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# The Evolution of Study Abroad in Germany: 1963–2011

HIS: Project Report

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# 1 Introduction

International mobility is not a new phenomenon among university students, or one that has only in recent years become a typical feature of academic training. Studying abroad—spending one or two semesters at an overseas university and gaining experiences in other countries—has been a key component in the evolution of university study from the very beginning. It wasn't before the mid-twentieth century, however, that students in Germany could draw on systematic support to help them study abroad. The fact that the German Academic Exchange Service (DAAD) resumed its activities in 1950 no doubt has to be regarded, among other things, as a clear signal of the desire to promote an academic philosophy that would make international experience an explicit element of a university degree. This aspect has since become much more important. Even though the majority of German students in most fields of study continue not to complete part of their degree in a foreign country, the number of students who do go abroad has now grown to an extent that would have been difficult to imagine back in the 1950s. Among today's students at German universities, whether or not to study abroad has become a standard question that no one can escape and that everybody has to come to terms with.

Rising levels of international student mobility came along with increasingly sophisticated attempts to measure this mobility in statistical terms. The first statistical and scientific surveys to capture German students' study abroad activities beyond what the DAAD published in its annual reports were conducted in the 1960s. With a complex topic such as this one, however, it is hardly surprising that it took many years for a widely accepted definition of international mobility, as well as certain minimum standards for analyzing that mobility, to emerge. It wasn't before the mid-1980s that German students' study abroad participation began to be measured on a more or less ongoing basis, mainly as part of the Deutsche Studentenwerk Social Surveys.

The mid-1980s also saw the emergence of an expanded understanding of what we mean by study abroad. Whereas previously only non-degree enrollment at overseas universities counted as study abroad and was measured as such, the analysis was now expanded to include work placements, internships, and language courses abroad. In recent years, the definition of international student mobility has been broadened even further. Now, attending summer schools or doing project work abroad is also considered to be relevant in this context.

With the growing interest in funding study abroad and the rising number of internationally mobile students, researchers have increasingly put a focus on the qualitative aspects of study abroad as well. Instead of merely measuring the percentages of students who go abroad, finding out more about students' motivation and their immediate experiences abroad, as well as the barriers and reasons for not studying abroad, have become equally important.

Despite current efforts to intensify the research on study abroad, the past thirty or forty years have been characterized by shifting research foundations and a lack of continuity in the statistical measurement of German students' international mobility. As a consequence, the possibilities for giving a comprehensive account of how the scale and scope of study abroad participation among German university students has evolved over time are severely limited. In addition to the limited data on student mobility, there are a number of methodological limitations that need to be pointed out.

Most importantly, such methodological problems arise from the fact that German universities have gradually been converting their traditional single-phase Diplom degree programs into bachelor's and master's programs, a process that started as early as the year 2000. The introduction of the new degree programs represents such a profound break that as soon as a certain number of

students are enrolled in these programs, it is no longer possible to continue the existing time series on the development of study abroad participation. Since the fundamental changes in curricular structure do not allow for making direct comparisons, a new series of measurement had to be started for the two-tiered degree system. As a result of these changing general conditions, the time series regarding the scope of German students' international mobility that were started in the 1970s and 1980s could only be continued through 2006 and 2009 in the present report. Current data on the international mobility of students enrolled in the new degree programs are presented in a separate section.

The following short version of the report is designed to provide an overview of the development of German university students' study abroad participation—with regard to the changing proportions of study abroad students as well as their rising absolute numbers. It is these quantitative changes in particular that illustrate the new quality of what is required of German universities in terms of international collaboration in order to enable their students to complete study abroad experiences that not only match their level of training but also provide them with high-quality options in their respective majors. After some introductory remarks on data and methodology, the first section of the report presents information on the evolution of university enrollment and the number of graduates in Germany. In a second section, the development of international mobility rates up until 2006 and 2009 among students enrolled in the traditional degree programs is presented by type of university, type of degree, and field of study, wherever possible. The third section presents initial findings on the scope of study abroad participation among students enrolled in bachelor's, master's, and Staatsexamen (state examination) programs since 2007. Based on the established mobility rates, the final section presents study abroad participation in absolute numbers.

## 2 Data and methods

In the past forty years, and under changing conditions, a variety of approaches was used to measure the percentage and absolute numbers of German study abroad students. As a result, it is quite difficult to establish a time series regarding the development of study abroad participation among German students. There are three methodological barriers that stand in the way of any such effort:

- Each of the surveys in question is based on a different understanding of study abroad; definitions range from putting an exclusive focus on non-degree enrollment at foreign universities to including all kinds of conceivable study abroad experiences.
- The established mobility rates tend to refer to different groups: the entire student population, upper-semester students, university graduates, and so on.
- There is considerable variation in the statistical quality of the data, which range from nationally representative samples to samples representative of certain groups of students and mere trend values.

These problems, aggravated by the prolonged time periods during which study abroad participation was not surveyed at all, not only serve to restrict data comparability, they also make it impossible to give a complete picture of the evolution of study abroad participation among German students. Based on the following datasets, we may only point out rough trends and tendencies in students' study abroad involvement.

The data for this study were essentially drawn from two survey series: first, the Social Survey, conducted every three years by HIS on behalf of the Deutsche Studentenwerk (DSW), and second, the three recent HIS surveys on the "International Mobility of German Students," conducted in 2007, 2009, and 2011 on behalf of the DAAD. Data collected in surveys of university graduates were not included in the analysis, however. It has only been in recent years that graduates were questioned about their study abroad involvement as students. As a consequence, the data currently available from these sources represent snapshots rather than time series.<sup>1</sup>

When looking at the results, another aspect needs to be kept in mind. In the Social Survey, international mobility rates are determined by using upper-semester German students studying for a first degree as the reference group. At research universities, this group includes students in their 9th to 14th semester of study; at universities of applied sciences, it includes students in their 7th to 11th semester of study.<sup>2</sup> The survey has been restricted to upper-semester students in order to obtain a complete picture of students' study abroad experiences. Referring to this group has the advantage of illustrating the percentage of students near the end of their studies who can look back on a study abroad experience. In other words, the mobility rates determined that way are close to those of the graduate population.

<sup>1</sup> The latest graduate surveys conducted by the International Center of Higher Education at the University of Kassel do contain information on the study abroad participation of the 2007 and 2008 graduate cohorts. However, since two other survey series are available to provide data for the most recent years, these graduate surveys were not taken into account for the present report on the long-term development of students' international mobility.

<sup>2</sup> Up until the 17th Social Survey (2003), international mobility rates were determined based on the study abroad experiences of upper-semester first-degree students who were in their 8th semester or higher at research universities, or in their 6th semester or higher at universities of applied sciences, at the time of the survey. However, subsequent assessments of the 18th Social Survey (2006), and comparisons with HIS graduate polls, have shown study abroad participation to cumulate at a later stage in students' undergraduate careers. As a consequence, the semester limits for determining mobility rates were raised to include semesters 9 through 11 for students at research universities and semesters 7 through 11 for students at universities of applied sciences. The mobility rates of earlier Social Surveys were re-calculated according to the new modified procedure. As a result, there are certain discrepancies between the data presented here and the data provided in the reports on earlier Social Surveys.

However, this approach does not provide any information about the international experience that students at German universities have at a given point in time. Such a value would include the study abroad experiences of all students enrolled at that point in time, regardless of how many semesters they have completed. The resulting overall mobility rate of the entire student population may serve as an indicator of the accomplished degree of internationalization, for example. This approach was applied in the DAAD studies on the “International Mobility of German Students,” for example. Designing surveys this way enables us to determine mobility rates for the entire student population as well as for groups of students at a particular stage of their degree.

Our interpretations of the available data on German students’ international mobility, however, must not only take account of changes in the general methodological approach and in specific procedures but also of the far-reaching overhaul of university structures and curricula in the past fifteen years. The gradual replacement of Diplom degree programs with bachelor’s and master’s programs has had the effect that comparing the mobility rates of older student cohorts with those of more recent ones does no longer make sense once the number of students studying for a bachelor’s or master’s degree has reached a certain point. The time series on international mobility that were begun in the 1970s and 1980s indicate the extent of study abroad among upper-semester students. Such a survey design is no longer possible with the two-tiered degree structure, however. Under these new conditions, any survey design must start by paying closer attention to the various types of degrees. This means that the existing time series may not be continued; study abroad participation now has to be measured under new conditions and with the help of new time series. The present report, therefore—adopting the changes made in the 19th Social Survey—provides the international mobility rates of students enrolled in the traditional degree programs up until 2009. Data that differentiate between research universities and universities of applied sciences are only available up until 2006, however. The time series on the traditional degree programs cannot be continued until the very last student has earned his or her Diplom or Magister degree but only as long as the data may reasonably be compared to earlier values in a specific field of study, for example. Conversely, time series for measuring international mobility in the new bachelor’s and master’s programs may only begin once there is a sufficient number of students enrolled in these programs to ensure the measured values may be compared to later ones, and that there won’t be any differences between reference groups. This means that a first set of mobility rates differentiated by type of university became available for bachelor students as early as 2007, whereas similar data for master students could only be provided for the first time in 2011.

When compiling the data on the evolution of German students’ international mobility, a number of compromises had to be made with respect to methodology, due to the problems mentioned above. Otherwise it would not have been possible to make reasonable and justified comparisons, as the majority of data were collected for students enrolled in Diplom degree programs. At the same time, of course, our aim is to also present a number of more recent findings that are more in line with the new curricular structures and will thus serve as the starting points of new time series.

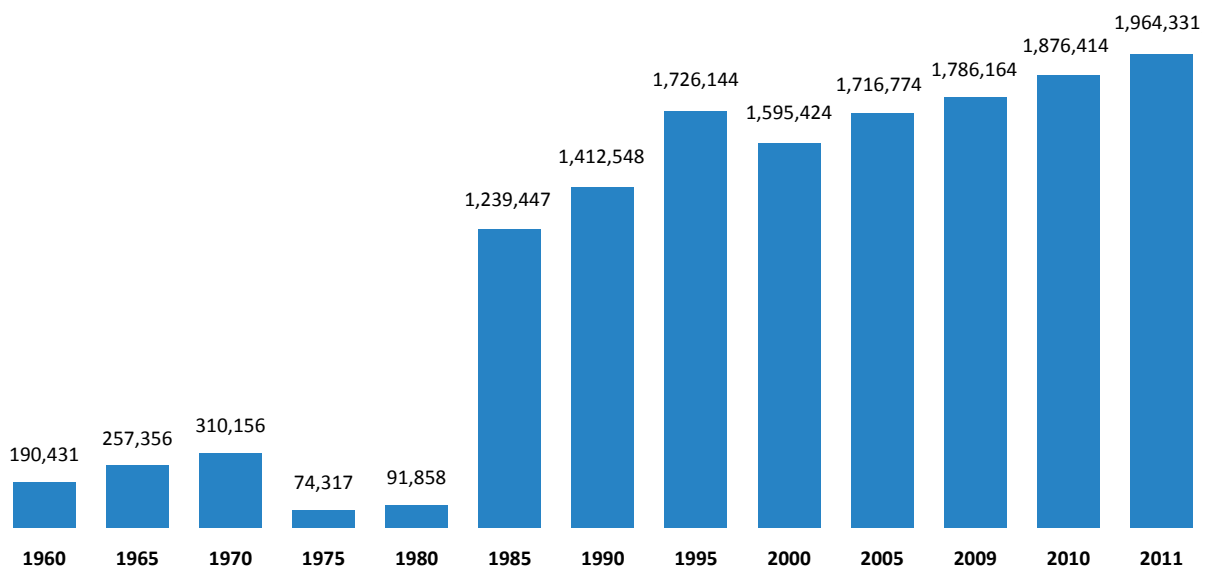
### 3 The evolution of study abroad in Germany

#### 3.1 The evolution of university enrollment and graduate numbers in Germany 1960 - 2009

In 1960, German universities enrolled a total of 190,431 German students (Fig. 1). The three decades that followed saw a continuous increase in student numbers. In the mid-1990s, university enrollment reached a temporary peak at 1,726,144, which was in part due to the fact that students from the new East German states had been included in the statistics. In the years following 1995, the number of German students decreased steadily, dropping to 1,595,424 in the year 2000. That same year, however, saw the beginning of a resurgence of student numbers, which have continued to rise ever since, most recently peaking at 1,964,331 in 2011.

