the company.

Every fourth company has already had a student doing a voluntary internship. A similar number of companies have a regular exchange of opinions with teachers regarding developments in their profession and/or have entered into partnerships with

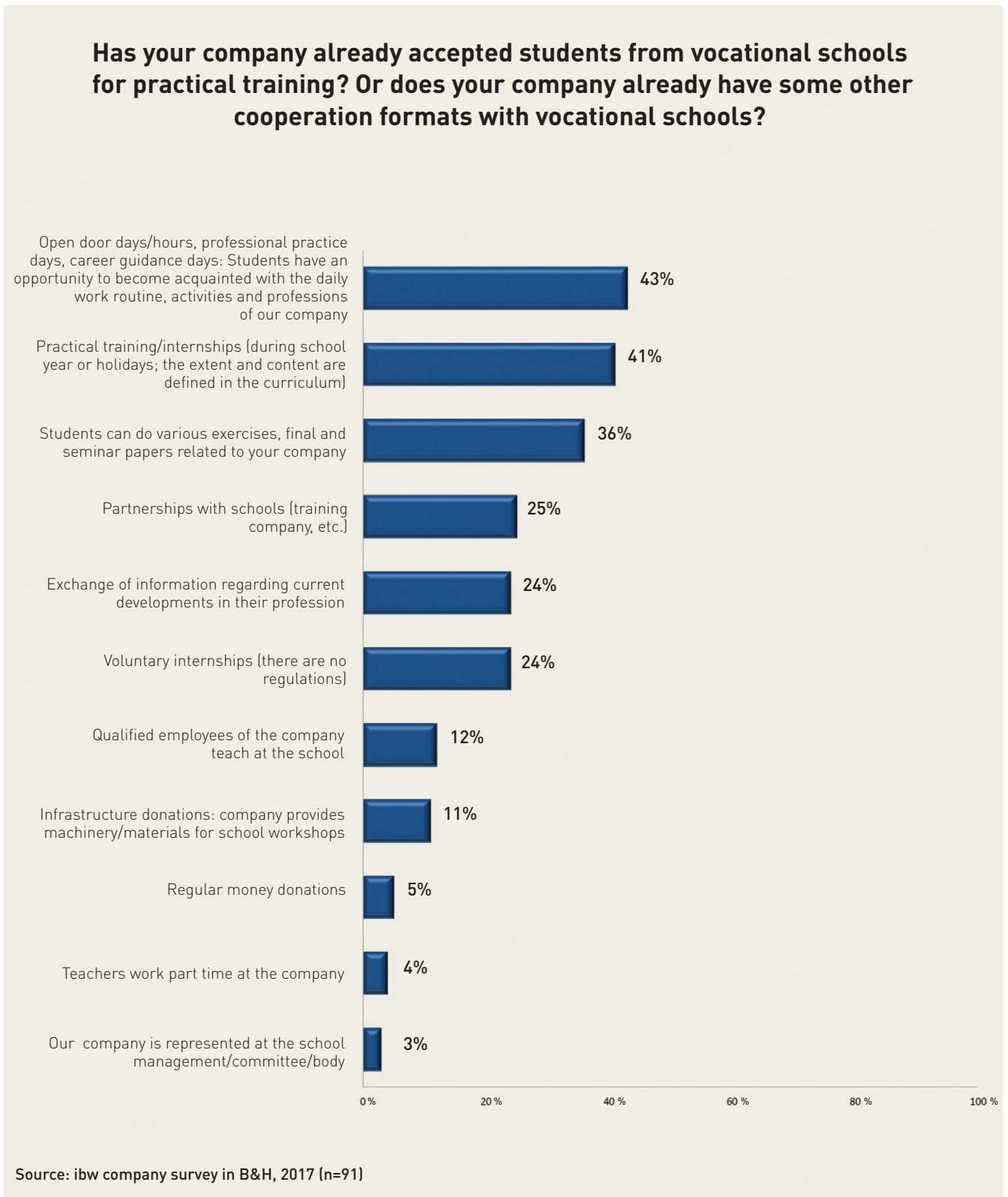
schools (e.g. training companies).

As opposed to this, other forms of partnerships are less present: infrastructure/money donations, expert personnel from companies teaching at schools, or teachers who work (part time) at companies, as well as company representatives/participation of companies at school bodies.

The sum of multiple statements of 230% points to the fact that numerous companies do not only have one form of cooperation with schools, but that they have several ("parallel") cooperation formats with schools. However, it is not possible to find specific concentrations, so that cooperation formats of a certain company probably do not depend only on its own preferences and possibilities, but also on the willingness of schools to enter into certain types of cooperation.

Chart 3: Cooperation experiences so far

Share of companies with experiences, multiple statements



To what extent are companies **satisfied** with these cooperation formats? Companies could express their opinion on a scale from 1 to 5 (very satisfied to completely dissatisfied). However, the results are alarming (please see chart 4): Specifically,

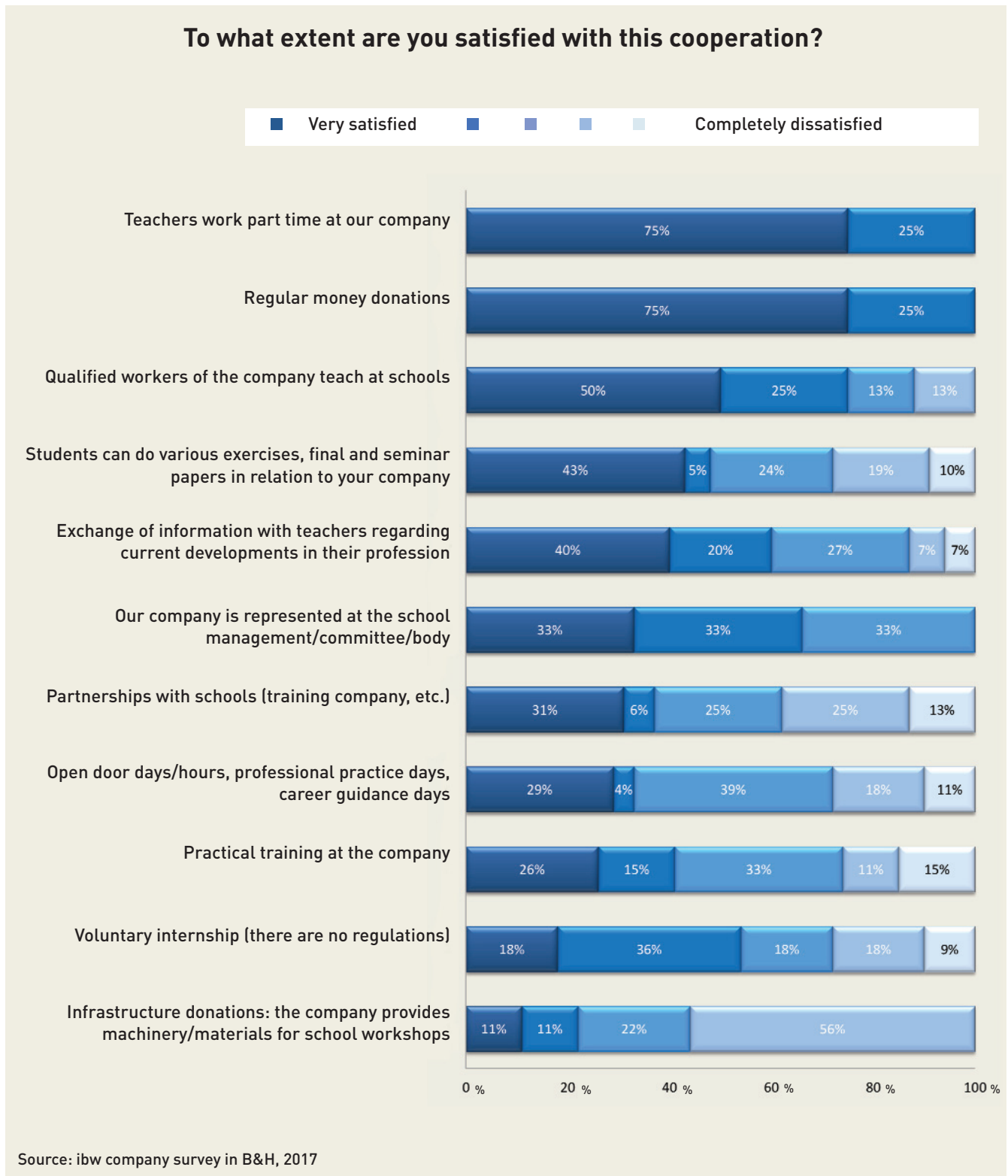
those cooperation formats that ensure the acquisition of experience or work-based learning (internships/practical trainings at companies and alternance) that are crucial for vocational education have a low score in the comparison. Only



around half of the companies are very satisfied or mostly satisfied with them – however, many companies are satisfied only to a lesser extent or completely dissatisfied. We can only hope that this will have no negative consequences on the latter regarding their further engagement in cooperation. It is evident that the highest satisfaction was fre-

quently expressed in case of those cooperation formats that only few companies and schools engaged in, namely "cooperation for the purpose of learning/work" of teachers or qualified workers or relevant partners and money donations. It is also interesting that the satisfaction of those companies that made infrastructure donations to schools is relatively low.