##### 1 Total university enrollment in Germany 1960–2011

→ Shown in absolute numbers



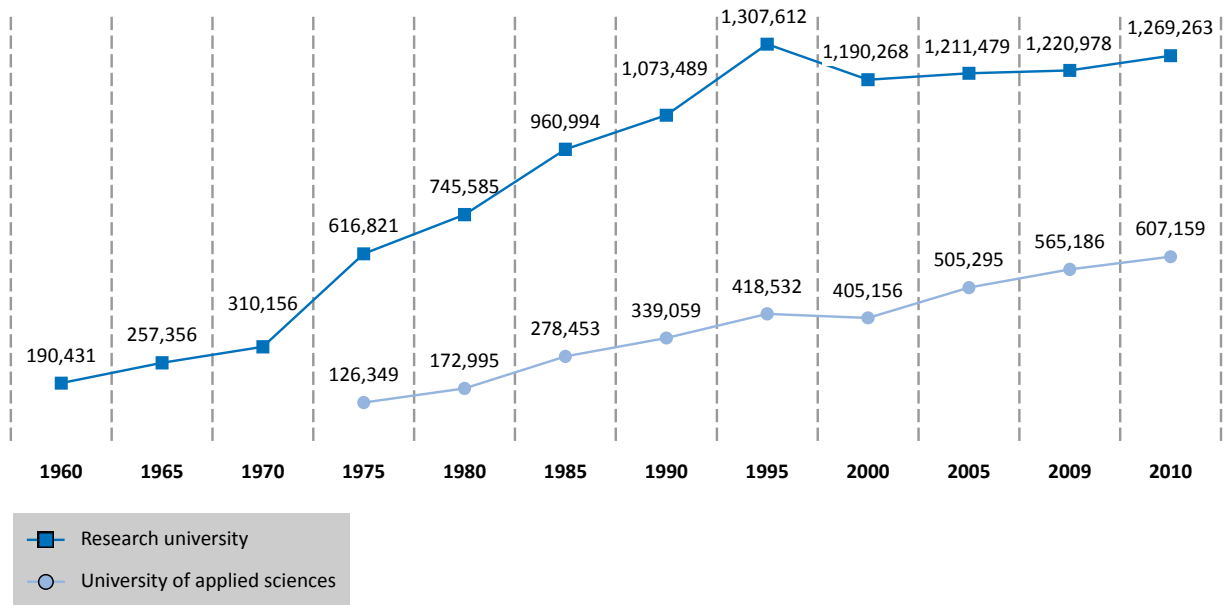
Source: German Federal Statistical Office

The temporary decrease in total enrollment between 1995 and 2000 resulted from a declining number of first-year students during those years. Moreover, the number of students who take an inordinate amount of time to complete their degrees (Langzeitstudierende) decreased after tuition fees were introduced for these types of students.

The considerable increase in overall student numbers over the past forty years is reflected in the enrollment trends at both research universities and universities of applied sciences (Fig. 2). Student numbers at universities of applied sciences have developed more steadily, however. The drop in enrollment between 1995 and 2000 was less pronounced at these institutions than it was at research universities. Since that period, universities of applied sciences, too, have seen strong enrollment growth. As early as 2001, student numbers were back at the 1995 level. With 607,159 German students studying at universities of applied sciences in 2010, enrollment at these institutions has increased by almost 50 percent.

2 University enrollment in Germany by type of institution, 1960–2011

→ Shown in absolute numbers



Source: German Federal Statistical Office

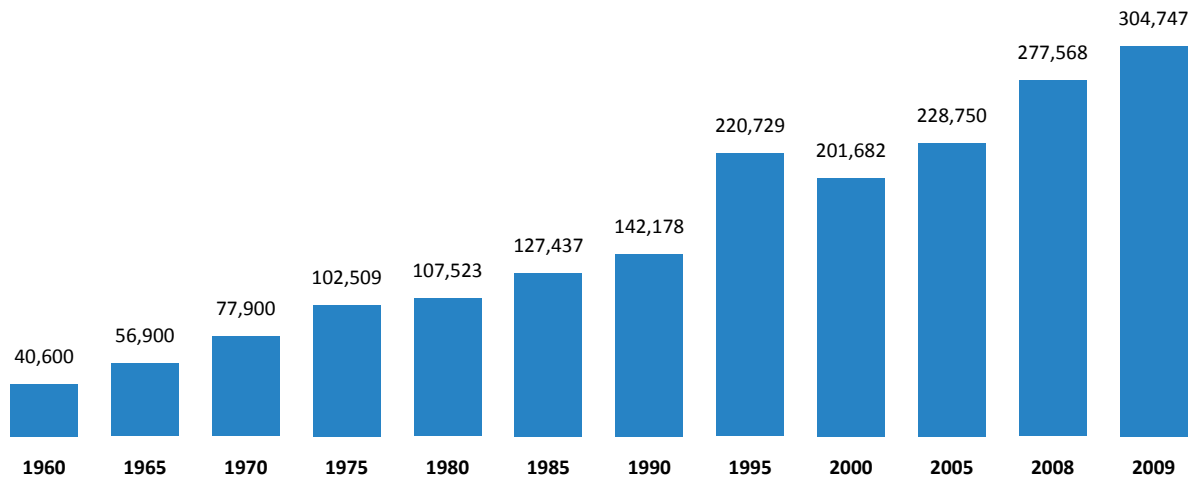
Although total enrollment at research universities is twice as high as that at universities of applied sciences, student numbers here have grown at a much slower pace over the past decade. While research university enrollment experienced tremendous growth between 1970 and 1995 - a time period when growth rates were less pronounced at universities of applied sciences - enrollment at research universities, which stood at 1,269,263 students in 2010, has yet to rebound to the 1995 peak of 1,307,612 that preceded the subsequent decrease in student numbers between 1995 and 2000.

Graduate numbers are another interesting aspect to consider when looking at the evolution of study abroad in Germany. In a trend that mirrors the growth in enrollment between the 1960s and the mid-1990s, the number of German graduates also saw a continuous increase during that period. The addition of graduates from the new East German states marked a particularly strong increase starting in 1995 (Fig. 3). Due to the subsequent drop in overall enrollment up until the year 2000, the number of graduates inevitably decreased as well before the trend was reversed and graduate numbers began to rise again.

Between the 1960s and the mid-1990s, there was a continuous increase in graduate numbers both at research universities and at universities of applied sciences (Fig. 4). This was followed by a sudden jump in the number of graduates, particularly at research universities, which was caused in part by the addition of graduates in the new East German states. Beginning in the mid-1990s, research universities as well as universities of applied sciences saw their graduate numbers decrease for a number of years. That temporary drop, however, was followed by an increase that started in the year 2000 and continued steadily throughout the past decade.

### 3 German university graduates (total), 1960–2009

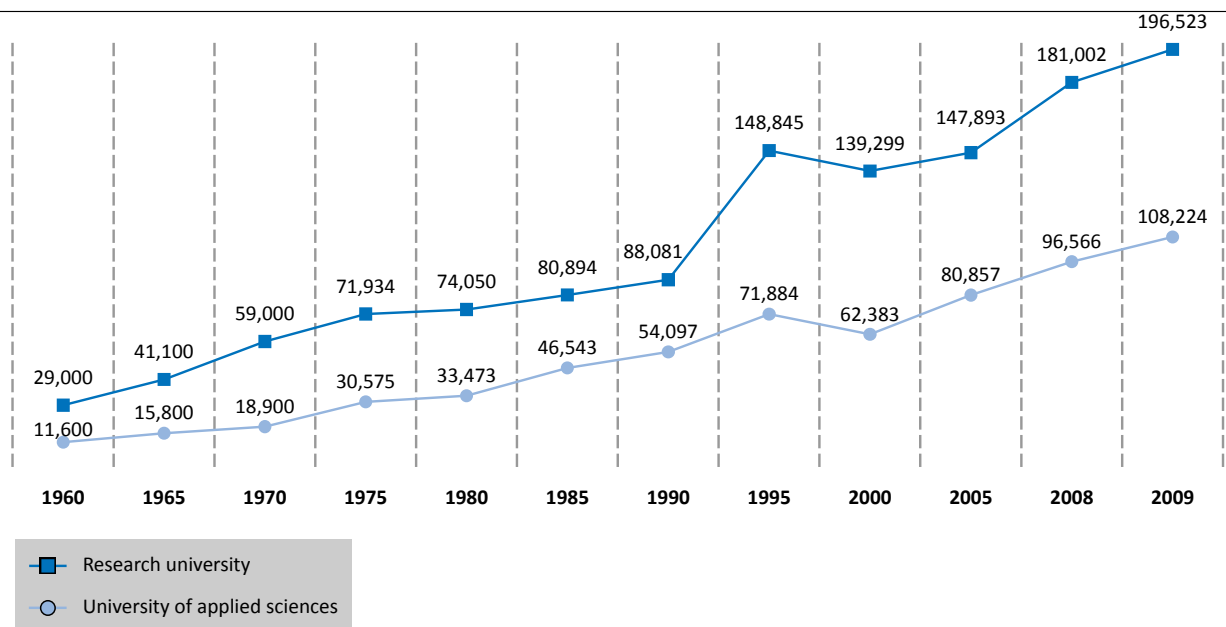
→ Shown in absolute numbers



Source: German Federal Statistical Office

### 4 German university graduates by type of university, 1960–2009

→ Shown in absolute numbers



Source: German Federal Statistical Office

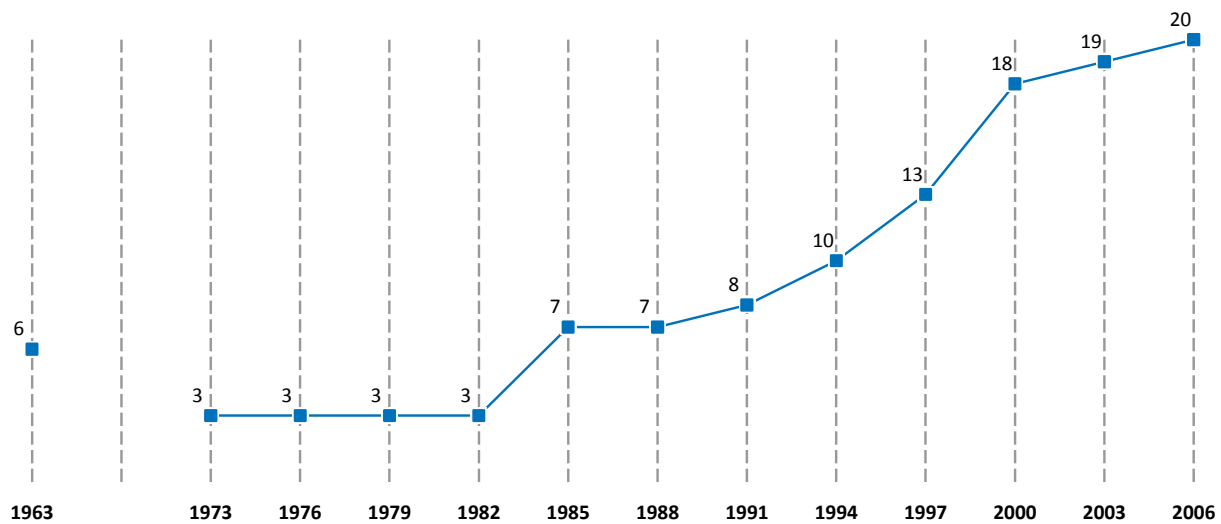
### 3.2 The evolution of the proportion of study abroad students in Germany, 1963–2009

The evolution of the proportion of German students who study abroad may best be tracked by drawing on the data of the DSW Social Surveys, which extend further back in time than any other source. This approach involves two limitations, however. First, such a long time series can only be established for students at research universities; second, the information only concerns a single type of study abroad: non-degree enrollment at a foreign university. Moreover, the 1960s are only represented by a single measurement in 1963, which was part of the 5th DSW Social Survey.

In the 1960s, the percentage of upper-semester German research university students who temporarily studied at a foreign university started out as high as 6 percent (Fig. 5). However, while subsequent years saw a major increase in overall enrollment, the study abroad participation rate dropped to 3 percent and remained at this low level until 1982. It wasn't before the mid-1980s that the proportion of German students undertaking study abroad began to grow again. In 1985 and 1988, their share was 7 percent. The 1990s saw strong growth in study abroad participation rates, which surged from 8 percent in 1991 to 18 percent in 2000. Growth rates have slowed down again since, however, with 19 and 20 percent of upper-semester German research university students studying at a foreign university in 2003 and 2006, respectively.<sup>3</sup> In summary, the percentage of upper-semester German students at research universities who temporarily study at a foreign university has more than tripled in the forty years between 1963 and 2006.

#### 5 German students participating in university study abroad, 1963–2006

→ Only 9th to 14th semester students at research universities; shown in percent



Source: DSW Social Survey

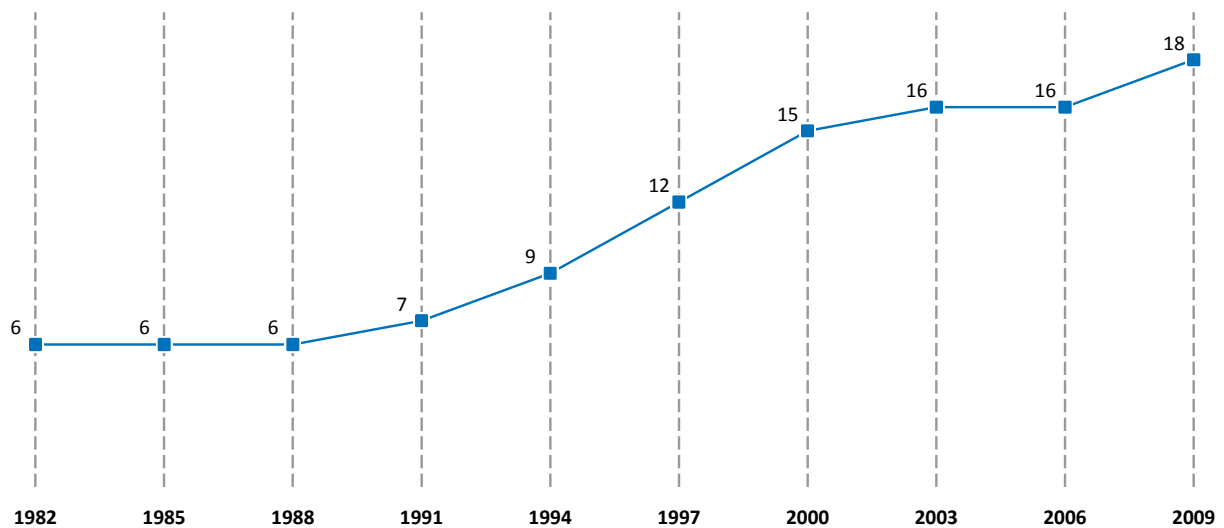
If we include universities of applied sciences in our analysis of study abroad trends among German students, participation rates turn out to be a bit lower, because studying at a foreign university for a semester or two has always been less common at universities of applied sciences than it has been at research universities. Data to illustrate the development at both research universities and universities of applied sciences are available starting with the year 1982. According to these combined data, the study abroad participation rate among upper-semester German stu-

<sup>3</sup> No comparable values are available for students surveyed in the 19th DSW Social Survey (2009).

dents remains at 6 percent during the 1980s (Fig. 6). Again, all of these numbers refer only to non-degree enrollment at foreign universities. In the 1990s, rates went up from 7 percent in 1991 to 15 percent in 2000. The years that followed saw less pronounced growth rates, however. Most recently, the study abroad participation rate peaked at 18 percent in 2009. Like the most recent figure for students at research universities, this value means that the total number of German study abroad students has tripled since the early 1980s. This trend, however, only refers to the traditional Diplom, Magister, and Staatsexamen programs. Students enrolled in the new bachelor's and master's programs have not been included here.