**Chart 4: Cooperation satisfaction**



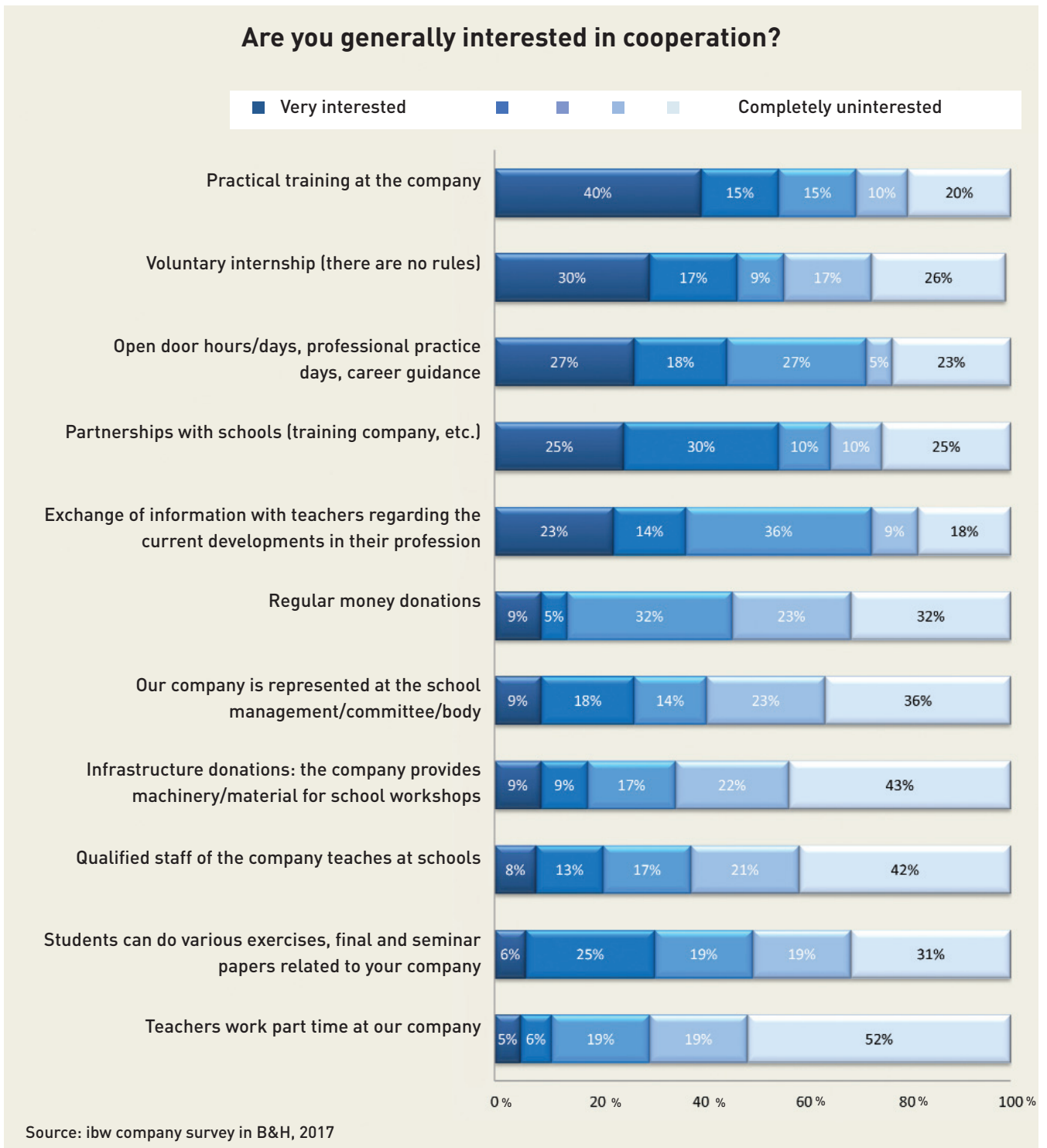
## 4.2 Interest in future cooperation formats with vocational schools

Companies were also asked whether they were generally interested in cooperation with vocational schools, if they did not have any such cooperation so far. A somewhat positive result (please see chart 5) is the fact that there is a great interest, especially in case of those cooperation formats that aim at the acquisition of ex-

perience or work-based learning (specialist/summer internship and alternance) as well as career guidance and open days for the purpose of learning about daily work routine at companies/working reality, which is of crucial importance for the vocational education system. Only one fourth of companies can even imagine a certain cooperation format. As opposed to this, as many as two thirds of respondents are interested in cooperation, although many of them obviously also have certain reservations.

Chart 5: Basic interest in cooperation

Only those companies that have not had any cooperation so far



It may therefore be assumed that there is generally a great potential when it comes to the participation of companies in Bosnia and Herzegovina in work-based learning. Further below, there is a section on improvements of framework conditions and potential further activities (information, support) needed for this.

There is generally a low interest in almost all other potential cooperation forms. That is noteworthy also because specifically these formats, as previously stated, are frequently related to the greatest satisfaction of companies applying them. This can also be interpreted in such a manner that more information and awareness raising activities in relation to potential benefits of such cooperation formats are needed.

What are then **challenges for companies** cooperating with schools? If we compare statements of companies that already have experiences in the cooperation with experiences of companies that have not cooperated with schools so far, there are pronounced differences between these two groups (please see chart 6).

In addition to this, companies that have already cooperated with schools consistently assess challenges as considerably lower than companies without such cooperation experiences.

Secondly, in case of both groups, it is obvious that companies consider the lack of support from public sector institutions to be the greatest challenge. In the opinion of many of them, the lack of sustainability of cooperation is also problematic, given the fact that it is largely based on the initiative and engagement of individuals. However, companies also complain about too complex/bureaucratic regulations.