#### 6 German students participating in university study abroad, 1982–2009

→ Students enrolled in traditional degree programs at research universities (9th–14th semester) and universities of applied sciences (7th–11th semester); shown in percent



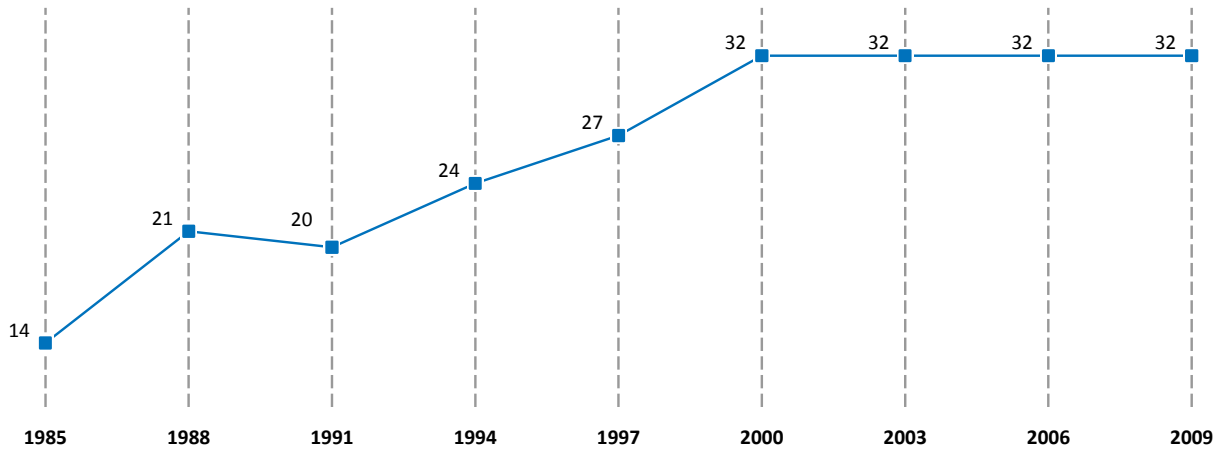
Source: DSW Social Survey

A slightly different trend emerges once other types of study abroad—most notably internships and language courses—are taken into account besides university study. University study and internships are the most frequently chosen types of study abroad. In the mid-1980s, 14 percent of all upper-semester German students completed one or more of these two study abroad experiences over the course of their degree (Fig. 7). In the second half of the 1980s, that number increased significantly to 21 percent, then fell to 20 percent in the early 1990s, only to start rising continuously again throughout the remainder of that decade. In the year 2000, the percentage of upper-semester German students who completed a study abroad experience reached 32 percent, a level at which it has remained for the past ten years. Again, these values exclusively refer to students enrolled in one of the traditional Diplom, Magister, or Staatsexamen programs. Overall, with regard to the most important types of study abroad, the number of upper-semester German study abroad students thus has doubled since the mid-1990s. This means that while participation rates in non-degree university study abroad have continued to increase slightly over the past ten years, participation in the other types of study abroad has not.

The DSW Social Survey has not yet produced any data regarding study abroad trends in the bachelor's programs. The 19th Social Survey (2009) was the first to provide detailed information regarding the international mobility of upper-semester bachelor students. In this context, "upper-

**7 Study abroad participation of German students, 1985–2009**

→ Students at research universities (9th–14th semester) and universities of applied sciences (7th–11th semester); shown in percent



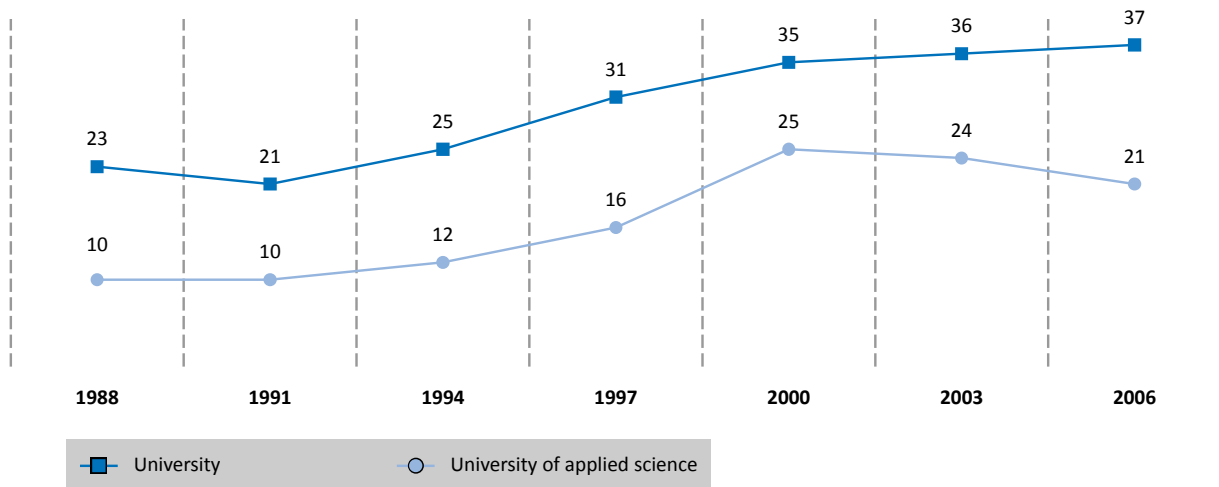
Source: DSW Social Survey

semester” refers to students in their 5th to 10th semester of undergraduate study. Of these, 16 percent had completed a study abroad experience at the time of the survey; 9 percent had studied at an overseas university.

Plotting study abroad trends (including all types of study abroad) separately for upper-semester German students at research universities and universities of applied sciences reveals participation rates at research universities to have risen continuously since 1991 (Fig. 8). After initially dropping to 21 percent in 1991, they went on to peak at 37 percent in 2006. Study abroad participation among students at universities of applied sciences can also be shown to have risen continuously between 1988 and 1997. After that, the number of study abroad students jumped to 25 percent in 2000 and has since dropped to 21 percent in 2006.<sup>4</sup>

**8 Study abroad participation of German students by type of university, 1988–2006**

→ Students at research universities (9th–14th semester) and universities of applied sciences (7th–11th semester); shown in percent



Source: DSW Social Survey

<sup>4</sup> For students surveyed in the 19th DSW Social Survey (2009), comparable data are not available at this point (neither for research universities nor for universities of applied sciences).

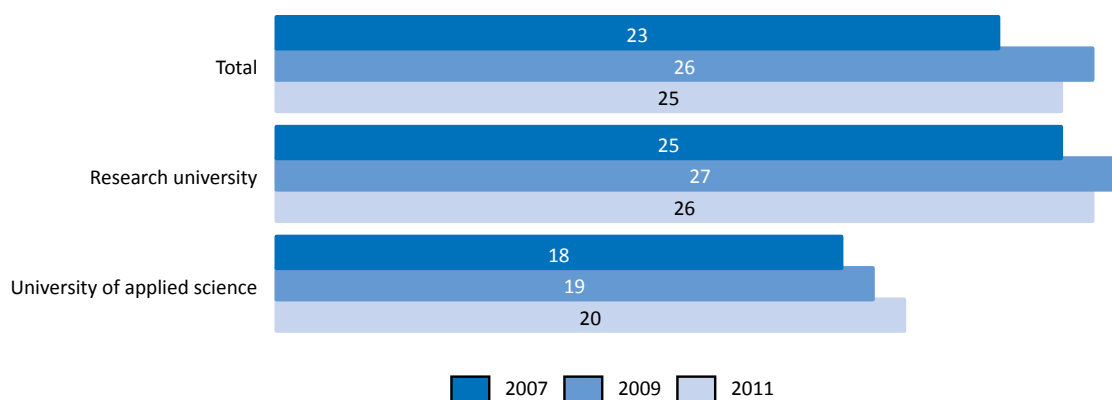
### 3.3 The evolution of the proportion of study abroad students in Germany, 2007–2011

The fact that most degree programs in Germany have been converted into bachelor's and master's programs necessitates a number of changes regarding the analysis of students' international mobility. First, we have to abandon the previous restriction to upper-semester students in favor of expanding the analysis to include the entire student population. Second, we need to pay more attention to the various types of degrees right from the start. As mentioned earlier, the existing time series cannot be continued as a result of the sweeping changes in curricular structures. This requires a new approach for measuring international mobility. In the 2007, 2009, and 2011 HIS surveys, therefore, which were commissioned by the DAAD, the design for capturing German students' study abroad participation was modified accordingly. In these surveys, mobility rates are provided separately by type of degree as well as in relation to the respective students at a specific point in their undergraduate or postgraduate careers. Although the data generated in the above-mentioned surveys are currently no more than starting points for new time series, they do point out a number of interesting trends that may be interpreted as resulting from the overhaul of curricular structures. What is more, the results of these surveys, which were specifically geared towards students' study abroad activities, serve to highlight the fact that the percentage of students going abroad varies widely by type of degree program and field of study. The measured values refer to all sorts of study abroad experiences: university study, internships, language courses, excursions, study trips, and project work, as well as summer and winter schools.

In 2007, the proportion of study abroad students in the entire German student population was 23 percent. Two years later, that figure had risen to 26 percent; currently it stands at 25 percent. This means that one in four German students enrolled at a research university or university of applied sciences in 2011 (excluding students in doctoral and continuing education programs) has completed some kind of study abroad experience. Certain differences with regard to students' mobility patterns emerge between the various types of universities, however (Fig. 9). For example, the initial growth in student mobility at research universities between 2007 and 2009 did not continue in 2011, whereas the 2011 mobility rate at universities of applied sciences is higher than those of 2007 and 2009. The differences between the two university types are caused, first and foremost, by widely diverging study abroad trends in the restructured degree programs

#### 9 Study abroad participation of German students by type of university, 2007–2011

→ Shown in percent



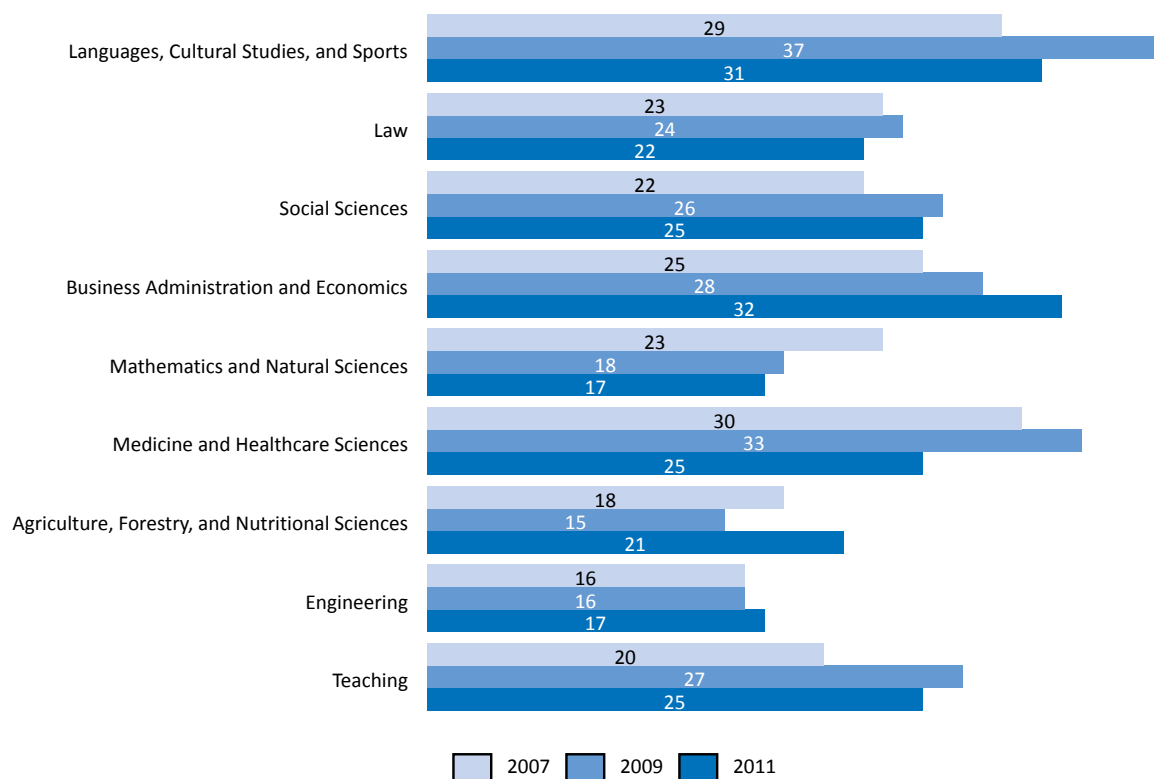
Source: HIS Survey on International Mobility (2011)

at research universities on the one hand and universities of applied sciences on the other. Remarkable differences in study abroad trends also emerge between the various fields of study (Fig. 10). Here, the field of business administration and economics is the only one to experience continuous growth, with a 2011 international mobility rate of 32 percent, up seven percentage points from the 2007 level. The exact opposite trend—that is, a continuous decrease in international mobility—emerges for the field of mathematics and science. Starting out at 23 percent in 2007, the mobility rate dropped to 19 percent in 2009 and currently stands at only 17 percent. The only other field of study to be characterized by such low levels of study abroad participation in 2011 is engineering. Students majoring in these fields, compared to students in other academic disciplines, have always been the least involved in study abroad. In fact, persistently below-average mobility rates have been a characteristic feature of this group of students for many years. In the other fields of study, mobility rates over the past four years vary. Initially—that is, between 2007 and 2009—languages and cultural studies, as well as teacher training programs, saw the strongest increase in study abroad participation, with growth rates of 8 and 7 percent, respectively. During that same time period, numbers also went up in the social sciences, medicine and healthcare sciences, and law. In all of these fields, however, the proportions of study abroad students are currently between one and eight percentage points below the mobility levels measured in 2009. Medicine/healthcare sciences and law are the fields that experienced the sharpest drops.

In agriculture, forestry, and nutritional sciences, a 2007 mobility rate that was below average to begin with (18%) dropped even further to 15 percent in 2009, the lowest rate across all fields

**10 Study abroad participation of German students by field of study: 2007, 2009, and 2011**

→ Shown in percent



Source: HIS Survey on International Mobility (2011)

of study. This downward trend was reversed in subsequent years, however; as a result, study abroad participation among this group of students, while still at a below-average level, has reached a higher percentage than ever before.

The evolution of study abroad in the newly introduced bachelor's programs deserves special attention (Fig. 11). Whereas study abroad participation among bachelor students at research universities did not see any changes between 2007 and 2009, and only a minor increase of one percentage point to 16 percent in 2011, mobility rates among bachelor students at universities of applied sciences have grown from 9 percent (2007) to 13 percent (2009) and currently stand at a remarkable 17 percent. It is safe to assume that such a positive trend in part results from the fact that universities of applied sciences in recent years have stepped up their efforts to encourage bachelor students to study abroad. In contrast to the research universities, universities of applied sciences have created an increasing number of pre-structured programs for university study abroad and internships abroad. These opportunities, which often require less time and organizational effort, are obviously very popular among bachelor students at universities of applied sciences.

### 11 Study abroad participation of German students by type of degree and university, 2007–2011

→ Shown in percent

	2007	2009	2011
Bachelor's programs total	12	14	17
Bachelor's programs at research universities	15	15	16
Bachelor's programs at universities of applied sciences	9	13	17
Master's programs total	30	27	35
Master's programs at research universities	-	-	39
Master's programs at universities of applied sciences	-	-	31
Staatsexamen (state examination) degree programs	23	28	25

Source: HIS Survey on International Mobility (2011)

It seems safe to assume that international mobility rates in the Staatsexamen degree programs have not been left entirely unaffected by the introduction of the new Bologna-compliant degrees. Teacher training programs in particular have seen a diverse range of changes in this respect. Of course, there is a wide array of additional factors that come into play here. In 2007, study abroad participation in Staatsexamen programs stood at 23 percent. It climbed to 28 percent in 2009, only to decrease again to 25 percent in 2011.

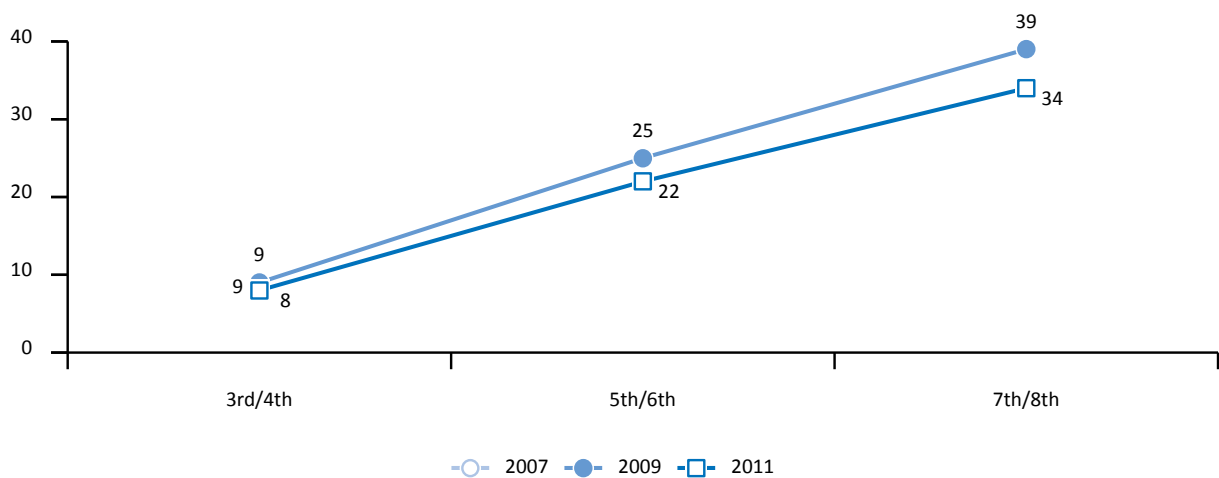
Initial mobility rates for master students are available for the years 2007 and 2009, but these still appear to reflect a situation in transition. By 2011, in contrast, the introduction of master's programs had progressed to an extent that allows for collecting highly reliable data. According to the 2011 survey, 39 percent of master students at research universities and 31 percent of master students at universities of applied sciences studied abroad. For students at research universities, this represents a 3-percent increase over the level of study abroad participation among upper-semester students in the traditional degree programs in the mid-2000s. For master students at universities of applied sciences, this comparison even shows a 10-percent increase over previous mobility rates. By and large, therefore, the level of study abroad participation among master students at research universities appears to resemble that of their former research university-based counterparts who studied for a Diplom degree. Master students at universities of applied science, by contrast, now study abroad at different levels than former Diplom students at that type of in-

stitution. Presumably, one important reason why universities of applied sciences have experienced stronger growth in mobility is that currently about 75 percent of undergraduate students at research universities go on to study for a master’s degree, whereas only about 50 percent of undergraduates at universities of applied sciences do so.<sup>5</sup>

A closer look at bachelor students’ mobility patterns over their undergraduate careers reveals that, at research universities, only one in ten students have studied abroad by the time they complete their third or fourth semester of studies (Fig. 12). That figure increases to 22 percent over the fifth and sixth semesters. Approximately one-tenth of all bachelor students at research universities take longer to graduate than the standard time to degree, which is six semesters. Among those who study for a seventh or eighth semester, the proportion of study abroad students—34 percent in 2011—is particularly high. These findings suggest that higher levels of international mobility are only possible at the price of a longer time to degree. While bachelor students in 2009 essentially faced the same situation, they still managed to achieve higher levels of mobility, even in their fifth/sixth or seventh/eighth semester of study. It seems obvious, therefore, that universities are struggling to increase study abroad participation at the undergraduate level.

**12 German study abroad students 2007–2011 in bachelor’s programs at universities by time of study abroad (in semesters)**

→ Shown in percent



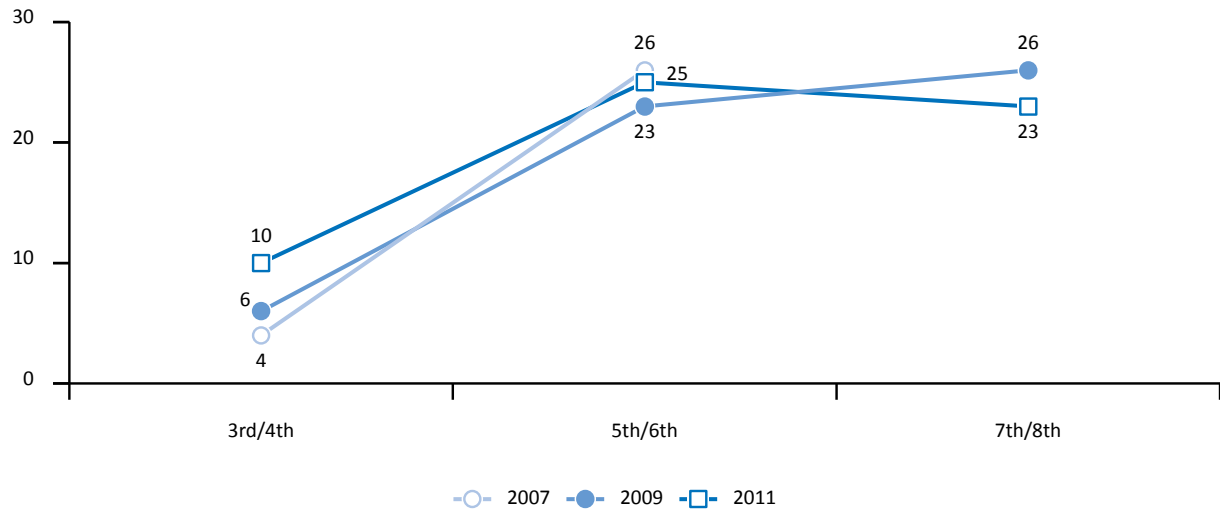
Source: HIS Survey on International Mobility (2011)

A different trend can be seen to emerge at universities of applied sciences. Here, 25 percent of all bachelor students completed a study abroad experience during their fifth or sixth semester in 2011, up from 23 percent in 2009 (Fig. 13). This is a higher value than the corresponding one achieved by their counterparts at research universities. In the seventh and eighth semesters, however, there is no further increase in mobility at universities of applied sciences. On the one hand, this finding may be due to the fact that the latter value primarily captures the mobility patterns of those enrolled in seven- or eight-semester (i.e. four-year) bachelor’s programs. While such programs do exist at universities of applied sciences, they are mostly found in very specific fields of study, most importantly engineering—fields of study, that is, in which students are ge-

<sup>5</sup> See K. Briedis, HIS Absolventenstudie 2011 (unpublished project report), Hannover 2011; H. Schomburg, Employability and Mobility of Bachelor Graduates in Germany, Kassel 2010, pp. 16ff.

### 13 German study abroad students 2007–2011 in bachelor's programs at universities of applied sciences by time of study abroad (in semesters)

→ Shown in percent



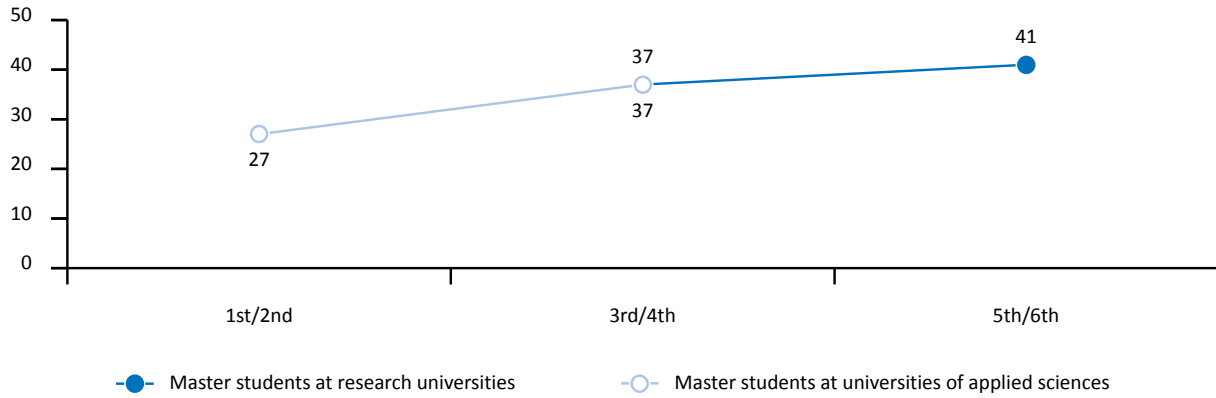
Source: HIS Survey on International Mobility (2011)

nerally more reluctant to undertake study visits abroad. On the other hand, as explained above, bachelor students at universities of applied sciences tend to take advantage of the increasing number of pre-structured study abroad programs offered by their institution. These opportunities, most of which are scheduled for the fourth or fifth semester, make it easier for students to organize a study abroad experience and help them not to lose any time towards their degree.

A positive trend with regard to international mobility may be observed for students who enroll in a master's program after graduating with a bachelor's degree. A number of differences emerge between the two types of universities, however. Among master students at universities of applied sciences, we see yet another major increase in study abroad participation (from 27% to 37%) between the first/second and third/fourth semester, whereas no such increase occurs among master students at research universities (Fig. 14). For the latter group, mobility rates start out high at 38 percent during the first two semesters but do not change much in subsequent semesters, slightly rising to 41 percent only during the fifth and sixth semester. Apparently, master students at research universities tend to study abroad primarily during the first stage of their master's program, or even directly after completing their bachelor's degree. Then again, the higher number of study abroad students among those who take longer than the standard time to degree (four semesters) suggests that at research universities, studying abroad often results in a longer time to degree at the postgraduate level as well.