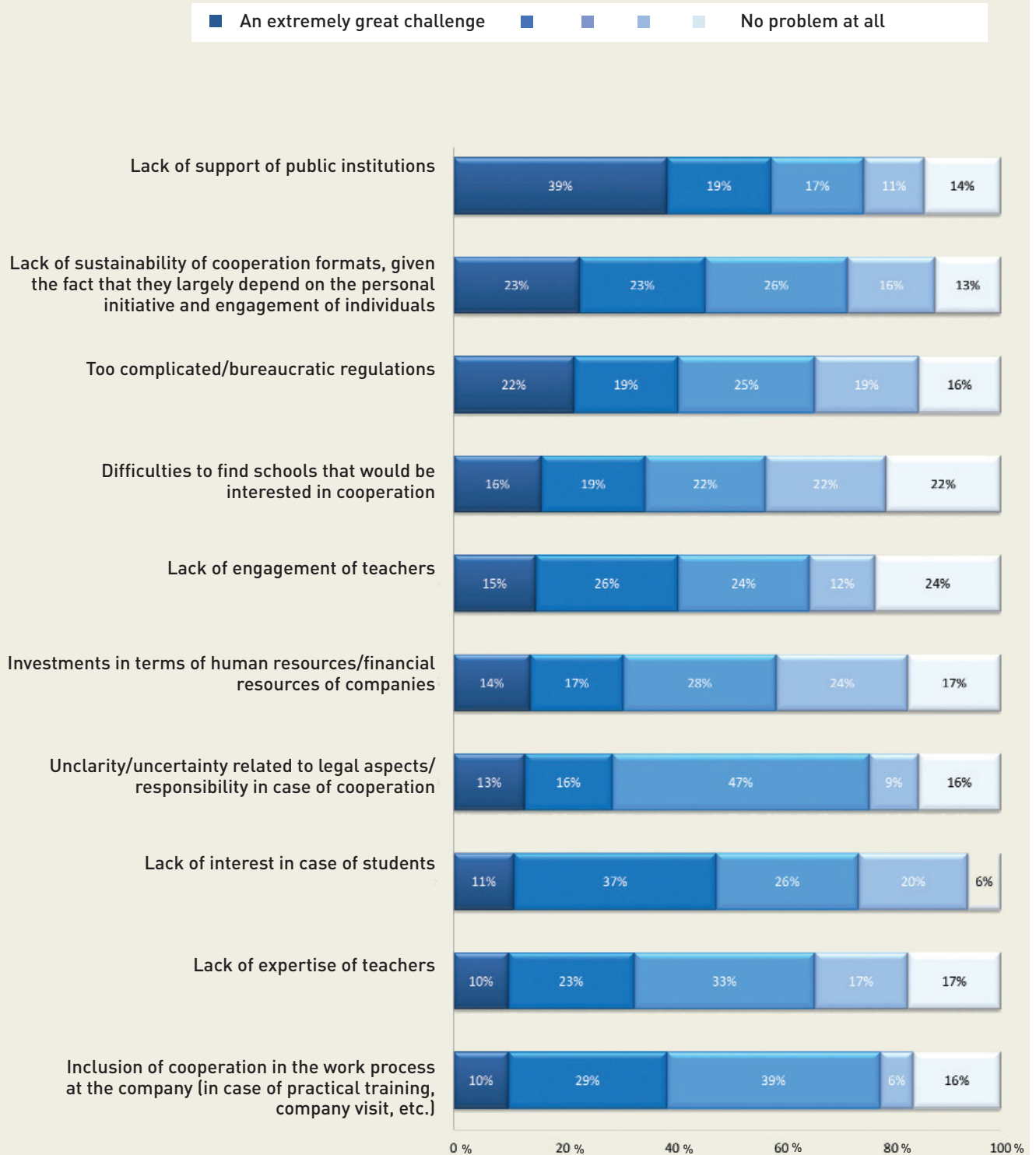
Companies without any experience in cooperation see considerable challenges related to almost all mentioned aspects. A positive thing is the fact they envision the least challenges in case of students' interest. They also do not expect too many difficulties for their companies in relation to human resources/financial resources that need to be invested and the inclusion in the production process at the company (e.g. alternance or practical training).

However, all other aspects were assessed as challenges. There are obviously great obstacles that must be overcome if these companies are to be motivated to engage in specific cooperation. Companies that are already cooperating with schools, might become pioneers/provide testimonials about their experiences, given the fact that they have an increasing trust when it comes to a realistic assessment of the situation from the perspective of the company.

Chart 6: Challenges related to the cooperation with schools from the perspective of companies

Companies **with** experience in cooperation

You stated that you have already cooperated with vocational schools. What are the greatest cooperation-related challenges based on your experience?

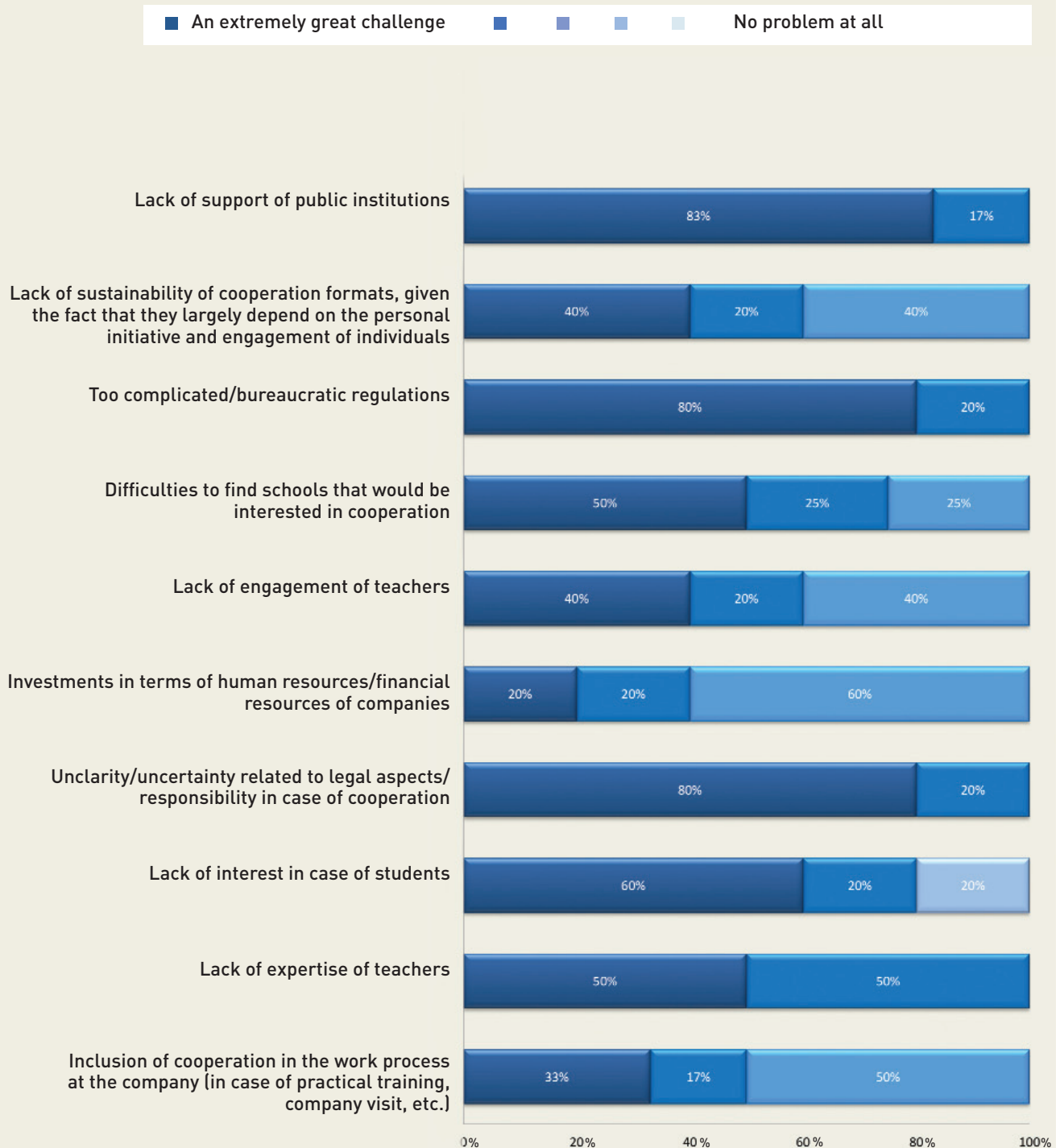


Source: ibw company survey in B&H, 2017

Note: For the purpose of easier comparison, the challenges for both charts were given in the same order [according to statements of companies with experience in cooperation]

## Companies *without* experience in cooperation

You stated that you were interested in cooperation with vocational schools. What are, in your opinion, the greatest challenges related to cooperation with vocational schools?