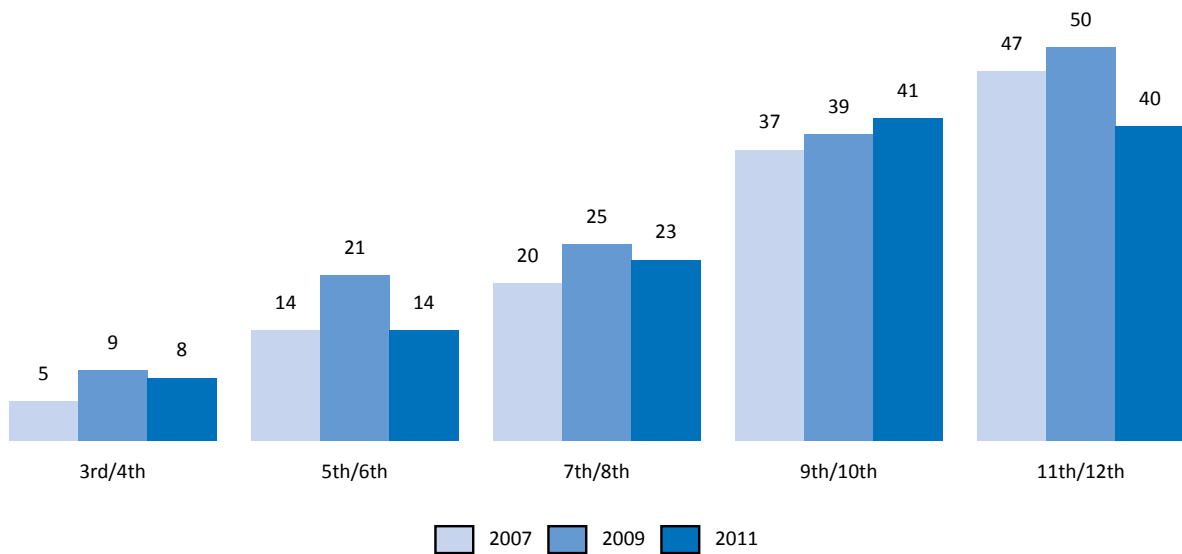
In Staatsexamen programs such as law, medicine, or teacher training, there is a continuous increase in study abroad participation as students progress towards their degree. By the time they reached their ninth or tenth semester, 43 percent of students in these fields had studied abroad according to the 2011 survey (Fig. 15). This is roughly the same percentage as in 2009. It is only during the eleventh and twelfth semester that the number of study abroad students did not increase further when compared to the situation two years earlier, which is mainly due to medical students' declining interest in completing a work placement abroad during the later part of their studies.

**14 German study abroad students 2011 in master’s programs at research universities and universities of applied sciences by time of study abroad (in semesters)**  
 → Shown in percent



Source: HIS Survey on International Mobility (2011)

**15 German study abroad students 2007–2011 in Staatsexamen degree programs by time of study abroad (in semesters)**  
 → Shown in percent



Source: HIS Survey on International Mobility (2011)

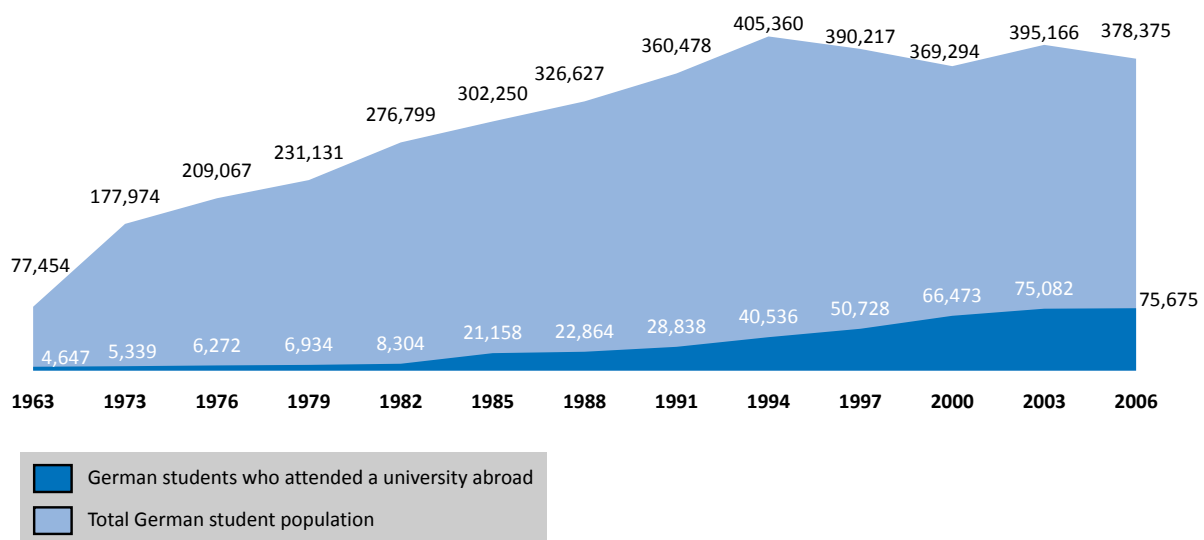
**3.4 The evolution of the number of study abroad students in Germany, 1963–2009**

As a consequence of rising university enrollment since the early 1960s, the absolute number of students going abroad has also continued to rise, even in times when the relative proportion of study abroad students remained unchanged. A look at the comparatively long time series that exists for upper-semester students at research universities who spent a semester or two as non-degree students at an overseas university reveals the following trends. Combining the number of upper-semester students and the corresponding percentage of students who attended a foreign

university results in a total of about 4,600 study abroad students in 1963 (Fig. 16). Twenty years later, in the early 1980s, there were approximately 8,300 students who undertook university study abroad. As a result of further enrollment growth and gradually increasing levels of study abroad participation, that figure had climbed to about 22,900 students by the end of the 1980s, and to about 45,000 students by the mid-1990s. In 1997, the number of German study abroad students exceeded 50,000 for the first time; only three years later, it already stood at 66,000. The upward trend continued up until 2006, which featured a total of just under 76,000 upper-semester students who temporarily attended a university abroad.

#### 16 German students participating in university study abroad, 1963–2006

→ Only students at research universities in their 9th to 14th semester of study; shown in absolute numbers



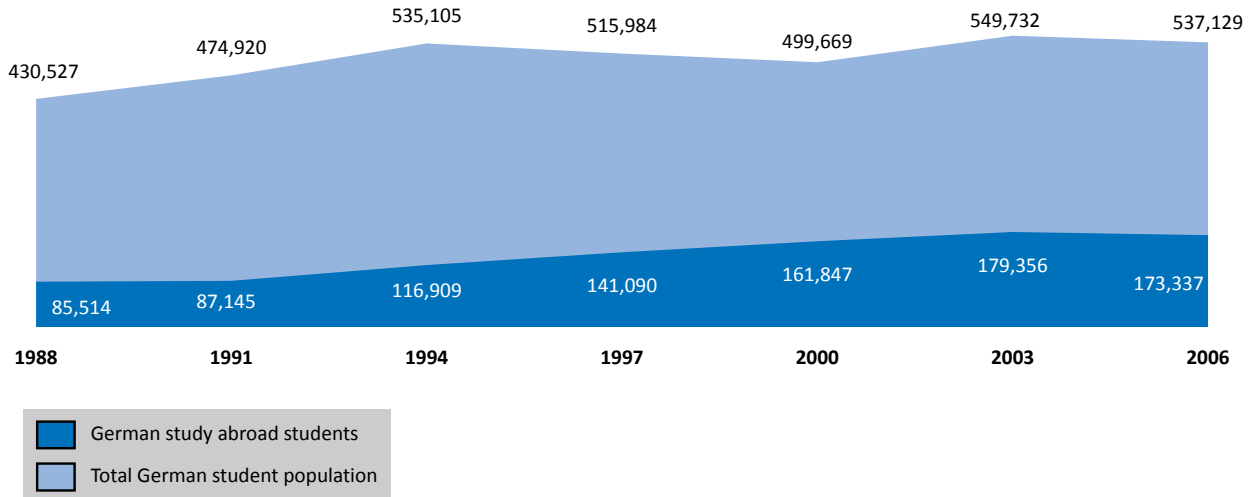
Source: Federal German Statistical Office/ DSW Social Survey

The extent of study abroad participation among upper-semester German students turns out to be significantly larger once we also include students at universities of applied sciences and extend the definition of study abroad to include additional forms such as internships abroad and language courses. In the second half of the 1980s, the number of upper-semester students at research universities and universities of applied sciences who studied abroad in the broad sense of the term was about 86,000 (Fig. 17). In the early 1990s, there was only a slight increase to 87,000 students, however. Yet the years that followed saw the emergence of a dynamic trend that brought the number of upper-semester study abroad students up to about 141,000 in the second half of the 1990s. This upward trend continued: in the year 2000, approximately 160,000 upper-semester German students reported having studied abroad at some point during their academic career. This figure continued to grow until 2003, peaking at about 179,000 before dropping to 173,000 study abroad students in 2006.<sup>6</sup>

<sup>6</sup> For students surveyed in the 19th DSW Social Survey (2009), comparable data are not available at this point (neither for research universities nor for universities of applied sciences).

**17 German study abroad students, 1988–2006**

→ Only students at research universities (9th to 14th semester) and at universities of applied sciences (7th to 11th semester); shown in absolute numbers

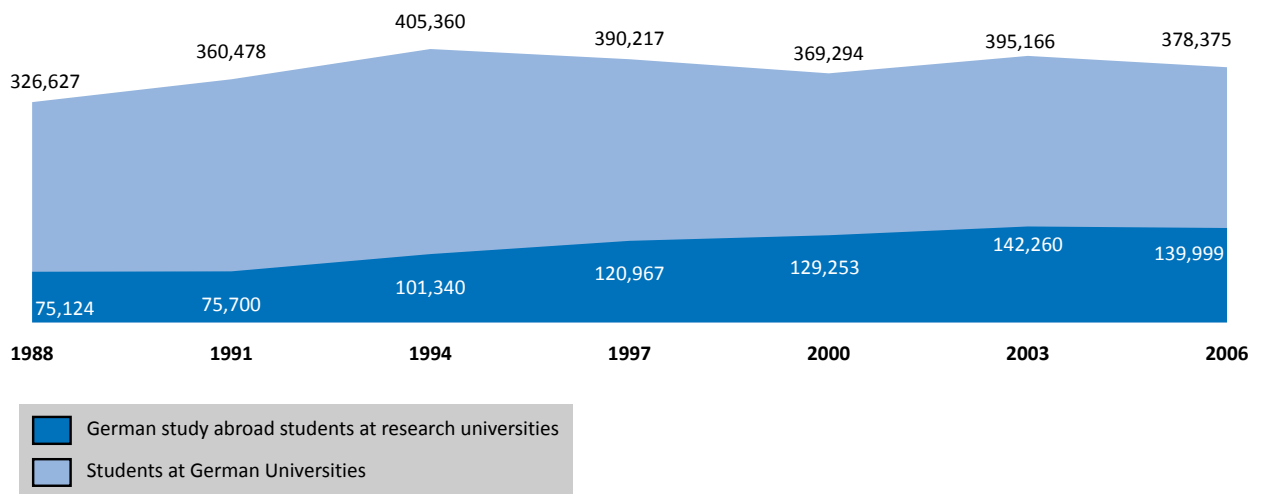


Source: Federal German Statistical Office/ DSW Social Survey

This trend can be shown for both research universities and universities of applied sciences. In 1988, roughly 75,000 upper-semester students at research universities reported having studied abroad in one way or another (Fig. 18). Nearly ten years later, that number had risen to approximately 121,000, and in 2003, the number of students who went abroad for university study, in-

**18 German study abroad students at research universities, 1988–2006**

→ Only students in their 9th to 14th semester; shown in absolute numbers



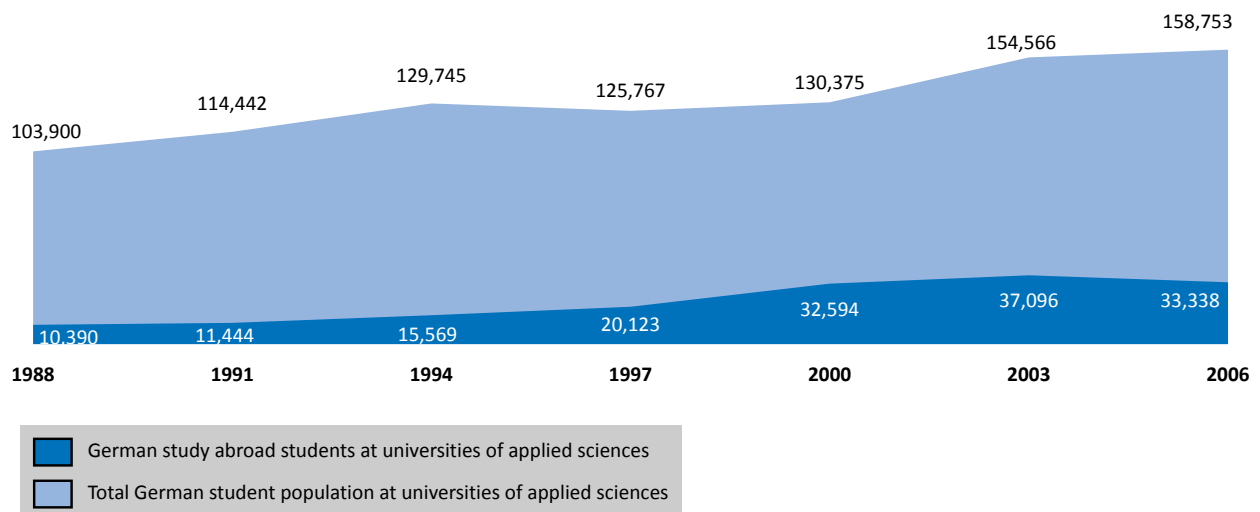
Source: Federal German Statistical Office/ DSW Social Survey

ternships, language courses, and the like exceeded 142,000. The year 2006, however, saw a slight decrease in study abroad participation, with the number of upper-semester study abroad students at research universities down to 140,000. But that slight drop does not do anything to diminish the remarkable fact that the number of study abroad students among upper-semester students at German research universities has nearly doubled over a period of twenty years.

Similar statements may be made about the situation at universities of applied sciences. Here, about 10,000 upper-semester students reported having studied abroad in 1988 (Fig. 19). By the mid-1990s, that number had risen to about 16,000. And in the year 2000, the number of study abroad students at universities of applied sciences had more than doubled to 33,000. Study abroad participation peaked in 2000, when roughly 38,000 upper-semester students at universities of applied sciences reported having studied abroad by that time. In subsequent years, up to and including 2006, that number dropped to about 33,000, however. Despite that relatively strong decrease in recent years, the number of study abroad students among upper-semester students at universities of applied sciences can still be said to have tripled over a period of twenty years.

### 19 German study abroad students at universities of applied sciences, 1988–2006

→ Only students in their 7th to 11th semester; shown in absolute numbers

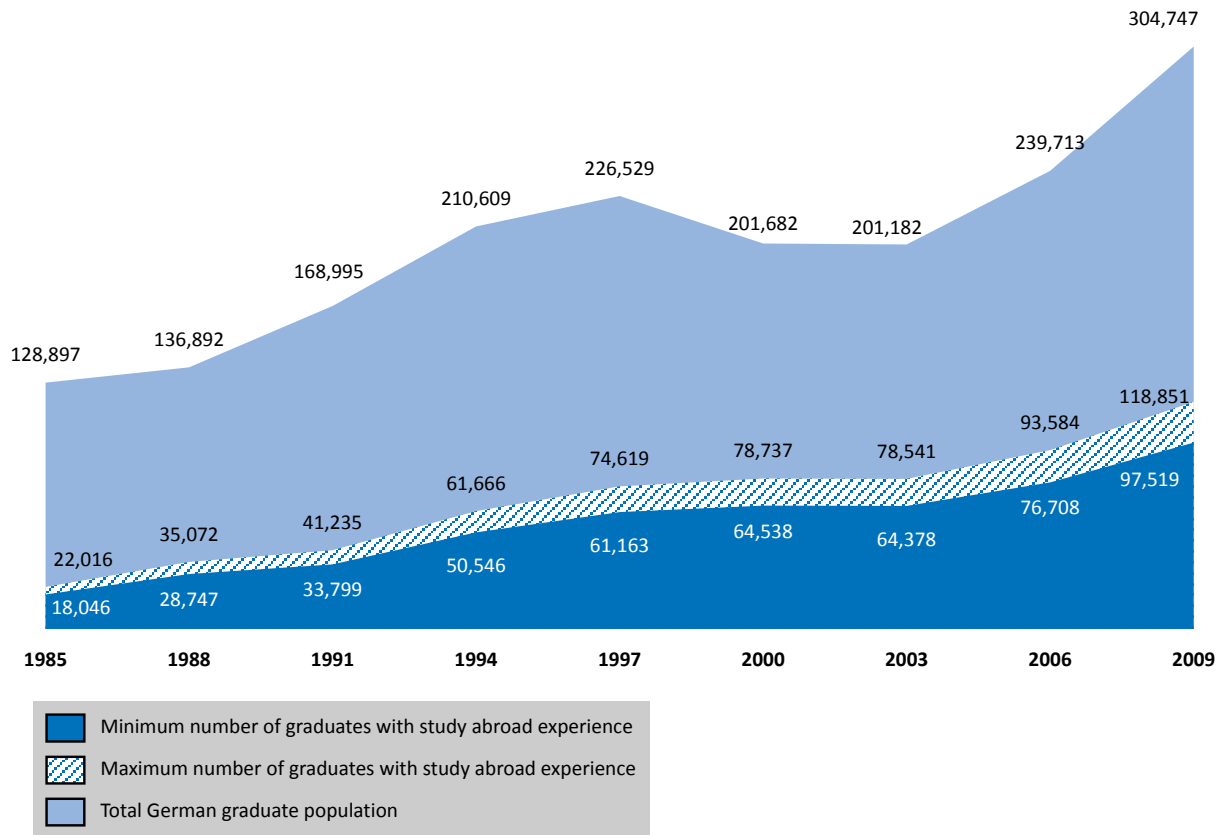


Source: Federal German Statistical Office/ DSW Social Survey

To complete the picture of the extent to which German students engage in study abroad, it should be interesting to relate international mobility rates to university graduates as well. However, the study abroad data available from the DSW Social Survey exclusively refer to upper-semester students, not to graduates. This is why we used two different values to measure graduates' study abroad participation. For the presentation in Figure 20, we first applied the international mobility rates of upper-semester students to the respective graduate population of each survey year. The resulting figure may be regarded as the minimum number of graduates who studied abroad. The actual number may be considerably higher, of course, since additional students might undertake a study abroad trip in the final stages of their degree before successfully completing all the required examinations. These students serve to raise mobility rates in the respective years.

20 German university graduates with study abroad experience, 1985–2006

→ Shown in absolute numbers



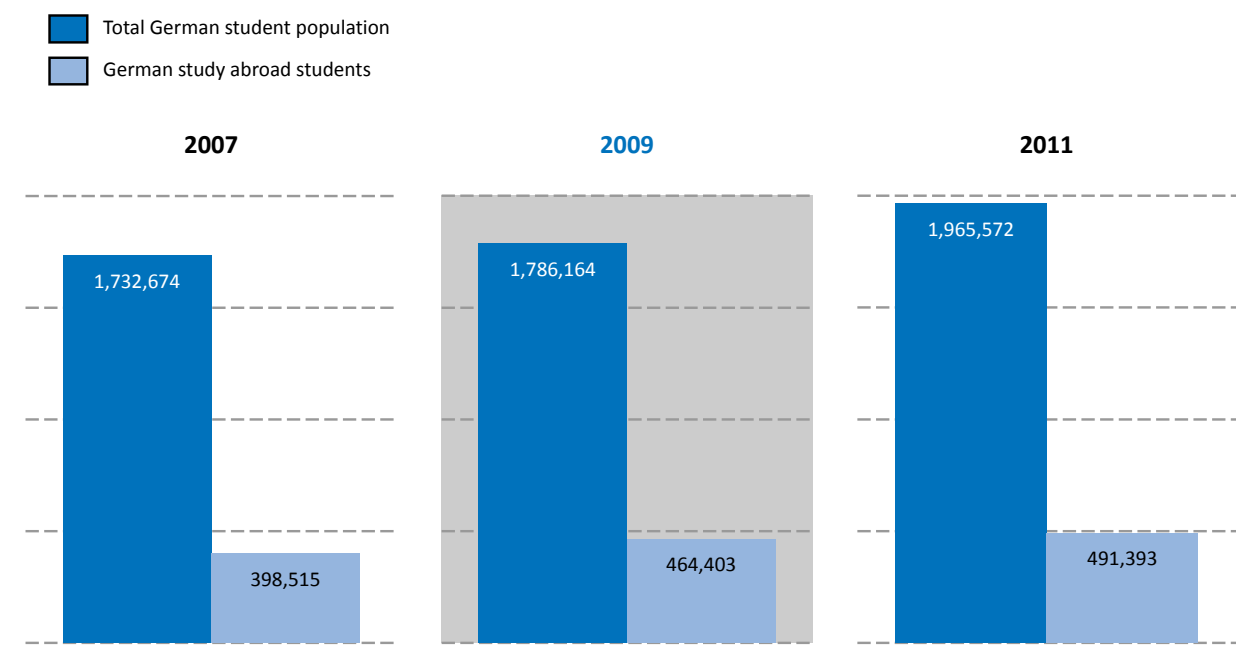
Sources: German Federal Statistical Office/DSW Social Survey/HIS Graduate Survey 2005

For that reason, we also considered the mobility rates determined as part of the 2005 HIS Graduate Survey and added the difference between those rates and the ones established for upper-semester students in the DSW Social Survey to the minimum number of study abroad students. The resulting figure may be regarded as the maximum number of graduates who studied abroad. It is important to refer to this figure as the maximum number because relevant pre-2007 data are only available for the 2005 graduate population. Using these data for earlier graduate cohorts may only be done with reservations and caution, however. After all, both the mobility rate itself and the difference between upper-semester students and graduates may have been smaller in earlier years than they were in 2005. That is why these figures are marked as sort of a maximum number of graduates who studied abroad. The actual number of graduates who studied abroad should lie somewhere between the minimum and the maximum numbers. For the mid-1980s, we may thus assume the number of German graduates who studied abroad to have been somewhere between 18,000 and 22,000. By the mid-1990s, those figures had risen to between a minimum of 51,000 and a maximum of 62,000 German graduates. Study abroad numbers continued to grow in subsequent years, leading up to between 65,000 and 79,000 graduates who had completed a study abroad experience in 2000. In 2009, the minimum and maximum numbers even reached about 98,000 and 119,000 graduates with study abroad experience, respectively. This would mean that the number of graduates who studied abroad has quintupled over a period of twenty years.

A different perspective is presented by the 2007–2011 HIS Surveys of International Mobility. These studies provide information about the total number of students with study abroad experience at the time the respective survey was conducted. The data show, for example, that of the 1.73 million university students enrolled in 2007, a total of 398,500 had already studied abroad in one way or another. In 2009, there were 464,400 study abroad students in a total German student population of 1.79 million. Two years later, 491,000 of 1.96 million students reported having gone abroad as part of their studies (Fig. 21).

## 21 German study abroad students, 2007, 2009, and 2011

→ Shown in absolute numbers



Sources: Federal German Statistical Office/ HIS Survey on the International Mobility of German Students

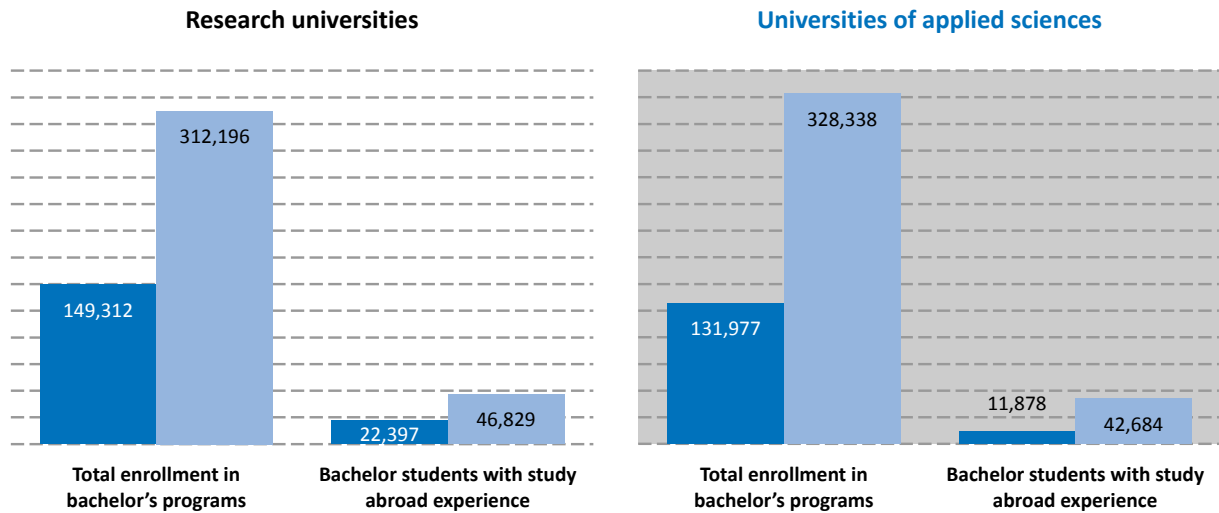
First and foremost, these numbers should be analyzed according to type of degree. Due to a lack of statistical data, however, this kind of analysis has to be limited to the years 2007 and 2009. Of the 149,300 bachelor students enrolled at research universities in 2007, 22,400 reported having studied abroad (Fig. 22). By 2009, that number had soared to about 47,000 study abroad students, but overall enrollment in bachelor programs at research universities had also more than doubled compared to two years earlier. A slightly more positive trend emerges at universities of applied sciences. Here, approximately 12,000 bachelor students—out of a total of 132,000—had studied abroad in 2007. In 2009, that number was four times as high at 42,700 study abroad students, whereas total enrollment in bachelor programs at universities of applied sciences had only increased by a factor of 2.5 compared to 2007.

Regarding study abroad among master students, there is a certain degree of uncertainty attached to the 2007 and 2009 data, since these years obviously still represent a period of transition in the area of master's-level study. Based on the mobility rates determined in the 2007 and 2009 surveys, the following picture emerges. Of the 35,400 students enrolled in master's programs in 2007, 10,600 reported having studied abroad. Two years later, total enrollment in master's programs had reached 64,000; of these students, 17,000 had studied abroad (Fig. 23).