Source: ibw company survey in B&H, 2017

Note: For the purpose of easier comparison, the challenges for both charts were given in the same order (according to statements of companies with experience in cooperation)

### 4.3 Experiences with students from vocational schools during practical training

After an overview of potential cooperation formats between companies and vocational schools and fundamental challenges in this field, the focus lies on two cooperation formats between companies and schools, which are probably the two most important formats for (dual) vocational education: alternance and acquisition of experience in practical training setting. It turned out that as many as half of the respondents had such experiences with students, whereas the other half of respondents has not yet had any such experiences (please see chart 7).

so (chart 8). The first reason is that "they consciously wanted to give young people a chance", which is the answer provided by 75% of companies (68% of them stated that they "fully agreed"! ). There are similarly high values in case of the answer that the reason is the wish to make young people acquainted with the world of work ("in order for interested young people to acquire their first work experiences", as well as "in order to enable them to gain an insight in the daily work routine and professions").

Reasons related to companies' own interest come only second: the wish to attract students to the company in order to meet their own need for qualified workers ("a decreased risk of hiring wrong candidates" as well as "a higher prominence of the company in the region").

Chart 7: Experiences with students during practical training



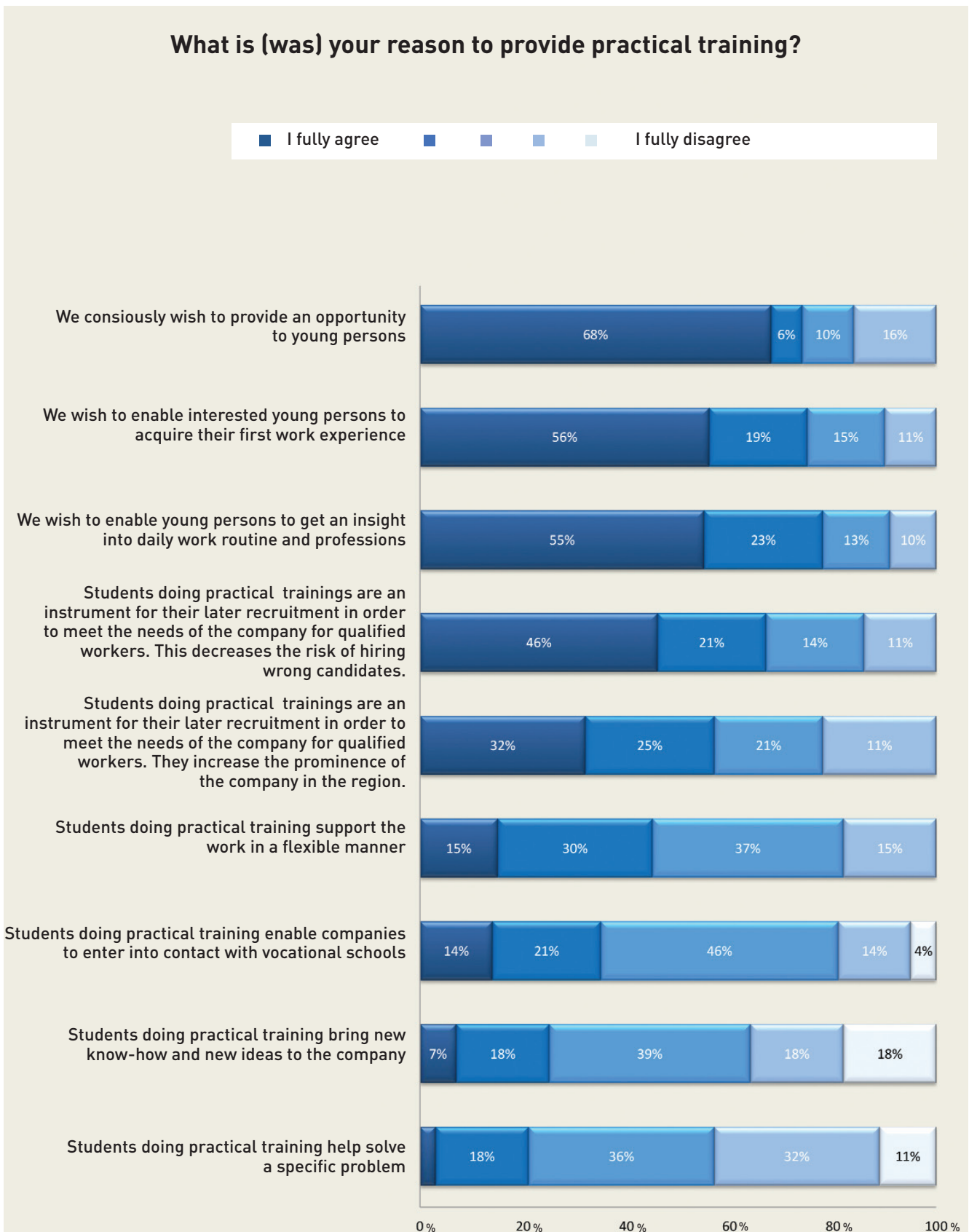
#### 4.3.1 Reasons for providing practical training

Companies that are currently providing practical training or that provided practical training before, answered the questions about their reasons to do

Only a small number of companies stated specific entrepreneurial reasons that are largely related to the specific work of students, such as flexible support in their work, impulses/new knowledge, or problem solving. The fact that 20-40% companies nevertheless agreed with these aspects to a somewhat less strong form is noteworthy.

Chart 8: Reasons for providing practical training positions

Only companies that have already had students doing practical training



Source: ibw company survey in B&H, 2017

If the structure of these statements is compared to reasons stated by companies in countries such as Austria, Germany or Switzerland when they accept students for practical training, a great difference may be perceived: in these countries, the key reason for providing practical training is a company's own interest. They train young qualified workers (in the form of apprenticeship) primarily in order to ensure their own new qualified workers. Many companies also give young persons an insight in daily work routine and enable them to acquire work ex-

perience – however, that is not the primary goal of most companies.

Components of work-based initial vocational education in Bosnia and Herzegovina thus depend to a much larger extent on the social interest of companies to provide support to young persons than on their wish to invest/achieve benefits for the company. As a result, tighter quantitative limits of participation of the "economy" in initial vocational education are drawn.



### 4.3.2 Reasons why companies have not yet provided practical training

There are obviously numerous reasons that result in the fact that companies do not provide components of initial practical training at companies (whether internships or alternance) (please see chart 9).

It is obviously crucial that...

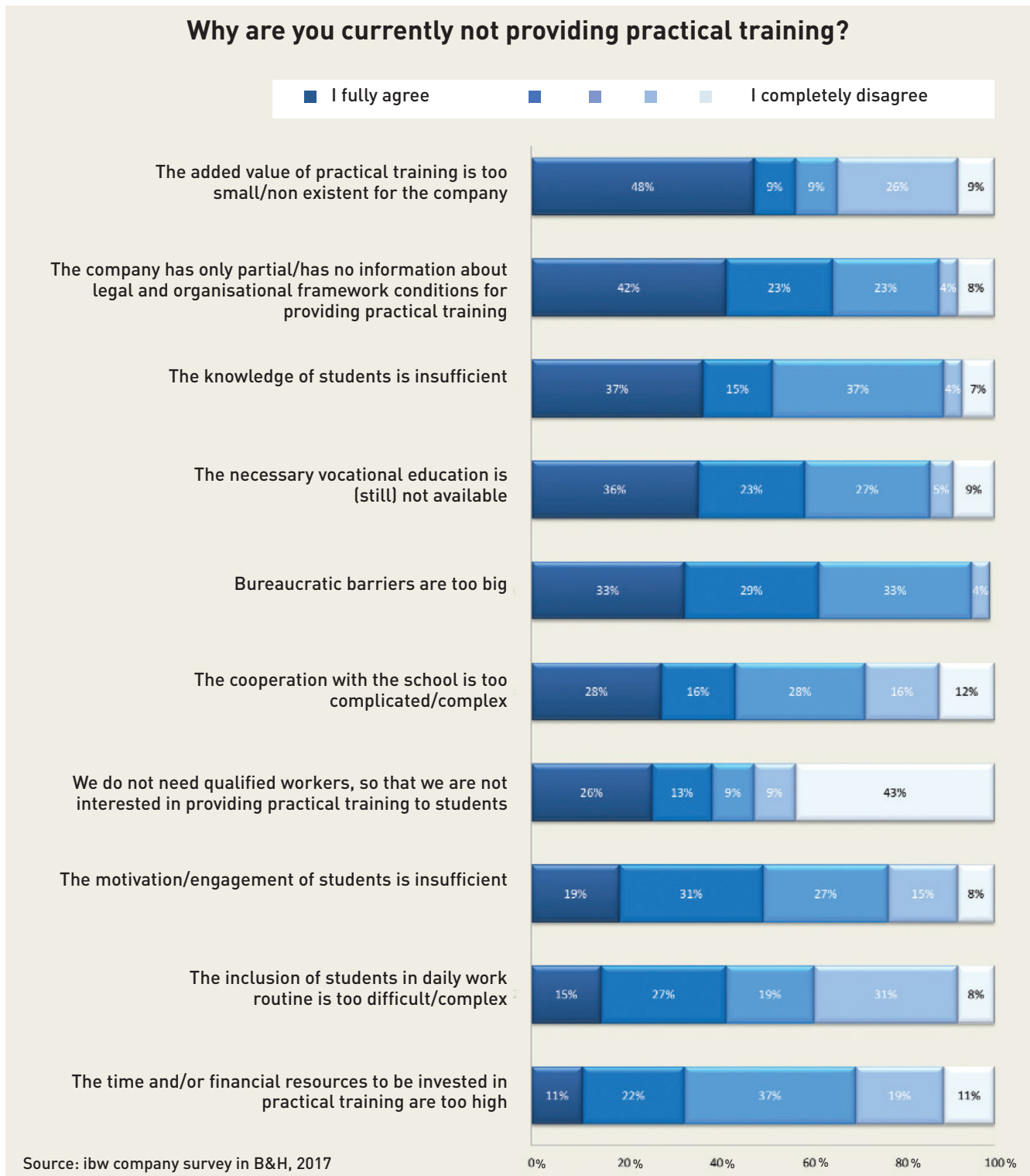
... companies do not really recognise the added value of company-based training.

... there is too little information about legal and organisational framework conditions or that bureaucratic obstacles are too big/seem too big.

... that vocational education needed/requested by companies is not sufficiently available, that curri-

Chart 9: Reasons why companies have not yet provided practical training

#### Only those companies that have not yet provided practical training



ricula are "obsolete" and/or there are professions that would be interesting for companies, but there are no school curricula and vocational education programmes.

In addition to this, there are frequently pronounced reservations regarding the knowledge of students and willingness of schools to cooperate (especially in terms of the extent to which such cooperation is complicated and complex in reality).

"The good news" resulting from answers given by companies is that there are small reservations regarding the engagement/motivation of students and that many companies believe that practical training at companies mostly can be integrated in daily production routine, as well as that most companies believe that the time and financial resources that need to be invested are entirely acceptable.

#### ***4.4 Basic requirements for the organisation of company-based practical training***

Irrespective of the fact whether a certain company already provided training to students or not, companies were asked about the manner in which practical training should be structured, so that a larger number of companies would participate in initial vocational education (by taking over compo-

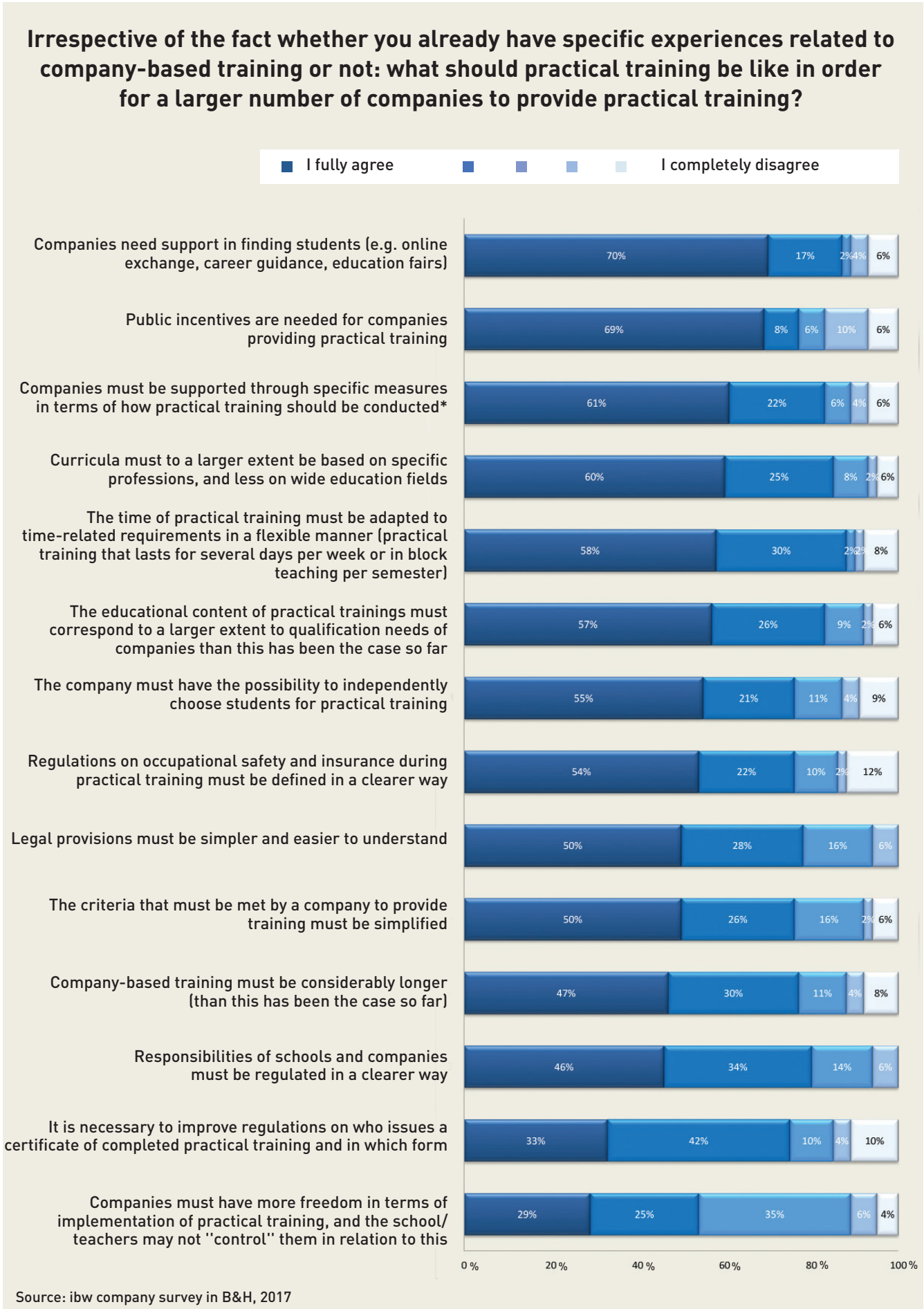
nents to be implemented as part of company-based training). The topic of systemic reform options/necessities was thus explicitly discussed.

The basic picture is clear: in case of all thematic fields/reform options that were mentioned, there was a high level of agreement (please see chart 10). Companies thus expressed a great need for a systemic reform. It is obviously needed in order for a larger number of companies to participate in initial vocational education.

Reform programmes include all basic aspects: greater possibilities for entrepreneurial action as well as support in selecting students, improved adaptation of education content to company needs for certain qualifications, longer training at the company as well as flexibility in terms of training schedule, simpler and clearer legal regulations (in particular in relation to occupational safety and insurance, distribution of roles and responsibilities between the school and company that provides the training, and last, but not least, better support for companies providing training from public institutions).

The reform programme is obviously comprehensive and challenging. It will therefore not be sufficient to only make small adaptations of the existing system in order to for a significantly higher number of companies to participate in initial vocational education, and specifically to take over concrete educational components.

Chart 10: Requirements for the organisation of practical training



The opinions of the respondents are extremely homogenous, i.e. there are no differences, irrespective of the fact whether these are Austrian or Bosnian and Herzegovinian companies, small, medium-sized or large companies, companies from the production industry or some other sector (trade, services, etc.). ALL companies therefore basically want the same reform programme.

If company-based training in Bosnia and Herzegovina could take place in an environment structured in such a way, 75% of respondents would provide practical training. As a result, there would be around 800 additional jobs per year at all these companies. At the same time, such a large number of positive answers points to a great potential, but also to the necessity of comprehensive/far-reaching reforms.