**22 German bachelor students with study abroad experience by type of university, 2007 and 2009**

→ Shown in absolute numbers

■ 2007 ■ 2009

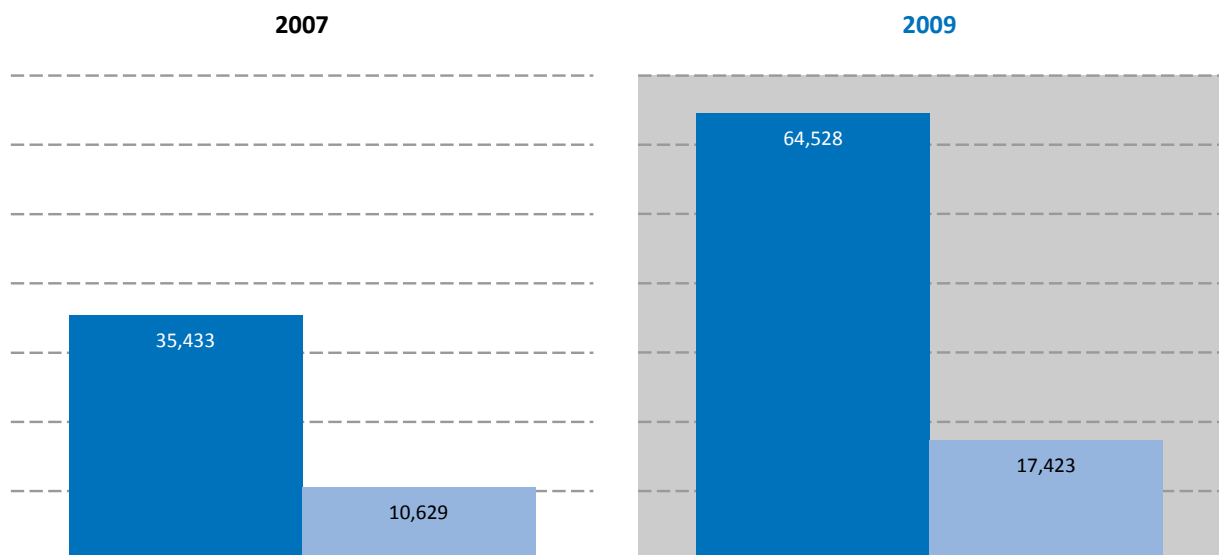


Sources: Federal German Statistical Office/ HIS Survey on the International Mobility of German Students

**23 German master students with study abroad experience, 2007 and 2009**

→ Shown in absolute numbers

■ Total German master student population  
 ■ German master students with study abroad experience



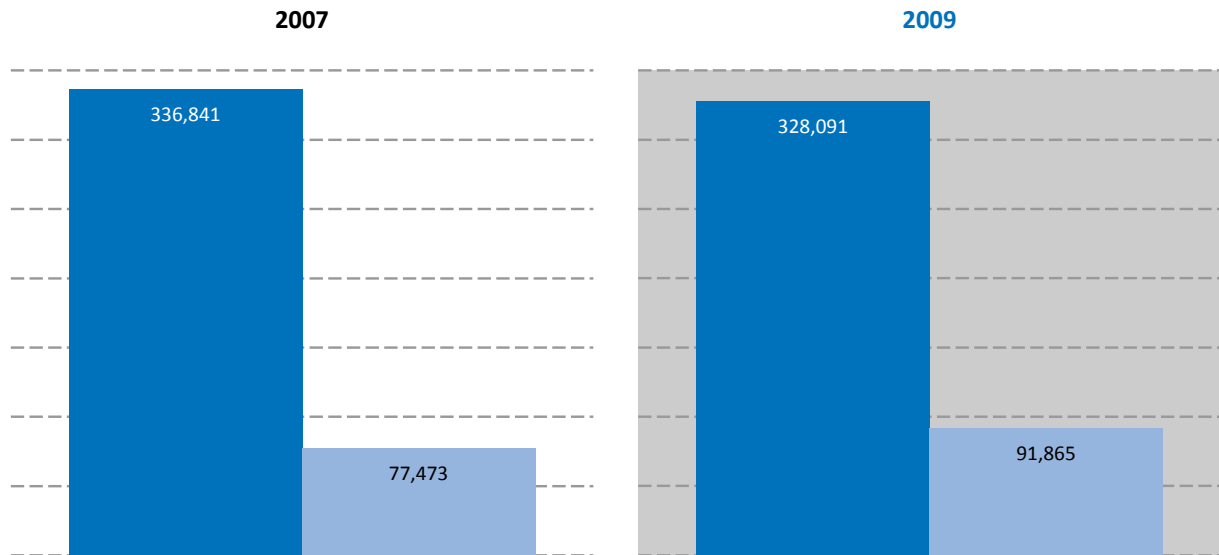
Sources: Federal German Statistical Office/ HIS Survey on the International Mobility of German Students

The corresponding quantitative proportions for students enrolled in Staatsexamen degree programs are shown in Figure 24.

**24 German Staatsexamen students with study abroad experience, 2007 and 2009**

→ Shown in absolute numbers

- Total German Staatsexamen student population
- German Staatsexamen students with study abroad experience

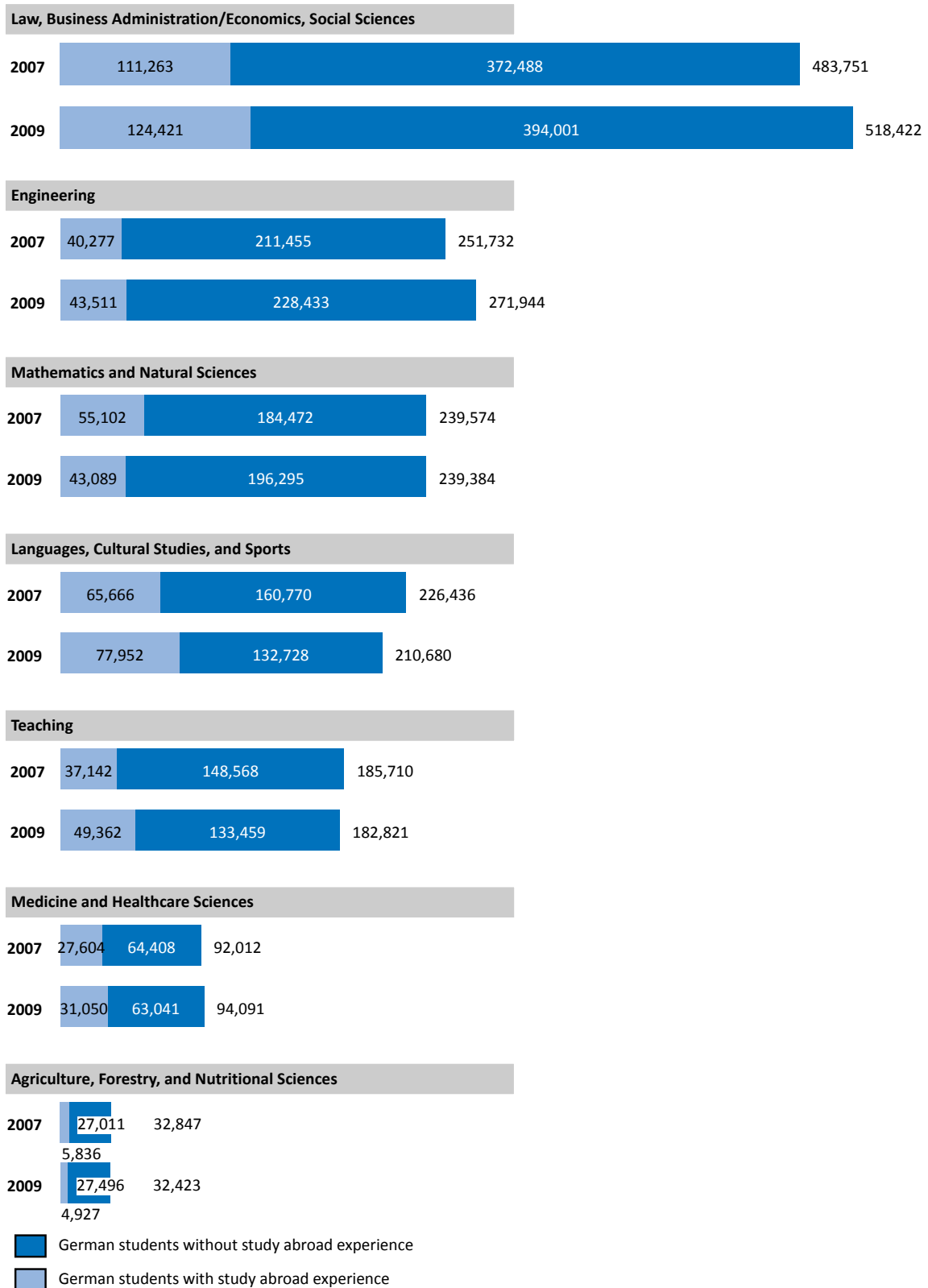


Sources: Federal German Statistical Office/ HIS Survey on the International Mobility of German Students

A look at international mobility by field of study reveals the number of study abroad students to have increased between 2007 and 2009 in most academic disciplines (Fig. 25). The only exceptions are the fields of mathematics and the natural sciences, as well as agriculture, forestry, and nutritional sciences. Among mathematics and science students, the number of study abroad students dropped sharply from 55,100 to 43,100, even though overall enrollment in these subjects fell only slightly. A similar situation emerges for students in agriculture, forestry, and nutritional sciences: only 4,900 of them completed a study abroad experience in 2009, down from 5,800 in 2007.

**25 German study abroad students by field of study, 2007 and 2009\***

→ Shown in absolute numbers



\*Figures for 2011 are not yet available

Sources: HIS Survey on the International Mobility of German Students

## 4 Summary and hypotheses on the evolution of study abroad in Germany

In our analysis of all the motivations, background factors, and contextual conditions that have influenced the evolution of study abroad in Germany over the past forty years, we can only draw on a very limited amount of data and information. For extended periods of time, there is a lack of consistent statistical data and of studies that examine the reasons why students choose to study abroad or not. As a consequence, at least for the time being, hypothetical assumptions and speculation about the causes of students' study abroad patterns have to take the place of stringent argumentation. In the conclusions presented below, however, we have consciously limited our analysis to aspects for which there is a high degree of evidence.

### I

Over the past four decades, the relevant actors, the universities, and the DAAD succeeded in raising both the proportion and the actual number of German study abroad students to a remarkable degree. The best way to illustrate the vast extent of this growth is to look at study abroad participation at research universities. Whereas in the early 1970s, only 3 percent of German students enrolled in their 9th to 14th semester reported having studied abroad at an overseas university, that proportion had increased to 20 percent by 2006. Accordingly, the absolute number of upper-semester study abroad students at research universities soared from about 5,000 to more than 75,000 over the same time period.

Such considerable growth may be observed for all the various types of study abroad, and both among students at research universities and at universities of applied sciences. In 1985, 14 percent of all upper-semester students had completed some sort of study abroad experience. 25 years later, that proportion—now at 32 percent—had more than doubled. At the same time, the number of study abroad students rose from 85,000 to 173,000.

These figures do not only serve to show the extent to which efforts to motivate students to go abroad have increasingly been successful, they also illustrate the high level at which international offices, ERASMUS coordinators, and other actors involved in helping students organize a study abroad period are operating these days.

### II

1963 was the first time that data on study abroad among German university students became available beyond what was published in the DAAD's scholarship statistics. In that year, 6 percent of all students enrolled in their 9th through 14th semester of study at research universities reported having temporarily studied at a foreign university. One of the reasons for this quite remarkable level of study abroad participation (compared to the 1970s) is the social homogeneity of the German student population at the time. Educational expansion had yet to set in, and German universities enrolled no more than 238,000 students, the majority of whom came from more or less affluent middle- and upper-class families with high levels of education. After the postwar Wirtschaftswunder years of economic recovery, it was precisely among members of this social class that a renewed interest in travel and other countries emerged. Vacationing abroad and traveling to Italy, Austria, and other countries quickly became a coveted pastime, while vibrant economic growth helped provide the necessary financial resources. These social changes also had an impact

on the aspirations of university students, who increasingly became interested in spending part of their studies in a foreign country.

### III

It was not before the 1970s that more systematic efforts were made, albeit in modest proportions initially, to measure study abroad participation among university students as part of the Deutsche Studentenwerk Social Survey. Even though the analysis was initially restricted to students at research universities and non-degree study at overseas universities, it does present a plausible picture of study abroad trends in those years.

Across the entire time period from 1973 through 1982, the proportion of upper-semester students who reported having studied at a foreign university remained stuck at 3 percent. However, this figure—which seems to suggest a decrease and subsequent stagnation— fails to convey the remarkable achievements made during those years in terms of popularizing study abroad and successfully placing students at foreign universities. We have to keep in mind, after all, that it was during the 1970s that university enrollment tripled and a range of new universities was founded. Moreover, a whole new type of university—the university of applied sciences—was introduced in those years. These developments came along with an enormous expansion of participation in (higher) education: never before had some many applicants from educationally disadvantaged backgrounds entered research universities and universities of applied sciences. It was this group of students in particular, however, that first needed to be encouraged to consider the idea of studying abroad—an idea to which many of them had little or no exposure at home. Yet it was not simply a lack of ambition that made these students reluctant to go abroad; many of them also felt they were deprived of the financial means to do so.