#### **4.5 Reform option "apprentice training"**

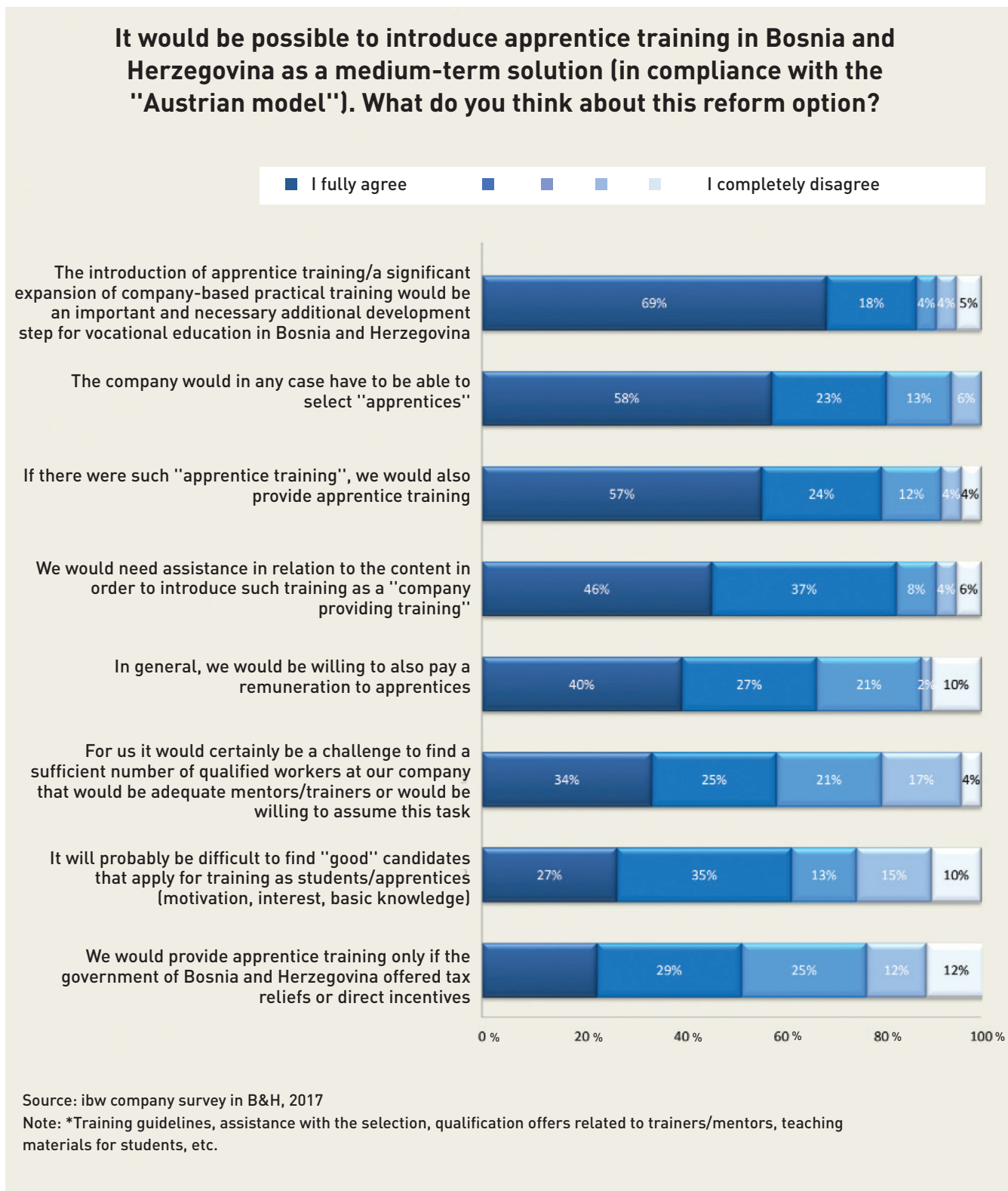
A final set of question relating explicitly to reform options regarding apprentice training (e.g. based on the Austrian system) was created in order to assess the scope/depth of the need for reforms in the opinion of companies.

The result basically reflects the necessary reforms from company perspective, as also stated in the previous chapter: this in a way stresses the depth of necessary reforms (please see chart 11).

In case of apprentice training based on a model similar to the "Austrian model", around 80% of respondents would be willing to provide apprentice training. On the one hand, this points to a great interest of companies in actively implementing initial

vocational education themselves, i.e. in taking over meaningful education components. On the other hand, it points out the importance of reform programmes. It is not about "copy-pasting" the entire German, Austrian or Swiss apprenticeship system, but rather about acknowledging basic components (such as the duration, places of learning, roles, responsibilities, etc.) of dual systems of these countries and their adaptation, as well as independent concepts for and in Bosnia and Herzegovina, i.e. in compliance with the characteristics and framework conditions of the country. In doing so, the possibility of companies to independently select students for practical training is certainly of crucial importance. A series of questions also explicitly relate to potential difficulties of such a reform programme. Most companies are essentially willing to pay remunerations to apprentices, however, many of them expect financial support from the state. A certainly more important question is how obviously great specific needs of companies in terms of content-related support could be met when introducing and implementing company-based training. Who would be competent/responsible for it? Who has the capacity and competences and in what way should such content-related support be provided/have to be provided? Another challenge from the perspective of companies would certainly also be the issue of finding a sufficient number of qualified workers at companies, who would be interested in being mentors/trainers and their adequate qualification for this task. There are also some reservations/doubts as to whether there would be a sufficient number of "good" students who already have certain qualifications and are motivated.

Chart 11: Reform option "apprentice training"



A detailed analysis has shown that companies have extremely homogenous views about this issue, irrespective of the fact whether these are Austrian or Bosnian and Herzegovinian companies, smaller, medium-sized or large companies, companies that engage in production or belong to other sectors

(trade, services, etc.). ALL companies therefore have a very positive attitude to medium-term/long-term reform options of establishing an apprentice training system, which is generally similar to the one in Austria, Germany or Switzerland.

# 5

## Recommendations for action for the purpose of strengthening work-based learning

The company survey has shown that, in the opinion of companies, there is a significant need for reforms, in order for the "economy" to be ready, i.e. in order for companies to be able to engage (more) in initial vocational education, and especially in order to provide practical training and work-based learning opportunities (alternance).

This basic view also results from a series of discussions with actors in Bosnia and Herzegovina (schools, companies, chambers, ministries). The author of the report was able to attend around a dozen of such round table discussions in the period fall/winter of 2017, which gathered stakeholders from the whole country (these round tables were held in Sarajevo, Banja Luka and Mostar). The external perspective shows that...

... initial vocational education in various parts of Bosnia and Herzegovina has very different forms, in part independently from legal framework conditions.

... work-based learning is implemented in various ways – however, the actors frequently lack a common vision/understanding of goals related to various formats. In addition to this, there are frequently no legal regulations, they are imprecise or they even differ in different parts of the country.

... the impact and involvement of social partners differ to a great degree in different parts of the country, and they are frequently insufficient.

... the roles and responsibilities (especially in case of schools and companies) are imprecise. This eventually also relates to unclarities regarding the criteria that companies have to meet in order to provide training.

... there is a pronounced lack of trust among the actors, which makes open discussions about existing problems more difficult/impossible (e.g. practical training that is not in compliance with the education purposes/"exploitation" of students during practical training or lack of willingness of schools to provide support to companies providing training).

Also, there is insufficient awareness from multiple points of view about the fact that schools and companies certainly have justified different interests and expectations related to benefits of work-based learning.

... the basic structure of work-based learning insufficiently incorporates companies' possibilities and needs for flexibility (e.g. lack of possibilities for (co)decision about the students that will be "accepted" for practical training, content and time of training components implemented at the company, too strict supervision by school coordinators).

... schools are frequently the ones that mostly make decisions about the scope and content of work-based learning (based on their own interest).

... there are no public support structures for companies interested in providing training.