Keeping in mind this general environment that characterized much of the 1970s, the evolution of study abroad in those years may not be interpreted as a time of stagnation. Despite challenging conditions, study abroad advocates succeeded in keeping the percentage of study abroad students constant, thus increasing their absolute numbers on an ongoing basis.

### IV

The 1980s experienced a significant increase in study abroad participation. In 1985, the proportion of upper-semester students who studied abroad in one way or another was 14 percent; by 1991, that figure had risen to 20 percent. In absolute numbers, this means that of all the students that were enrolled in their 7th through 11th (universities of applied sciences) or 9th through 14th semester of study (research universities) that year, nearly 100,000 had completed some kind of study abroad experience.

One trend that worked in favor of increasing international mobility among students was the fact that educational expansion started to level off during the 1980s. As a result, the influx of additional groups of applicants gradually decreased. By that time, the new research universities and universities of applied sciences had become established parts of German higher education; international offices had been created at almost every institution, with routine operating procedures firmly in place. Moreover, a host of new exchange and scholarship opportunities provided by the DAAD, but also by the universities themselves, helped improve the general framework for promoting study abroad. Most importantly, it was in those years that the European Union's ERASMUS program was launched in its present form, quickly evolving into a major success story.

However, it was not only the expansion of global university exchanges that fueled students' international mobility in those years, but also the growing number of German high school students

who went on exchanges to the United States, the United Kingdom, and other countries. Having gone abroad as a high school student serves to reinforce one's motivation to do so again as a university student. That is why former high school exchange participants are much more likely to think of study abroad as a natural part of their university careers.

Growing demand for university graduates with international experience is another positive factor boosting study abroad in the 1980s.

## V

In the 1990s, study abroad experienced its strongest growth to date. The proportion of upper-semester students who studied abroad soared from 20 percent in 1991 to 32 percent in 2000. At research universities, study abroad participation even jumped by 14 percentage points to 35 percent over that same time period. In 2000, nearly 162,000 upper-semester German students reported having studied abroad in one way or another.

It seems that one of the reasons for this positive trend to become possible was that research universities and universities of applied sciences did not have to cope with higher enrollments during the 1990s. Neither did they have to accommodate new groups of applicants from educationally disadvantaged backgrounds. The loosely structured Magister degree programs proved to be particularly well suited for boosting international mobility. While there is much to criticize about this aspect, the lax regulations regarding time to degree and wide-ranging opportunities to study according to one's own pace and priorities served to increase students' willingness as well as their ability to go and study abroad for a while.

It is important not to forget here that an abundance of funding opportunities, such as DAAD scholarship programs and funded university exchanges, for example, was in place in the 1990s. The ERASMUS program was picking up speed, enrolling more and more students each year. Moreover, certain labor market sectors, such as business and management, were seeing a growing demand for graduates with advanced language and intercultural skills.

## VI

Over the past ten years, the extent of study abroad participation has essentially remained at the high level it had reached at the beginning of the decade. There has only been a minor increase in the percentage of upper-level students who completed a term at a foreign university. In 2003, however, due to high overall enrollment, the total number of study abroad students peaked at about 179,000 upper-semester students who reported having completed some kind of study abroad—the highest number to date.

Considering the multiplicity of efforts in recent years to increase study abroad participation, the relatively small gains with respect to international mobility between 2000 and 2010 do present something of a puzzle. At this point, we cannot be entirely sure about what has been causing this trend. Possibly the fact that mobility rates have remained at a comparatively high level should be considered a success in and of itself—much the way keeping study abroad at comparatively high levels in the 1970s represented a major accomplishment. German universities in recent years have been implementing very ambitious curricular reforms that inevitably created some rocky transitions and insecurities. Special emphasis was placed on making students finish their degree on time, which no doubt had an impact on their willingness to undertake study abroad. It seems obvious that under the new degree system, both universities and students first need to develop new regulations and patterns for integrating study abroad components into the curriculum.

Finding funding for study abroad—a major problem that is here to stay—is another source of insecurity likely to prevent more students from considering international opportunities.

## VII

There is much evidence to suggest that study abroad in Germany is currently in a state of transition. Under the new degree system, the main challenge is to enable a greater number of students to go abroad even as they are pursuing their bachelor's degree and to encourage them to take advantage of existing opportunities.

Further increasing the extent of international mobility does seem to be a feasible goal. After all, an overwhelming majority of German students considers study abroad to be very important for their academic training and, most importantly, for their future careers. Today, every German student inevitably asks himself or herself the question, “Do I want to study abroad or not?” Although the answers to this question vary considerably, this is an extremely favorable situation to start from. By introducing suitable measures to support students in their study abroad plans and help them realize these plans more easily, it should be possible to raise international mobility rates even further.

Another favorable factor is the comparatively new opportunity to apply for Auslands-BAföG (federal financial aid for study abroad), which greatly helps finance a study abroad experience. The strongest effect, however, is to be expected from the labor market. The growing demand for graduates with advanced foreign language skills and some initial exposure to an international study or work environment will put strong pressure on students and universities alike to do everything they can to satisfy this demand.

## Sources and references

- Das soziale Bild der Studentenschaft in der Bundesrepublik Deutschland, 9. Sozialerhebung des Deutschen Studentenwerks, Bonn 1980
- Das soziale Bild der Studentenschaft in der Bundesrepublik, 11. Sozialerhebung des Deutschen Studentenwerkes, Bonn 1986
- Das soziale Bild der Studentenschaft in der Bundesrepublik, 12. Sozialerhebung des Deutschen Studentenwerkes, Bonn 1989
- Das soziale Bild der Studentenschaft in der Bundesrepublik, 13. Sozialerhebung des Deutschen Studentenwerkes, Bonn 1992
- Das soziale Bild der Studentenschaft in der Bundesrepublik, 14. Sozialerhebung des Deutschen Studentenwerkes, Bonn 1995
- Das soziale Bild der Studentenschaft in der Bundesrepublik, 15. Sozialerhebung des Deutschen Studentenwerkes, Bonn 1998
- Die wirtschaftliche und soziale Lage der Studierenden in der Bundesrepublik Deutschland 2000, 16. Sozialerhebung des Deutschen Studentenwerkes durchgeführt durch HIS Hochschul-Informationssystem, Bonn 2001
- Internationalisierung des Studiums – Ausländische Studierende in Deutschland – Deutsche Studierende im Ausland. Ergebnisse der 16. Sozialerhebung des Deutschen Studentenwerkes durchgeführt durch HIS Hochschul-Informationssystem, Bonn 2002
- Die wirtschaftliche und soziale Lage der Studierenden in der Bundesrepublik Deutschland 2003, 17. Sozialerhebung des Deutschen Studentenwerkes durchgeführt durch HIS Hochschul-Informationssystem, Bonn, Berlin 2004
- Internationalisierung des Studiums – Ausländische Studierende in Deutschland – Deutsche Studierende im Ausland. Ergebnisse der 17. Sozialerhebung des Deutschen Studentenwerkes durchgeführt durch HIS Hochschul-Informationssystem, Bonn, Berlin 2005
- Die wirtschaftliche und soziale Lage der Studierenden in der Bundesrepublik Deutschland 2006, 18. Sozialerhebung des Deutschen Studentenwerkes durchgeführt durch HIS Hochschul-Informationssystem, Bonn, Berlin 2007
- Übergänge und Erfahrungen nach dem Hochschulabschluss, Ergebnisse der HIS-Absolventenbefragung des Jahrgangs 2005. HIS: Forum Hochschule 13/2007, Hannover
- Internationale Mobilität im Studium. Studienbezogene Aufenthalte deutscher Studierender in anderen Ländern. Deutscher Akademischer Austausch Dienst (DAAD), Dokumente und Materialien, Band 60, Bonn 2007
- Internationalisierung des Studiums – Ausländische Studierende in Deutschland – Deutsche Studierende im Ausland. Ergebnisse der 18. Sozialerhebung des Deutschen Studentenwerkes durchgeführt durch HIS Hochschul-Informationssystem, Bonn, Berlin 2008
- Internationale Mobilität im Studium. Ergebnisse einer Wiederholungsbefragung 2009 zu studienbezogenen Aufenthalten deutscher Studierender in anderen Ländern. Hochschul-Informationssystem, HIS-Projektbericht, Hannover 2009
- Die wirtschaftliche und soziale Lage der Studierenden in der Bundesrepublik Deutschland 2009, 19. Sozialerhebung des Deutschen Studentenwerkes durchgeführt durch HIS Hochschul-Informationssystem, Bonn, Berlin 2010
- Internationalisierung des Studiums – Ausländische Studierende in Deutschland – Deutsche Studierende im Ausland. Ergebnisse der 19. Sozialerhebung des Deutschen Studentenwerkes durchgeführt durch HIS Hochschul-Informationssystem, Bonn, Berlin 2010

- Internationale Mobilität im Studium. Erste Ergebnisse der Befragung 2011 zu studienbezogenen Aufenthalten deutscher Studierender in anderen Ländern. Projektbericht, Hochschul-Informationssystem, Hannover 2011

## Appendix

### A1 German university enrollment, 1960–2011

Year	Total enrollment	Research universities	Universities of applied sciences
1960	190,431	190,431	0
1961	206,378	206,378	0
1962	222,879	222,879	0
1963	237,869	237,869	0
1964	249,852	249,852	0
1965	257,356	257,356	0
1966	251,649	251,649	0
1967	266,870	266,870	0
1968	272,025	272,025	0
1969	290,593	290,593	0
1970	310,156	310,156	0
1971	338,907	338,907	0
1972	449,466	449,466	0
1973	618,226	513,984	104,242
1974	690,310	574,110	116,200
1975	743,170	616,821	126,349
1976	788,704	651,279	137,425
1977	823,522	674,410	149,112
1978	856,083	698,661	157,422
1979	887,220	724,004	163,216
1980	918,580	745,585	172,995
1981	978,590	788,249	190,341
1982	1,063,970	851,546	212,424
1983	1,131,875	892,901	238,974
1984	1,197,619	934,635	262,984
1985	1,239,447	960,994	278,453
1986	1,262,199	975,001	287,198
1987	1,288,602	991,201	297,401
1988	1,328,439	1,015,498	312,941
1989	1,378,323	1,053,634	324,689
1990	1,412,548	1,073,489	339,059
1991	1,479,239	1,126,241	352,998
1992	1,532,000	1,162,831	369,169
1993	1,684,947	1,291,424	393,523
1994	1,724,594	1,312,602	411,992
1995	1,726,144	1,307,612	418,532
1996	1,706,772	1,289,762	417,010
1997	1,682,788	1,272,381	410,407
1998	1,664,463	1,258,764	405,699
1999	1,634,657	1,231,183	403,474
2000	1,595,424	1,190,268	405,156
2001	1,611,836	1,191,270	420,566
2002	1,662,088	1,218,084	444,004
2003	1,711,785	1,242,864	468,921
2004	1,773,329	1,274,729	498,600
2005	1,716,774	1,211,479	505,295
2006	1,737,408	1,226,558	510,850
2007	1,732,674	1,220,566	512,108
2008	1,707,799	1,193,032	514,767
2009	1,786,164	1,220,978	565,186
2010	1,876,422	1,269,263	607,159
2011	1,964,331	-	-

Source: Federal German Statistical Office, main reports

**A2 German university graduates, 1960–2009**

Year	Total graduates	Research universities	Universities of applied sciences*
1960	40,600	29,000	11,600
1961	42,900	32,200	10,700
1962	47,700	34,400	13,300
1963	49,600	35,500	14,100
1964	52,600	37,900	14,700
1965	56,900	41,100	15,800
1966	61,100	43,800	17,300
1967	64,100	46,900	17,200
1968	64,300	47,500	16,800
1969	72,300	54,700	17,600
1970	77,900	59,000	18,900
1971	81,500	62,000	19,500
1972	84,400	64,400	20,000
1973	91,483	62,268	29,215
1974	96,841	66,747	30,094
1975	102,509	71,934	30,575
1976	108,240	78,982	29,258
1977	113,505	80,190	33,315
1978	111,276	80,495	30,781
1979	111,877	77,800	34,077
1980	107,523	74,050	33,473
1981	109,666	74,241	35,425
1982	118,163	78,438	39,725
1983	124,027	82,134	41,893
1984	127,413	82,764	44,649
1985	127,437	80,894	46,543
1986	134,582	84,220	50,362
1987	138,955	86,202	52,753
1988	141,811	88,150	53,661
1989	145,087	90,456	54,631
1990	142,178	88,081	54,097
1991	152,919	94,064	58,855
1992	157,911	97,323	60,588
1993	193,704	133,727	59,977
1994	210,609	142,693	67,916
1995	220,729	148,845	71,884
1996	227,039	154,978	72,061
1997	226,529	154,769	71,760
1998	216,559	149,520	67,039
1999	209,938	143,980	65,958
2000	201,682	139,299	62,383
2001	194,320	132,313	62,007
2002	193,497	130,771	62,726
2003	201,182	131,717	69,465
2004	211,353	136,245	75,108
2005	228,750	147,893	80,857
2006	239,713	156,361	83,352
2007	256,820	168,002	88,818
2008	277,568	181,002	96,566
2009	304,747	196,523	108,224

\* In the official statistics, a number of degrees awarded by technical and engineering schools have ex post been listed as university of applied sciences degrees.

Source: Federal German Statistical Office, main reports