From an external perspective, it is possible to deduct certain **options for action** as regards the manner in which the cooperation between schools and companies – and especially work-based learning – might be improved in the future. The key issues would therefore be the following ones<sup>8</sup>:

- Explanations regarding the formats of work-based learning in terms of their goals, structural forms and roles and responsibilities of schools and companies.
- Defining obligatory minimum standards/criteria for companies that provide training
- Structuring training components at companies while at the same time considering legitimate entrepreneurial cost-benefit analyses, the need for flexibility and student training quality assurance
- Introducing public sector support structures and instruments for companies in order to improve their competences for implementing high-quality work-based learning
- Establishment/expansion of school competences and update of expertise of teachers regarding theoretical and practical learning
- Defining framework conditions for cooperation

<sup>8</sup> For the purpose of an overview and discussion about fundamental "success factors" for introducing work-based learning, please see Bliem W., Schmid K., Petanovitsch A. (2014): Erfolgsfaktoren der dualen Ausbildung. Transfermöglichkeiten. (Success Factors of Dual Education. Possibilities for their Transfer.). ibw research report number 177, Vienna

German language version: <https://www.ibw.at/resource/download/289/ibw-forschungsbericht-177.pdf>  
English language version: <https://www.ibw.at/bibliothek/id/258/>

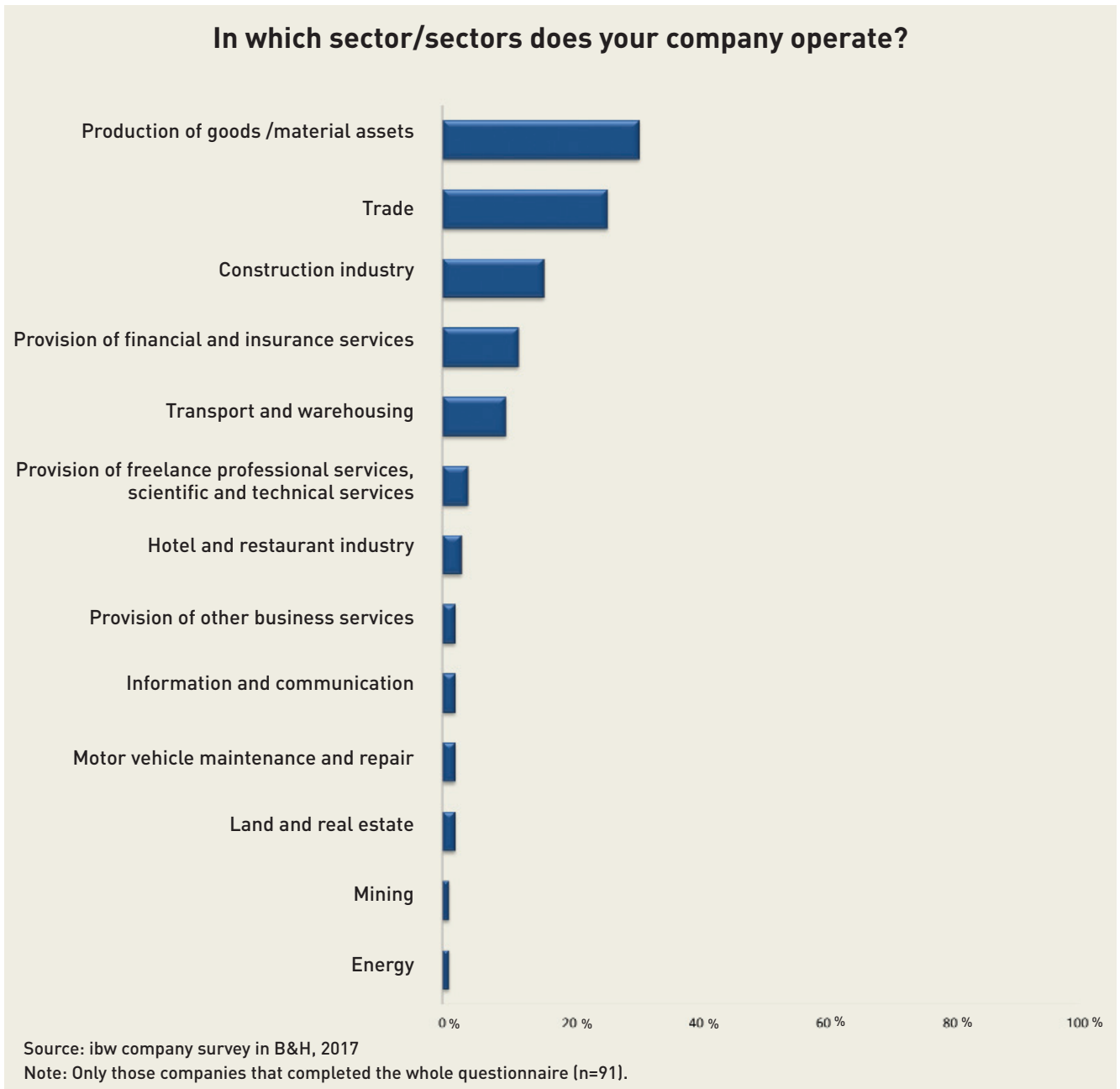
formats between schools and companies, such as practical training contract templates or donation templates

- Inclusion of institutional actors, such as the association of employers, in the process of vocational education management in Bosnia and Herzegovina. Development of a relevant expertise at these organisations in relation to vocational education
- Last, but not least, regulations and administrative procedures should be standardised throughout the country in order to guarantee transparency of access to and quality of work-based learning both for students and companies.

# 6

## Appendix I: Company survey details

Chart 12: Company structure by sectors





# 7

## Appendix II: Questionnaire



### QUESTIONNAIRE

#### Cooperation with vocational schools | Company-based training

F1a

In which sector/sectors does your company operate? (multiple answers are possible)	
<input type="checkbox"/>	Mining
<input type="checkbox"/>	Production of goods/material assets
<input type="checkbox"/>	Energy
<input type="checkbox"/>	Water supply, sewerage, waste disposal and environmental remediation activities
<input type="checkbox"/>	Construction industry
<input type="checkbox"/>	Trade
<input type="checkbox"/>	Motor vehicle maintenance and repair
<input type="checkbox"/>	Transport and warehousing
<input type="checkbox"/>	Hotel and restaurant industry
<input type="checkbox"/>	Information and communication
<input type="checkbox"/>	Provision of financial and insurance services
<input type="checkbox"/>	Land and real estate
<input type="checkbox"/>	Provision of freelance professional services, scientific and technical services
<input type="checkbox"/>	Provision of other business services
<input type="checkbox"/>	Other sectors:

Specific sector: .....

F1 b

What is the key business activity of your company in Bosnia and Herzegovina? (only one answer is possible)	
<input type="checkbox"/>	Trade
<input type="checkbox"/>	Production
<input type="checkbox"/>	Sourcing/procurement
<input type="checkbox"/>	Advisory services/services
<input type="checkbox"/>	Other: .....

## F2

How many employees does your company currently have in Bosnia and Herzegovina? <i>(only one answer is possible)</i>	
<input type="checkbox"/>	1-9
<input type="checkbox"/>	10-19
<input type="checkbox"/>	20-49
<input type="checkbox"/>	50-249
<input type="checkbox"/>	more than 250

## F3

In which city/region does your company have its seat or branch office? <i>(multiple answers are possible)</i>	
<input type="checkbox"/>	Sarajevo
<input type="checkbox"/>	Banja Luka
<input type="checkbox"/>	Mostar
<input type="checkbox"/>	Brčko District
<input type="checkbox"/>	Other city/region: .....

*First of all, we would like to know whether you already cooperate with vocational schools or whether you would be interested in cooperating with them.*

**F4 Has your company already accepted students from vocational schools? Or does your company already cooperate with vocational schools in some other format?**

If your answer is affirmative, to what extent are you satisfied with the cooperation?  
*(1 = very satisfied to 5 = completely dissatisfied)*

If your answer is negative, would you in general be interested in cooperation?  
*(1 = very interested to 5 = completely uninterested)*

Cooperation	Existing cooperation? Level of satisfaction		Interest in cooperation in future?
Open door days/hours, professional practice days, career guidance: students can get acquainted with the daily work routine, activities and professions at our company	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Voluntary internship (there are no regulations)	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Practical training at the company/specialist training (during the school year or holidays; the scope and content are defined in the curriculum)	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Partnerships with schools (training company, etc.)	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Infrastructure donations: the company provides machinery/material for school workshops	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Regular money donations	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Students can do various exercises, final and seminar papers related to your company	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Exchange of information with teachers regarding current trends in the profession	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Qualified workers of the company teach at schools	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Our company is represented at the school management/board/body	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Other cooperation formats? Please indicate: .....	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Other cooperation formats? Please indicate: .....	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5

***If in F4 you indicated an existing cooperation:***

**F4a You stated that you already have an existing cooperation with vocational schools.**  
 What are in your opinion the greatest challenges of such cooperation?

*(1 = very big challenges to 5 = without any problems at all)*

***If an existing cooperation was not indicated in F4, and if interest was expressed for at least one cooperation format:***

**F4b You stated that you were interested in cooperation with vocational schools.**

What are in your opinion probably the greatest challenges when it comes to cooperation with vocational schools?

*(1 = very big challenges to 5 = without any problems at all)*

<b>Challenges</b>	<b>Importance (1 to 5)</b>
Difficulties to even find schools interested in cooperation	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Lack of sustainability of cooperation, given the fact that it is largely based on the initiative and engagement of individuals	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Lack of engagement of teachers	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Lack of knowledge of students	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Unclarity/uncertainty regarding legal aspects/responsibilities related to the cooperation	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Too complicated/bureaucratic regulations	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Lack of support of the public sector	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Incorporation of cooperation (in case of practical training at the company, company visit, etc.) in the work process at the company	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Investments related to human resources/financial resources of the company	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5
Other challenges: .....	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> 1 2 3 4 5

***We would now like to focus on your experiences regarding practical training of students from vocational schools (i.e. not higher education students).***

**F5 Has your company already had experiences with students from vocational schools?**

*We kindly ask you to give answers only in relation to those practical trainings that students from vocational schools must/should participate in, as well as practical training, the scope and content of which are defined in the curriculum (such as obligatory internships or practical training at the company during the school year).*

<input type="checkbox"/>	YES, we currently have students doing practical training <i>(please continue with F6a)</i>
<input type="checkbox"/>	YES, we used to have students doing practical training, however, this is currently not the case <i>(please continue with F6a, and then also F6b&amp;F6c)</i>
<input type="checkbox"/>	NO, we have never had students doing practical training <i>(please continue with F6c)</i>
<input type="checkbox"/>	I don't know <i>(please continue with F7)</i>

**If F5 = YES, now:**

F6a Why are you providing practical training?

**If F5 = YES, but only previously:**

F6a Why were you providing practical training?

*(1 – I fully agree, 2 I agree, 3 I am neutral – I neither agree nor disagree, 4 I disagree, 5 I completely disagree)*

Reasons	Grade (1 to 5)
Students are an instrument for meeting the needs of the company for qualified workers	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
They reduce the risk of hiring wrong candidates	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
They increase the level of prominence of the company within the target group of candidates	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We would like to offer interested young persons an insight into daily work routine and professions	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We would like to give a chance to interested young persons to acquire their first work experiences	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Students that do practical training support the work in a flexible manner	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Students doing practical training help solve a specific problem	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Students doing practical training bring new know-how and new ideas to the company	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Students doing practical training are a manner of entering into contact with vocational schools	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We consciously wish to give an opportunity to young persons	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Other/additional reasons: .....	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>

**F6b Scope of practical training of students at the company:**

Obligatory internship:

... number of weeks during holidays

Practical training at the company during school year:

... number of days per week or

... number of weeks per semester

**If F5 = NO:** F6c Why are you currently not providing practical training?

*(Categories of answers are identical as in case of F6a)*

Reasons why your company is not providing practical training	Grade (1 to 5)
The added value of practical training is too small/non-existent for the company	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The inclusion of students in the daily work routine is too difficult/complicated	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The necessary vocational education is (still) not available	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The time and/or financial resources to be invested in practical training are too high	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Bureaucratic barriers are too big	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The cooperation with the school is too complicated/complex	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The motivation/engagement of students is insufficient	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The knowledge of students is insufficient	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The company has only partial/has no information about legal and organisational framework conditions for providing practical training	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We do not need qualified workers, so that we are not interested in providing practical training to students	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Other/additional reasons: .....	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>

**F7 Irrespective of the fact whether you already had specific experiences with practical training or not: What should practical training in general be like in order for a higher number of companies to provide practical training?**

*(1 – I fully agree, 2 I agree, 3 I am neutral – I neither agree nor disagree, 4 I disagree, 5 I completely disagree)*

Reform options	Grade (1 to 5)
Company-based training must be considerably longer (than this has been the case so far)	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The company must have the possibility to choose students for practical training on its own	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The content of practical trainings must correspond to a larger extent to qualification needs of companies	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The time of practical training must be adapted to time-related requirements of the company in a flexible manner (practical training that lasts for several days per week or in block teaching per semester)	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Companies must have more freedom in terms of implementation of practical training and the school/teachers may not "control" them in relation to this	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Curricula must to a larger extent be based on specific professions, and less on wide education fields	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Regulations defining who issues the certificate of practical training and in which form must be improved	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Legal provisions must be simpler and easier to understand	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Responsibilities of the school and company must be regulated in a clearer way	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Regulations on occupational safety and insurance during practical training must be defined in a clearer way	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The criteria that must be met by a company to provide training must be simplified	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Companies need support in finding students for practical training (e.g. online stock exchange, career guidance, education fairs)	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Companies must be supported through specific measures in terms of how practical training should be conducted (training guidelines, assistance in selection, qualifications for trainers/mentors, teaching materials for students, etc.)	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
There have to be public incentives for companies that provide practical training	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
Other/additional reform options that are absolutely necessary: .....	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>

**F8 Would your company be willing to offer (more) practical training positions under the above conditions?**

- YES                       I am not sure                       NO (please continue with F9)
-                       

**F8b In case of which profession/professional field would your company be interested in providing practical training for students? How many students would that approximately be per year?**

Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_  
 Profession/professional field: \_\_\_\_\_ No. \_\_\_\_\_

***"Apprentice training": Is this a necessary medium-term reform option?***

**F9 Medium-term reform options could also include the introduction of apprentice training in Bosnia and Herzegovina (similarly to the Austrian model), or the time spent doing practical training at the company within the existing practical training might be extended in such a way that at least half of the training takes place at the company. What is your opinion on these reform options?**

*(1 – I fully agree, 2 I agree, 3 I am neutral – I neither agree nor disagree, 4 I disagree, 5 I completely disagree)*

Reform options "apprentice training"	Grade (1 to 5)
The introduction of apprentice training/significant expansion of company based practical training would be an important and necessary development step for vocational education in Bosnia and Herzegovina	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
If there were such "apprentice training", we would also provide apprentice training	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
The company would in any case have to be able to select "apprentices"	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
For us it would certainly be a challenge to find a sufficient number of qualified workers at our company that would be adequate mentors/trainers or would be willing to assume this task	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
In general, we would be willing to also pay a remuneration to apprentices	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
It will probably be difficult to find "good" candidates that apply for training as students/apprentices (motivation, interest, basic knowledge, etc.)	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We would need assistance in relation to the content in order to introduce such training as a company providing training	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>
We would provide apprentice training only if the government of Bosnia and Herzegovina offered tax reliefs or direct incentives	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <b>1 2 3 4 5</b>



*Thank you very much for taking the time to participate in our survey. Over the coming weeks, we will analyse the data we gathered in order to see your opinion as to the direction in which our support to the process of reforms in vocational education in Bosnia and Herzegovina should/would have to go. In addition to this, we are working on a manual – so that in it you will obtain information on possibilities for regional cooperation with vocational schools.*

Would you like to receive the key findings of this survey and the manual by e-mail?

- No
- Yes, please send them to (e-mail address): .....

Would you like to continue participating in the discussion about reform options in vocational education?

- No
- Yes, please send them to (e-mail address): .....